HYPERION® FINANCIAL MANAGEMENT – SYSTEM 9

RELEASE 9.3.1

INSTALLATION GUIDE

ORACLE® | Hyperion®

Financial Management Installation Guide, 9.3.1

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Financial Management Installation Overview

Installation Introduction

Oracle's Hyperion® Financial Management – System 9 is a comprehensive, Web-based application that delivers global collection, financial consolidation, reporting, and analysis in one highly scalable solution.

For hardware and software requirements and a list of product port numbers, see the *Hyperion Installation Start Here.*

Financial Management is designed to operate as a multitier system. A Financial Management configuration contains three logical tiers: a database tier, application/Web server tier (also referred to as the middle tier), and client tier.

- The database tier contains the relational database and all Financial Management data and metadata. Supported databases include Microsoft SQL Server, Oracle, and IBM DB2.

- The application/Web server tier, or middle tier, contains the domain intelligence and connections to the relational database, application server, and Web server. You access the Web-enabled portions in this tier.

- The client tier provides the user interface and the ability to communicate with the application tier. You can display data and metadata and enter data. Financial Management has a thin Web-client architecture so that basic users require only a supported browser on a client computer. No processing or business rules occur on the client. The client is offered through Web servers or through a Windows client installed on the local computer.

Financial Management Components

Shared Services

Features enabled by Oracle's Hyperion® Shared Services:

- User provisioning

- External authentication definition

- Metadata synchronization

- Data synchronization

- Task flow management

The *Hyperion Security Administration Guide* describes user-provisioning functionality and external authentication definition. All other Shared Services functionality is described in the administrator's and user's guides for the products that implement it.

Workspace

You access Financial Management on the Web through the Oracle's Hyperion® Workspace. Workspace provides the user interface for viewing and interacting with content created using financial applications and Oracle's Hyperion® Reporting and Analysis – System 9 authoring studios:

- Consolidation application tasks

- Planning application tasks

- Financial reporting for scheduled or on-demand highly formatted financial and operational reporting from many data sources

- High performance multidimensional modeling, analysis, and reporting

- Interactive reporting for ad hoc relational queries, self-service reporting and dashboards against ODBC data sources

- Production reporting for high volume enterprise-wide reporting

- Web analysis for interactive ad hoc analysis, presentation, and reporting of multidimensional data

Performance Management Architect

Oracle's Enterprise Performance Management Architect is a component of Financial Management and Oracle's Hyperion® Planning – System 9 that enables administrators to manage, create, and deploy Hyperion Applications within one interface. It can be installed as part of the Financial Management setup program.

If you do not choose to install Performance Management Architect, you use Classic Application Administration to run Financial Management. Classic Application Administration is automatically installed as part of the installation process.

Performance Management Architect requires:

- A separate database

- Microsoft Internet Information Services (IIS)

- ASP.NET 2.0

- Use of a Java application server
- Dimension Editor and Application Creator security roles

The Dimension Editor creates and manages import profiles for dimension creation, as well as creating and managing dimensions manually within the Performance Management Architect user interface or the Classic Application Administration option. This role is required to access Classic Application Administration options for Financial Management and Planning using Web navigation.

The Application Creator can create applications but can change only the dimensions to which they have access permissions. This role is required for Financial Management andPlanning users to be able to navigate to their product's Classic Application Administration options on the Web. The Financial Management Application Creator can create Consolidation applications and Generic applications. To create applications on either the Web or the Desktop, the user must also be a member of the Application Creators group specified in the Financial Management Configuration Utility.

For more information on requirements, see the *Hyperion Installation Start Here*.

The Oracle's Hyperion® Configuration Utility™ is used to register Performance Management Architect with Shared Services, configure the database, and deploy to an application server.

Note: This is a functional diagram and does not represent the number of servers needed for a deployment.

Performance Management Architect features include:

- **Dimension Library**—A centralized location to manage dimensions and dimension properties. You can use the Dimension Library to:
  - Create dimension import profiles—enabling dimension updates from both flat files and relational database interface tables
  - Add, delete, and modify dimension members
  - Modify dimension and member properties
- **Application Library**—A summary of Application Views that have been created and/or deployed. Application Views contain dimensions and dimension attributes that are designed to meet specific requirements for application needs. You can use the Application Library to:
  - Create Views based on dimension sets
  - Manage Application Views in one centralized location
  - View the data flow between Application Views
  - Migrate Application Views to different servers
  - Deploy Application Views
- **Data Synchronization**—Enables data synchronization within Hyperion applications. You can use the Data Synchronizer to:
  - Create data movement synchronizations between Hyperion applications. For example, an administrator can synchronize data between two Financial Management

applications; two Planning applications, and between one Financial Management and a Planning application

- ❍ Create data mappings for reuse
- ❍ Create flat file and interface table mappings to import data into Hyperion applications
- **Application Upgrade**—Enables administrators to upgrade from previous releases.
- **Job Console**—Provides a summary of Dimension Library and Application View activities, including imports, deployments, and data synchronizations.

For help on tasks performed in Performance Management Architect, see the *Hyperion Enterprise Performance Management Architect Administrator's Guide* and online help.

Smart View

Oracle's Hyperion® Smart View for Office provides a common Microsoft Office interface for Financial Management, Planning, Oracle's Hyperion® Essbase® – System 9, and Oracle's Hyperion® Financial Reporting – System 9. Using menu-driven options in Microsoft Office, you can import data and images from Hyperion products into Microsoft Office components such as Excel, Word, and PowerPoint. In addition, you can work with Financial Management functions and data forms.

Financial Reporting

Financial Reporting enables you to create highly formatted reports that combine text, data grids, charts, graphs, and images. In addition to providing complete control over layouts, formatting, fonts, and colors, it provides powerful business analytics, such as conditional suppression and automatic calculations, that can be used to focus and filter reports. A repository of reusable report components simplifies the process of building and maintaining complex reports.

DIM Adapter for Financial Management

The Oracle's Hyperion® Data Integration Management Adapter for Financial Management enables you to retrieve and write data for Financial Management and transfer application data to an external target. It is sold separately and is not included as part of the core Financial Management package.

Application Link

Oracle's Hyperion® Application Link is a suite of application integration services that integrates external source data with Hyperion's business analysis software. It is purchased separately. You can use it to load data values, accounts, entities, and custom dimensions from flat files or ODBC-compliant databases into Financial Management.

FDM

Oracle's Hyperion® Financial Data Quality Management is a packaged solution for finance users that includes a guided Web-based workflow user interface for leveraging standardized financial data management processes, a data preparation server for integrating and validating financial data from any source system, and prepackaged adapters for Financial Management to reduce data integration costs and data mapping complexities. It is sold separately and is not included as part of the core Financial Management package.

Hyperion License Compliance

Hyperion no longer ships or requires Oracle's Hyperion® License Server™ (or standalone license files) for use with Hyperion products.

To ensure compliance with your license agreement, Hyperion recommends that you implement an auditing process. In addition, during product configuration with Hyperion Configuration Utility, you activate only the features you purchased. For more information, see "Hyperion License Compliance" in *Hyperion Installation Start Here*.

Financial Management Configurations

Financial Management can be configured in various ways. Server specifications depend on factors such as number of users, business process, size, design, and complexity of your applications. Hyperion recommends that you contact Hyperion Consulting Services for assistance in planning your deployment.

You can install Financial Management to one or more Financial Management application servers, and install Financial Management Web server components to one or more Financial Management Web servers. You should install the Performance Management Architect Dimension server component to one Dimension server. For information on Performance Management Architect, see "Performance Management Architect" on page 10.

Using Application Server Clusters

Financial Management uses N-Tier architecture to deploy mission critical consolidations and reporting applications to hundreds and even thousands of users. Load balancing is used to support large numbers of concurrent users. In general, load balancing is a way of dividing concurrent usage as equally as possible across a cluster of machines. To end users, the machines in a cluster seem to be one machine but, behind the scenes, the system assigns users to various servers to help distribute the load.

There are two types of automatic load balancing: session level and request level. With session level load balancing, the user performs all operations from logon to logoff on one application server, but may perform the operations of another session on another machine. Usually, this type of load balancing is used for applications that must maintain state throughout a user's session. Financial Management falls into this classification.

Load balancing can be achieved through the Financial Management clustering feature. The administrator configures a cluster to include Financial Management application servers. During logon, the user selects the cluster name. Using a random approach, Financial Management logs users on the application servers defined in the cluster, thereby spreading the users across the available servers. Financial Management generates a random number by using time (milliseconds) as a parameter and logs each user on the appropriate server. Using milliseconds helps guarantee random assignments if users log on at the same time.

If any server fails, the cluster is automatically notified and the failed server is removed from the list of available servers. Any users logged on to the failed server must log on again, using the cluster. Users are automatically assigned to available servers. It is possible to have a server that is not part of the cluster but is synchronized with the other application servers in the cluster. Thus a dedicated reports or consolidation server can be used with servers that are part of the cluster. Clustering applies only to the Financial Management application server and does not apply to the Web server or Database server tiers.

End-user load balancing is a way of distributing concurrent usage as evenly as possible across multiple servers. If you use multiple application servers, you can specify a cluster of application servers through which to distribute the user load. For example, you can create an application server cluster named Marketing_Servers and add application servers Mkt1, Mkt2, Mkt3, and Mkt4 to the cluster. You can add or remove servers from an application server cluster as needed.

In random load balancing, requests are randomly routed to servers. Random load balancing is commonly used for homogeneous cluster deployments such as Financial Management. In random load balancing, users are distributed evenly, thus all servers in a cluster should have similar configurations to prevent unpredictable performance. If one machine in a cluster has significantly less processing power than other machines in the cluster, random load balancing gives the less powerful machine as many requests as it gives more powerful machines.

The client computer stores a list of the available servers in the local registry. Upon logon, the computer randomly selects a server and attempts to log on. If the selected server has a problem, it is removed from the local list, and the client computer randomly picks another server. After the client computer connects to a server, it asks the server to which it is connected for an updated list of servers. The client computer updates its local registry with the new list in preparation for the next logon request.

Web-based operations occur similarly, except that the registry is maintained on the Web server and updated after each user logon. By using the registry to store available server information, the Web server avoids relying on a central server to process all logons.

You set up application server clusters using the configuration utility.

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Creating Financial Management Databases

Financial Management uses the relational database to store all of its data. Before you can create applications, you must install relational database software and create and configure an Financial Management database.

Performance Management Architect also requires that you create a separate Performance Management Architect database, and a database if you use Interface Tables (optional).

For database requirements, see the *Hyperion Installation Start Here*.

During Financial Management configuration, you specify the maximum number of relational database connections used by each application. See "Database Connection Pooling" on page 24.

When you create databases, record the usernames and passwords that you assign so that you can refer to them when running the configuration utility.

General guidelines for creating relational databases are listed in this table:

Table 1   **Database Requirements**

Database Requirement	Recommendation
Database tablespace size	● 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 readjust the size of the system table database to match the size of the application.

Basic privileges	Database users must be assigned privileges to add, modify, and delete these database objects:
	• tables
	• indexes
	• views
	• procedures
	• roles/authorities
	• sequences
	• triggers
	In addition, users must be granted a role that assigns unlimited tablespaces. For Oracle databases specifically, users must be assigned the RESOURCE role also.

Creating Oracle Databases

The Oracle Universal Installer guides you through the installation and configuration of your Oracle database server. See the *Oracle Administrator's Guide*.

Oracle database guidelines:

● For Financial Management and Performance Management Architect, the database administrator should create a tablespace and an Oracle user with tablespace privileges. The user administers the Financial Management repository. See basic privileges in Table 1.

> **Note:**   Using an existing user and tablespace is not recommended.

● If you are using FDM, it should not be in the same Oracle instance as Financial Management.

● You must install the Oracle client on the Financial Management application server. If you use Performance Management Architect, you must also install it on the Performance Management Architect Dimension Server.

When you configure the server, you need this information:

● The name or IP address of the computer on which Oracle is installed

● The TCP port on which Oracle is listening (if not the default port 1521)

● The Oracle service name or SID where the tablespace resides

● The name of the Oracle user with rights to connect to and create tables in the Oracle instance

● The password of the Oracle user with rights to connect to and create tables in the Oracle instance

Creating Microsoft SQL Server Databases

For instructions on installing Microsoft SQL Server, see Microsoft's SQL Server installation documentation. For information on creating databases, see the *Microsoft SQL Server Creating and Maintaining Databases Guide*.

The database administrator should create a database and a user with rights to the database. For basic privileges, see Table 1.

Note: When you set the Security properties for the database, make sure that you select this Authentication option: "SQL Server and Windows".

When you configure the application server, you need this database information:

- The name or IP address of the computer on which SQL Server is installed
- The TCP port on which SQL Server is listening (if not the default port 1433)
- The name of the database created for Financial Management
- The name and password of the SQL Server user with db_owner rights to the database

Creating IBM DB2 Databases

The IBM DB2 Universal Database Library is on a CD or DVD provided by IBM. For information on installing and configuring databases, see the *IBM DB2 Administration Guide: Planning* and *IBM DB2 Administration Guide: Implementation*.

Note: When installing DB2, clear the OLAP Starter Kit option.

Creating IBM DB2 Databases for Financial Management

Use the IBM DB2 Client Configuration Assistant to set up a database alias that enables Financial Management to connect to the database.

Select these options:

- Register this Database for ODBC
- As a System Data Source

Note these guidelines:

- When you create the DB2 database, be sure to use Unicode Transformation Format (UTF-8) codeset.
- Create a database and a DB2 user for administering the Financial Management repository. For basic privileges, see Table 1.
- Minimum tablespace requirements:
  - ❍ Data tablespace: 8K page size
  - ❍ User Temporary Tablespace: 8K page size
- You must install the IBM DB2 client on the Financial Management application server.

  When you configure your application server, you need this information:

- The name or IP address of the computer on which DB2 is installed

- The TCP port for the DB2 instance (if not the default port of 50000)
- The name of the database on which the Financial Management DB2 user resides
- The name and password of the DB2 user with rights to connect to and create tables in the Financial Management database instance on DB2

Creating IBM DB2 Databases for Performance Management Architect

If you use an IBM DB2 database for Performance Management Architect, DB2 9 Runtime Client and DB2 .NET Data Provider 9.1.0.2 must be installed on the Performance Management Architect Dimension server. See "Installing DB2 v9 Runtime Client and DB2 .NET Data Provider for Performance Management Architect" on page 19.

To create a DB2 database:

- Create the Performance Management Architect database in a local directory
- Create a bufferpool to hold the system temporary tablespace that temporarily stores data during sort and collate operations
- Create the system temporary tablespace

Creating the Performance Management Architect Database

When you create the DB2 database in a local directory, be sure to use the Unicode Transformation Format (UTF-8) codeset.

Setting Up a Bufferpool and System Temporary Tablespace

The system temporary tablespace and its corresponding bufferpool (bpmapool) are required by Performance Management Architect. The following SQL script creates the required bufferpool and tablespace.

Example

```
CREATE BUFFERPOOL bpmapool IMMEDIATE SIZE 250 PAGESIZE 32K

CREATE  SYSTEM TEMPORARY TABLESPACE bpmabigtemp PAGESIZE 32K MANAGED BY SYSTEM USING ('C:
\DB2\Database\bpmabigtemp')
EXTENTSIZE 16 OVERHEAD 12.67 PREFETCHSIZE 16 TRANSFERRATE 0.18 BUFFERPOOL bpmapool
```

If you are using a DB2 database for Performance Management Architect, a tablespace is created during database configuration in the Configuration Utility. The database administrator must ensure that the user who logs on to the Performance Management Architect relational database has CREATE access to the bufferpool and tablespace and CREATE VIEW privileges.

Installing DB2 v9 Runtime Client and DB2 .NET Data Provider for Performance Management Architect

To use a DB2 database with Performance Management Architect, follow these requirements:

● Install DB2 v9 Runtime Client and DB2 .NET Data Provider on the Dimension Server machine. (DB2.NET Data Provider is installed as part of the DB2 v9 Runtime Client installation.)

● Ensure that your DB2 database is installed on a different computer, and not the Performance Management Architect Dimension Server machine where the DB2 9 Runtime Client will be installed.

DB2 9 Runtime Client Setup for Performance Management Architect

You must install DB2 9 Runtime Client to ensure that Performance Management Architect services communicate with a DB2 database.

● If the Performance Management Architect computer has DB2 9 Runtime Client installed, verify that an entry exists in the Global Assembly Cache. See "Verifying DB2 9 Runtime Client for Existing Installations" on page 19.

● If the Performance Management Architect computer does not have the DB2 9 Runtime Client installed, you must install it. See "Installing DB2 9 Runtime Client for Performance Management Architect" on page 20.

Verifying DB2 9 Runtime Client for Existing Installations

➤ To verify the Global Assembly Cache entry:

1 Click **Start > Run**.

2 Enter `c:\windows\assembly` and click **OK**.

3 Scroll down the resulting list and locate `IBM.Data.DB2 9.0.0.2`.

4 Right-click `IBM.Data.DB2 9.0.0.2` and select **Properties**.

5 Click **Version**— at the top it should display **File Version: 9.1.0.2** or greater.

> **Tip:** You can also verify that the version 9 Runtime Client is installed if the following path and file exist: `C:\PROGRAM FILES\IBM\SQLLIB\BIN \NETF20\IBM.DATA.DB2.DLL` or `C:\PROGRAM FILES\IBM\SQLLIB_01\BIN \NETF20\IBM.DATA.DB2.DLL`.

To install the Runtime Client, see "Installing DB2 9 Runtime Client for Performance Management Architect" on page 20.

If you see this version or newer, the setup is complete, and nothing needs to be installed.

Installing DB2 9 Runtime Client for Performance Management Architect

➤ To install DB2 9 Runtime Client:

1 Download DB2 9 Runtime Client using the following URL. (You must be a registered IBM user.)

   http://www-306.ibm.com/software/data/db2/v9/index_download.html

2 In Next Steps, near the bottom of the page, click **DB2 Client**.

3 Click **Sign in** and enter your IBM ID and Password.

4 Select the driver based on your operating system and language preference, and click **Continue**.

5 Select choices for the radio button questions, and click **I Agree**.

6 Click **I Confirm** and select a download option:

   ● Download Using HTTP

   ● Download Director

   The file size for `db2_v9_en_US_setup.exe` is 23 MB.

7 Click **Download Now** and save to a location on the computer where Performance Management Architect services are installed.

8 **Double-click** `db2_v9_en_US_setup.exe` **to execute.**

   Note: When you install the DB2 9 Runtime Client, it automatically detects an existing client and enables you to upgrade the existing version or add a new version copy to preserve the existing version. You should select the second option to ensure that existing applications or software that use the older Runtime Client are not affected.

9 Accept the defaults and complete the installation.

Configuring DB2.Net Data Provider for Performance Management Architect

After you complete the Runtime Client installation you must configure DB2.Net Data Provider.

➤ To configure DB2.Net Data Provider:

1 Select **Start > Programs > IBM DB2 > Configure DB2 .NET Data Provider**.

   This entry is added to the Global Assembly Cache automatically: `c:\windows\assembly`. The entry is listed as `IBM.Data.DB2`.

   A version is listed next to the name, however, you should verify the File Version, not the version listed next to the name.

2 To verify the file version, right-click the item and select **Properties**. Click **Version** and verify the File Version number listed at the top of the tab.

   The file version should be 9.1.0.2 or greater.

Creating Data Link (UDL) Files

A universal data link (`.udl`) file provides a connection between a database server and an application server. You must create a `.udl` file for Financial Management.

➤ To create a data link (`.udl`) file:

1   From Windows Explorer, select the folder in which to store the file.

   Note: You should store the file in a directory other than the Financial Management installation directory, so that you can retain the file if you uninstall Financial Management.

2   Select **File > New > Text Document**.

   A file named `New Text Document.txt` is displayed.

3   Rename the file, removing all spaces, and changing its file extension to `.udl`, for example, `hfm.udl`.

4   When asked to confirm changing the file extension, click **Yes**.

5   Configure the `.udl` file.

   See these topics:

   ● "Configuring the Data Link for Oracle" on page 21

   ● "Configuring the Data Link for Microsoft SQL Server" on page 22

   ● "Configuring the Data Link for IBM DB2 " on page 23

Configuring the Data Link for Oracle

The data link specifies the database server name and other database-related information, such as the username and password of a user with full access rights to the database server.

For Oracle, Financial Management requires the Oracle OLE DB Provider. You can download and obtain information about the Oracle DB Provider from the Oracle Web site.

➤ To download Oracle OLE DB Provider:

1   Using a Web browser, go to `www.oracle.com`.

2   Click the **Downloads** link.

3   From the **Technologies, Utilities, and Drivers** section, select **Oracle Provider for OLE DB**.

4   Select the file to download, and follow the screen prompts.

➤ To configure the data link for Oracle:

1   From Windows Explorer, double-click the UDL file that you created.

   The Data Link Properties box is displayed.

2   On the **Provider** tab, from the **OLE DB Providers** list, select **Oracle Provider for OLE DB**.

3 Click **Next**.

4 On the **Connection** tab:

    a. Enter the server name *<Oracle Global Database Name>*.

    b. Enter a username and password.

       Note: Ensure that the user is granted privileges to create, update, and delete tables. See "Creating Oracle Databases" on page 16.

5 Select **Allow saving password**.

6 Select the database to which you want to connect.

7 Click **Test Connection.**

8 On the **Test Connection Succeeded** box, click **OK.**

9 Click **OK** to save the connection and close the dialog box.

Configuring the Data Link for Microsoft SQL Server

The data link specifies the database server name and other database-related information, such as the username and password of a user with full access rights to the database server.

➤ To configure the data link for Microsoft SQL Server:

1 From Windows Explorer, double-click the UDL file that you created.

The Data Link Properties dialog box is displayed.

2 On the **Provider** tab, from the **OLE DB Providers** list, select **Microsoft OLE DB Provider for SQL Server.**

3 Click **Next**.

4 On the **Connection** tab:

    a. Enter the server name, which is the computer hosting the relational database.

    b. Select **Use a Specific User Name and Password**.

    c. Enter a username and password for a user with full access rights to the database.

       Note: You can use the default username sa. If you use the default name, leave the password text box blank, and select Blank Password. If you do not want to use the default username, you must enter the name of a user other than the default user who has full access rights. Ensure that this user is granted privileges to create, update, and delete tables. See "Creating Microsoft SQL Server Databases" on page 16.

    d. Select **Allow Saving Password.**

5 Select the database to which you want to connect.

6 Click **Test Connection.**

7 On the **Test Connection Succeeded** box, click **OK.**

8   Click **OK** to save the connection, and close the dialog box.

9   Right-click the UDL file, and select **Open** to set the selected UDL file as the system data link file.

Configuring the Data Link for IBM DB2

The data link specifies the database server name and other database-related information, such as the username and password of a user with full access rights to the database server.

➤   To configure the data link for IBM DB2:

1   From Windows Explorer, double-click the UDL file that you created.

The Data Link Properties box is displayed.

2   On the **Provider** tab, from the **OLE DB Providers** list, select **IBM OLE DB Provider for DB2 Servers**.

3   Click **Next**.

4   On the **Connection** tab:

   a.   Select **Use data source name option**.

   This option selects the data source name that you established during the IBM DB2 installation.

   Note: If the data source name is not displayed in the list, go to the Client Configuration Assistant, Database Properties box, and select As a system data source.

   b.   Enter a username and password.

   Note: Ensure that the user is granted privileges to create, update, and delete tables. See "Creating IBM DB2 Databases" on page 17.

5   Select **Allow saving password**.

6   Click **Test Connection**.

7   On the **Test Connection Succeeded** box, click **OK**.

8   Click **OK** to save the connection and close the dialog box.

9   Right-click the UDL file and select **Open** to set the UDL file as the system data link file.

Encrypting UDL Files

Financial Management provides a utility to encrypt the UDL file used by the application server to communicate with the database. Based on the UDL file extension, Financial Management detects whether the file is encrypted. If the file extension is `.UDL`, the system assumes that the file is not encrypted. If the file extension is `.hfmudl`, the system assumes that the file is encrypted.

To encrypt the UDL file, you use the EncryptHFMUDL utility located in the `FinancialManagement/Server` directory.

➤ To encrypt the UDL file:

1 **Do one of these tasks to access the MS-DOS command prompt:**

- Select **Start** > **Programs** > **Accessories** > **Command Prompt**.

- Select **Start** > **Run**, and type **cmd**.

2 **Enter** `encrypthfmudl hfm.udl hfm.hfmudl`

where *hfmUDL.* is the location and name of your original UDL file, and *hfm.hfmUDL.* is the location for the encrypted UDL file.

> **Note:** The encrypted UDL file extension must be `.hfmudl`. After encrypting the file, you can delete the original unencrypted file.

➤ To decrypt the UDL file:

1 **Do one of these tasks to access the MS-DOS command prompt:**

- Select **Start** > **Programs** > **Accessories** > **Command Prompt**.

- Select **Start** > **Run**, and type **cmd**.

2 **Enter** `encrypthfmudl hfm.hfmudl hfm.udl /u`.

where *hfm.hfmudl.* is the location for the encrypted UDL file, and *hfm.udl* is the location for the decrypted UDL file.

Database Connection Pooling

Financial Management utilizes connection pooling in communicating with the database. Connection pooling enables more efficient database utilization and does not require each user to be set up in the relational repository.

When you configure Financial Management, the Financial Management Configuration Utility enables you to specify the number of pooled database connections. The number of connections that you specify in the configuration utility is the maximum number of pooled connections consumed by an application. The pool starts with eight connections. If after a certain number of attempts, the pool is unable to service a request for an additional connection, it adds eight more connections. The system continues adding blocks of eight connections until it reaches the maximum number of connections defined in the utility. If the system needs an additional connection beyond this limit, a temporary connection is created to service the request, which is closed after the task is complete.

The system also creates additional connection pools that are reserved for system use and are not used for user activity. The system-use pools are divided into these connection types:

- A pool of nine connections per application is reserved for system activity.

- A pool of eight connections per application is reserved for error handling.

- A pool of eight connections per application server is created for user logon activities. The user logon pool can grow by four to the system-defined maximum value of 16 connections. Connections required above the maximum are temporary.

In general, there are 25 connections dedicated to system-level activities: eight connections reserved for each application server, and 17 connections reserved for each application.

Connection use is dependent on the activity type. Users with Read access, which are the majority of users in an application, generally use one or no connections. Users with Write access can consume more connections, as they write to the database. The number of connections consumed by a user with Write access, for example, a consolidator, depends on the application server hardware and quantity of data being written. In general, users with Write access may use five to ten connections.

Financial Management opens the defined number of connections when an application is first opened. The connections are then available for subsequent users of the system. If a user process requests a connection and all connections are in use, the system polls the connection pool for a short time, waiting for a connection to become available. If no connection is available, the system creates eight connections and adds them to the pool. The connection pool is limited to the total that you define in the configuration utility.

Connections are application specific. The default pool is created only after an application is opened. However, connections are not released on an application basis. They are released on an application server basis; thus all connections are not released until the application server has no Financial Management users accessing any application.

Financial Management also supports Extended Analytics, which enables extracting data to a relational database for use with other systems, such as Analytic Services. The extract process has a dedicated connection pool that is created when a star schema is created. The default pool is 16 temporary connections that are destroyed when the processing is complete.

Example 1

Three applications on one application server, default maximum connection pooling is used (40 connections)

- Application A is logged on - 8 connections (plus system)
- Application B is logged on - 8 connections (plus system)
- Application C is logged on - 8 connections (plus system)
- System connections: 59 (8 plus 17 per application)
- Total connections: 83

> **Note:** Total connections could grow by 96 if all application connection pools expand to the system maximum as defined in the configuration utility (default is 40).

- Application B is logged off (no users)
- Total connections: 83
- All users log off all applications
- Total connections: 0

Example 2

One application on two application servers, default maximum connection pooling is used (40 connections)

- Application A is logged on (server 1) - 8 connections (plus system)

- Application A is logged on (server 2) - 8 connections (plus system)

- System connections: 50 (8 plus 17 per application per application server)

- Total connections: 66

- Application A (server 2) is logged off (no users)

- Total connections: 33

- All users log off all applications

- Total connections: 0

At times, connectivity between the application server and the database server might be lost due to network issues, for example. If the system detects that a connection is no longer valid, it attempts to recreate the connection.

Deleting applications also consumes the default number of pooled connections. Before deleting an application, Financial Management opens the application to verify security access, consuming the default number of connections. After security is validated, the system deletes the application.

3

Installing Financial Management and Performance Management Architect Server Components

In This Chapter

The Financial Management setup program installs the files needed to run Financial Management and Performance Management Architect. Before installing Financial Management, you must complete these steps:

● Install and configure Shared Services.

● Configure external authentication through Shared Services.

For instructions, see the *Hyperion Shared Services Installation Guide*.

If you use a separate application server and client workstation, you must install Financial Management on each computer.

If you install Financial Management on one computer, you can install the Server and Client components simultaneously with the Custom installation option.

Installing Microsoft Internet Information Services

To use Financial Management on the Web, you must install Microsoft Internet Information Services (IIS) on the Web Server. If you use a separate, dedicated computer to run the Financial Management Web server components, you must install IIS on that computer.

To use Performance Management Architect, you must have IIS 6.0 or 5.0 installed on the Dimension Server.

The IIS version depends on whether you are using Windows 2000 Server or Windows 2003:

- For Windows 2000 Server, IIS 5.0 is provided.

- For Windows 2003, IIS 6.0 is provided.

  For IIS 6.0, you must enable these components:

  ○ Active Server Pages (ASP)

  ○ ASP.NET 2.0

Verifying the IIS Installation

➤ To verify the IIS installation:

1 Select **Start > Programs > Administrative Tools > Component Services,** and double-click **Services,** or from Windows 2003, select **Start > Settings > Control Panel > Administrative Tools > Services.**

2 Check to see that the IIS services are running:

   a. Select **IIS Admin Service**, and, if it is not started, click **Start**.

   b. Select **World Wide Web Publishing Service**, and if it is not started, click **Start**.

   c. If you did not see the services for IIS, make sure that IIS is installed.

      i. In Control Panel, select **Add/Remove Programs**.

      ii. Under **Windows Components**, select **Application Server** and look for **Internet Information Services** (IIS).

      iii. Install IIS if it is not already installed.

About Hyperion Home

When multiple Hyperion products are installed on one computer, common internal and third-party product components are installed to a central location, called *Hyperion Home*. The Hyperion Home location is defined in the system environment variable called *HYPERION_HOME*.

Hyperion Home Location

The default location for Hyperion Home is `C:\Hyperion`. When you install, the installer searches for the `HYPERION_HOME` environment variable on the computer to which you are installing.

If the Hyperion Home location was previously defined for another Hyperion product, the installation uses that location and it cannot be changed through the installer.

If the current installation is the first Hyperion installation on the computer, you can specify the location during installation.

Changing the Hyperion Home Location

After Hyperion Home is defined through the product installation, you can run a migration utility to change the Hyperion Home location.

The migration utility moves the files installed in Hyperion Home to the new location and updates the value of the HYPERION_HOME environment variable.

Hyperion Home Migration Utility is provided with the Shared Services installation.

Note: For an Apache Tomcat 5.0.28 Windows installation, you can install the Shared Services server as a Windows service. If you select this option, the Shared Services server is launched automatically by the service and runs in the background. However, if you change the HYPERION_HOME location, the Windows service does not automatically start. This problem occurs because the registry entries for the Windows service retain the old path information. To solve this problem, you must manually update the location of the Windows service.

➤ To change the Hyperion Home location:

1 Launch the migration utility by selecting **Start > Programs > Hyperion > Foundation Services> Home Migration Utility**, or by double-clicking the run.exe file from <HYPERION_HOME>\common \utilities\HyperionHomeTool\9.3.1\bin.

2 Step through the screens, and when prompted, enter the Hyperion Home location or click **Browse** to navigate to the preferred location.

Do not choose a HYPERION_HOME location that contains a space character. For example, C: \Program Files is not acceptable.

Installation Files and Directories

The Financial Management installation program installs files needed to run Financial Management, Performance Management Architect, and common components used by multiple Hyperion products. Performance Management Architect is a component of the Financial Management installation. If you choose to use Classic Application Administration instead of Performance Management Architect, Classic Application Administration is automatically installed with Financial Management.

Note: The installation program contains these three files: media.inf, setup.exe, and suite.jar, which must be in the same directory for the installation program to run.

What Happens During Installation

By default, the Financial Management and Performance Management Architect installation program performs these operations:

● Creates installation directories

- Copies Financial Management software files to the directory specified during the installation

- If Performance Management Architect is selected for installation, copies software files to the Performance Management Architect installation directory, creates the virtual directory in IIS, installs .NET Framework 2.0 if not installed, and installs C++ Runtime libraries.

- Copies common components to the HYPERION_HOME directory that you specify

- Installs the Java Runtime Environment (JRE) version

Directories and Files Installed

The setup program installs Financial Management files in one directory, internal components and third-party products in another directory, and Performance Management Architect files in a separate directory.

- Financial Management software files are installed in the directory specified during installation (for example, *<drive>*:\Hyperion\FinancialManagement). Files required for the Performance Management Architect Dimension Server and Data Synchronization Server application server deployment are installed in an AppServer directory, and files required for the Dimension Server are installed in the Server directory.

- Additional internal components and third-party products are installed in *<drive>*:*HYPERION_HOME*\common.

Files Installed in the Performance Management Architect Directory

If you install Performance Management Architect, its components are installed in the directory that you specify during installation. The default location is *<drive>*:\Hyperion\BPMA.

Table 2   Files Installed in the BPMA Directory

Directory	Contents
AppServer	Files required for Java application server deployment for Dimension server and Data Synchronization server
Common	Shared libraries for Performance Management Architect
Server	SQL files required for relational database configuration
docs	*Hyperion Enterprise Performance Management Architect Administrator's Guide*

Files Installed in the HYPERION_HOME Directory

Various files are installed in the HYPERION_HOME\common directory by a default installation of Shared Services. Some common components, and thus some files and folders, are optional and may not be installed.

Table 3   Common Component Folders Created in the Common Directory

Directory	Contents
appServers	Application server files
CLS	License services APIs
config	Hyperion Configuration Utility files
CSS	Files to support Hyperion external authentication
Docs	Product documentation files
EssbaseJavaAPI	Java driver used when embedding Essbase in other applications
EssbaseRTC	Essbase runtime client used when embedding Essbase in other applications
httpServers	Apache Web server files
HyperionLookandFeel	Installer user interface files
JakartaCommons	Common development library files
JavaMail	Files to support sending e-mail using Java
JCE	JCE files for encryption, key generation and agreement, and MAC
JDBC	JDBC files
JRE	Java Runtime Environment files
lib	common internal library files
loggers	Files for external authentication logging
ODBC	ODBC drivers
Opatch	Oracle patching tool files; for future use
PERL	Scripting language files
SAP	SAP files
Shared Services	Supporting services for Shared Services
utilities	Utilities to change the location of Hyperion Home and export, import, or validate provisioning data
validation	Not used in this release
velocity	Not used in this release
XML	Common XML components

Installing Financial Management

Use this procedure to install Financial Management Application and Web Server components.

➤ To install Financial Management on the application server:

1 Ensure that Shared Services is installed and configured in the environment. See the *Hyperion Shared Services Installation Guide.*

2 Navigate to the directory for the installation program, select **File > Run** or **Start > Run** and enter *Drive:\folder\Setup.exe*, where *Drive* and *folder* are the installation program location.

3 Select the installation process language, and click **OK**.

4 Review the **Welcome** box and click **Next**.

5 From the list of countries, select the location from which you are installing, and click **Next**.

6 Read the license agreement, select **I AGREE** and click **Next**.

7 Click **Next** to accept the default installation path for *HYPERION_HOME*, or click **Browse** and navigate to another directory, and click **Next**.

The default directory is `C:\Hyperion`.

Ensure that the directory name does not contain spaces. You can enter only English alphanumeric characters and these special characters: dash (-), underscore (_), backslash (\), forward slash (/), dot (.), colon (:). The colon character (:) is supported only for Windows platforms to specify the drive (for example, c:\).

> **Note:** If the installation program detects a *HYPERION_HOME* directory, Directory Name and Browse are not selectable.

> **Note:** If a Java Virtual Machine (JVM) version is detected in the Hyperion Home location, a warning message is displayed. Shut down products using JVM and click OK to continue.

8 Click **Next** to accept the default installation directory or click **Browse** to select another directory, and click **Next.**

The default directory is `C:\Hyperion\FinancialManagement`.

Ensure that the directory name does not contain spaces. You can enter only English alphanumeric characters and these special characters: dash (-), underscore (_), backslash (\), forward slash (/), dot (.), colon (:). The colon character (:) is supported only for Windows platforms to specify the drive (for example, c:\).

9 From **Setup Type**, select **Custom**, and click **Next**.

10 Select components to install, and clear components that you do not want to install.

- To install all Client, Application Server, and Web components, select **Hyperion Financial Management — System 9** and **Hyperion Enterprise Performance Management Architect**.

  To install specific components, select:

- **Client**

  Install all components for a full client installation, including the Win32 Client, Analytic Data Model (ADM) Client, and Sample Applications.

- **Application Server**

  Install all files required for the application server.

- **Web**

  Install all components to access Financial Management through the Internet.

  ❍ **Web Server**

    Install Web Server components on this computer. You can, if you want, install the Web Server components later on another computer.

  ❍ **Smart View Provider**

    Install the Smart View provider on the Web server. For information on installing Smart View on the client tier, see "Installing Smart View " on page 38. For information on using Smart View, see the *Hyperion Smart View for Office User Guide* or *Online Help* installed with Smart View.

    Note: SmartView requires the use of Microsoft .NET Framework 2.0. When you select this component, if you do not have .NET Framework 2.0 installed, the system will install it as part of the installation process. If you do not want to install SmartView, you can choose to continue the installation without installing it.

- **Consultant Utilities**

  Install Financial Management additional utilities.

- **Oracle Hyperion EPM Architect**

  Note: To use Performance Management Architect, install both of these components. The system detects if these components have previously been installed on this computer, for example, during a Planning installation, in which case you do not need to reinstall them.

  ❍ **Application Server**

    Installs the Dimension Server, Data Synchronization Server, and files required for Interface Datasources.

  ❍ **Web Server**

    Installs Performance Management Architect Web tier.

Note: To use Performance Management Architect, you must have installed a Java application server. For a list of supported Java application servers, see the *Hyperion Installation Start Here.*

Performance Management Architect requires the use of Microsoft .NET Framework 2.0. During the Performance Management Architect Application Server installation, if .NET Framework 2.0 is not detected, you are prompted to install it. Select **Install Microsoft .Net Framework 2.0 and continue** to have .NET 2.0 automatically installed.

11 Review the component summary information, and click **Next** to continue the installation, or **Back** to change settings.

If you do not have Microsoft Data Access Component (MDAC) installed on the application server, the system installs it automatically at this point. The MDAC installation process can be time-consuming, and requires that you reboot your computer.

12 If system files were detected that needed to be updated during installation, a status message is displayed. Click **Next** to continue.

For a list of updated files, check the install log, `installLog.txt`, at the root of the directory in which you installed Financial Management. If Windows File Protection is enabled, download the Windows update to obtain the latest version of the files.

13 When you receive the message that the installation is complete, click **Next**.

14 If prompted, select whether to restart your computer at this time, and click **Finish.**

15 Run the configuration utility. See Chapter 5, "Configuring and Setting Up Financial Management".

It is recommended that you reboot your computer before starting configuration.

Installing Only Web Server Components

If you run Web server components on the application server, you can install the components during a Custom installation.

If you need to install the Financial Management Web server components on an additional application server or on the server that is running Microsoft Internet Information Server (IIS), during the installation process, you can install only the Web Server components.

➤ To install only the Financial Management Web server components:

1 Start the Financial Management installation.

See "Installing Financial Management" on page 32.

2 From **Setup Type**, select **Custom**, and click **Next**.

3 From **Component Selection**, select **Web Server**.

Note: Clear components that you do not want to install. If you clear a component that is already installed on the computer, the component is removed from the computer.

4 Select a destination folder for the files, and click **Next**.

5 Review the current settings, and click **Next** to continue the installation, or **Back** to change settings.

6 If prompted, select whether to restart your computer at this time, and click **Finish.**

Installing Only the Analytic Data Model (ADM) Driver

If you use Financial Management with Financial Reporting, Oracle's Hyperion® Web Analysis – System 9, or Oracle's Hyperion® Application Builder J2EE, you must install the Analytic Data Model (ADM) driver components. You can install only the ADM components using the following procedure. This process installs the files needed for ADM integration with Financial Management. By default, the ADM driver, `HsvADMDriver.dll`, is installed in *Drive:*\Hyperion \FinancialManagement\Client.

➤ To install only the ADM components:

1 Start the Financial Management installation.

   See "Installing Financial Management" on page 32.

2 From **Setup Type,** select **Custom,** and click **Next**.

3 From **Component Selection**, select **ADM Client**.

   Note: Clear components that you do not want to install. If you clear a component that is already installed on the computer, the component is removed from the computer.

4 Select a destination folder for the files, and click **Next**.

5 Review the component settings, and click **Next** to continue the installation or **Back** to change settings.

6 If prompted, select whether to restart your computer at this time, and click **Finish**.

Installing the HFM Software Development ToolKit

The HFM Software Development ToolKit is a guide for programmers who are responsible for using the Web object model to customize Financial Management.

➤ To install the Software Development Toolkit:

1 Navigate to the installation program directory, select **File > Run** or **Start > Run** and enter *Drive:**folder* **Setup.exe**, where *Drive* and *folder* are the installation program location.

2 From the the directory in which you downloaded the ToolKit, double-click `HFM_SDK.exe`.

3 Review the **Welcome** box and click **Next**.

4 Select a destination folder for the files, and click **Next**.

5 Click **Finish**.

6 After you install the Toolkit, navigate to the installation directory, and open `Readme.html`.

Performing Silent Installations of Financial Management

If you want to install Financial Management on multiple computers and use the same options for each installation, you can use a silent mode installation process. Silent installations automate the installation process so that you can install Financial Management without manually specifying settings during each installation.

To run a silent installation, you record your installation settings in a response file for the first computer and then run the response file to apply the settings for other computers.

Creating the Response File

The response file is a recording of the Financial Management installation program and contains the system-specific information that you are prompted to enter during installation, including the bean ID keys and their values.

➤ To create the response file:

1 Ensure that JDK version 1.3.1 or later is installed on your computer.

2 Create a blank text file to use as the response file.

3 Navigate to the directory that contains the product installer (`setup.exe`).

4 Open the command prompt and enter:

   `setup.exe -options-record` *<responsefilename>*

   The Financial Management installation program is launched.

5 As you step through the installation, enter the values to use as the defaults in the response file.

   The values are recorded in the response file. You can modify the response file if you want to change the options.

6 After the installation, open the response file in a text editor. Confirm that the bean ID keys and values are correct, or modify as required. Save the file.

Running the Silent Installation

You can silently install Financial Management by running the response file.

➤ To run the silent installation:

1 Copy the response file and the Financial Management installation files to the location of the computer on which you are installing.

2 Open the command prompt and enter: `setup.exe -options` *<responsefilename>* `-silent`

   The installation runs in the background, and Financial Management is installed with the settings of the original installation.

4

Installing the Client Tier Components

The client is offered through Web servers or through a Win32 client installed on the local computer. Requirements at the client level are minimal, as no processing or business rules are performed on the client. For client requirements, see the *Hyperion Installation Start Here.*

Installing Financial Management on the Client

The installation program installs files needed to run Financial Management and common components used by multiple Hyperion products.

The Typical installation for client installations does not install server components. If you need to install server components, see Chapter 3, "Installing Financial Management and Performance Management Architect Server Components".

Note: The installation program contains these three files: `media.inf`, `setup.exe`, and `suite.jar`, which must be in the same directory for the installation program to run.

➤ To install Financial Management on the client tier:

1   Ensure that Shared Services is installed and configured in the environment. See the *Hyperion Shared Services Installation Guide.*

2   Navigate to the directory for the installation program, select **File > Run** or **Start > Run** and enter *Drive:* *****folder***\\Setup.exe**, where *Drive* and *folder* are the installation program location.

3   Select the installation process language, and click **OK**.

4   Review the **Welcome** box and click **Next**.

5   From the list of countries, select the location from which you are installing, and click **Next**.

6   Read the license agreement, select **I AGREE** and click **Next**.

7   Click **Next** to accept the default installation path for *HYPERION_HOME*, or click **Browse** and navigate to another directory, and click **Next**.

Ensure that the directory name does not contain spaces. You can enter only English alphanumeric characters and these special characters: dash (-), underscore (_), backslash (\), forward slash (/), dot (.), colon (:). The colon character (:) is supported only for Windows platforms to specify the drive (for example, c:\).

Note: If the installation program detects a *HYPERION_HOME* directory , Directory Name and Browse are not selectable.

8 Click **Next** to accept the default installation directory, or click **Browse** to select another directory, and click **Next**.

9 From **Setup Type**, select **Typical**, and click **Next**.

10 From **Component Selection**, select the components to install, and clear components that you do not want to install.

11 For a **Typical** installation, you can install these components:

- **Win32 Client**

  Install all components for the Windows 32 client desktop.

- **ADM Client**

  Install Analytic Data Model (ADM) if you use Financial Management with Financial Reporting, Web Analysis, or Oracle's Hyperion® Application Builder J2EE. ADM is the connectivity component between Hyperion data sources. You can also install ADM later on another computer.

- **Sample Applications**

  Select this option to install sample applications.

12 Click **Next** to accept the default installation directory, or click **Browse** to select another directory, and click **Next**.

13 Review the component settings, and click **Next** to continue the installation or **Back** to change settings.

14 If prompted, select whether to restart your computer at this time, and click **Finish**.

15 Run the configuration utility.

See Chapter 5, "Configuring and Setting Up Financial Management".

Installing Smart View

Smart View provides a common Microsoft Office interface for Financial Management, Planning, Hyperion® System™ 9 BI+™ Essbase Analytics™, and Reporting and Analysis modules. Using menu-driven options in Microsoft Office, you can import data and images from Hyperion products into Microsoft Office components such as Excel, Word, and PowerPoint, and work with Financial Management functions.

The Financial Management Setup program places the installer for Smart View in this location:

`<drive>:\Hyperion\FinancialManagement\Web\HFMOfficeProvider`.

The SmartView installer is named `SmartView.exe`. You can distribute the installer to your users using several methods, for example, by e-mail or by a URL. You can also create a public task list with a SmartView link to the installer and specify a security group for add-in users. Users in the specified security group can click the link and run the installation. For information on creating a task list, see the *Hyperion Financial Management — System 9 User's Guide.*

After Smart View is installed, users must create a connection to Financial Management using the SmartView Connection Manager.

For instructions on using Smart View, see the *Hyperion Smart View for Office User Guide* or *Online Help* installed with Smart View.

➤ To install Smart View on the client tier:

1   Navigate to the Smart View installation file location specified by your administrator.

2   Double-click the `SmartView.exe` file to run the installation and click **Next**.

3   Install Smart View to the default path, `C:\Hyperion\SmartView`, or click **Change** to install to another directory, and click **Next**.

4   Click **Install**.

5   Click **Finish** to exit the installation wizard.

The next time that you open Microsoft Excel, Word, or PowerPoint, a Hyperion menu is added to the menu bar.

Note: Before you uninstall Smart View, you must exit all Microsoft Office applications. When you uninstall Smart View, several registry items remain on your computer to preserve your Smart View login and user preference information. These files are in the HKEY_CURRENT_USER\Software\Hyperion Solutions folder and are called Hyperion SmartViewConnections, Login, and Preferences.

Verifying Communications Between the Application Server and Client

After setting up the application server and the client workstation, you must make sure that communications between the server and client are working properly.

Verify these items:

● Ensure that the user logged on the application server has administrative rights to the Windows server.

● Ensure that Distributed Component Object Model (DCOM) configuration is enabled on the application server. The Default Authentication level must be set to None on the client workstation to enable Financial Management components to communicate with other Hyperion products.

● To confirm communications between the application server and the client, you must register the application server at the client workstation.

5

Configuring and Setting Up Financial Management

You run the Hyperion Configuration Utility to configure Hyperion products. After running the Hyperion Configuration Utility, you must run the Financial Management Configuration Utility, which enables you to perform these tasks:

- Configure application servers

- Set up application server clusters

- Register and unregister application server clusters

- Configure Web servers

- Set up links to Related Content

- Configure Smart View

Whenever you install or reinstall Financial Management, you must run the Financial Management configuration utility.

Hyperion Configuration Utility

Hyperion Configuration Utility is a common tool that installs automatically with Hyperion products. Although you must use it to set up new products that you install, it also enables you to reconfigure existing products and upgraded products. Configuration involves these tasks:

- Product option activation— To comply with your license agreement, select the product features that you are authorized to use.

- Shared Services registration—To use Shared Services to provision and share users among Hyperion product applications.

- Relational database configuration—To store and retrieve application data in a database repository.

- Application server deployment—To deploy the application automatically, or partially, to an application server.

- Shared Services deregistration—To deregister products fromShared Services before upgrading or uninstalling these products.

For information about the order of configuration tasks, acceptable characters, and resolving configuration issues, see:

- ???

- ???

- ???

Task Sequence

Hyperion recommends that you configure products separately and perform all configuration tasks. However, you can configure products simultaneously performing all, or specific, configuration tasks.

Restricted Characters

Only enter alphanumeric, dash (-), dot (.) , underscores (_), and tildes (~) during configuration. Tildes are only supported on Microsoft Windows. All other characters are not supported.

Troubleshooting

Terminating configuration for one product does not stop the configuration of other products. All configuration warnings and errors are logged as follows:

If you encounter errors, perform these tasks:

- Configure products individually.

- See the *Hyperion Installation and Configuration Troubleshooting Guide* for information about configuration checks, debugging using logs, troubleshooting methodology, and solutions to common configuration issues.

Satisfying Initial Requirements

If you are using Hyperion Configuration Utility for the first time, perform these tasks:

Table 4   Configuration Requirements

Task	Reference
Satisfy system and product-specific requirements.	"System Requirements" and "Planning Hyperion Installations" in the *Hyperion Installation Start Here*
Gather the information you need to configure products.	"Hyperion Configuration Utility Worksheets" in the *Hyperion Installation Start Here*
Install, configure, and start the Shared Services server.	*Hyperion Shared Services Installation Guide*

Configuring Product Upgrades

You can use Hyperion Configuration Utility to configure and reconfigure supported product upgrades. Note the following:

- If you upgraded Shared Services, configure it before configuring other products.
- Configure upgraded products individually.
- Deploy to the same database you used when you configured the previous product release.

If you do not want to use Shared Services with the products you are upgrading, select Shared Services Deregistration during configuration

Configuring Financial Management

Run Hyperion Configuration Utility on the computer hosting the products to configure or reconfigure.

➤ To configure Financial Management:

1   Launch Hyperion Configuration Utility as follows:

- At the end of installation by selecting **Launch Hyperion Configuration Utility** on the last panel.
- Using one of these methods:

2   Select the language in which to configure and click **Next**.

3   On the Welcome page, click **Next**.

4 Select the products and the tasks to perform, then click **Next**.

Task Sequence for Financial Management

Select these tasks to configure Financial Management:

- Register Financial Management with Shared Services
- Run the Financial Management Configuration Utility. See "Using the Financial Management Configuration Utility" on page 44.
- If you are using Performance Management Architect, configure the Financial Management Product Instance. See Chapter 6, "Configuring and Setting Up Performance Management Architect".

Registering with Shared Services

By default, the user you specify during registration is pre-provisioned as `admin`. This enables you to log on toShared Services after configuration using `admin/password`, to create and provision users.

➤ To register Financial Management with Shared Services:

1 Specify Shared Services server information:

Table 5   Shared Services Registration

Field	Description
Server Name	The name of the computer where the Shared Services server is installed. **Caution!** Do not specify an IP address, especially in DHCP environments, or enter restricted characters.
Port	The default or custom Shared Services server port number.
User	The username of the Shared Services Administrator.
Password	the password of the Shared Services Administrator.
SSL	Select to use Secure Sockets Layer for encryption. See the *Hyperion Product SSL Configuration Guide*.

2 Click **Next**.

Using the Financial Management Configuration Utility

The Financial Management Configuration task launches the Financial Management Configuration Utility. The Financial Management Configuration Utility is a wizard that enables you to enter server security information and create database links when you run it on the application server, register servers and create virtual Web directories when you run it on the Web server, set up links to related content, and configure Smart View for Office.

The tabs that display in the configuration utility depend on the components that you are configuring. For example, the Application Server and Application Server Cluster tabs pertain to an Application Server installation. The Server/Cluster Registration tab pertains to the Client installation. The Web Server, Related Content, and Smart View Provider tabs pertain to a Web Server installation.

The Financial Management Configuration Utility, `HFMConfigure.exe`, is installed in the following default directory when you install Financial Management:

> C:*HYPERION_HOME.*\FinancialManagement\Client.

➤ To use the Financial Management configuration utility:

1 Use one of these methods to start the configuration utility:

   ● Launch it from the Hyperion Configuration Utility.

   ● Select **Start** > **Programs** > **Hyperion** > **Financial Management** > **Server and Web Configuration**.

2 Enter information on each tab and click **Apply** to save your changes before moving to the next tab.

   Note: If you click Cancel and move to another tab before applying changes, the system prompts you with a message that changes have not been applied. You can click Yes to save the changes, or No to exit the utility without saving changes.

3 When you finish entering information for each tab, click **OK** to save your changes and close the utility.

Configuring Application Servers

You use the Financial Management Configuration Utility to configure application servers.

Setting DCOM User Information

The configuration utility enables you to configure Distributed Component Object Model (DCOM) security.

Note: You must run the configuration utility as a Domain or Local Administrator to configure the DCOM user.

The Financial Management application server is built using DCOM technology. DCOM enables network-based component interaction and enables process sharing across a network.

All Financial Management application server processes are run under an administrator identity (the specified Windows admin user), so no other administrator is required to log on the application server to start the application server processes.

You must specify the Windows administrator under whose identity the application server processes are launched.

After you enter the Windows administrator information, the system performs these steps:

- Creates the Windows admin user (DCOM user) if the user does not exist. The user must be part of the server domain to access Financial Management tasks and application elements.

- Adds the user to the local Administrators group

  Note: The Financial Management administrator user or group must be a member of the local Administrators group on each application server.

- Assigns these local security policies to the admin user: "Act as part of the operating system" and "Log on as a batch job" . These local security rights must be enabled for users on each Financial Management application server.

- Sets the "DCOM Run as" identity for all Financial Management application processes

- Sets DCOM Launch permissions for users

➤ To specify the DCOM user information:

1   From the Financial Management Configuration Utility, select the **Application Server** tab.

2   For **DCOM User Info**, enter the domain and username.

   If a username is not specified, security settings are retained from the previous configuration (if applicable).

   Note these limitations for the domain and username:

   - A username cannot duplicate any other user or group name of the computer being administered. A username can contain up to 20 uppercase and lowercase letters. A username cannot consist solely of periods (.) and spaces and cannot contain these special characters: " ' / \ [ ] : ; | = , + * ? < > &

   - Do not use a single quotation mark (') in a username. A user with a single quotation mark in the username cannot log on to Financial Management.

   - You cannot use an IP address as a domain name when you configure the user account.

3   Enter the user password.

   Note: The password can contain up to 14 characters. The system does not verify the password, so ensure that the password that you use is valid.

4   Re-enter the password.

   The **Password** and **Confirm Password** boxes are case-sensitive.

   Note: If the entries that you make require changing the local security policy on the system, you must log off and log on again to commit the changes.

Specifying Application Security Groups

You must specify the Financial Management Application Creator Group and Administrator Group. Only the users in the Application Creator Group can create Financial Management

applications. Only the users in the Administrator Group can access administrative tasks. The Administrator Group must be a group that has already been defined in Shared Services.

If you do not specify the Administrator Group, the DCOM user will have access to system administrative tasks.

Note: If you are using Financial Management or Performance Management Architect on the Web, you need additional security roles. See "Performance Management Architect" on page 10.

➤ To specify the Application Creator Group and Administrator Group:

1 Ensure that the Shared Services server is started.

2 From the Financial Management Configuration Utility, select the **Application Server** tab.

3 In the **Application Security** section, enter the **Creator Group** name, or leave the default setting of Everyone, and in the **Administrator Group** box, enter the Administrator Group name.

Setting the Working Folder and Database Link

You must specify the Financial Management Application Server Working folder, the database link file, and the number of pooled database connections.

If you choose, you can also specify the database tablespaces in which data tables and indexes are created.

➤ To specify the folder and database link information:

1 From the Financial Management Configuration Utility, select the **Application Server** tab.

2 In the **Working Folder and Database Link** section, enter or browse to the path for the Server Working Folder.

The Server Working folder stores system-generated files, such as reports. The default Server Working Folder location is: `<drive>:\Hyperion\FinancialManagement\Server Working Folder`.

Note: When you use multiple application servers, each server should have its own working folder. Application servers should not share working folders as temporary files might be overwritten.

3 Enter or browse to the database link (UDL) file name that you created when you set up the database.

If you do not have a UDL file, you must create one. For instructions, see "Creating Data Link (UDL) Files " on page 21.

A database link (UDL) provides a connection between an application server and a database server. It specifies the database server name and other database-related information, such as the username and password of a user with full access rights to the database server. You must create a UDL file for each application server to access applications.

4 **Optional:** To specify the database tablespaces in which the Financial Management data tables and indexes are created, click next to **Data Tablespace** or **Index Tablespace**; select the location for the data tables, the indexes, or both, and click **OK**.

If you do not specify a tablespace, the default tablespace is used.

Note: For IBM DB2 Database Managed Space (DMS), or for SQL and Oracle databases, you can specify a tablespace for the data table and a tablespace for the index. For IBM DB2 System Managed Space (SMS), you can specify only a data tablespace, which is used for both the data table and the index. You cannot specify a separate tablespace for the index.

5 **Enter the number of maximum pooled relational database connections for the application, or use the default setting of 40.**

See "Database Connection Pooling" on page 24

Note: Financial Management requires approximately 25 relational database connections per application in addition to the number that you specify in the Relational Database Support dialog box.

Enabling Multiple Server Support

If you use multiple application servers, you can set them up in clusters so that they are synchronized to communicate with each other. A cluster is a group of one or more application servers. To use application server clusters, you must enable Multiple Server support.

If you do not want to enable Multiple Server support, you can skip this topic.

You can control the amount of time between when users make changes to data or to an application and when the changes are visible to users who are accessing the data or application from another application server.

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

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

To enable access to an application from multiple application servers, all application servers must have this setup:

- Multi-server support enabled.
- Access to the same data link (UDL file).

- Access to the same data link (UDL file) for Extended Analytics. See "Specifying DSN Information for Extended Analytics (Optional)" on page 49.

➤ To enable multiple server support:

1 From the Financial Management Configuration Utility, select the **Application Server** tab.

2 In the **Multi Server Support** section, select **Enable Multi Server Support**.

3 For **Maximum Application Server Delay (Seconds)**, enter the time interval between when a change is made to an application and when the change is visible to users accessing the application through another application server.

4 For **Maximum Data Synchronization Delay (Seconds)**, enter the time interval between when a change is made to data and when the change is visible to users accessing the data through another application server.

Tip: If these text boxes are grayed out, deselect and then reselect them to adjust the settings.

Specifying DSN Information for Extended Analytics (Optional)

The Extended Analytics feature enables you to use Hyperion System 9 BI+™ Oracle's Hyperion® Essbase® – System 9™ to analyze data and produce reports. You use a data source name (DSN) to specify the relational database destination for Extended Analytics. You must specify the data source name and path. You can add, remove, or modify data source names as needed.

If you do not want to specify Data Source Name (DSN) information for Extended Analytics, you can skip this topic. You must click Apply before moving to the next tab.

You should not use the relational database and UDL file for Extended Analytics that you use for your Financial Management applications. You should create a database for the exported star schema and data, and a UDL file that points to the database.

Note: When you use multiple servers with the Extended Analytics feature, you must enable multiple server support on each application server, and you must set up each application server so that these elements are the same on all servers: Clock setting, Data source, and UDL file.

For information on using Extended Analytics, see the *Hyperion Financial Management — System 9 Administrator's Guide*.

➤ To add a data source name:

1 From the Financial Management Configuration Utility, select the **Application Server** tab.

2 In the **DSN Info** section, click **Add DSN**.

3 For **DSN Name**, enter the data source name.

4 For **DSN Path**, enter or browse for the data source path.

5   **Optional:** To specify the database tablespaces in which the Financial Management data tables and indexes are created:

    a.   Click (next to the **Data Tablespace** field), and select the data table location.

    b.   Click **OK.**

    c.   Click (next to the **Index Tablespace** field), and select the index location.

        Note: For Oracle and IBM DB2 SMS, you can specify only a data tablespace; index tablespaces are not used.

    d.   Click **OK.**

6   Click **OK.**

➤   To modify a data source name:

1   Select **Application Server.**

2   In the **DSN Info** section, select the DSN.

3   Click **Modify** and change the name.

➤   To remove a data source name:

1   Select **Application Server.**

2   In the **DSN Info** section, select the DSN.

3   Click **Remove DSN.**

4   Click **Apply** .

Configuring Application Server Clusters

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

Note: To use application server clusters, you must enable multiple server support.

➤   To set up application server clusters:

1   From the Financial Management Configuration Utility, select the **Application Server Clusters** tab.

2   For **Cluster Name**, enter an application server cluster name.

    ●   To add a cluster or server, click **Add**, enter the name, and click **OK.**

    ●   To remove a cluster or server, select the name, and click **Remove.**

3   Specify the names of the application servers that participate in the cluster:

    ●   To add servers to a cluster, click **Add Server**, enter the server name, and click **OK.**

● To remove servers from a cluster, select the server name, and click **Remove Server**.

Enabling Remote Activation (DCOM Limits for 2003 and XP)

If you use Windows 2003 Service Pack 1 or Windows XP Service Pack 2, you might experience problems starting Financial Management remotely as an Anonymous User. If you are using these, the button will be active if the settings are not correct to run Financial Management.

Note: If you use Windows 2000, this button is not displayed.

Hyperion recommends that if the button is active for your computer, you should click it to enable the Financial Management Server to be started remotely.

➤ To enable remote activation for Windows 2003 SP1 or Windows XP SP2:

1 From the Financial Management Configuration Utility, select the **Application Server Clusters** tab.

2 From **DCOM Limits**, click **Configure Limits**.

3 Click **Apply** to apply the changes.

The system displays a message that limits have been enabled.

Completing Server/Cluster Registration

You must register your server or cluster before you can access applications.

If you register one of the servers in a cluster, the system registers all of the servers in that cluster. For example, you create an application server cluster named Marketing_Servers with application servers Mkt1, Mkt2, Mkt3, and Mkt4. You can enter Mkt1 as the server to be registered, and the system registers all of the servers in that cluster.

If you run the configuration utility from an admin account, the configuration utility creates the `HKeyLocalMachine/Software/Hyperion Solutions` registry key so that you can register server clusters. If you are not running the configuration utility from an admin account, you might encounter problems when registering servers. In this case, in the registry, you should manually assign Read/Write access rights to `HKeyLocalMachine/Software` for the user who is registering the servers.

When you specify an individual server name from the servers in the cluster, the entire cluster is registered. If there is only one application server in the server cluster, you must enter the server name.

➤ To register an application server cluster:

1 From the Financial Management Configuration Utility, select the **Server/Cluster Registration** tab.

2 Enter the server name that you are registering.

The application server name is used to obtain application server cluster information.

3 Select one of these options:

- **Use Automatic Load Balancing** - to register the server cluster that was created in the Application Server Clusters tab.

- **Use One Server Only** - to specify that only one server be used instead of a cluster

4 Click **Add**.

Tip: If you need to unregister a server or cluster, select it from the list and click **Remove**.

Enabling DCOM

From the Financial Management Configuration Utility, you can enable DCOM for the entire computer. Enabling DCOM makes possible the launching of servers and connecting to objects by remote clients for the machine. It also sets the DCOM Default Authentication level to None for the computer. The Enable DCOM step is required for Financial Management client components to communicate with Financial Management application server components when the application server is on a different computer. It also makes it possible for the Financial Management client and application server computers to be on different domains.

➤ To enable DCOM:

1 From the Financial Management Configuration Utility, select the **Server and Cluster Registration** tab.

2 Click **Enable DCOM**.

Note: This button is grayed out if previously configured.

3 Click **Apply.**

Configuring Web Servers

You use the Financial Management Configuration Utility to configure Web servers.

You must register an application server on the Web server machine for users to be able to connect to the application server through the Web. See "Completing Server/Cluster Registration" on page 51.

Specifying Web Directories

You must create a virtual directory on the Financial Management Web server for the Financial Management Web components to be accessible to Web users. You specify the Web installation directory and the directory URL.

➤ To create Web directories:

1 From the Financial Management Configuration Utility, select the **Web Server** tab.

2 For **Web Server Installation Directory**, enter or browse to the path for the Financial Management Web installation directory.

> **Note:** The default location is the directory in which the Web components were installed, for example: `C:\Hyperion\FinancialManagement\Web\HFM`.

3 For **Virtual Directory**, enter the virtual directory name, for example: `HFM`.

Specifying the File Transfer Directory

You must create a file transfer directory for load and extract log files and temporary files. When you specify the file transfer directory, the system performs these steps:

● Creates the file transfer directory, if it does not exist

● Assigns the IIS users Windows permissions of Read, Write, and Execute

➤ To specify the File Transfer Directory, browse to the path for the folder for the load, extract, and log files, or use the default location; for example: `C:\Hyperion\FinancialManagement\Web\HFM\FileTransfer`

> **Note:** The File Transfer directory should be located outside of the virtual directory. If it is located under the virtual directory, you should set No Execute rights on the File Transfer directory.

Setting Upload File Size and Buffer Size

If you use IIS 6.0, you can use the Financial Management Configuration Utility to set the ASP file size properties for loading and extracting files on the Web. Hyperion recommends that you use the default file size properties unless you experience problems during loading and extracting. However, if you load or extract huge files and send large amounts of data to the browser and experience errors, you can change the file size settings.

For example, if you load large files, you might receive a 403 error message if the maximum upload file size is set too low. In this case, you must increase the maximum file size. You enter the file size in bytes, so if you expect to load files of 200 megabytes, you change the setting for maximum upload file size to 200,000,000 bytes.

➤ To set the ASP upload file size and buffer size:

1 From the **Web Server** tab, in the **Max Upload File Size** box, enter a maximum size for loading Web files.

2 For **Response Buffer Size**, enter a maximum size for extracting Web files.

If you run IIS 5.0 Isolation mode in IIS 6.0 on Windows 2003, after you create Web directories and set ASP properties, you must manually set two additional IIS properties for the application protection and authentication level.

Specifying the Alert SMTP Server

You can use e-mail alerts for intercompany transactions, intercompany matching reports, and during the process control review process to highlight key events or data changes in the system. E-mail alerts are sent using standard Simple Mail Transfer Protocol (SMTP) protocol. To enable e-mail alerts, you must specify the SMTP server name. For information on using alerts, see the *Hyperion Financial Management — System 9 User's Guide*.

➤ To specify the Alert SMTP server:

1 From the Financial Management Configuration Utility, select the **Web Server** tab.

2 For **Alert SMTP Server**, enter the SMTP server name.

Specifying Links for Other Hyperion Applications

Note: If you do not want to access other Hyperion applications, you can skip this topic. Before moving to the next tab or closing the utility, click Apply.

You can launch other Hyperion products from Financial Management and access other Hyperion applications without having to supply login information. You must specify the URL for each application that you want to access.

➤ To specify URLs for other Hyperion applications:

1 From the Financial Management Configuration Utility, select the **Web Server** tab.

2 In the **Application Links** section, enter the URL for the Hyperion application that you want to access.

   The URL is case-sensitive.

   The Shared Services URL is the URL for the Web Server link (not your application server).

   To drill through from Web data grids to FDM, use this URL:

   ```
   http://<machine-name>/HyperionFDM/AuthorizedPages/
   IntersectionSummaryByLocation.aspx
   ```

   For information on Oracle's Hyperion® Financial Data Quality Management drill through, see the *Hyperion Financial Management — System 9 User's Guide*.

Setting Web Server DCOM User Information

If you are installing only the Web Server components, you must specify the DCOM user information on the Web Server tab.

➤ To set DCOM user information:

1 From the Financial Management Configuration Utility, select the **Web Server** tab.

2 Enter the Domain, username, and user password, and confirm the password.

Note: The **Password** and **Confirm Password** boxes are case-sensitive.

3 Click **Apply.**

Configuring Related Content

You can link from Financial Management to related content in other applications, such as Financial Reporting and Web Analysis. The Related Content feature enables you to include reports, views, and folders from other applications directly within Financial Management on the Web.

➤ To link to related content in another application:

1 From the Financial Management Configuration Utility, select the **Related Content** tab.

2 Enter the URL to the related content resource server.

Note: The Workspace URL is `http://<workspace_server>:19000/workspace/browse/listXML`. To obtain the URL for other products, see that product's documentation.

3 Click **Add** to add the URL to your URL list or **Remove** to remove a URL.

Note: After adding or removing a URL, you must close and reopen the Resource Server dialog box to see your changes.

4 Click **Apply.**

Configuring the Smart View Provider

The Smart View component enables you to use Smart View and is supplied as part of the Financial Management installation. If you did not select the Smart View component when you ran the installation, you can rerun the installation process and install it.

➤ To configure Smart View:

1 From the Financial Management Configuration Utility, select the **Smart View Provider** tab.

2 For **Web Session Timeout**, enter the Web session timeout value in minutes.

Note: The default session timeout is 20 minutes. You should set the timeout option to a length of time appropriate for your Smart View sessions.

3 In the **Installation Folder** box, enter the location in which the SmartView component was installed or use the default location.

Note: The default location is `C:\Hyperion\FinancialManagement\Web\HFMOfficeProvider`.

4   For **Virtual Directory Name**, enter the virtual directory name for Smart View or use the default virtual directory.

The default directory name is `HFMOfficeProvider`.

5   **Optional:** For **Deployment**, select an option:

- **Always force client to upgrade** to upgrade to the latest add-in version to ensure that the client and server versions are compatible

- **Always warn when client version is newer** to warn of a newer add-in version

6   **Optional:** For **Proxy Server Timeout**, if you use a proxy server between the Web server and client, select **Enable connection keep alive**, and set a time interval in seconds for the connection.

7   Click **OK** to save the changes and close the Financial Management Configuration Utility.

Product Instance Configuration

If you are using Performance Management Architect, you must complete additional configuration tasks, including Product Instance Configuration. See the procedures in Chapter 6, "Configuring and Setting Up Performance Management Architect".

If you are not using Performance Management Architect, skip this task.

Reconfiguring Products

Hyperion Configuration Utility enables you to reconfigure products to incorporate changes in your environment such as a different application server.

To reconfigure, launch Hyperion Configuration Utility on the computer hosting the product, and follow the procedures in this chapter.

Note: If you reconfigure a database, restart the application server afterward.

Completing Hyperion Configuration Utility

Configuration time depends on the products and tasks you selected. Progress is recorded in `configtool.log` as follows:

When configuration finishes, the status of each task is displayed.

If configuration is successful, perform any required post-configuration tasks and start the product.

If errors display, perform these tasks:

- Configure products individually and perform tasks separately.

- See the *Hyperion Installation and Configuration Troubleshooting Guide* for information about resolving configuration issues.

<table>
<tr><td>**6**</td><td># Configuring and Setting Up Performance Management Architect</td></tr>
</table>

In This Chapter

Follow this sequence to configure Performance Management Architect for the first time.

Note: Before starting the configuration process, ensure that you have installed the application server that you plan to use for Performance Management Architect Web server and Data Synchronization server.

If you are using Classic Application Administration, skip this chapter.

Task Sequence for Performance Management Architect

These are the tasks required to configure Performance Management Architect:

● Register with Shared Services

● Deploy to an Application Server

● Configure Database

● Interface Datasource Configuration (Optional). Interface tables are database tables used to import data and metadata from external systems into Performance Management Architect. To understand use of the Interface Datasource Configuration option in the Hyperion Configuration Utility, see the *Hyperion Enterprise Performance Management Architect Administrator's Guide.* This option is not required to install Performance Management Architect and can be done at a later time.

All input for Shared Services registration, database configuration, and application server deployment is gathered by Hyperion Configuration Utility and configuration for these tasks occurs once at the end.

Registering with Shared Services

➤ To register with Shared Services:

1 **Specify Shared Services server information:**

By default, the user you specify during registration is pre-provisioned as `admin`. This enables you to log on to Shared Services after configuration using `admin/password`, to create and provision users.

Table 6 Shared Services Registration

Field	Description
Server Name	The name of the computer where the Shared Services server is installed. **Caution!** Do not specify an IP address, especially in DHCP environments, or enter restricted characters.
Port	The default or custom Shared Services server port number.
User	The username of the Shared Services Administrator.
Password	the password of the Shared Services Administrator.
SSL	Select to use Secure Sockets Layer for encryption. See the *Hyperion Product SSL Configuration Guide*.

2 **Click Next.**

Configuring the Database

The Performance Management Architect database is used for the Dimension server. When you configure Hyperion products to use a database, Hyperion Configuration Utility ensures that the database is connected and is a supported database type.

For simplicity, Hyperion recommends that you use the same, or the default, database name (`hypdb`), username (`hypuser`), and password for all products that you install.

If you changed a database-owner password in your relational database, you must change it in the Hyperion Configuration Utility. See ???.

If you change the Shared Services administrator password, you must rerun the Configure Database task. If you do not, the Process Manager service will fail to start.

You can use Windows Authentication for SQL Server connections if you use Microsoft SQL Server database. See "Microsoft SQL Server Windows Authentication" on page 59.

➤ To configure the Performance Management Architect database:

1 From the list of supported databases, select the database and click **Next**.

> **Note:** Oracle 10g can be selected for a 10.1.0.5 or a 10.2.0.2 database.

> **Note:** If you are using a DB2 database for Performance Management Architect, DB2.NET Data Provider is required. See "Creating IBM DB2 Databases" on page 17.

2 Specify database information:

Table 7 Database Configuration

Field	Description
Server	Name of the computer or server hosting the database.
Port	Server port number on which the database listens.
Product	Name of each product and its installation location.
Database or SID (Oracle only)	Database name or the Oracle system identification (database instance). Do not use restricted characters.
Username	The name of the database owner.
Password	The password of the database owner. **Note:** If this changes, reconfigure as described in the *Hyperion Installation Start Here*.
Data Tablespace (Oracle)	Name of an existing tablespace used to create tables. The data tablespace is the logical portion of the database used to allocate storage for table data.
Index Tablespace (Oracle)	Name of an existing tablespace used to create database indexes. The index tablespace is the logical portion of the database used to allocate storage for index data.

3 Click **Next** after viewing configuration status.

4 Click **Next**.

Microsoft SQL Server Windows Authentication

➤ To set up Windows authentication for a SQL Server connection:

1 Set up SQL Server with your NT login user:

2 Ensure that your NT domain user is assigned to the SQL Server database (for example, hub).

3 Grant the NT domain user full access permissions to the database.

4 From the configuration task list, select **Configure Database**.

5 From the database list, select **SQL Server**.

6 Specify all database information except for **Username** and **Password**.

Deploying Performance Management Architect to an Application Server

Performance Management Architect application server deployment involves two components: the Performance Management Architect server (BPMWebTier) and the Data Synchronization server (BPMDataSynchronizer).

Deploying to the Application Server

You can deploy multiple products to one application server, in a single profile (WebSphere) or domain (WebLogic 9.1.x). The application server must be installed on the same computer as the products.

For simplicity, Hyperion recommends that you use the same application server, and domain or profile.

➤ To deploy Performance Management Architect to an application server:

1 Select the application server that you are using and select Automatic as the deployment type, and click **Next**.

   Note:

   For manual deployment, see Appendix B, "Manually Deploying Performance Management Architect to an Application Server".

2 In the **Application Server** dialog box, specify application server information:

Table 8   Deployment

Field	Description
Location	Path to the application server installation directory: ● WebSphere Base: ● WebSphere Express: ● WebLogic 8.1.x: ● WebLogic 9.1.x:
Deploy as a service	Selected by default to register the web application as a Windows service listed in Windows Control Panel. See "Startup Dependencies" in the *Hyperion Installation Start Here*.
Profile (WebSphere)	Name of the profile where you access the application. By default, all applications deploy to the same profile. To change the profile name, see ???.
Domain (WebLogic)	Default name of the domain where you access the application. For WebLogic 9.1.x, all applications deploy to the same domain. To change the domain name, see ???.

Field	Description
BEA Home (WebLogic)	Path to the BEA Home directory (e.g.,)
Username and Password (WebLogic)	WebLogic administrator username and password used to log on. **Note:** If such a user doesn't exist, the information you enter creates a user.
Component	Products being deployed. Some products display as components.
Server Name	Name of the server where you will access the product.
Port	To change the default port, enter a unique port number that does not exceed 1025 to avoid conflicts with third-party port assignments. See "Ports" in the *Hyperion Installation Start Here*.

3   Click **Next**.

If you installed the Performance Management Architect Web Server component during installation, continue with the next steps. These steps prompt you to specify the location of the Performance Management Architect Dimension Server and Data Synchronization server to enable communication with the Web server.

4   Accept the defaults for Dimension server details, or make a change if necessary (for example, if IIS is on a port other than 80 or the server is on a different machine), and click **Next.**

Note: Hyperion recommends that you accept the default connection details.

Table 9   Dimension Server Fields

Field	Instruction
Server Name	Enter a server name.
Port	Enter the port for the server.
SSL	Select if you are using Secure Sockets Layer (SSL).
Maximum connections	Enter the maximum number of simultaneous connections to the server.
Maximum idle connections	Enter the maximum number of idle connections in the pool. If the number of idle connections exceed this limit, the connection is closed.
Maximum wait time	Enter the connection timeout in milliseconds for idle connections. If a connection is idle for longer than the specified time, the connection is closed.

5   Accept the defaults for the Data Synchronization server details, or make changes if necessary, and click **Next.**

Note: Hyperion recommends that you accept the default connection details.

Table 10 Data Synchronization Server Fields

Field	Instruction
Server Name	Enter a server name.
Port	Enter the port for the server.
SSL	Select if you are using Secure Sockets Layer (SSL).
Maximum connections	Enter the maximum number of simultaneous connections to the server.
Maximum idle connections	Enter the maximum number of idle connections in the pool. If the number of idle connections exceed this limit, the connection is closed.
Maximum wait time	Enter the connection timeout in milliseconds for idle connections. If a connection is idle for longer than the specified time, the connection is closed.

6   For Performance Management Architect Web Server details, if you are using Secure Sockets Layer (SSL), change the port number to your SSL port number, select **SSL**, and click **Next**.

What Happens During Deployment

WebSphere and WebLogic 9.1.*x*

Hyperion Configuration Utility deploys each application to the same WebSphere profile or WebLogic domain. The profile or domain is created when the first application is deployed. Each application runs in a separate JVM.

Hyperion Configuration Utility deploys the application to:

Under this directory, the `bin` directory contains start and stop scripts for all deployed applications. For each application, there is also a `setCustomParams<`*Product*`>.bat` file or a shell script where JAVA_OPTIONS can be changed when starting using start scripts.

To change the default profile or domain directory, modify the deployment directory parameter in the `weblogic.properties` or `websphere.properties` in:

Note: It is not recommended to change other parameters in this file.

WebLogic 8.1.*x*

Deploying to a single domain for WebLogic 8.1.*x* is not supported. For WebLogic 8.1.*x*, Hyperion Configuration Utility deploys the application to:

Configuring Interface Datasources (Optional)

Interface tables are database tables used to import data and metadata from external systems into Performance Management Architect. To understand use of the Interface Datasource Configuration option in the Hyperion Configuration Utility, see the *Hyperion Enterprise*

Performance Management Architect Administrator's Guide. This option is not required to install Performance Management Architect and can be done at a later time.

Financial Management Product Instance Configuration

To complete the configuration of Financial Management and Performance Management Architect, you must perform the Product Instance Configuration task.

This task creates the Financial Management instance that is needed for deploying applications in Performance Management Architect. A Financial Management instance specifies the environment that you are using for deploying applications in Performance Management Architect. An instance is composed of a Web server with the application servers or clusters registered to it that communicate to one database. For example, a Consolidation instance could be composed of the Web server and the application servers or clusters used for consolidation that all communicate to one database.

You must run this task from the Web server.

Creating an Instance

Use this procedure to create an instance. After you create the instance, it must be registered with Shared Services.

Note: You create an instance from the Configuration Utility on the Web server. By default, the system displays the name of the Web server from which you are running the Configuration Utility.

➤ To enter the instance information:

1 From the list of products to configure, select **Financial Management.**

2 From the list of tasks, select **Financial Management Product Instance Configuration** and click **Next.**

3 Complete this information:

Table 11   Financial Management Instance Fields

Field	Instruction
Instance Name	Enter a name for the instance.
Web Server Host	This must be a local machine name. By default, this displays the name of the Financial Management Web server from which you are running the Hyperion Configuration Utility. You can use the default value, or if you use SSL, you must enter a fully qualified domain name.
Virtual Directory Name	Specify the name of the virtual directory that you created in IIS when you installed Financial Management, or use the default name of HFM.
Port	Specify the port for the Web server, or use the default setting of 80.
SSL	Select if you are using Secure Sockets Layer (SSL).

Field	Instruction
Select which clusters and servers you want in this instance	Select a cluster or server. This list is automatically populated with the names of the servers and clusters associated with this instance.

4   At the prompt to return to the product selection panel, click **No** and click **Next.**

5   Click **Finish.**

Editing an Instance

If you have created an instance and deployed applications from Performance Management Architect, if you change your server or cluster information, you must edit the instance. For example, if you add or remove a server from a cluster, add or remove a cluster, or change a cluster name, you must edit the instance information to be able to access the deployed applications.

➤ To edit an instance:

1   From the Web server, re-run the Hyperion Configuration Utility and select **HFM Performance Management Architect Configuration**.

2   Select the instance and edit the instance information as needed.

3   Click **Next** to continue with the configuration utility.

4   Log in to Performance Management Architect and from the Application Library, right-click on each application for which the instance changed, and select **Reregister.**

5   Restart Workspace and Reporting and Analysis services.

> **Note:**   You will not see the applications for which you changed the instance until you restart.

7

Post-Configuration Tasks

Installing and Configuring Workspace

Before you can use Financial Management or Performance Management Architect, you must install and configure Workspace, which is part of Oracle's Hyperion® Reporting and Analysis – System 9 installation. You must install the Workspace Services and UI Services components. An important part of configuring Workspace is to enable the Web Server Plug-in. See the *Hyperion Reporting and Analysis — System 9 Installation Guide*.

After you complete Workspace configuration, you must grant security rights using the Shared Services User Management Console.

Installing Financial Reporting

When you install Workspace, you can install Financial Reporting. See the *Hyperion Reporting and Analysis — System 9 Installation Guide*.

If you use Financial Management with Financial Reporting, you must install the Analytic Data Model (ADM) driver components. If you did not previously install ADM, you can install it by running the Financial Management installation and selecting only the ADM components.

If you use Financial Management and Financial Reporting on different domains, you must set the DCOM authentication on the Financial Management client computer to None to ensure communication between them. See ???

Note: Financial Reporting can use Apache Web server for the Web server; however, Apache and Microsoft IIS use the same port. If you run Financial Management and Financial Reporting on the same computer, you must use IIS as the Web server.

Configuring Settings for IIS 5.0 Isolation Mode (Optional)

Before you install Financial Management, you install and configure IIS. However, if you run IIS 5.0 Isolation mode in IIS 6.0 on Windows 2003, after you run the configuration utility and create your Web directories, you must manually set two additional IIS properties for the Application Protection and Authentication Level.

➤ To set the properties for IIS 5.0 Isolation mode:

1   Select **Start > Programs > Administrative Tools > Internet Services Manager.**

2   Expand **Internet Information Services** and its subdirectories, and right-click the virtual directory for Financial Management, for example, HFM and select **Properties**.

3   On the **Virtual Directory** tab, from the list for Application Protection, change the setting to **High (Isolated).**

4   Close Internet Services Manager.

5   Select **Start > Programs > Administrative Tools > Component Services.**

6   Expand the folders, and select **COM+ Applications.**

7   Select the Financial ManagementWeb site, for example, IIS (Default Web Site//Root/HFM).

8   Right-click the Web site and select **Properties.**

9   On the **Security** tab, from the list in the**Authentication Level for Calls**, change the setting to **None.**

Completing Shared Services Tasks

After you configure Financial Management and Performance Management Architect, you must grant other users security rights and complete additional tasks using the User Management Console. See the *Hyperion Security Administration Guide*.

1.   Create a project using the User Management Console.

2.   Assign roles for Shared Services user management.

3.   Assign global roles of Application Creator and Dimension Editor to use Performance Management Architect or Classic Application Administration.

Verifying Performance Management Architect Installation

Note: If you are using Classic Application Administration, skip this section.

➤ To verify that you can log on to Performance Management Architect:

1 Ensure that Shared Services and Workspace are running.

2 Ensure that IIS is running.

3 Start the Dimension server by doing one of the following:

- From the Services panel, start **Hyperion BPM Architect Process Manager**.

  Note: Starting the Process Manager service automatically starts these services: Hyperion System 9 BPM Architect Engine Manager, Hyperion System 9 BPM Architect Event Manager, and Hyperion System 9 BPM Architect Job Manager.

- Select **Start** > **Programs** > **Hyperion** > **BPM Architect** > **Start Hyperion S9 Dimension Server**.

  Note: If you have difficulty starting the Dimension server, you might need to change the timeout setting. See "Starting and Stopping Performance Management Architect Dimension Server " on page 68.

4 Start the Performance Management Architect application server by doing one of these tasks:

- From the Services panel, start **Hyperion S9 BPMA Web ATS5** (for Tomcat); **Hyperion S9 BPMA Web WLS<version>** (for WebLogic); or **Hyperion S9 BPMA Web WAS<version>** (for WebSphere) .

- Select **Start** > **Programs** > **Hyperion** > **BPM Architect** > **Start Server BPM Architect**.

5 Open your Web browser and access Performance Management Architect through Workspace (`http://<Web Server>:<port>/workspace/`) where **<**`Web Server`**>** is the Web server machine hostname and **<**`port`**>** is the Web server listen port; for example, 19000 if using the Apache instance bundled with BI+.

6 Enter your system user name and password and click `Log On`.

  Note: If you have difficulty accessing Performance Management Architect, see "Performance Management Architect Access Issues" on page 97 in the Troubleshooting section.

7 In Workspace, select **Navigate > Administer > Dimension Library**.

8 Verify that you can log on to Financial Management.

9 Follow the procedures in the *Hyperion Enterprise Performance Management Architect Administrator's Guide* to import dimensions and create an application view.

Starting and Stopping Performance Management Architect Dimension Server

You can start and stop the Performance Management Architect Dimension server from the Start menu or through the Services panel.

➤ To start or stop the Dimension server:

Do one of these tasks:

- Select **Start** > **Programs** > **Hyperion BPM Architect** > **Start (Stop) Hyperion S9 Dimension Server**.
- From the Services panel, start **Hyperion System 9 BPM Architect Process Manager**.

If you experience a problem with starting up the service for the Dimension server (Process Manager), you can change the timeout setting. The default timeout setting for startup of the Dimension server is 180 seconds.

➤ To increase the timeout setting for startup of Dimension Server:

1. Open the `BPMA_Server_Config.xml` file. This file is located in `%HYPERION_HOME%\BPMA`
   `\AppServer\DimensionServer\ServerEngine\bin`.

2. Search for `DimensionServerStartupTimeout` under `Config > ProcessManager` and change the value of the timeout (in seconds).

Starting and Stopping Performance Management Architect Application Server

You can start and stop the Performance Management Architect application server using the Services panel, the Start menu, or a command. The location of the command depends on which Java application server you are using.

➤ To start or stop the Performance Management Architect application server:

Do one of these tasks:

- From the Services panel, start **Hyperion S9 BPMA Web ATS5 (for Tomcat); Hyperion S9 BPMA Web WLS<version> (for WebLogic); or Hyperion S9 BPMA Web WAS<version> (for WebSphere)**.
- Select **Start** > **Programs** > **Hyperion** > **BPM Architect** > **Start (Stop) Server BPM Architect**.
- On the computer hosting your Java application server, locate the start or stop server command.

Table 12   Location Example for StartBPMAWebServer and StopBPMAWeb Server Commands

If you are using:	Go to the following directory (for example)	Execute This Command
Tomcat	`<drive>:\Hyperion\ BPMA\AppServer \InstalledApps\Tomcat\5.0. 28\BPMAWebServer`	Double-click `startBPMAWebServer.bat` or `stopBPMAWebServer.bat`
WebLogic	`<drive>:\Hyperion\ BPMA\AppServer \InstalledApps\WebLogic\<version> \BPMAWebServer\bin`	Double-click `startBPMAWebTier.cmd` or `stopBPMAWebTier.cmd`
WebSphere	`<drive>:\hyperion\ BPMA\AppServer \InstalledApps\Websphere\<version> \BPMAWebServer\bin`	Double-click `startBPMAWebServer.bat` or `stopBPMAWebServer.bat`

Starting and Stopping Performance Management Architect Data Synchronizer Server

The Data Synchronizer server must be started to use data movement capabilities of Performance Management Architect. However, it is not needed to verify the installation, or log into Workspace. See the *Hyperion Enterprise Performance Management Architect Administrator's Guide* for more information about using the Data Synchronization features.

You can start and stop the Data Synchronizer server from the Services panel, the Start menu, or by using a command. The location of the command depends on which Java application server you are using.

➤ To start or stop the Data Synchronizer server:

Do one of the following:

- From the Services panel, start **Hyperion S9 BPMA DataSync ATS5 (for Tomcat); Hyperion S9 BPMA DataSync WLS<version> (for WebLogic); or Hyperion S9 BPMA DataSync WAS<version> (for WebSphere).**

- Select **Start** > **Programs** > **Hyperion BPM Architect** > **Start (Stop) Server BPMA Data Synchronizer.**

- On the computer hosting your Java application server, locate the start or stop server command.

Table 13   Location Example for StartBPMAWebServer and StopBPMAWeb Server Commands

If you are using:	Go to the following directory (for example)	Execute This Command
Tomcat	`<drive>:\Hyperion\ BPMA\AppServer \InstalledApps\Tomcat\5.0. 28\BPMADataSync`	Double-click `startBPMADataSynchronizer.bat` or `stopBPMADataSynchronizer.bat`
WebLogic	`<drive:\Hyperion\ BPMA\AppServer \InstalledApps\WebLogic\<version> \BPMADataSync`	Double-click `startBPMADataSynchronizer.cmd` or `stopBPMADataSynchronizer.cmd`

If you are using:	Go to the following directory (for example)	Execute This Command
WebSphere	`<drive>:\hyperion\ BPMA\AppServer` `\InstalledApps\Websphere\<version>` `\BPMADataSync\bin`	Double-click `startBPMADataSynchronizer.bat` or `stopBPMADataSynchronizer.bat`

Using Sample Files

Financial Management provides sample application files that you can use to populate a test application.

For instructions on creating applications, see the *Hyperion Financial Management — System 9 Administrator's Guide*. If you are using Performance Management Architect, see the *Hyperion Enterprise Performance Management Architect Administrator's Guide*.

If you installed the Sample Applications component from the Typical or Custom installation process, the files are in the directory in which you installed Financial Management.

Note: By default, the sample applications are installed in `C:\Hyperion` `\FinancialManagement\Sample Apps`.

If you did not install the sample files, you can obtain them by reinstalling Financial Management and selecting the Sample Applications component. See "Installing Financial Management" on page 32.

When you create a test application, you can load files from the Sample Apps directory. The directory includes sample security, metadata, data, rules, and journal files; report definitions, data grids; and Web Data Entry form scripts. Sample files are provided for the Comma, Simple and Statutory applications. Instructions for loading the sample files are included in the Documentation folder of each application.

Table 14   Application File Types

Sample File	Contents
Member List (`.lst`)	Dimension member lists
Metadata (`.ads`) (`.xml`) for Classic Application Administration	Metadata
Data (`.dat`)	Applicable scenarios and years with data
Rules (`.rle`)	Rules used to run logic on the data in the application
Journals (`.jlf`)	Sample journal and template file formats
Data Explorer (`.hde`)	Explore Data grids
System Report (`.rpt`)	System reports for Explore Data, Journals, or Intercompany Reports

Sample File	Contents
Web Data Grid files (`*.xml`)	Web data grids
Web Data Entry Forms (`.wdf`)	Web Data Entry Form scripts
Task List (`.xml`)	Task List

8

Uninstalling Financial Management

Uninstalling Prior Releases

If you are using a previous Financial Management — System 9 release, you do not need to uninstall before installing this release.

If you are using a release prior to System 9, you must uninstall it before installing this release.

Before you uninstall, stop all activities and processes connected to the Financial Management servers

The uninstall process does not remove IIS virtual directories, so after uninstalling Financial Management, you must open IIS and manually remove the directories. The uninstall process also may not remove all common components in the *<Hyperion_Home>*\Common directory because other Hyperion products may be using them. You can manually remove components that you are not using for other products.

If Financial Management is registered with Shared Services, deregister it before uninstalling.

After uninstalling Financial Management or shared components, restart your computer.

➤ To uninstall Financial Management:

1 Deregister Financial Management from Shared Services:

    a.   Start the Hyperion Configuration Utility.

    b.   Select **Financial Management** and click **Next**.

    c.   Select **Shared Services Deregistration** and click **Next**.

    d.   Enter the Shared Services administrator password and click **Next**.

2 Use one of these methods to uninstall:

    ● Navigate to the **Uninstall** directory in the Financial Management directory, and click `UninstallFinancialManagement.exe`.

    ● Select **Start** > **Settings** > **Control Panel** > **Add/Remove Programs**, select **Hyperion Financial Management**, and click **Remove**.

> **Note:** If you have both Financial Management and Planning installed, Performance Management Architect can be uninstalled only by the product that installed it originally.

3 After the uninstall process is complete, restart your computer.

4 Remove files remaining in the installation directory.

5 Manually remove IIS virtual directories that you created that point to physical directories removed by the uninstall.

6 Ensure that all references to Financial Management in the registry are removed.

Uninstalling Shared Components

To uninstall shared components such as Shared Services, see the *Hyperion Shared Services Installation Guide*.

9

Upgrading to Financial Management 9.3.1

Upgrading Overview

Use these steps to upgrade from a prior release. Detailed procedures are provided in the following sections.

Upgrade Tasks	Reference
Review system requirements for this release.	*Hyperion Installation Start Here*
Install or upgrade Shared Services: 1. Back up your Shared Services relational database and Open LDAP repository. 2. Install Shared Services and configure the Shared Services Application Server and RDBMS. **Note:** Ensure that the database that you are using for Shared Services is installed and operational before installing Shared Services.	*Hyperion Shared Services Installation Guide*
Configure the Shared Services external authentication provider.	*Hyperion Shared Services Installation Guide*
Save your application data to the relational database and back up your relational database.	RDBMS guide
Back up applications.	"Backing Up Applications" on page 76
Uninstall prior Financial Management releases if needed (for pre-System 9 versions).	"Uninstalling Prior Releases" on page 73
Install Financial Management (Performance Management Architect optional).	"Installing Financial Management" on page 79

Upgrade Tasks	Reference
Configure Financial Management and Performance Management Architect (if installed) using the Hyperion Configuration Utility. **Note:** TheShared Services server must be running when you perform this step.	Chapter 5, "Configuring and Setting Up Financial Management"
Complete post-configuration tasks: 1. Install and configure Workspace. Optionally install Financial Reporting. 2. Complete Shared Services tasks in the User Management Console: ● Create a project in Shared Services. ● Assign roles for Shared Services user management. ● Assign global roles of Application Creator and Dimension Editor to use Performance Management Architect or Classic Application Administration. See the *Hyperion Security Administration Guide.* ● Verify installation.	1. For Workspace installation and configuration, see the *Hyperion Reporting and Analsysis — System 9 Installation Guide.* 2. For Shared Services tasks, see the *Hyperion Security Administration Guide.* 3. To verify the installation, see "Verifying Performance Management Architect Installation" on page 67.
Upgrade applications using the HFM Schema Upgrade utility, and the Performance Management Architect Application Upgrade if you use Performance Management Architect.	"Using the Schema Upgrade Utility" on page 84 and "Upgrading Applications in Performance Management Architect" on page 86.
Optional: Install the DIM Adapter for Financial Management or Application Link adapter for Financial Management.	Chapter 10, "Installing Additional Hyperion Products"
If you use Smart View, install Smart View on the client tier.	"Installing Smart View " on page 38

Backing Up Applications

You can use Financial Management applications by running an upgrade utility to update them. If you plan to keep applications, you should make backup copies before you uninstall Financial Management.

To make backup copies of applications, extract and save application files. For instructions on extracting files, see the *Hyperion Financial Management — System 9 Administrator's Guide.*

Extract and save these application file types to the Temp directory on the application server:

● Security files (`*.sec`)

● Metadata files (`*.xml` or `*.app`)

● Member Lists files (`*.lst`)

● Rules files (`*.rle`)

● Data files (`*.dat`) - all applicable scenarios and years with data

● Journals files (`*.jlf`) - all applicable scenarios and years with journal data

Back up all of these files:

● Data Explorer grid files (`*.hde`)

● Web data grid files (`*.xml`)

● Web Data Entry Form files (`*.wdf` or `*.grd`)

- System Report files (`*.rpt`, `*.xml`, or `*.html`)

Backing Up Database Information

In general, all application and user data is stored in the relational database. To preserve application integrity, perform standard backup and restoration procedures as dictated by the RDBMS vendor. Some configuration files and registry settings reside on other servers, however the files and settings are easily re-created in case of loss and do not hamper application integrity.

The following table shows the Financial Management components and recommended backup procedures.

Table 15   Recommended Backup Procedures

Component	Data Stored	Backup	Restore	Restore Order
Supported RDBMS	All application data	Periodic complete database backup using the RDBMS tools available, and regular backups of the transaction log	Restore from last dump and roll in transaction logs	First
Financial Management Primary Server	Registry settings, `.UDL` file, Report style sheets for system reports (`.xsl`)	Standard incremental file backups	Standard full restore	Second
Financial Management secondary servers	Registry settings, `.UDL` file, report style sheet for system reports (`.xsl`)	Standard incremental file backups	Standard full restore	Third
Financial Management Web server	Registry settings	Standard incremental file backups	Standard full restore	Fourth
Win32 Client workstations	Win32 grid definitions if HFM Windows client installed	Standard incremental file backups	Standard full restore	Last

When you perform a periodic complete backup using the database procedures recommended by the vendor, to insure database integrity, you must place the RDBMS in single-user mode. Use of single-user mode temporarily disconnects the application servers from the relational database.

Before you restore a database, stop these services:

- Application servers (Financial Management servers)
- Financial Management server processes:
  - `HsxServer.exe`
  - `HsvDataSource.exe` (Stop all instances of this process.)

When you end processes, all user connections are dropped. After completing the restore procedure, restart the stopped services. Users can then re-connect.

Verifying MDAC Version on the Application Server

Before you uninstall Financial Management, you must verify that the Microsoft Data Access Component (MDAC) version running on the application server is MDAC 2.7.1 or higher. If you are using Windows 2003, MDAC 2.8 is required. The MDAC file name is `msado15.dll` and is located in the `Program Files\Common Files\System\ado` directory.

Note: If your system does not have MDAC installed, Financial Management installs it during the installation process.

➤ To verify the MDAC version:

1 Select **Start > Search > For Files or Folders**, type `msado15.dll`, and click **Search Now**.

2 Right-click the file and click **Properties**.

3 Select **Version** .

4 Click **Product Version**, and ensure that it is 2.7.1 or higher.

5 Click **OK**.

Uninstalling Prior Releases

If you are using a previous Financial Management — System 9 release, you do not need to uninstall before installing this release.

If you are using a release prior to System 9, you must uninstall it before installing this release.

Before you uninstall, stop all activities and processes connected to the Financial Management servers.

The uninstall process does not automatically remove virtual directories from IIS, so after you uninstall Financial Management, you must open IIS and manually remove the directories. The uninstall process also may not remove all common components in the *<Hyperion_Home>* `\Common` directory because other Hyperion products may be using them. You can manually remove components that you are not using for other products.

If Financial Management is registered with Shared Services, deregister it before uninstalling.

After you uninstall Financial Management or shared components, restart your computer.

➤ To uninstall Financial Management:

1 Deregister Financial Management from Shared Services:

    a. Start the Hyperion Configuration Utility.

    b. Select **Financial Management** and click **Next**.

    c. Select **Shared Services Deregistration** and click **Next**.

    d. Enter the password and click **Next**.

2 Use one of these uninstall methods:

- Navigate to the **Uninstall** directory in the Financial Management directory, and click `UninstallFinancialManagement.exe`.

- Select **Start** > **Settings** > **Control Panel** > **Add/Remove Programs**, select **Hyperion Financial Management,** and click **Remove**.

> **Note:** If you have both Financial Management and Planning installed, Performance Management Architect can be uninstalled only by the product that installed it originally.

3 After the uninstall process is complete, restart your computer.

4 Remove files remaining in the installation directory.

5 Manually remove virtual directories that you created that point to physical directories removed by the uninstall.

6 Make sure that all references to Hyperion Financial Management in the registry are removed.

Installing Financial Management

If you use a separate application server and client workstation, you must install Financial Management on each computer. If you install Financial Management on one computer, you can install the Server and Client components simultaneously with the Custom installation option.

Installing Financial Management Server Components

You can install Financial Management Application and Web Server components simultaneously.

➤ To install Financial Management on the application server:

1 Ensure that Shared Services is installed and configured in the environment. See the *Hyperion Shared Services Installation Guide.*

2 Navigate to the directory for the installation program, select **File > Run** or **Start > Run** and enter *Drive:* *****folder***\\Setup.exe**, where *Drive* and *folder* are the installation program location.

3 Select the installation process language, and click **OK**.

4 Review the **Welcome** box and click **Next**.

5 From the list of countries, select the location from which you are installing, and click **Next**.

6 Read the license agreement, select **I AGREE** and click **Next**.

7 Click **Next** to accept the default installation path for *HYPERION_HOME,* or click **Browse** and navigate to another directory, and click **Next**.

The default directory is `C:\Hyperion`.

Ensure that the directory name does not contain spaces. You can enter only English alphanumeric characters and these special characters: dash (-), underscore (_), backslash (\\), forward slash (/), dot (.), colon (:). The colon character (:) is supported only for Windows platforms to specify the drive (for example, c:\\).

Note: If the installation program detects a *HYPERION_HOME* directory, Directory Name and Browse are not selectable.

Note: If a Java Virtual Machine (JVM) version is detected in the Hyperion Home location, a warning message is displayed. Shut down products using JVM and click OK to continue.

8 Click **Next** to accept the default installation directory or click **Browse** to select another directory, and click **Next**.

The default directory is `C:\Hyperion\FinancialManagement`.

Ensure that the directory name does not contain spaces. You can enter only English alphanumeric characters and these special characters: dash (-), underscore (_), backslash (\), forward slash (/), dot (.), colon (:). The colon character (:) is supported only for Windows platforms to specify the drive (for example, c:\).

9 From **Setup Type**, select **Custom**, and click **Next**.

10 Select components to install, and clear components that you do not want to install.

● To install all Client, Application Server, and Web components, select **Hyperion Financial Management — System 9** and **Oracle Hyperion EPM Architect**.

To install specific components, select:

● **Client**

Install all components for a full client installation, including the Win32 Client, Analytic Data Model (ADM) Client, and Sample Applications.

● **Application Server**

Install all files required for the application server.

● **Web**

Install all components to access Financial Management through the Internet.

❍ **Web Server**

Install Web Server components on this computer. You can, if you want, install the Web Server components later on another computer.

❍ **Smart View Provider**

Install the Smart View provider on the Web server. For information on installing Smart View on the client tier, see "Installing Smart View" on page 38. For information on using Smart View, see the *Hyperion Smart View for Office User Guide* or *Online Help* installed with Oracle's Hyperion® Smart View for Office.

Note: SmartView requires the use of Microsoft .NET Framework 2.0. When you select this component, if you do not have .NET Framework 2.0 installed, the system will install it as part of the installation process. If you do not want to install SmartView, you can choose to continue the installation without installing it.

- **Consultant Utilities**

  Install additional utilities for Financial Management.

- **Oracle Hyperion EPM Architect**

  Note: To use Performance Management Architect, install both of these components. The system detects if these components have previously been installed on this computer, for example, during a Oracle's Hyperion® Planning – System 9 installation, in which case you do not need to reinstall them.

  ❍ **Application Server**

    Installs the Dimension Server, Data Synchronization Server, and files required for Interface Datasources.

  ❍ **Web Server**

    Installs the Performance Management Architect Web tier.

  Note: To use Performance Management Architect, you must have installed a Java application server. For a list of supported Java application servers, see the *Hyperion Installation Start Here*.

  Performance Management Architect requires the use of Microsoft .NET Framework 2.0. During the Performance Management Architect Application Server installation, if .NET Framework 2.0 is not detected, you are prompted to install it. Select **Install Microsoft .Net Framework 2.0 and continue** to have .NET 2.0 automatically installed

11 Review the component summary information, and click **Next** to continue the installation, or **Back** to change settings.

   If you do not have Microsoft Data Access Component (MDAC) installed on the application server, the system installs it automatically at this point. The MDAC installation process can be time-consuming, and requires that you reboot your computer.

12 If system files were detected that needed to be updated during installation, a status message is displayed. Click **Next** to continue.

   For a list of updated files, check the install log, `installLog.txt`, at the root of the directory in which you installed Financial Management. If Windows File Protection is enabled, download the Windows update to obtain the latest version of the files.

13 When you receive the message that the installation is complete, click **Next**.

14 If prompted, select whether to restart your computer at this time, and click **Finish.**

15 Run the configuration utility. See Chapter 5, "Configuring and Setting Up Financial Management".

Installing Financial Management on the Client

The installation program installs files needed to run Financial Management and common components that are used by multiple Hyperion products.

The Typical installation does not install server components. If you need to install server components, see Chapter 3, "Installing Financial Management and Performance Management Architect Server Components".

Note: The installation program contains these three files: `media.inf`, `setup.exe`, and `suite.jar`, which must be in the same directory for the installation program to run.

➤ To install Financial Management on the client tier:

1 Ensure that Shared Services is installed and configured in the environment. See the *Hyperion Shared Services Installation Guide.*

2 Navigate to the directory for the installation program, select **File > Run** or **Start > Run** and enter *Drive: \folder***Setup.exe**, where *Drive* and *folder* are the installation program location.

3 Select the installation process language, and click **OK**.

4 Review the **Welcome** dialog box and click **Next**.

5 From the list of countries, select the location from which you are installing, and click **Next**.

6 Read the license agreement, select **I AGREE** and click **Next**.

7 Click **Next** to accept the default installation path for *HYPERION_HOME*, or click **Browse** and navigate to another directory, and click **Next**.

   Note: Ensure that the Hyperion Home directory name does not contain spaces. If the installation program detects a *HYPERION_HOME* directory, Directory Name and Browse are not selectable.

8 Click **Next** to accept the default installation directory or click **Browse** to select another directory, and click **Next**.

9 From **Setup Type**, select **Typical**, and click **Next**.

10 From **Component Selection**, select the components to install, and clear components that you do not want to install.

11 For a **Typical** installation, you can install these components:

   ● Win32 Client

      Install all components for the Windows 32 client desktop.

   ● ADM Client

      Install Analytic Data Model (ADM) if you use Financial Management with Financial Reporting, Oracle's Hyperion® Web Analysis – System 9, or Application Builder. ADM is the connectivity component between Hyperion data sources. You can also install ADM later on another machine.

- **Sample Applications**

  Select this option to install sample applications.

12 Click **Next** to accept the default installation directory, or click **Browse** to select another directory, and click **Next**.

13 Review the component settings, and click **Next** to continue the installation or **Back** to change settings.

14 If prompted, select whether to restart your computer at this time, and click **Finish**.

15 Run the configuration utility.

   See Chapter 5, "Configuring and Setting Up Financial Management".

Upgrading Applications from Prior Releases

If you want to use applications from prior releases, you must upgrade the applications using the HFM Schema Upgrade utility. You use this utility to upgrade previous System 9 Financial Management applications, as well as applications prior to System 9.

Note: Migrations of pre-9.2 releases to 9.3.1 must apply the updated Schema Upgrade utility provided in Financial Management Release 9.3.1.4.0.2.

If you are using Performance Management Architect, you then upgrade the converted applications in Performance Management Architect. See "Upgrading Applications in Performance Management Architect" on page 86.

The Schema Upgrade utility is installed in the Server directory when you install Financial Management, and it runs on the application server. The utility requires that Financial Management is configured Shared Services. It converts any database table that does not meet the current release specifications. This accounts for changes in metadata, data types, and other changes that optimize or enhance Financial Management. It also migrates security users and their roles from the prior release to Shared Services. This is handled by the migration utility that is executed by the Schema Upgrade utility, which analyzes the current security settings and extracts a security load file used to load Financial Management users and their roles to Shared Services.

When you run the utility, based on your settings, the Schema Upgrade utility sequentially upgrades one application at a time. If it is determined that security needs to be migrated, the migration utility is launched on the first instance and used for subsequent applications. Before you upgrade, you need to know the Shared Services URL, the Financial Management project to which you want to migrate, the Web URL used for security administration, and an administrator name and password. It converts the tables and migrates the users from your Financial Management application to Shared Services for all applications.

The Schema Upgrade utility assigns these roles to all Financial Management Application Administrators when an application is upgraded:

- Dimension Editor
- Application Creator

- Financial Management Application Creator

These roles are required to access both Performance Management Architect and Classic Application Administration. See "Performance Management Architect" on page 10.

Note: The Load System role that enables users to load metadata is not automatically assigned. For information on assigning roles, see the *Hyperion Security Administration Guide*.

Using the Schema Upgrade Utility

Before you use the Schema Upgrade utility, you must complete these tasks:

- Shared Services must be installed, configured and running, and you must create a project. Financial Management must be registered in Shared Services, which configures external authentication.

- You must configure Financial Management, including setting DCOM, creating a UDL file, and registering the application server, and you must have an available Financial Management Web server.

Note: The upgrade utility assumes that the decimal character is a period (.). If you use another character, such as a comma (,), you must change the decimal character setting in the RDBMS to a period, and after running the utility, change it back. Web data grids that you created in prior releases with Java applets are supported after you upgrade, however, data grids that you created using HTML in prior releases are not supported or viewable after you run the upgrade utility.

When you use the Schema Upgrade utility, all applications for the current database are upgraded simultaneously, and the upgrading options apply to all applications. You cannot upgrade only one application.

You can choose how to handle errors that occur during the upgrading process. For example, you can set the process to halt when an error occurs so that you can view it immediately, or to ignore errors and continue upgrading, and view the errors later.

You can create an error log to check results after the upgrade. If an error log exists, you can choose to truncate the log on startup to clear the contents, or back up the log.

If you are upgrading an application from a prior release, during the upgrading process, the system stores security load files used in the user migration in your system Temp directory, so you can also review that directory for results. The security filenames are `HFMSecurityFile_<application name>_<month-date-year>.sec`. It is recommended after completing the upgrading process that you manually extract the security files from each application to save for backup and future reference.

Users are validated during the upgrading process, so users who no longer exist in external security do not load. After upgrading, you can view results in the log file in the system Temp directory. The log file is named `HFMSecurityFile_<application name>_<month-date-year>.log`.

Note: The utility recognizes the security files based on the application name and month, date, and year. If for any reason the upgrading process fails and you restart it on a different day, you must manually adjust and reload the files.

➤ To upgrade applications:

1   Navigate to the Financial Management installation directory, and locate the **Server** directory, for example:

    `C:\Hyperion\FinancialManagement\Server.`

2   From the **Server** directory, double-click the Upgrade utility file, `HFM Schema Upgrade.exe.`

3   From the **SchemaUpgrade** window, click **Connect** to connect to the Financial Management database.

    All applications with the defined database are displayed in the Available Applications section.

4   For **Error Handling**, select an option:

    ● **Halt on Any Error**

    ● **Ignore Errors and Continue**

5   For **Log File Name**, enter an upgrade error log name.

    Note: You can save the log file in any directory that you choose.

6   For **Logging Options**, select an option:

    ● To clear the log contents, select **Truncate Existing Log on Startup.**

    ● To save the log, select **Backup Existing Log.**

7   Click **Upgrade.**

    The system prompts you with a reminder to back up your database and the option to postpone the upgrade so that you can do the backup.

8   From the system warning that all applications will be converted, click **Yes** to continue.

    When the application tables are upgraded, the security tables are extracted as load files and reloaded. This process may take several minutes based on the size of the security files and the number of users, groups, and roles. When the utility reaches the security tables for the first application, if it detects that users need to be migrated, the User Migration dialog box is displayed.

9   From **User Migration**, enter the information to provision the application and click **OK:**

    a. For **User Management URL**, enter the URL that you use for Shared Services, for example, `http://<Shared Services server>:58080/interop.`

    b. For **User Management Project**, enter the name of the project that you created.

    c. For **Financial Management Web Server URL for Security Administration**, enter the Financial Management Web server name.

    d. For **Administrator Logon**, enter the domain, username, and password. The user must be a Shared Services administrator.

Note: After you specify this information the first time, the system uses it to upgrade subsequent applications.

10 When you receive the Processing Complete message, click **OK**.

11 **Optional:** To view the error log after upgrading, click **View Log**.

12 Click **Close**.

Upgrading Applications in Performance Management Architect

If you are using Performance Management Architect, after you convert applications using the Schema Upgrade utility, you run the Application Upgrade for Performance Management Architect.

Note: If you are not using Performance Management Architect, you work with applications using Classic Application Administration. If you upgrade an application created in Classic Application Administration to Performance Management Architect, you cannot return to working with that application in Classic Application Administration.

➤ To run the application upgrade:

1 From the Workspace, select **Navigate > Administer > Application Upgrade.**

2 Review the Welcome screen, and click **Next.**

3 The Upgrade Summary page displays the applications to which the user has access to upgrade (this information is provided from the Shared Services server. If an application cannot be upgraded, an explanation is provided.)

4 On the Select Applications page, add applications that you want to upgrade to the **Applications to Upgrade** list and click **Next.**

5 Review the summary of applications to upgrade, and click **Next** to execute the upgrade.

6 Click **Finish** to view the upgrade process in the Job Console.

7 Open the Application Library to confirm that the applications are in Performance Management Architect.

8 Navigate to Dimension Library and review the dimensions that were added to Performance Management Architect.

9 Open the application.

About Configuring Product Upgrades

Use Hyperion Configuration Utility to configure products when they are upgraded from a previous Hyperion release. Hyperion Configuration Utility determines (and the product selection page indicates) whether the products installed on the computer are new or upgraded.

All configuration tasks are available for upgraded products; however, for upgraded products configured for relational databases, the database configuration page is read-only except for the password. You can configure only one upgraded product at a time because each product may be configured for a different database. Similarly, you cannot configure new products and upgraded products simultaneously.

If you are upgrading Shared Services and other Hyperion products, upgrade Shared Services first. You must reregister products with Shared Services.

Note: Hyperion Configuration Utility is backward compatible with previous Hyperion releases and can be used to configure products for previous releases.

10

Installing Additional Hyperion Products

After installing Financial Management and verifying that you can create and connect to applications, you can install Financial Reporting, and the DIM Adapter for Financial Management or Application Link adapter.

Installing Reporting and Analysis

Install Oracle's Hyperion® Financial Reporting – System 9 if you did not install it when you installed and configured Workspace. See the *Hyperion Reporting and Analysis — System 9 Installation Guide*.

Installing Data Integration Management Adapters

After you install and configure Oracle's Hyperion® Data Integration Management, you can install and configure adapters that enable you to retrieve and write data for other Hyperion products:

To use the DIM Adapter for Financial Management, you first must install and configure Financial Management.

Note: The DIM Adapter for Financial Management requires the Financial Management client to be installed on the same computer. If the Financial Management application servers are installed on a separate machine, DCOM must be enabled. The Enable DCOM option can be found on the Server/Cluster Registration tab of the Financial Management configuration utility. See "Enabling DCOM" on page 52.

Each adapter includes online help that provides instructions for using the adapter.

You must have administrative privileges on any computer where you install the adapter. The adapter installer provides two options:

- Typical—Install all adapter components
- Custom—Install the components that you select:
  - Client Plug-in—Enables you to configure source and target definitions for the Hyperion application in Designer.

    Client Plug-in should be installed on the same computer as PowerCenter Client.
  - Repository Server Plug-in— Enables you to register the adapter in a repository.
  - Server Plug-in— Enables you to execute workflows.

The installer sets environment and system variables:

- `HFMCONNECTORPATH` is set to `Installation Folder\HFMConnector`.
- PATH is updated with the `Installation Folder\HFMConnector\lib` folder.

Note: When you install the client and server components of any Data Integration Management adapter on one computer, you must install both components in the same location.

➤ To install a Data Integration Management adapter:

1 From the installation DVD or the directory where you downloaded the adapter installer, click `setupwin32Platform.exe`.

2 On the adapter installer **Welcome** screen, click **Next**.

3 Select a country for the installation, and click **Next**.

4 On the license agreement screen, select **I AGREE**, and click **Next**.

   Note: You must select I AGREE to continue with the installation.

5 Click **Next** to accept the Hyperion Home directory.

6 Select a setup type, and click **Next**.

7 If you selected the Custom setup option in the preceding step, select components to install, and click **Next**.

8 Verify the installation summary, and click **Next**.

   Tip: You can click Back to change installation choices.

Installing Adapters in Silent Mode

When you install a Data Integration Management adapter in silent mode, the installer retrieves the installation properties that are saved in a response file instead of displaying screens where you enter these properties. Silent mode is often used for performing installations remotely. You can create the response file from a template before you perform an installation, or you can create the file during an installation for use in subsequent silent-mode installations.

➤ To install an adapter in silent mode, run this command:

InstallerFile -silent -options *ResponseFile*

where *InstallerFile* is a platform-specific installation program (such as
setupwin32.exe for an installation on a Windows platform or setupSolaris.bin for a
Solaris platform) and *ResponseFile* is the property file containing the parameters required
for the installation.

Installing Adapters in Console Mode

When you run the installer for an adapter in console mode, you select input from a series of
menus that are displayed.

➤ To install an adapter in console mode, run this command:

InstallerFile -console

where *InstallerFile* is a platform-specific installation program (such as
setupSolaris.bin for a Solaris platform).

Configuring Adapters

After installing Data Integration Management adapters, you must configure them on the
computers hosting the PowerCenter Server, Client, and Repository Server components of Data
Integration Management.

You can perform these tasks on Windows computers where PowerCenter Client is installed.

Note: Adapter configuration is not done with the Hyperion Configuration Utility.

Registering Adapters with a Repository

If you install the Repository Server Plug-in or Server Plug-in component of Data Integration
Management adapter, you must register the adapter with the repository. This registration is not
required if you install only the Client Plug-in.

➤ To register a Data Integration Management adapter with a repository:

1 **Ensure that Data Integration Management Repository Server is running:**

    a. From the Windows **Control Panel**, select **Administrative Tools**.

    b. Select **Services**.

    c. In the **Services** window, check the status of **Hyperion S9 Data Integration Management
Repository Server**.

    d. Unless the status is "Started," click **Start** (in the upper left of the window).

    Note: Keep the Services window open for the next step.

2   Stop Data Integration Management Server, if it is running:

a.   In the **Services** window, check the status of **Hyperion S9 Data Integration Management Server**.

b.   If the status is "Started," click **Stop** (in the upper left of the window).

3   Connect to the Repository Server host computer:

a.   Select **Start** > **Programs** > **Hyperion** > **Data Integration Management** > **Informatica PowerCenter 7.1.4 - Client** > **Repository Server Administration Console**.

b.   In **Repository Server Administration Console**, right-click the name of the Repository Server host computer, and select **Connect**.

c.   Enter your password for the host computer, and click **OK**.

4   Under the Repository Server host computer name, click **Available packages**.

5   Right-click *DIM Adapter for Financial Management.xml*, and select **Register**.

6   Enter the repository administrator user name and password, and click **OK**.

Note: By default, both the user name and the password are *Administrator* if you are using Informatica native authentication. If you are using Shared Services authentication, the default user name and password are *admin* and *password*, respectively.

7   When a message that the registration succeeded is displayed, click **OK**.

8   Repeat steps 6 through step 8 for each adapter to be registered.

Note: For more information, see "Registering and Unregistering Repository Plug-ins" in the Informatica PowerCenter *Repository Guide*.

Configuring Hyperion Application Connections

After you configure an adapter, you must configure an application connection in Workflow Manager before you can extract data from sources or write data into targets. When configuring application connections, you specify attributes that Data Integration Management Server uses to connect to a database during a Data Integration Management session. The application connections that you define in Workflow Manager are saved in Data Integration Management Repository.

➤   To configure application connections:

1   Ensure that Data Integration Management Repository Server is running:

a.   From the **Control Panel**, select **Administrative Tools**.

b.   Select **Servers**.

c.   In the **Services** window, check the status of **Hyperion S9 Data Integration Management Repository Server**.

d.   Unless the status is "Started," click **Start** (in the upper left of the window).

2   Start the repository:

a. Select **Start** > **Programs** > **Hyperion** > **Data Integration Management** > **Informatica PowerCenter 7.1.4 - Client** > **Repository Server Administration Console**.

b. In **Repository Server Administration Console**, right-click the name of the Repository Server host computer and select **Connect**.

c. Enter your password for the host computer, and click **OK**.

d. In the **Repositories** directory, double-click the repository name.

e. Click **Start** (on the left).

3 Select **Start > Programs > Hyperion Data Integration Management > Informatica PowerCenter 7.1.4 - Client > Workflow Manager**.

4 In **Workflow Manager**, connect to the repository:

a. In the Repository Navigator panel, double-click the repository name.

b. Enter the repository administrator's user name and password, and click **Connect**.

5 Select **Connections > Application**.

6 Click **New**.

7 Select the connection for the adapter that you are configuring, and click **OK**.

8 Enter the requested information, and click **OK**:

The information requested depends on the Hyperion application. It can include these items:

- **Name**—A name for the connection

- **User Name**—Your user name for the Hyperion application

- **Password**—Your password for the repository, for example, your password for Financial Management

- **URL**—The Hyperion product application URL that you want to use

- **Host** or **ServerHost**—The name of the Hyperion product server host computer, for example, the name of the Financial Management server host computer

- **Port**—The port number used by the application

  See *Hyperion System 9 Installation Start Here* for information about ports.

- **Cluster** —The name of the registered cluster where the application runs

Application Connection Browser lists the new application connection.

Tip: You can edit or delete an application connection by selecting it in the list in Application Connection Browser and clicking Edit or Delete.

Configuring JVM Options

➤ To configure JVM options:

1 Start Informatica Server Setup by selecting **Start > Programs > Hyperion Data Integration Management > Informatica PowerCenter 7.1.4 – Server > Informatica Server Setup**.

2 With **Configure Informatica Service** selected, click **Continue**.

3 Select the **JVM Options** tab.

4 In **VM Location**, enter the fully qualified path to the `jvm.dll` file in your JAVA_HOME directory, and click **OK**.

Uninstalling Adapters

➤ To uninstall a Data Integration Management adapter:

1 Start the adapter installer: `Uninstall.exe`.

2 On the uninstaller **Welcome** screen, click **Next**.

3 Ensure that all PowerCenter Client applications are selected, and click **Next**.

4 On the uninstallation summary screen, click **Next**.

5 When the summary screen says that the uninstallation has succeeded, click **Finish**.

6 **Optional:** Remove the adapter from a repository:

    a. Open Data Integration Management Repository Server Administration Console by selecting **Start > Programs > Hyperion Data Integration Management > Informatica PowerCenter 7.1.4–Client > Repository Server Administration Console**.

    b. Select the repository in which the adapter is registered.

    c. Stop the repository if it is running.

    d. Click **Repository > Registered packages** and select the Oracle's Hyperion® Data Integration Management Adapter for Financial Management—`HFM.xml` adapter file.

    e. Click **Unregister**.

    f. In **Remove Repository plug-in**, enter the repository user name and password, and click **OK**.

    The Output window displays the status of the plug-in uninstallation.

    Note: Repeat step 6 to remove the adapter from additional repositories.

Uninstalling Adapters in Silent Mode

When you uninstall a Oracle's Hyperion® Data Integration Management adapter in silent mode, the installer retrieves the uninstallation options that are saved in a response file instead of displaying screens where you enter these properties. Silent mode is often used for performing uninstallations remotely. You can create the response file from a template before you perform an uninstallation, or you can create the file during an uninstallation for use in subsequent silent-mode uninstallations.

➤ To uninstall an adapter in silent mode, run this command:

UninstallerFile -silent -options *ResponseFile*

The uninstaller file is in the `Uninstall` subdirectory of the adapter installation directory.

Uninstalling Adapters in Console Mode

When you run the uninstaller for an adapter in console mode, you select input from a series of menus that are displayed.

➤ To uninstall an adapter in console mode, run this command:

UninstallerFile -console

The uninstaller file is in the `Uninstall` subdirectory of the adapter installation directory.

Installing the Application Link Adapter

Application Link is an application integration product with a graphical user interface that makes it easy to create seamless integration from your source system into Financial Management. You can use Application Link to load data values, accounts, entities, and custom dimensions from a flat file or ODBC-compliant database into Financial Management. Application Link includes the Hyperion Translation Manager wizard, to map your source data to Financial Management equivalents.

For Oracle's Hyperion® Application Link 9.0, use the 9.2.1 adapter.

Updating Financial Management Adapter 9.2.1

To use the adapter, see the *Hyperion Financial Management — System 9 Adapter User's Guide.*

If you uninstall a previous version of the adapter before installing this release, ensure that the `HsvHALClasses.jar` file is deleted.

➤ To update the adapter:

1 Download the `hfmad921_Windows.zip` file and unzip the files in to a temporary folder.

2 Double-click the setup executable file, **setup_vbis_win32.exe.**

   Note: This utility may take several minutes to load.

3 From **Welcome to Vignette V7 Business Integration Studio,** click **Next.**

4 From **Adapter Library Selection**, select the adapter and do one of these steps:

   ● If the status is displayed as **Compatible or Upgrade,** click **Next.**

   ● If the status is displayed as **Incompatible,** cancel the installation and review the installation log in your **<vbis install dir>\vbis\logs** directory.

     The log file name is **vbis_install_<date – timestamp>.log**.

5 From **Install Preview**, verify that the Financial Management adapter library is displayed in the list, and click **Next.**

6 When **Installation Summary** is displayed, click **Finish**.

Troubleshooting

This appendix describes troubleshooting procedures for Financial Management and Performance Management Architect installation and configuration.

Note: If you experience problems installing or running Shared Services, see the *Hyperion Shared Services Installation Guide*.

Financial Management and Performance Management Architect Configuration Issues

Error Message or Problem	Solution
Errors occur during configuration	1. Review the Hyperion Configuration Utility log file that contains configuration errors and warning messages in a central location: `<HYPERION_HOME>\common\config\logs\configtool.log`. 2. As a troubleshooting measure, perform configuration tasks individually for one module at a time.

Performance Management Architect Access Issues

Error Message or Problem	Solution
Performance Management Architect installation failed	This could be the result of a Microsoft .NET Framework 2.0 error during its automatic installation in Performance Management Architect. Install Microsoft .NET Framework 2.0 manually, and then rerun the installation.

Trouble logging on to Performance Management Architect	Verify that the ASP.NET version is 2.0.50727.
Security rights issue when logging on to Performance Management Architect	The Application Creator and Dimension Editor security roles must be assigned to use Performance Management Architect. See the Shared Services\Global Roles section of the *Hyperion Security Administration Guide*.
Logon to Workspace fails	See the *Hyperion Reporting and Analysis — System 9 Installation Guide*.
You receive an Authentication error when you are logged in to the Workspace and try to access a Financial Management application or Performance Management Architect feature.	● You might need to be provisioned for the application. See the *Hyperion Security Administration Guide*. ● Your token or session might have timed out. Log off, then log on to start a new session. ● A problem may exist with the Financial Management Web Server or Application Server. Check that they are running with no problems.
Dimension Library does not display in Performance Management Architect.	Verify that you have the proper Performance Management Architect roles. You must have the Dimension Editor and Application Creator security roles to access the Dimension Library. See the Shared Services\Global Roles section of the *Hyperion Security Administration Guide*. After you are assigned the Dimension Editor role, log off and log back on to Performance Management Architect.
Performance Management Architect tasks do not display.	Check the following: ● Verify that the Shared Services server is started, and if not, start it. See the *Hyperion Shared Services Installation Guide*. ● Verify that Workspace services are started. See the *Hyperion Reporting and Analysis — System 9 Installation Guide.* ● Verify that you can access Workspace. Use this URL: `http://<Web Server>:<port>/workspace/` where `<Web Server>` is the Web server machine hostname and `<port>` is the Web server listen port; for example, 19000 if using the Apache instance configured with BI+. ● Verify that you have configured the Workspace proxy server plug-in for your Application Server. Use this URL: `http(s)://<workspace_server>:<workspace_port>/awb/conf/AwbConfig.xml,` where `<Web Server>` is the Web server machine hostname and `<port>` is the Web server listen port; for example, 19000 if using the Apache instance configured with BI+. If you can access this, the proxy server is configured. If this does not work, configure it. See the *Hyperion Reporting and Analysis — System 9 Installation Guide*.
You receive an error when trying to run Data Synchronizations in Performance Management Architect.	Make sure that the Hyperion FM-DME Listener service is started. This service is installed automatically during the Financial Management installation and is required to run Performance Management Architect data synchronizations. If the service is stopped, the DME Web Service is not able to communicate with all Financial Management instances on the server.

Performance Management Architect Dimension Library or Application Library Access

If you cannot access a Performance Management Architect task, verify that you can access each component separately to locate the source of the communication error.

Error Message or Problem	Solution
Server was unable to process request. No connection could be made because the target machine actively refused it (org.apache.axis.AxisFault)	Dimension Server is not running. Start the Dimension Server and retry logging in.

Communication errors or internal server errors occur.	Possible solutions:
	
	1. Check this URL:
	
	    `http(s)://<workspace_server>:<workspace_port>/awb/conf/AwbConfig.xml.`
	
	2. If this step fails, check this URL:
	
	    `http(s)://<bpma_server>:<bmpa_port>/awb/conf/AwbConfig.xml`
	
	3. If this step works, then Performance Management Architect is not correctly enabled in Workspace. Reconfigure Workspace.
	
	4. If this step does not work (error is 404), then the Performance Management Architect Web Server is not started.

Errors on the Performance Management Architect Dimension Server.	Possible solutions:
	
	● Use this URL:
	
	    `http(s)://<local_machine_name>/hyperion-bpma-server/Sessions.asmx.`
	
	    If you see a Sessions page displayed, then IIS is correctly configured. If there is any error in IIS, check the Event Log to determine the problems. Check the System and Application Log to see if anything was logged by ASP.NET, IIS, or DCOM, and fix the errors. A possible cause is incorrect privileges for the user for the TEMP directory.
	
	● Check the Event Logs from sources starting with HyS9BPMA. Possible causes are communication errors with Oracle's Hyperion® Shared Services, or the database.
	
	● The ASPNET user may not have access to certain folders. If the Event Log displays any security related errors, assign rights to the ASPNET user.
	
	    1. From the command prompt, go to this directory: `C:\Windows\Microsoft.NET\Framework\v2.0.50727.`
	
	    2. Type `run aspnet_regiis.exe-ga.`

Errors accessing the Performance Management Architect Dimension Server Web services.	● Verify the logs to check subcode and Win32 code. If subcode is 2, and Win32 code is 1260, the problem is related to Web Service Extensions. In IIS, Web Service Extensions, make sure that the ASP.NET 2.0.50727 Web Service Extension status is Allowed.
	
	● If SiteMinder is installed, remove the wildcard mapping:
	
	    1. From the `hyperion-bpma-server` virtual directory, click Properties, and click Configuration.
	
	    2. Remove any values in the wildcard mapping section.

Error opening the Performance Management Architect Dimension Library.	Verify that DCOMCNFG permissions are set properly in Windows 2003. To set DCOM Config permissions: 1. Select Start > Run, and enter DCOMCNFG . 2. Expand Component Services > Computers > My Computer > DCOM Config. 3. Scroll to IIS Admin Service, right-click Properties and select the Security tab. 4. From Launch and Activation, select Customize and click Edit. 5. Click Add and add Network Service. 6. Select Allow for all permissions. 7. Click OK to close the dialog boxes. 8. Restart IIS and all Web servers.
IIS is not started on the Performance Management Architect Dimension Server.	From Control Panel > Administrative Tools > Services, start World Wide Web Publishing Service if not already started.
Performance Management Architect services are not started.	Start the Performance Management Architect Process Manager service if not already started. Check that these services start: ● Engine Manager ● Event Manager ● Job Manager

Financial Management Access

Error Message or Problem	Solution
You cannot access Financial Management through the Workspace.	1. Test access to the Workspace. Use this URL: `http://<Web Server>:<port>/workspace/` where `<Web Server>` is the Web server machine hostname and `<port>` is the Web server listen port; for example, 19000 if using the Apache instance configured with BI+. 2. If Step 1 does not work, verify that you have configured the Workspace proxy server plug-in. If it is configured, test that you can access Financial Management directly.
If you cannot access Financial Management through the Oracle's Hyperion® Workspace, verify that you can access Financial Management directly.	Use this URL: `http://<server_URL>/<aliasdir>/` where <aliasdir> is the name of the alias virtual directory that you created for Financial Management on the Web. If this does not work, there is a problem with the installation or configuration. Check the Financial Management installation log in the root of the directory in which you installed Financial Management.

You cannot log on to Financial Management.	This might be due to a security access issue. Check the following:
	● Financial Management is installed and configured.
	● IIS is started, and a virtual directory for Financial Management was created.
	● In IIS, verify the settings for authentication. You can use Anonymous Authentication or Web Authentication, depending on your security policies.
	To check the authentication method:
	1. Start IIS and expand Default Web Site.
	2. Right-click the folder for Web authentication, for example, the Financial Management folder for the Web, and select Properties.
	3. Select Directory Security.
	4. Verify that either Anonymous Access or Web Authentication has been properly configured.
You cannot log on to the Financial Management Client through a proxy server.	Make sure that proxy authentication is properly configured. See Microsoft Internet Explorer and Netscape help for procedures.

Connection Troubleshooting

The following table and procedures describe troubleshooting connection issues.

Error Message or Problem	Solution
Connection fails for Financial Management.	If the DCOM launching user is set to a local machine account, domain users cannot log on to some modules. For example, if a user logs on to a workstation with a user ID on Domain A, and logs on to Financial Management with a user ID on Domain B (or any domain that Domain B can access), when the user attempts to connect to a Financial Management server on Domain B, the connection might fail. To resolve the problem, do one of these procedures:
	● Set up a one-way trust relationship from Domain B (Financial Management Server) to Domain A (Financial Management Client). This method is recommended as the best workaround.
	● Set the DCOM Default Authentication Level to None on the client. However, note that by turning off the DCOM authentication on the client, DCOM authentication is turned off for all the DCOM applications on the client.
When the computer is restarted, Financial Management installation fails.	Check the Remote Procedure Call service in Windows.
	1. Select **Start > Programs > Administrative Tools > Services** or for Windows 2003, select **Start > Settings > Control Panel > Administrative Tools > Services**.
	2. Check the Remote Procedure Call (RPC) Locator, which is set to Manual by default. Select the service, click Start, and restart the computer.
You cannot connect to the database.	Configure the UDL file. See:
	● "Configuring the Data Link for Microsoft SQL Server" on page 22.
	● "Configuring the Data Link for Oracle" on page 21.
	● "Configuring the Data Link for IBM DB2 " on page 23.

You cannot connect to SQL Server.	• Windows authentication may have been used instead of Microsoft SQL Server authentication. Hyperion recommends using SQL Server authentication.
	• The system may be using the Microsoft SQL Server default setting to connect to the database using named pipes instead of TCP/IP.
	See "Verifying Microsoft SQL Server Authentication Settings" on page 103.
SQL Server: Test connection failed because of an error in initializing provider. Client unable to establish connection.	A problem may exist with the Microsoft SQL Server connection and the UDL file. See "Creating Data Link (UDL) Files " on page 21.

Establishing the SQL Server Connection Using TCP/IP

If you use Microsoft SQL Server 2005, it disables TCP/IP connections to the database by default. You need to enable these connections before running the Hyperion Configuration Utility.

➤ To establish the SQL Server connection using TCP/IP:

1 Select **Start > Settings > Control Panel**.

2 Select **Administrative Tools**, and double-click **Data Sources (ODBC)**.

3 Click **Add**.

4 In the list of drivers, highlight **SQL Server**, and click **Finish**.

5 Enter a data source name, description, the data server name for the SQL Server to which to connect, and click **Next**.

6 Select this authentication option: **With SQL Server authentication using a login ID and password entered by the user**.

7 Click **Client Configuration**, select **TCP/IP** (if not selected), and click **OK**.

8 For **Connect to SQL Server** , enter the login ID and password, and click **Next**.

9 Change the default database to the Oracle's Hyperion® Financial Management – System 9 database.

10 Click **Next**, and click **Finish**.

11 Click **Test Data Source**.

12 When you receive the success message, click **OK**, and click **OK** to close the dialog box.

13 Click **OK** to close the **ODBC Administrator** dialog box.

14 Create and configure the data link (`.udl`).

See "Creating Data Link (UDL) Files " on page 21.

Verifying Data Link Connection Settings

➤ To verify data link connection settings:

1 In **Data Link Properties**, select the **Connection** tab.

2 Ensure that **Use a specific user name and password** is selected.

Verifying Microsoft SQL Server Authentication Settings

➤ To verify the Microsoft SQL Server authentication setting:

1 Select **Start > Programs > Microsoft SQL Server > Enterprise Manager**.

2 Expand the list of Microsoft SQL Servers.

3 Right-click the database server name, and select **Properties**.

4 Select the **Security** tab.

5 Ensure that this Authentication option is selected: **SQL Server and Windows**.

6 Click **OK**.

B

Manually Deploying Performance Management Architect to an Application Server

About Manual Configuration

The procedures in this appendix should be followed to manually deploy the Performance Management Architect Web Tier server and Data Synchronization server to WebLogic or WebSphere on a Windows machine. First install Performance Management Architect, and then use the Oracle's Hyperion® Configuration Utility™ to select the manual option for deployment to an application server.

Note: 19091 is the default port for Performance Management Architect Web Tier and 19101 is the default for Data Synchronizer.

The required files (`awb.war` and `DataSync.war` are placed in this location:

`<HYPERION_HOME>\BPMA\AppServer\InstallableApps\`

For detailed information on manually deploying to your Web application server, refer to your vendor's administrator's guide.

Manually Deploying Performance Management Architect into WebLogic 9.1

➤ To manually deploy Performance Management Architect into WebLogic 9.1:

1 **Install Performance Management Architect on a Windows computer.**

2. In WebLogic, create the Performance Management Architect domain by using the WebLogic Configuration Wizard:

    a. Run `config.cmd` from this directory: `<drive>:\<BEA_HOME>\common\bin`.

    b. In the WebLogic Configuration wizard, select **Create a new WebLogic Domain**. Then click **Next**.

    c. In Select Domain Source, select **Generate a domain configured automatically to support the following BEA products**. Then click **Next**.

    d. In **Configure Administrator Username and Password**, enter the user name and user password. Then click **Next**.

    e. In **Configure Server Start Mode and JDK**, in the left panel, select **Production mode**. In the right panel, under **BEA Supplied JDKs**, select **JRockit SDK 1.5.0_04**. Then click **Next**.

    f. In **Customize Environment and Services Settings**, select **Yes** and click **Next**.

    g. In Configure the Administration Server:

        i. For **Name**, enter a server name (Hyperion defaults to BPMAServer).

        ii. For the Listen address, keep the default option (All localhost addresses).

        iii. In Listen port, enter an unused port number (BPMA defaults to 19091 for AWB and 19101 for DataSync).

        iv. Click **Next**.

    h. In **Configure Managed Servers**, click **Next**.

    i. In **Configure Machines**, click **Next**.

    j. In **Review WebLogic Domain**, verify the Domain summary. Then click **Next**.

    k. Create the WebLogic domain:

        i. In **Domain Name**, enter a valid name (Performance Management Architect defaults to bpma_domain).

        ii. In **Domain Location**, enter the location (Performance Management Architect defaults to `<drive>:\bea\user_projects\domains`)

        iii. Click **Create**.

    l. Once Domain creation is successful, select **Start Admin Server** , and click **Done**. This launches the Performance Management Architect domain server created in WebLogic.

3. In the Deploying to an Application Server task in the Configuration Utility, select your Web application server and the **Manual** option.

4. Deploy Performance Management Architect to Weblogic.

    a. Extract the `awb.war` and `DataSync.war` contents to `<HYPERION_HOME>\BPMA \AppServer\InstalledApps\WebLogic\9.1\BPMAWebServer\awb`. The `awb.war` and `DataSync.war` can be found in `<HYPERION_HOME>\BPMA\AppServer \InstallableApps\`.

    b. Start the server by selecting: **Start > Programs > BEA Products > User Projects > <BPMA_DOMAIN> > Start Admin Server for weblogic server domain**.

c. Start the WebLogic Administration console by selecting **Start** > **Programs** > **BEA Products** > **User Projects** > <**BPMA_DOMAIN**> > **Admin Server Console** or in a Web browser, entering the URL such as `http:\\<server>:<port>/console` where `<server>` is the machine where WebLogic is running and `<port>` is the BPM Architect domain port (19091).

d. Enter the username and password that you created earlier and click **Log In**.

e. From the **Change Center** panel, select **Lock and Edit**.

> **Note:** This is required to install and deploy but is not required once the install and deploy is done.

f. From the left panel of the Administration Console, select **Deployments**.

g. In the right pane, from **Summary of Deployments** > **Deployments**, select **Install**.

h. In the **Install Application Assistant**, browse to `<HYPERION_HOME>\BPMA\AppServer\InstalledApps\WebLogic\9.1\BPMAWebServer\awb`. Then click **Next**.

i. Once the file loads (this may take a while), from **Choose targeting style,** select **Install this deployment as an application**. Then click **Next**.

j. Select **I will make the deployment accessible from the following location**. Then browse to the location (`<HYPERION_HOME\BPMA\AppServer\InstalledApps\WebLogic\9.1\BPMAWebServer\awb`). Then select **Next**.

k. In **Additional configuration**, select whether you want to see the deployment configuration settings.

l. Verify the deployment summary and click **Finish**.

m. After the configuration loads (this may take a while), click **Save** from the **Overview** tab.

n. After the **Settings updated successfully** message is displayed, select **Activate Changes**.

o. From the **Domain structure** panel in the left pane, select **Deployments**.

p. In the **Summary of Deployments** panel, check that the state is "Prepared."

q. Select the application. Then select **Start** > **Servicing all request**.

r. In **Start Deployments**, select **Yes**.

s. In the **Summary of Deployments** panel, check that the state is "Active."

5 The application is ready to launch. Test by accessing the URL: `http://<web server>:<port>/awb` where `<web server>` is the Web server machine hostname and `<port>` is the Web server listen port, for example 19091.

6 Repeat these steps to deploy Performance Management Architect Data Synchronization server to WebLogic.

Manually Deploying Performance Management Architect into WebLogic 8.1.4

➤ To manually deploy and configure Performance Management Architect into WebLogic 8.1.4:

1 Install Performance Management Architect on a Windows computer.

2 In WebLogic, create the Performance Management Architect domain by using the WebLogic Configuration Wizard:

   a. Run `config.cmd` from this directory: `<drive>:\<BEA_HOME>\common\bin`.

   b. Select **Create a new WebLogic domain** and click **Next**.

   c. Select **Configuration Template** > **Templates**, highlight **Basic Weblogic Server Domain**, and click **Next**.

   d. Select **Custom** from the Express or Custom Configuration option, and click **Next**.

   e. In **Configure Administration Server**:

       i.   For **Name**, enter a server name (Hyperion defaults to BPMAServer).

       ii. For the Listen address, select **localhost**.

       iii. In Listen port, enter an unused port number (Defaults to 19091 for AWB or 19101 for DataSync).

       iv. If you want to enable SSL, select **Configure SSL**.

       v.   Click **Next**.

   f. In **Configure Managed Servers, Clusters and Machines Options**, click **Next**.

   g. In **Database (JDBC) Options**, click **Next**.

   h. In **Messaging (JMS) Options**, click **Next**.

   i. In **Configure Administrative Username and Password**, enter a user name, password and confirm the password. Then click **Next**.

   j. In **Configure Windows Options**, click **Next**.

   k. In **Build Start Menu Entries**, enter a name and argument. For example, **BPMArchitect**, then click **Next**.

   l. Under **Configure Server Start Mode and Java SDK**, select **Production Mode**. .

   m. Under Create Weblogic Configuration:

       i.   Click **Browse** to identify the folder in which to create the Performance Management Architect domain.

       ii. In **Configuration Name**, enter the domain name (Performance Management Architect defaults to BPMADomain)

       iii. Click **Create**.

   n. After Domain creation is successful, select **Start Admin Server** , and click **Done.** This launches the Performance Management Architect domain server created in WebLogic.

3 In the Deploying to an Application Server task in the Configuration Utility, select your Web application server and the **Manual** option.

4 DeployPerformance Management Architect to Weblogic.

   a. Extract the `awb.war` contents from `<HYPERION_HOME>\BPMA\AppServer\InstallableApps\` to `<HYPERION_HOME>\BPMA\AppServer\InstalledApps\WebLogic\8.1\BPMAWebServer\awb`.

   b. Start the WebLogic server you just created. For example, `<WL_HOME>\user_projects\domains\<USER_DOMAIN>\startWebLogic.cmd` or by selecting **Start** > **Programs** > **BEA WebLogic Platform 8.1**.

   c. Enter the username and password that you created earlier and click **Log In**.

   d. From the left panel of the Administration Console, select **Deployments** > **Web Applications Modules**.

   e. In the right pane, select **Deploy a new Web Application Module**.

   f. Browse to select the location of the exploded war file.

   g. Select **Target Module**.

   h. Review the choices.

   i. Under **Identity**, enter a name for the application (for example, bpma).

   j. Select **Deploy**.

   k. Verify the deployment status by waiting until it displays **Available**. The application is now ready.

5 Repeat these steps to deploy the Data Synchronization server to WebLogic.

Manually Deploying Performance Management Architect into WebSphere 6.0.2.11

➤ To manually deploy Performance Management Architect into WebSphere 6.0.2.11:

1 Install Performance Management Architect on a Windows computer.

2 Create a Profile

   a. Launch the Create Profile Wizard (**Start** > **Programs** > **IBM WebSphere** > **Application Server v6** > **Profile creation wizard**). Then select **Next**.

   b. Enter a profile name. For example: `BPMArchitect`

   c. Select the profile directory or leave the default. Then click **Next**.

   d. The port value assignment is displayed. Click **Next**.

   e. In Windows Service Definition, select whether to run the application as a Windows service. If you are running as a service, select **Log on as a specified user account**. Then click **Next**.

   f. Review the profile summary, then click **Next** to create the new profile.

g. Once the profile creation results is displayed, click **Finish**.

3   Create a virtual host by accessing the WebSphere Admin Console.

a. Select **Environment** > **Virtual Hosts** > **New** and specify a name for the virtual host (for example, BPMAVirtualHost).

b. Click **Apply**, **OK**, and **Save**.

c. In the Additional Properties section, select **Host Aliases**.

    i.   On the **Host Aliases** page, click **New**.

    ii. Specify a hostname or IP address of your server in Host Name or enter * to allow listening on all IP addresses for the machine. .

    iii. Specify the HTTP port that client machines will use to access BPM Architect (for example, 19091 for BPM Architect Web Tier and 19101 for Data Synchronizer).

    iv. Click **Apply**, **OK**, and **Save**.

4   In the Deploying to an Application Server task in the Configuration Utility, select your Web application server and the **Manual** option.

5   Deploy Performance Management Architect:

a. From the WebSphere Admin console, select **Applications** > **Install New Application**.

b. Enter the full server path to the `awb.war` file (`<HYPERION_HOME>\BPMA\AppServer\InstallableApps\awb.war`.

c. Select **Generate Default Bindings**.

d. Select **do not override existing bindings**.

e. Select **do not user default virtual host name for Web modules**. Then click **Next**.

f. Click **Continue** to acknowledge application security warnings.

g. Specify a name for the Web application (for example: `awb`)

h. Select the appropriate module to server for `awb`. Select check box for `awb` module.

i. Select **Apply**, then select **Next**.

j. In **Map Virtual Hosts for Web modules**, select the Virtual host from the drop-down list (for example, default_host). Then select the check box for the Web module `awb`.

k. Verify the summary, then click **Finish** to start the deployment. Due to the size of the Performance Management Architect application, this may take several minutes to complete. Do not interrupt the deployment process.

l. When the deployment is successful, select **Save to Master Configuration**.

m. Select **Save**.

n. Restart the application server.

6   Repeat these steps for the Data Synchronization server.

Manually Deploying Performance Management Architect into WebSphere 5.1.1.7

➤ To manually deploy Performance Management Architect into WebSphere 5.1.1.7:

1 Install Performance Management Architect on a Windows computer.

2 Log in to the WebSphere Admin Console and create an application server:

    a. Select **Servers** > **Application Servers** and in the right pane select **New**.

    b. In **Server**, enter a server name (for example, bpma). Then click **Next**, then **Finish**.

    c. In the left pane, select **Servers** > **Application Servers**.

    d. In the right pane, select the server created in step 2b, and in the additional properties section, select **Web Container** > **HTTP Transport**. Make a note of the assigned HTTP and HTTPS (SSL) port numbers, changing if needed.

    e. In the left pane, select **Environment** > **Virtual Hosts**.

    f. In the right pane, open the default_host.

    g. In the Additional Properties section, select **Host Aliases**. Then click **New**.

        i. Assign a value to the Host Name field depending on your needs: .

            1. To allow a host to connect to the selected http transports, enter an asterisk (*) in this field.

            2. To limit access to a host, such as your Web Server machine, enter the host's name or IP address.

        ii. Specify the HTTP port that client machines will use to access Performance Management Architect (for example, 19091 for Performance Management Architect Web Tier or 19101 for Data Synchronizer).

        iii. Click **Apply**, **OK**, and **Save to Master Configuration**.

3 In the Deploying to an Application Server task in the Configuration Utility, select your Web application server and the **Manual** option.

4 Create the Oracle's Enterprise Performance Management Architect application.

    a. Select **Applications** > **Install New Application**.

    b. Browse to the location of the `awb.war` file.

       If you installed to the default location, the file is located at `<<HYPERION_HOME>\BPMA\AppServer\InstallableApps\`.

    c. Specify application context root: `awb`.

    d. Click **Next**

    e. Select **Generate Default Bindings** .

    f. Select **do not use default virtual host name for Web modules**. Then click **Next**.

    g. Change the Application Name to **awb**. Then click **Next**.

      h.   In **Map modules to application servers**, under modules, select the module named **awb**.

      i.   Under **Clusters and Servers**, select the server named **awb**

      j.   Click **Apply** and then **Next**.

      k.   Review the summary, then click **Finish**.

      l.   Save to master configuration.

5   Repeat these steps to manually deploy and configure the Data Synchronization server.

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