Essbase® Administration Services

Release 7.1

Installation Guide



Hyperion Solutions Corporation

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Preface

Welcome to the Essbase Administration Services Installation Guide:

- "Purpose" on page vii
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- "Conventions" on page x
- "Additional Support" on page xii
- "Documentation Feedback" on page xii

Purpose

This guide provides you with information that you need to install Essbase Administration Services and to start it for the first time. It explains Administration Services deployment options and contains the concepts, processes, and procedures that you need to install the software.

Audience

This book is for Essbase system administrators who need to install and configure Administration Services software on Windows or UNIX platforms. It also assists system administrators in deciding how to deploy Administration Services with Analytic Servers in an enterprise environment.

Document Structure

This document contains the following information:

- Chapter 1, "Overview and Deployment," provides an overview of the Administration Services architecture and deployment options.
- Chapter 2, "Planning the Installation," lists installation prerequisites and system requirements for Administration Services.
- Chapter 3, "Installing Administration Services," explains how to install Administration Services.
- Chapter 4, "Upgrading to This Release," describes the process for upgrading from previous releases of Administration Services.
- Chapter 5, "Working with Administration Services," provides procedures for getting started with and using Administration Services.
- Chapter 6, "Implementing the Hyperion Security Platform," explains how to set up Analytic Services and Administration Services to use external authentication supplied by the Hyperion security platform.
- Chapter 7, "Configuring Third-Party Components," describes how to configure third-party components for use with Administration Services.
- Index contains a list of Administration Services terms and their page references.

Where to Find Documentation

All Administration Services documentation is accessible from the following locations:

• The HTML Information Map is located at

EASPATH\eas\doc_launcher.htm

Launch this file, and then provide the name of the computer where Administration Server is installed. Administration Server must be started when you launch the Information Map.

• The Help menu in Administration Services Console provides access to most documentation.

- The Hyperion Solutions Web site is located at http://www.hyperion.com
- Access to the Hyperion Download Center is through http://hyperion.subscribenet.com
- To access documentation through the Hyperion Solutions Web site:
 - 1. Log on to http://www.hyperion.com.
 - 2. Select the **Support** link and type your username and password to log on.

Note: New users must register to receive a username and password.

- **3.** Click the **Hyperion Download Center** link and follow the on-screen instructions.
- To access documentation from the Hyperion Download Center:
 - 1. Log on to http://hyperion.subscribenet.com.
 - 2. In the Login ID and Password text boxes, enter your assigned login ID name and password.
 - 3. In the Language list box, select the appropriate language and click Login.
 - **4.** If you are a member on multiple Hyperion Download Center accounts, select the account that you want to use for the current session.
 - **5.** Perform one of the following actions:
 - To access documentation online, from the **Product List**, select the appropriate product and follow the on-screen instructions.
 - To order printed documentation, from the **Information** section in the left frame, select **Order Printed Documentation** and follow the on-screen instructions.
- To order printed documentation if you do not have access to the Hyperion Download Center:
 - In the United States, call Hyperion Solutions Customer Support at 877-901-4975.
 - From outside the United States, including Canada, call Hyperion Solutions Customer Support at 203-703-3600. Clients who are not serviced by support from North America should call their local support centers.

Conventions

This book uses several formatting styles to indicate actions that you should take or types of information that you need. Table i lists each document convention:

Table i: Document Conventions

Example	Description		
>	Arrows indicate the beginning of a procedure consisting of sequential steps.		
Bold	Bold in procedural steps highlights major interface elements.		
Ctrl+0	Keystroke combinations shown with the plus symbol (+) indicate that you should press the first key and hold it while you press the next key. Do not type the + symbol.		
Exampletext	Courier font indicates that the material shown is a code or syntax example. Names of files and directories are also displayed in this font.		
<i>Courier italics</i>	Courier italic text indicates a variable field in command syntax. Substitute a value in place of the variable shown in Courier italics.		
ARBORPATH	 If Analytic Services is installed on the same computer, this environment variable is set to the directory path of the Analytic Services installation. The default is c:\hyperion\essbase on Windows platforms and /home/hyperion/essbase on UNIX platforms. If Analytic Services is not installed on the same computer, this environment variable is set internally when you start Administration Server. For more information about ARBORPATH, see "Starting Administration Server" on page 54. 		
	When you see the environment variable <i>ARBORPATH</i> in italics, substitute the value of <i>ARBORPATH</i> from your site.		

Example	Description	
EASPATH	This is the directory path of the Administration Services installation. The default is c:\hyperion on Windows platforms and /home/hyperion on UNIX platforms.	
	On Windows, EASPATH is also a system environment variable.	
	In this document, when you see <i>EASPATH</i> in italics, substitute the appropriate directory path from your site.	
HYPERION_HOME	The environment variable HYPERION_HOME points to the directory in which common files used by Administration Services and other Hyperion products are installed on Windows. The default for HYPERION_HOME is c:\hyperion.	
Italics	Titles of books and online help systems are displayed in <i>italics</i> . Italics also indicate important terms and special emphasis.	
Mouse orientation	This document provides examples and procedures using a right-handed mouse. If you use a left-handed mouse, adjust the procedures accordingly.	
Menu options	Options in menus are shown in the following format. Substitute the appropriate option names in the placeholders, as indicated.	
	Menu name > Menu command > Extended menu command	
	For example: 1. Select File > Desktop > Accounts .	

Additional Support

In addition to providing documentation and online help, Hyperion offers the following product information and support. For details on education, consulting, or support options, visit the Hyperion Solutions Web site at http://www.hyperion.com.

Education Services

Hyperion offers instructor-led training, custom training, and eTraining covering all Hyperion applications and technologies. Training is geared to administrators, end users, and information systems (IS) professionals.

Consulting Services

Experienced Hyperion consultants and partners implement software solutions tailored to clients' particular reporting, analysis, modeling, and planning requirements. Hyperion also offers specialized consulting packages, technical assessments, and integration solutions.

Technical Support

Hyperion provides enhanced electronic-based and telephone support to clients to resolve product issues quickly and accurately. This support is available for all Hyperion products at no additional cost to clients with current maintenance agreements.

Hyperion Developer Network

Hyperion Developer Network is your one-stop community destination for all things Essbase. Visit http://dev.hyperion.com.

Documentation Feedback

Hyperion strives to provide complete and accurate documentation. We value your opinions on this documentation and want to hear from you. Send us your comments by clicking the link for the Documentation Survey, which is located on the Information Map for your product.

Overview and Deployment

This chapter introduces you to Essbase Administration Services and explains how to deploy this administration tool.

• "About Essbase Administration Services" on page 13

Chapter

- "Components of Administration Server" on page 15
- "Deployment of Administration Services" on page 16
- "Accessing Deployment Servers from Administration Services" on page 20

About Essbase Administration Services

Essbase Administration Services is the cross-platform framework for managing and maintaining Hyperion Essbase. Administration Services provides a single point of access for viewing, managing, and maintaining Analytic Servers, Administration Servers, and Deployment Servers. This product provides the following:

- The functionality of Application Manager
- Additional administrative features not provided with Application Manager
- An interface for Analytic Services administration tools, such as MaxL
- A framework for plug-in components
- Administration of Essbase Deployment Servers

Administration Services consists of two components:

• Administration Services Console (client tier)

This component is a Java client console that enables administrators to manage the Analytic Services environment from a robust graphical user interface.

• Administration Server (middle tier)

This component is a Java middle-tier server that communicates with both Administration Services Console and Analytic Servers. Administration Server maintains communication and session information for each connection to Analytic Servers. Administration Server also stores documentation files so that console users can access documentation without having to install it locally.

Administration Server serves as the middle tier between Administration Services Console and Analytic Servers, as shown in Figure 1.



Figure 1: Essbase Administration Services Architecture

These three tiers can be installed on different computers or platforms. For deployment scenarios and details, see ""Deployment of Administration Services" on page 16."

Components of Administration Server

Administration Server requires the following third-party components:

- A relational database management system (RDBMS)
- An application server
- Java Runtime Environment (JRE)

By default, all of the components you need to run Administration Services are automatically installed by the Administration Services installer program. This release also supports the substitution of certain third-party products within the existing framework.

Relational Database Management System (RDBMS)

Administration Server requires a relational database for storage of Log Analyzer information. For information about which databases are supported, and for instructions to substitute a third-party database, see "Enabling Support for Third-Party Databases" on page 76.

Application Server

Administration Server requires an application server, which provides the business logic for Administration Services. For information about which application servers are supported, and for instructions to substitute a third-party application server, see "Deploying Administration Server on Third-Party Application Servers" on page 79.

Java Runtime Environment (JRE)

Administration Services is a Java application and therefore requires a Java Runtime Environment (JRE) to execute the program. This release requires JRE version 1.4.1 and installs this version automatically on all platforms. For specific information about Java requirements, see "System Requirements" on page 24.

Deployment of Administration Services

This section describes how to deploy Administration Services with Analytic Servers. For information about deploying Administration Services with Deployment Servers, see "Accessing Deployment Servers from Administration Services" on page 20.

You can install Administration Services on the same computer as Analytic Server or on a different computer, in various configurations. For example, you can install Analytic Server on a computer running UNIX and install Administration Server and Administration Services Console on a computer running Windows. You can also install Administration Server and Administration Services Console on separate computers and platforms. For a list of supported platforms for each component, see "System Requirements" on page 24.

Refer to the following topics when considering deployment:

- "Deployment Scenarios" on page 16
- "Deployment and Configuration Guidelines" on page 19

Deployment Scenarios

Essbase components can be installed in many deployment scenarios. The best configuration depends on your organizational requirements and on which release of Analytic Server you are using. Before selecting a deployment scenario, read the information in "Deployment and Configuration Guidelines" on page 19.

Here are a few deployment scenarios to consider:

• Administration Server on one computer, Analytic Server on a separate computer, and Administration Services Console on one or more client computers, as shown in Figure 2





You can also have multiple Administration Server computers and multiple Analytic Server computers, each running on a different platform. Consider this configuration if you have multiple administrators working with large outlines and Analytic Server has limited resources, or if you will be administering large outlines during heavy Analytic Services usage, such as querying or building databases. 1

• Everything on one computer, as shown in Figure 3

Figure 3: Single Computer



Consider this configuration if you have limited resources or if you need to perform administration tasks from the computer hosting Analytic Server. See "Deployment and Configuration Guidelines" on page 19 for important requirements for this scenario.

• Analytic Server and Administration Server on one computer, and Administration Services Console on one or more client computers, as shown in Figure 4



Figure 4: Single Server Computer, Multiple Clients

Each computer can run on a different platform. Consider this configuration if you have limited resources but need to administer Analytic Servers from multiple locations.

Deployment and Configuration Guidelines

This topic discusses guidelines to consider when choosing a deployment scenario and configuring the Administration Server computer.

Administration Server and Administration Services Console should be installed on the same computer only if the following requirements are met:

- You want to run Administration Server on a Windows platform. (Administration Services Console is supported only on Windows platforms).
- Only one administrator uses Administration Services to manage small-sized Analytic Server installations. (As an example, a small-sized Analytic Server installation includes fewer than 10 applications, each of which contains fewer than 1000 users, fewer than 1000 filters per database, and no scripts larger than 1 MB).
- The computer has the required amount of memory for both components. For detailed memory requirements, see "System Requirements" on page 24.
- Outline editing is carefully monitored. Outline editing consumes memory on both Administration Server and Administration Services Console. Consider how many outlines are being edited simultaneously and how large the outlines are. For detailed outline memory requirements for Administration Server, see Table 3 on page 27. For detailed outline memory requirements for Administration Services Console, see Table 6 on page 30.

In all other cases, Administration Server and Administration Services Console should be installed on separate computers. The configuration of the Administration Server computer depends upon the potential workload of Administration Server. Use the following guidelines when configuring the Administration Server computer:

• Administration Server is a single process and can address only 2 GB of memory; therefore, it runs out of memory if users are simultaneously editing outlines. Consider deploying multiple instances of Administration Server if users will be editing multiple outlines simultaneously.

• If more than 10 users will be connected to Administration Server simultaneously, consider (1) using a computer that employs multiple CPUs for Administration Server or (2) deploying multiple instances of Administration Server on separate computers to improve performance.

Note: For detailed information on memory requirements for Administration Server and Administration Services Console, see "System Requirements" on page 24.

Accessing Deployment Servers from Administration Services

You can use Administration Services Console to manage Essbase databases that are connected through Essbase Deployment Servers. You must install, configure, and start the Deployment Servers separately from Administration Services. For information about how to install and configure Deployment Servers, see *Essbase Deployment Services Installation Guide*.

Each Administration Services user can add the appropriate Deployment Servers to the Enterprise View tree in Administration Services Console. The added Deployment Servers are listed under the Essbase Deployment Servers node in Enterprise View. For instructions about adding and managing Deployment Servers, see *Essbase Administration Services Online Help*.

You can install Administration Services on the same computer as Deployment Server or on a different computer, in various configurations. Deployment Servers can be configured for TCP/IP or HTTP operation; both modes can be managed through Administration Services. For information about which versions of Deployment Server are supported, see "Release Compatibility" on page 24.

For information about how to install and configure Deployment Servers, see *Essbase Deployment Services Installation Guide*.

Chapter

Planning the Installation

This chapter provides an overview of the installation process and specifies the hardware, operating system, and software requirements for Essbase Administration Services.

- "Workflow for Installation" on page 21
- "Product Components" on page 23
- "Prerequisites" on page 23
- "System Requirements" on page 24

Workflow for Installation

Use the following process to install Administration Services and to set up users.

1. Install a supported release of Analytic Server.

See "Release Compatibility" on page 24.

If you are installing Analytic Server simultaneously with Administration Services, you can install the two products in any order. Administration Services deploys its own set of Essbase .dlls and sets ARBORPATH internally, so there is no dependency on an existing Analytic Server installation.

- 2. Prepare to install Administration Services:
 - Verify that you have all necessary software and documentation. See "Product Components" on page 23.
 - Decide how you want to deploy Administration Services. You can install Administration Services and Analytic Services on different computers or platforms. See "Deployment of Administration Services" on page 16.
 - Decide if you want to use a supported third-party relational database and/or application server instead of the default products provided with the installation. See "Configuring Third-Party Components" on page 75.
 - Ensure that you have met installation prerequisites, as described in "Prerequisites" on page 23.
 - Confirm that your platform is supported by Administration Services and that system requirements are met for the computer on which you are installing. See "System Requirements" on page 24.
- **3.** If upgrading from a previous release of Administration Services, review the procedures for upgrading to this release.

See "Upgrading to This Release" on page 49.

4. Install Administration Services.

See "Installing Administration Services" on page 33.

5. Start Administration Services.

See "Starting Administration Services" on page 53.

6. Set up Administration Services users.

See "Setting Up Users" on page 59.

7. Make a backup copy of the files used to store Administration Services user information.

See "Backing Up and Restoring User Information" on page 60.

8. Specify an outgoing mail (SMTP) server on Administration Server.

See "Setting Up an SMTP Server" on page 60.

Product Components

Before you install Administration Services, confirm that you have all necessary product components:

- The appropriate self-extracting download files from Hyperion Download Center or the CD
- This book, the Essbase Administration Services Installation Guide
- The Essbase Administration Services Installation Checklist
- The Essbase Administration Services Readme File

Prerequisites

Before installing Administration Services, make sure that you have met the following prerequisites:

- On UNIX platforms, if the HYPERION_HOME environment variable is already defined from a previous Hyperion product installation on the machine to which you are installing, ensure that it is set before launching the Administration Services installer. HYPERION_HOME is where common components are installed during some Hyperion product installations. If the HYPERION_HOME environment variable already exists on the computer to which you are installing, setting the environment before launching the installer will ensure that the appropriate components are installed to the existing location of HYPERION_HOME. You must install common components to the same location as the existing HYPERION_HOME setting. For more information about HYPERION_HOME, see "What Happens During Installation" on page 37.
- If you plan to deploy Administration Server on a supported third-party application server, you must install the application server first and then install Administration Server on the computer hosting the application server. For more information, see "Deploying Administration Server on Third-Party Application Servers" on page 79.
- Be aware of existing port usage so that you can resolve port conflicts during installation. For more information about configurable ports, see "Specifying Communication Ports for Apache Tomcat" on page 58.
- If you plan to use external authentication, see the requirements in Chapter 6, "Implementing the Hyperion Security Platform."

System Requirements

Use the tables in the following topics to verify that this release supports the platforms where you plan to install Administration Services:

- "Release Compatibility" on page 24
- "Supported Platforms for Administration Server" on page 25
- "System Requirements for Administration Server" on page 26
- "Supported Platforms for Administration Services Console" on page 29
- "System Requirements for Administration Services Console" on page 29

Release Compatibility

Use these topics for release compatibility information:

- "Supported Analytic Server Releases" on page 24
- "Supported Deployment Server Releases" on page 25
- "Administration Server and Administration Services Console Compatibility" on page 25

Supported Analytic Server Releases

Administration Services supports the following releases of Analytic Server:

- Release 6.5.1
- Release 6.5.2 (Linux platform release for Analytic Server)
- Release 6.5.3
- Release 6.5.4
- Release 7.0
- Release 7.1

Note: Administration Services does not support Analytic Server Release 6.5.0.

Although you can use Administration Services to connect to an earlier release of Analytic Server, you cannot use the features introduced in later releases of Analytic Server.

Supported Deployment Server Releases

Administration Services supports Deployment Server Release 7.1 or higher.

Administration Server and Administration Services Console Compatibility

When you upgrade to a new release of Administration Services, you must upgrade both Administration Server and Administration Services Console.

Supported Platforms for Administration Server

Table 1 lists the supported platforms for this release of Administration Server.

Platforms	Supported Versions
AIX	5L (V5.1 or V5.2) on PowerPC computers, including RS 6000
	• An updated C++ runtime environment is required.
	• For 5.1: ML1 and ML 4 are not supported.
	• For 5.2: The minimum supported level is 5.2 ML 1.
HP-UX	11.0 and 11i on PA-RISC computers running HP-UX kernel-threads
Linux	RedHat Linux AS 2.1 for Intel
Solaris	2.8 or 2.9 (SUN OS 5.8 or 5.9)
Windows	Windows 2000 SP3
	Windows 2003

Table 1: Administration Server Supported Platforms

Updated C++ Runtime Environment for AIX 5L

If the following error message is displayed on AIX, you need to install an updated C++ runtime environment on that computer:

```
exec(): 0509-036 Cannot load program ESSBASE because
of the following errors: 0509-150 Dependent module
/usr/lib/libC.a(shrcore.o) could not be loaded.
0509-152 Member shrcore.o is not found in archive
```

► To download this file:

1. Go to the IBM technical support website:

https://techsupport.services.ibm.com/

- 2. Search for the PTF number (U489780) or the fileset (xlC.aix50.rte.6.0.0.7).
- **3.** Download the file.

System Requirements for Administration Server

Table 2 lists the system requirements for the computer where Administration Server is installed.

Component	Requirement		
Disk space	180 MB minimum		
	This estimate includes documentation files and all Hyperion common components. The installer program calculates the exact amount of required disk space, based on your installation choices.		
	Allow extra disk space for data files and outline files that are copied to Administration Server during data loads and outline editing, respectively.		
RAM	See Table 3 on page 27.		
Network protocol	TCP/IP		
Java platform	Java Runtime Environment Version 1.4.1 (installed automatically on all platforms)		
RDBMS ¹	Choose one of the following:		
	• MySQL 4.0.12PRO		
	• Oracle 8i and 9i		
	• IBM DB2 7.2 and 8.1		
	Note: Oracle and DB2 databases do not have to be installed on the same computer as Administration Server.		

Table 2: Administration Server System Requirements

Component	Requirement		
Application server ²	Choose one of the following:		
	• Apache Tomcat Server 4.1.30		
	• BEA WebLogic Server 8.1		
	• IBM WebSphere Application Server 5.1		
ESSLANG environment variable	The installation program prompts you to select a value for ESSLANG, which points Administration Server to the correct Global C code page.		
	For detailed information about what you should select for the ESSLANG value, see "Selecting the ESSLANG Value" on page 46.		

Table 2: Administration	Server S	ystem Red	quirements	(Continued))
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- ¹ If you choose, the correct version of MySQL is installed and configured for use with Administration Services. For information about enabling support for third-party databases, see "Enabling Support for Third-Party Databases" on page 76.
- ² If you choose, the correct version of Apache Tomcat Server is installed and configured for use with Administration Services. For information about deploying Administration Server on a supported third-party application server, see "Deploying Administration Server on Third-Party Application Servers" on page 79.

The following table lists detailed memory requirements for Administration Server.

Component	Requirement	Discussion
Startup memory	38 MB	Startup memory consists of: 16 MB initial heap + 22 MB for code
Working memory	32 MB * number of concurrent Administration Server users	For example: When 10 administrators are connected to Administration Server: 32 MB * 10 = 320 MB

Table 3: Detailed Memory Requirements for Administration Server

Component	Requirement	Discussion
Outline memory	1 KB per member for outlines open in Outline Editor	This memory is used by the outline API cache when outlines are opened in Outline Editor.
-Xmx parameter in adminsvr.lax Default value = 128 MB Recommended value = initial heap memory + working memory	Default value = 128 MB	This parameter is in the following file:
	Recommended value = initial heap memory +	<i>EASPATH</i> \eas\server\bin\ adminsvr.lax
	in the "lax.nl.java.option.additional" section.	
	The -Xmx parameter controls the maximum memory available to Administration Server (excluding outline memory), which is limited by the physical memory available on the operating system.	
		It is recommended that you calculate the appropriate value for this parameter using the following formula:
		initial heap memory + working memory
		For example:
		16 MB + (32 MB * <i>n</i>) where <i>n</i> = number of concurrent Administration Server users

Table 3: Detailed Memory Requirements for Administration Server (Continued)

Supported Platforms for Administration Services Console

 Table 4 lists the supported platforms for this release of Administration Services

 Console.

Table 4: Administration Services Console Supported Platforms

Platforms	Supported Versions	
Windows	Windows XP	
	Windows 2000 SP3	
	• Windows 2003	

System Requirements for Administration Services Console

 Table 5 lists the system requirements for the computer where Administration

 Services Console is installed.

Component	Requirement	
Disk space	90 MB minimum	
	Note: The installer program calculates the exact amount of required disk space, based on your installation choices.	
RAM	See Table 6 on page 30.	
Network protocol	TCP/IP	
Java platform	Java Runtime Environment Version 1.4.1 (installed automatically on all platforms)	
Screen resolution	1024 x 768	

Table 5: Administration Services Console System Requirements

The following table lists detailed memory requirements for Administration Services Console:

Component	Requirement	Discussion
Startup memory 33 MB	33 MB	Startup memory consists of:
		8 MB initial heap + 25 MB for code
Working memory	64 MB ¹ per <i>connected</i>	For example:
Analytic Server	Analytic Server	64 MB * 3 (connected Analytic Servers) = 192 MB
		Analytic Servers that are listed in Enterprise View but are not connected do not use memory. Administration Services Console caches most of the information retrieved from Analytic Server until the user disconnects from Analytic Server. Examples of information kept in cache include
		application list
		database list
		• user list
		• filter list
		• group list
		• open calculation scripts, report scripts, and MaxL scripts
	To reduce memory usage, close unnecessary instances of script editors.	

Table 6: Detailed Memory Requirements for AdministrationServices Console

Component	Requirement	Discussion
Outline memory	Outline Editor: 32 MB + (500 B per member)	 In Outline Editor, a maximum of 5,000 level-0 members per parent are retrieved into memory: Non-level-0 members are retained in memory.
		• Memory is not released for members that are modified during the editing session. For example, deleted or renamed members are retained in memory.
		For example, if the outline has 1,000 non-level-0 members and 100,000 level-0 members, then memory usage would be: 33,554,432 + (500 * 1,000) + (500 * 5,000) = 36,554,432 B
	Outline Viewer: 32 MB + (8 B * number of visible members)	In Outline Viewer, a member is considered "visible" if its parent is expanded.
		For example, if the outline has 1,000 non-level-0 members and 100,000 level-0 members, then memory usage would be: 33,554,432 + (8 * 101,000) = 34,362,432 B
-Xmx parameter in admincon.lax	Default value = 256 MB Recommended value = initial heap memory + working memory + outline memory	This parameter is in the following file: EASPATH\eas\console\bin\ admincon.lax in the "lax.nl.java.option.additional" section. The -Xmx parameter controls the maximum memory available to Administration Services Console. It is recommended that you calculate the
		appropriate value for this parameter using the following formula:
		initial heap memory + working memory + outline memory

Table 6: Detailed Memory Requirements for AdministrationServices Console (Continued)

¹ For small-sized Analytic Services installations, working memory can be reduced to 32 MB per connected Analytic Server. For an example of a small-sized installation, see "Deployment and Configuration Guidelines" on page 19.

Planning the Installation



Chapter

Installing Administration Services

This chapter provides instructions for installing Administration Services on all platforms and describes what happens during the installation process.

This chapter includes the following topics:

- "Launching Installers" on page 34
- "Launching Installers on UNIX" on page 35
- "Installing Administration Services Software" on page 35
- "What Happens During Installation" on page 37
- "Running Administration Server as a Windows Service" on page 42
- "Selecting the ESSLANG Value" on page 46
- "Uninstalling Administration Services" on page 47

Before you begin installation, read and follow the instructions outlined in Chapter 2, "Planning the Installation."

Launching Installers

Before installing Administration Services, decide which software installation format you will use. You can install from files that you have downloaded from the Hyperion Download Center or from a CD.

- To launch the Administration Services installer from the appropriate self-extracting download file from the Hyperion Download Center:
 - 1. Log on to the Hyperion Download Center.
 - 2. Navigate to the Administration Services product page from the list provided.
 - **3.** Download the Start Here document for instructions on downloading the installer files.
 - 4. Run the appropriate installer.

Note: For information about launching UNIX installers, see "Launching Installers on UNIX" on page 35.

- To launch the Administration Services installer from the CD:
 - **1.** Navigate to the eas directory on the CD.
 - 2. Navigate to the appropriate directory for your platform.
 - **3.** Run the appropriate installer for your platform:
 - setup.exe for Windows
 - setup.bin for UNIX

Note: For information about launching UNIX installers, see "Launching Installers on UNIX" on page 35.

Launching Installers on UNIX

On UNIX platforms, you can launch the installer from the console or in XWindows.

To launch the installer in XWindows, type:

./installer file name For example:

./setup.bin

To launch the installer in the console, type:

./installer file name -console

For example:

./setup.bin -console

Installing Administration Services Software

Administration Services provides a cross-platform installer program for both Windows and UNIX platforms.

You can access the installer program from the appropriate self-extracting download files at the Hyperion Download Center or from the CD. To make the installer program available to users who do not have access to Hyperion Download Center or the CD, download the program to a network.

Note: You can leave Analytic Server running while installing Administration Services.

To install Administration Services:

1. Verify that all prerequisites and system requirements are met.

For detailed information, see Chapter 2, "Planning the Installation."

2. Download and launch the applicable installer program for the Administration Services software.

See "Launching Installers" on page 34 for instructions.

3

- **3.** Follow the installation prompts, keeping in mind the following information:
 - You can install Administration Services to any directory except a directory that contains a space in the directory name (for example, c:\Program Files). The default directory is c:\hyperion.
 - Hyperion common components are installed to a different directory than the Administration Services software: *HYPERION_HOME*\common. The default location for HYPERION_HOME is c:\hyperion. Once defined, the location for HYPERION_HOME cannot be changed.

The location for common components is defined in the HYPERION_HOME system variable. On Windows platforms, if the HYPERION_HOME system variable already exists, the Administration Services installer places common components in the existing HYPERION_HOME location. On UNIX platforms, if the HYPERION_HOME system variable already exists, you must set the environment before launching the installer to ensure that common components are installed to the existing location of HYPERION_HOME.

For more information about HYPERION_HOME, see "Files Installed in the HYPERION_HOME Directory" on page 40.

- A typical installation installs Administration Server and Administration Services Console components and the documentation. A custom installation enables you to install Administration Server and Administration Services Console components separately.
- You can choose to install the default middle-tier relational database (MySQL), or you can choose not to install MySQL if you plan to use a supported third-party database instead. If you choose to install MySQL, you must specify a port number and location or accept the defaults. The standard port used to communicate with MySQL is port 3306. This port must be available when you start Administration Server.

If you do not know what information to specify, see your administrator for the database you are substituting. The relational database is used only to store Log Analyzer information. For more information about MySQL, see "What Happens During Installation" on page 37. For more information about third-party databases, see "Enabling Support for Third-Party Databases" on page 76.

• You can choose to install the default middle-tier application server (Apache Tomcat), or you can choose not to install Apache Tomcat if you plan to use a supported third-party application server instead. If you
choose to install Apache Tomcat, you must specify port numbers to use or accept the defaults. For more information about Apache Tomcat, see "What Happens During Installation" on page 37.

For instructions about deploying to a supported third-party application server, see "Deploying Administration Server on Third-Party Application Servers" on page 79.

- On Windows platforms, you can install Administration Server as a Windows service. For instructions, see "Installing Administration Server as a Windows Service" on page 43.
- The installer prompts you to select a value for the ESSLANG environment variable. The default value for the ESSLANG variable is English (Latin1). For detailed information about what you should select for the ESSLANG variable, see "Selecting the ESSLANG Value" on page 46.

After installation is complete, you can start Administration Services and create users. See "Working with Administration Services" on page 53.

What Happens During Installation

During installation, the Administration Services installer program performs the following operations:

• Creates the \eas directory and subdirectories under the location you specify in the installer

The directory where you install Administration Services is referred to as the EASPATH directory. For a listing of the Administration Services directories created, see "Files Installed in the EASPATH Directory" on page 39.

• On Windows, creates the EASPATH environment variable on the system

EASPATH is set to the root directory of the Administration Services installation (for example, c:\hyperion).

• Installs Hyperion common components to the HYPERION_HOME\common directory

Some third-party common components are optional and may not be installed. For more information about third-party products, see "About Third-Party Components" on page 75.

For more information about HYPERION_HOME and for a listing of the directories created, see "Files Installed in the HYPERION_HOME Directory" on page 40.

• Installs Apache Tomcat Server, if you chose to install it during the Administration Server installation

Apache Tomcat is installed to the HYPERION_HOME\common directory. For information about default ports for Apache Tomcat, see "Specifying Communication Ports for Apache Tomcat" on page 58. For information about deploying to a supported third-party application server, see "Deploying Administration Server on Third-Party Application Servers" on page 79.

• Installs and starts the MySQL database, if you chose to install it during the Administration Server installation

MySQL is installed to the HYPERION_HOME\common directory. For information about deploying to a supported third-party relational database, see "Enabling Support for Third-Party Databases" on page 76.

On Windows platforms, MySQL is installed and started automatically as a Windows Service (Hyperion-MySQL-4.0.12). On UNIX platforms, MySQL is started in the background. If MySQL has been stopped for any reason, and if you want to use the Log Analyzer feature, you need to restart it. For instructions, see "Stopping and Restarting the MySQL Database" on page 57.

• Installs documentation files to the Administration Server computer

Documentation is installed in:

EASPATH\eas\deployments\Tomcat\4.1.30\webapps\easdocs

If you have deployed Administration Server on a supported third-party application server, the documentation is deployed on that application server and is not installed on Administration Server.

For more information about documentation, see "Documentation Installed" on page 41.

• On Windows, adds shortcuts to the Start menu

The uninstaller program is located in EASPATH\eas\uninstall

For uninstallation instructions, see "Uninstalling Administration Services" on page 47.

• Installs and runs Essbase Deployment Server as a servlet in the Administration Server application server (Tomcat Apache by default)

This servlet is used exclusively for the Data Preview Grid feature. For more information about this feature, see *Essbase Administration Services Online Help*.

Note: For information about managing Essbase Deployment Servers through Administration Services Console, see *Essbase Administration Services Online Help.*

Files Installed in the EASPATH Directory

The directory where you install Administration Services is referred to as the EASPATH directory. The default for EASPATH is c:\hyperion on Windows platforms and /home/hyperion on UNIX platforms.

 Table 7 describes the directories that the installer program creates for a typical (both server and console software) installation.

Directory	Description
eas	Contains Administration Services readme file, documentation launch file, and their associated files
eas\console	Contains Administration Services Console executable files, Java class files, and any temporary files created by the console
eas\deployments	Contains application server files, documentation files, and files to support administration of Essbase Deployment Servers

Table 7: Directories Created in the EASPATH Directory During a Typical Installation

Directory	Description
eas\server	Contains Administration Server executable files, relational database files, Java class files, and server locale files
eas\uninstall	Contains files for uninstalling Administration Services

Table 7: Directories Created in the EASPATH Directory During aTypical Installation (Continued)

Files Installed in the HYPERION_HOME Directory

The Administration Services installer places components that might also be used by other Hyperion programs in a common location. This includes third-party products such as JRE as well as internal Hyperion components. The location for these components is defined in the system environment variable called HYPERION_HOME. The default location for HYPERION_HOME is c:\hyperion on Windows platforms and /home/hyperion on UNIX platforms. Once defined, the location for HYPERION_HOME cannot be changed.

For more information about how the HYPERION_HOME environment variable is set or detected during installation, see "Installing Administration Services Software" on page 35. Table 8 lists the files that are installed in the *HYPERION_HOME*\common directory with a default installation of Administration Services. Some common components are optional and may not be installed.

Directory	Description
appServers	Contains Apache Tomcat Server files (optional during installation)
CSS	Contains Hyperion Security Platform files
DBMS	Contains MySQL database management system (DBMS) files (optional during installation)
HyperionLookAndFeel	Contains installer user interface files
JDBC	Contains Java Database Connectivity (JDBC) files
JRE	Contains Java Runtime Environment (JRE) files
loggers	Contains files for Hyperion Security Platform logging
XML	Contains common XML components

Table 8: Directories Created in the HYPERION_HOME\common Directory

CAUTION: Do not manually move, delete, or overwrite the common components.

Documentation Installed

Documentation files are installed to Administration Server so that all console users can access documentation from Administration Services Console without needing to install documentation locally. If you have deployed Administration Server on a supported third-party application server, the documentation is deployed on that server. For information about supported third-party application servers, see "Deploying Administration Server on Third-Party Application Servers" on page 79.

All documentation components can be launched from the Administration Services Information Map.

To launch the Information Map in a Web browser, navigate to the EASPATH\eas directory and double-click the doc_launcher.htm file.

Note: On Windows platforms, if you chose to add shortcuts to the Start menu during installation, you can also launch the Information Map from the Start menu. Select Start > Programs > Hyperion Solutions > Essbase Administration Services > Information Map.

Browser Limitations

For best results, Hyperion recommends viewing *Essbase Administration Services Online Help* in Internet Explorer version 6.0 or later or in Netscape Navigator version 7.0 or later. Certain features of the help system, however, are not supported by Netscape Navigator.

On UNIX platforms, if you use Netscape Navigator to view the help system, you must open Netscape *before* you attempt to launch the help system from the Help menu in Administration Services Console.

Running Administration Server as a Windows Service

Running Administration Server as a Windows service enables you to start and stop it from the Windows Control Panel. Running Administration Server as an automatic service starts Administration Server as a service when you start Windows. This section contains the following topics:

- "Installing Administration Server as a Windows Service" on page 43
- "Adding Administration Server as a Windows Service" on page 43
- "Verifying That Administration Server Is Running as a Windows Service" on page 44
- "Stopping the Administration Server Windows Service" on page 44
- "Starting the Administration Server Windows Service" on page 44
- "Resetting the Administration Server Windows Service" on page 45
- "Removing the Administration Server Windows Service" on page 46

Installing Administration Server as a Windows Service

To install Administration Server as a Windows service:

- 1. During the Administration Services installation, when prompted to install Administration Server as a Windows service, select **Yes**.
- **2.** After installing Administration Services, reboot the Windows server computer.

Adding Administration Server as a Windows Service

You can add Administration Server as a Windows service, even if it was not installed as a Windows service.

To add Administration Server to the list of Windows services:

1. From a command prompt, navigate to the following directory:

EASPATH\eas\server\bin

2. Run the following command:

install_service.bat

Administration Services installs the Windows service as Hyperion-Essbase_Administration_Server Windows service. A message displayed in the command prompt window indicates that the service is installed.

3. Start the Hyperion-Essbase_Administration_Server Windows service.

See "Starting the Administration Server Windows Service" on page 44.

The Hyperion-Essbase_Administration_Server Windows service is set to start automatically each time you reboot.

Verifying That Administration Server Is Running as a Windows Service

- To verify that Administration Server is running as an automatic Windows service after you reboot:
 - 1. Select Start > Settings > Control Panel.
 - 2. Double-click Administrative Tools.
 - **3.** Double-click **Services**.

You see Hyperion-Essbase_Administration_Server in the list of services. The Startup (or Startup Type) field for the service should say Automatic, and the Status field should say Started.

Note: If the Startup field is blank or if it says Disabled or Manual, see "Resetting the Administration Server Windows Service" on page 45.

Stopping the Administration Server Windows Service

- > To stop the Administration Server Windows service:
 - 1. Select Start > Settings > Control Panel.
 - 2. Double-click Administrative Tools.
 - **3.** Double-click **Services**.

The Services window is displayed. Hyperion-Essbase_Administration_Server is listed in the list of services.

- **4.** Highlight, but do not double-click, the service name.
- **5.** Select Action > Stop.

The Service Control message box is displayed briefly. After the message box is displayed, the Status field for Hyperion-Essbase_Administration_Server is blank.

Starting the Administration Server Windows Service

If you stop the Administration Server Windows service or if you have just added Administration Server as a Windows service, you can start the service from the Services dialog box of the Control Panel.

- To start the Administration Server Windows service:
 - 1. Select Start > Settings > Control Panel.
 - 2. Double-click Administrative Tools.
 - 3. Double-click Services.

The Services window is displayed. Hyperion-Essbase_Administration_Server is listed in the list of services.

- **4.** Highlight, but do not double-click, the service name.
- **5.** Select Action > Start.

The Service Control message box is displayed briefly when the Status field for Hyperion-Essbase_Administration_Server is Started.

Resetting the Administration Server Windows Service

When you install Administration Server as a Windows service, it is listed as Hyperion-Essbase_Administration_Server in the list of services. If someone disables the service or sets it to manual startup, you can reset Administration Server to start automatically.

- To reset Administration Server to start automatically:
 - 1. Select Start > Settings > Control Panel.
 - 2. Double-click Administrative Tools.
 - 3. Double-click Services.

The Services window is displayed. Find Hyperion-Essbase_Administration_Server in the list of services.

- 4. Double-click Hyperion-Essbase_Administration_Server.
- **5.** Set the service to log on automatically as a system account.
 - a. In the Hyperion-Essbase_Administration_Server Properties dialog box, select Automatic from the Startup type drop-down list.
 - **b.** In the Log On tab, select Local System account.

Removing the Administration Server Windows Service

> To remove Administration Server as a Windows service:

- Stop the Hyperion-Essbase_Administration_Server Windows service. See "Stopping the Administration Server Windows Service" on page 44.
- **2.** From a command prompt, navigate to the following directory:

EASPATH\eas\server\bin

3. Run the following command:

remove_service.bat

A message displayed in the command prompt window indicates that the service has been removed.

Selecting the ESSLANG Value

The Administration Services installer prompts you to select a value for the ESSLANG environment variable. ESSLANG points Administration Server to the correct Global C code page (installed in the *EASPATH*\eas\server\locale directory). The default value for ESSLANG is English (Latin1).

The Administration Services installer provides a list of supported locales, displayed in abbreviated format: Language (code page), for example, English (Latin1). Once set, the ESSLANG environment variable value contains the full value for the locale (for example, English_UnitedStates.Latin1@Binary).

ESSLANG must be the same on the Analytic Server computer and on the Administration Server computer. The ESSLANG value for a computer must agree with the encoding of the operating system of that computer.

Note: For important information about ESSLANG and Unicode applications on Analytic Server, see the *Essbase Analytic Services Installation Guide*.

On Windows, the ESSLANG value you select during installation creates or replaces the ESSLANG system environment variable with the selected locale. On UNIX, this setting exports the ESSLANG selection to the *EASPATH*/eas/server/bin/startEAS script.

On Windows, if ESSLANG is already set on the computer to which you are installing Administration Server, that value is selected by default in the installer. On UNIX, the installer always defaults to English (Latin1), even if ESSLANG is already set to a different value. You must select the same value as the existing ESSLANG setting when the installer prompts you; otherwise, your applications may fail to start.

For the full list of supported ESSLANG values, see *Essbase Analytic Services Database Administrator's Guide*.

ESSLANG does not need to be set on the computer where Administration Services Console is installed, unless it is installed on the same computer as Administration Server. If you are installing only the console, the installer does not prompt you to set ESSLANG.

Uninstalling Administration Services

Administration Services provides a cross-platform uninstaller program that helps you to remove Administration Server and Administration Services Console from your system. If you are using the default application server, documentation files are also removed by the uninstaller.

The uninstaller program does not remove the following information:

- The common components that reside in the *HYPERION_HOME*\common directory
- Files used to store Administration Services user information (from the *EASPATH*\eas\storage\easusers directory)
- Log files that reside in the EASPATH\eas\server directory.
- Other files or directories that are created after installation
- To uninstall Administration Services:
 - **1.** If you want to retain Administration Services user information, export the users.

See "Backing Up and Restoring User Information" on page 60.

2. If you are uninstalling Administration Server and you installed Administration Server as a Windows service, stop and remove the Administration Server Windows service.

See "Removing the Administration Server Windows Service" on page 46.

- **3.** Stop all instances of Administration Server and Administration Services Console.
- 4. Launch the uninstaller program for your platform.

Table 9: Administration Services Uninstaller Program

Platform	Uninstaller Program
Windows	EASPATH\eas\uninstall\uninstall.exe
UNIX	EASPATH/eas/uninstall/uninstall

Note: On Windows platforms, you can also uninstall from the Control Panel (Add/Remove Programs).

- **5.** Follow the uninstall prompts.
- 6. After the uninstallation is complete, delete the EASPATH\eas directory.

Upgrading to This Release

This chapter describes the process for upgrading from a previous release of Administration Services to this release.

- "Upgrading from Release 6.5.3 or Release 7.0" on page 49
- "Uninstalling Previous Releases" on page 51

Chapter

Upgrading from Release 6.5.3 or Release 7.0

Use the following process to upgrade from Release 6.5.3 or Release 7.0 of Administration Services to this release:

1. Verify that you have all necessary software and documentation for this release.

See "Product Components" on page 23.

2. Decide how you want to deploy Administration Services.

You can install Administration Services and Analytic Server on different computers or platforms. See "Deployment of Administration Services" on page 16.

3. Ensure that you have met all prerequisites.

See "Prerequisites" on page 23.

4. Confirm that your platform is supported by Administration Services and that system requirements are met for the computer on which you are installing.

See "System Requirements" on page 24.

4

- **5. Optional**: Export user information so that you can migrate users to the new release:
 - **a.** From the Administration Services Console window under the Essbase Administration Servers node, select the Administration Server name.
 - b. Right-click and select Export database to file.
 - **c.** In the **Export Database** dialog box, specify the location for the export file.
 - d. Click Export.

The user information is exported to the specified location in XML format, with sensitive data encrypted. The user information for the default administrator account is not exported.

6. Back up the directory used to store objects that are saved on Administration Server, such as MaxL scripts and partition definitions. Administration Server objects are stored in:

EASPATH\eas\storage

- 7. Stop Administration Server and Administration Services Console.
- **8.** On Windows, stop and remove the MySQL embedded database service by running the appropriate file for your release:
 - Release 6.5.3:

EASPATH\eas\server\dbms\bin\stop_mysql.bat

• Release 7.0:

EASPATH\eas\server\dbms\bin\remove_EASMySql.bat

Note: On UNIX, MySQL is stopped when Administration Server is stopped and is removed when you uninstall.

9. Uninstall any previous releases of Administration Services.

See "Uninstalling Previous Releases" on page 51.

- **10.** Delete one of the following directories:
 - If uninstalling Release 6.5.3, delete the *ARBORPATH*\eas directory.
 - If uninstalling Release 7.0, delete the EASPATH directory.

11. Install this release of Administration Services.

See "Installing Administration Services" on page 33.

12. Start Administration Services.

See "Starting Administration Services" on page 53.

- **13. Optional**: Import users from the previous release:
 - **a.** From the Administration Services Console window under the Essbase Administration Servers node, select the Administration Server name.
 - a. Right-click and select **Import database from file**.
 - **b.** In the **Import Database** dialog box, navigate to the location of the export file.
 - c. Select the exported file, and click Import.

User information is restored. Existing users are not overwritten.

14. Restore the directory that is used to store objects saved on Administration Server (see step 6 on page 50).

Uninstalling Previous Releases

If you have a previous release of Administration Services already installed, see "Upgrading from Release 6.5.3 or Release 7.0" on page 49 for instructions about uninstalling.

For information about uninstalling the current release, see "Uninstalling Administration Services" on page 47.

Upgrading to This Release



Chapter 5

Working with Administration Services

This chapter describes how to start and stop Administration Services and provides the access information that you need to connect for the first time.

- "Starting Administration Services" on page 53
- "Shutting Down Administration Services" on page 56
- "Stopping and Restarting the MySQL Database" on page 57
- "Specifying Communication Ports for Apache Tomcat" on page 58
- "Setting Up Users" on page 59
- "Backing Up and Restoring User Information" on page 60
- "Setting Up an SMTP Server" on page 60

Note: For instructions to start Analytic Servers, see "Running Analytic Servers, Applications, and Databases" in *Essbase Analytic Services Database Administrator's Guide.*

Starting Administration Services

After you install Administration Services, start Administration Server and then Administration Services Console.

Note: For troubleshooting information about starting Administration Services, see the eas_readme.htm file in the *EASPATH*\eas directory.

For information about how connections to Analytic Servers are established and how ports are established, see *Essbase Administration Services Online Help*.

Starting Administration Server

Note: If Administration Server is installed and running as a Windows service, you cannot also start it manually because the default port number is already being used by the Windows service. If you try to start Administration Server manually, you will see an error message indicating that the port is in use. To view the procedure for changing a default port value, see "Specifying Communication Ports for Apache Tomcat" on page 58.

When you start Administration Server, ARBORPATH is set internally to the following location:

EASPATH\eas\server

This internal setting overrides (but does not replace) the value for the ARBORPATH system environment variable, if it is set on the same computer.



• On Windows platforms, launch

EASPATH\eas\server\bin\startEAS.exe

Note: If you chose to add shortcuts to the Start menu during installation, you can start Administration Server from the Start menu (Start > Programs > Hyperion Solutions > Essbase Administration Services> Start Administration Server).

- On UNIX platforms, start Administration Server in the foreground or the background:
 - Foreground:

From the EASPATH/eas/server/bin directory, type

./startEAS

Background:

From the EASPATH/eas/server/bin directory, type

```
./startEAS &
```

or

nohup ./startEAS &

When Administration Server starts, a text-mode Agent process or DOS window is displayed.



Starting Administration Services Console

- To start Administration Services Console:
 - 1. Launch EASPATH\eas\console\bin\admincon.exe.

Note: If you chose to add shortcuts to the Start menu during installation, you can start Administration Services Console from the Start menu (Start > Programs > Hyperion Solutions > Essbase Administration Services > Administration Console).

When Administration Services Console starts properly, the Essbase Administration Services Login dialog box is displayed.

- 2. In the Essbase Administration Services Login dialog box, perform the following steps:
 - **a.** Enter the Administration Server name.

This is the name of the computer on which you installed Administration Server.

Note: If the value for the Administration Server port has been changed from the default value, you must specify the new port value after the Administration Server name (for example, AdminServerName:9002). For more information about communication ports, see "Specifying Communication Ports for Apache Tomcat" on page 58.

b. Enter your Administration Server username.

If you do not have this information, contact the Administration Services administrator. If you are connecting for the first time after installation, use the default username, admin.

c. Enter your Administration Server password.

If you do not have this information, contact the Administration Services administrator. If you are connecting for the first time after installation, use the default password, password.

The console is displayed with Enterprise View in the left frame and a blank workspace in the right frame. If you are starting Administration Services for the first time, the User Setup Wizard is displayed. For instructions, see "Setting Up Users" on page 59.

5

Shutting Down Administration Services

The process for shutting down Administration Services is described in the following topics:

- "Closing Administration Services Console" on page 56
- "Stopping Administration Server" on page 56

Closing Administration Services Console

To close Administration Services Console, from the console menu bar, select File > Exit.

You are prompted to save information, such as settings and modifications.

In instances where your session has timed out but you still have open files that require action (for example, a report script), you are prompted to log back on to Administration Services Console before closing. You can change the timeout setting for Administration Services sessions. For more information on setting the timeout, see *Essbase Administration Services Online Help*.

Stopping Administration Server

- To stop Administration Server, launch one of the following files:
 - On Windows platforms, launch

EASPATH\eas\server\bin\stopadminsvr.exe

Note: If you chose to add shortcuts to the Start menu during installation, you can stop Administration Server from the Start menu (Start > Programs > Hyperion Solutions > Essbase Administration Services > Stop Administration Server).

• On UNIX platforms, launch

EASPATH/eas/server/bin/stopEAS

Note: If you are using the middle-tier MySQL database, the database is not stopped when Administration Server is stopped. For more information, see "Stopping and Restarting the MySQL Database" on page 57.

Stopping and Restarting the MySQL Database

If you choose to install the MySQL database, it is started during the installation. On Windows platforms, the database runs as a Windows service (Hyperion-MySQL-4.0.12). On UNIX platforms, the database runs in the background. The database is not stopped when you shut down Administration Server.

To stop the Hyperion-MySQL-4.0.12 service on Windows platforms, use the Windows Control Panel or enter the following string at a command prompt:

```
net stop "Hyperion-MySQL-4.0.12"
```

To stop MySQL on UNIX platforms, run the following script:

HYPERION_HOME/common/DBMS/MySQL/4.0.12/bin/mysql_stop.sh

If MySQL has been stopped, and if you want to use the Log Analyzer feature, you must restart MySQL manually.

To restart MySQL on Windows platforms, use Windows Control Panel to restart the Hyperion-MySQL-4.0.12 service or enter the following string at a command prompt:

```
net start "Hyperion-MySQL-4.0.12"
```

To restart MySQL on UNIX platforms, run the following script:

HYPERION_HOME/common/DBMS/MySQL/4.0.12/bin/mysql_start.sh

Note: To start MySQL, you must be logged on to the UNIX server on the account that was used to install Administration Server.

Specifying Communication Ports for Apache Tomcat

Administration Services provides the following configurable communication ports for the default middle-tier application server (Apache Tomcat). If you choose to install Apache Tomcat, the installer program prompts you to configure the following ports:

• The startup port listens to commands from Administration Services Console. This port is established when Administration Server is started and is released when Administration Server is shut down. The default port is 9001.

If you change this port setting, you need to specify the new port value when you log in to Administration Services Console (for example, *AdminServerName*:9002).

- The shutdown port listens for a shutdown command when Administration Server is stopped. This port is released when Administration Server is shut down. The default port is 9005. For information about stopping, see "Stopping Administration Server" on page 56.
- The SSL HTTP connector port listens to commands from Administration Services Console. This port is established when Administration Server is started and is released when Administration Server is shut down. The default port number is 9443.
- The Warp connector port (Apache connector port) is used to connect Apache with Tomcat as the Apache servlet container. The port is established when Administration Server is started and is released when Administration Server is shut down. The default port number is 9008.
- If you choose to install the MySQL database, the default port number is 3306. You can change this port at installation time only.

If a default port is already in use, you must specify another port value.

> To change the default ports used by Apache Tomcat:

- In a text editor, open the server.xml file located in the EASPATH\deployments\Tomcat\4.1.30\conf directory.
- 2. Referring to the default port numbers identified above, find the appropriate port number within server.xml and replace it with a new value.

- 3. Save the server.xml file.
- 4. If Administration Server is running, shut it down.
- **5.** Restart Administration Server.

You must restart the Administration Server for the port settings to take effect.

See "Starting Administration Server" on page 54.

- **6.** On Windows platforms, if you are running Administration Server as a Windows service, stop the service and start Administration Server manually.
- 7. If you changed the port setting for the startup port, you need to specify the new port value after the Administration Server name (for example, *AdminServerName*:9002) when logging on to Administration Services Console.

Setting Up Users

Before other users can begin using Administration Services to manage Essbase, you must add users to Administration Server and populate each user's Enterprise View with the appropriate Analytic Servers.

- To add users to Administration Server and populate each user's Enterprise View:
 - From the Administration Services Console window, launch the User Setup Wizard by selecting Wizards > User Setup Wizard.
 - **2.** In the User Setup Wizard, follow the prompts to set up users for Administration Services, keeping in mind the following factors:
 - If you connected using the default administrator information, change the password for the administrator account.
 - If you need help while using the User Setup Wizard, click **Help**.

Note: Users can also edit their own list of Analytic Servers using the User Setup Wizard, the User Properties window, or the right-click menu off of the Essbase Analytic Servers node in Enterprise View.

Backing Up and Restoring User Information

After you create Administration Services users and establish each user's list of Analytic Servers, you should export user information so that you can restore if necessary.

- To back up (export) user information:
 - **1.** From the Administration Services Console window, under the Essbase Administration Servers node, select the Administration Server name.
 - **2.** Right-click and select **Export users**.
 - 3. In the **Export Users** dialog box, specify the location for the export file.
 - 4. Click Export.

The user information is exported to the specified location in XML format, with sensitive data encrypted. The user information for the default administrator account is not exported.

- To restore (import) user information:
 - **1.** From the Administration Services Console window, under the Essbase Administration Servers node, select the Administration Server name.
 - **2.** Right-click and select **Import users**.
 - **3.** In the **Import Users** dialog box, navigate to the location of the export file.
 - 4. Click Import.

User information is restored. Existing users are not overwritten.

Setting Up an SMTP Server

Simple Mail Transfer Protocol (SMTP) is a protocol for sending e-mail messages. To enable administrators to send e-mail messages directly from Administration Services Console to other administrators or to Hyperion Technical Support, an outgoing mail (SMTP) server must be specified on the Administration Server computer. When an administrator sends e-mail from Administration Services Console, the specified SMTP server is used to send the message to the receiver's e-mail client. Specify an SMTP server in Administration Services Console on the Admin Server Properties window—Configuration tab. If an SMTP server is not specified, administrators cannot send e-mail from the console.

- To specify an outgoing mail server:
 - **1.** Start Administration Services.

See "Starting Administration Services" on page 53.

- **2.** From the Administration Services Console window under the Essbase Administration Servers node, select the Administration Server name.
- 3. Right-click and select Edit properties.
- 4. In the Admin Server Properties window, select the Configuration tab.
- 5. In the E-mail Server area, enter the name of the SMTP server.
- 6. Click Apply and close the Admin Server Properties window.

For more information about setting up an SMTP server, see *Essbase* Administration Services Online Help.

Working with Administration Services



Chapter

Implementing the Hyperion Security Platform

This chapter explains how to set up Analytic Services and Administration Services to use external authentication supplied by the Hyperion security platform. It includes the following topics:

- "About the Hyperion Security Platform" on page 63
- "Workflow for Implementing the Security Platform" on page 64
- "Selecting a Deployment Scenario" on page 68

About the Hyperion Security Platform

Using external authentication to manage user accounts provides the following benefits:

- The existing corporate structure of user accounts can be employed to reduce administrative overhead.
- Single sign-on between Analytic Services and other Hyperion products eliminates the need for users to log on multiple times with multiple usernames and passwords.

This chapter assumes that you have a corporate authentication provider. The following providers are supported:

- Windows NT LAN Manager
- Microsoft Active Directory
- An iPlanet or Novell LDAP Directory

You must configure Analytic Server and Administration Server to work with your authentication provider.

For more information about the Hyperion security platform, see the "Security Platform Reference" section of the *Technical Reference*.

Workflow for Implementing the Security Platform

This topic describes the workflow for implementing the security platform for use with Administration Services:

- 1. Read the Security Platform Configuration documentation, located in the "Security Platform Reference" section of the *Technical Reference*.
- **2.** Decide how you will implement the security platform: from an application or from an application server.

Table 10 lists the Web servers/application servers that are supported, on each operating system, by the Hyperion security platform.

Operating System	Web/App Servers	
Windows NT 4.0, sp 6a or higher	IIS 4.x, Apache 2.0.43	
Windows 2000 Server and Advanced Server, sp 3 or higher	IIS 5.x, Apache 2.0.43	
Windows 2003	IIS 6.x	
Solaris 8 and 9	Apache 1.3.27	
HP-UX 11i	Apache 1.3.27	

Table 10: Supported Web Servers/Application Servers by OS

3. Decide which of the supported authentication providers, on which platforms, to make available in the security realm. See Table 11.

	Lightweight Directory Access Protocol (LDAP) version 3 compatible directories	NT LAN Manager (NTLM)	Microsoft Active Directory 2000	Microsoft Active Directory 2003
Windows NT 4.0, sp 6a or higher	Х	X	Х	Х
Windows 2000 Server and Advanced Server, sp 3 or higher	X	Х	Х	X
Windows 2003	Х	Х	Х	Х
UNIX	X	X - requires installation of Hyperion Remote Authenticati on Module	X	X

Table 11: Supported Authentication Providers and Platforms

Note: The tested and supported LDAP servers are: iPlanet 5.2, Novell eDirectory 8.7, IBM Directory Server 5.1, and Domino LDAP 5.x and 6.0. iPlanet is now known as Sun[tm] Open Net Environment (Sun ONE).

4. Select a deployment scenario.

The security platform can be implemented with Administration Services and Analytic Services in a variety of deployment scenarios. See sample deployment scenarios in "Selecting a Deployment Scenario" on page 68.

5. Install Analytic Services.

See the *Essbase Analytic Services Installation Guide*, particularly the topic "Installing the Hyperion Security Platform" in the "Performing Advanced Installation Tasks" chapter. The topic includes platform-specific information about setting up Java environment variables and about implementing other steps that the security platform requires.

- 6. Install Administration Services, as described in this book.
- **7.** Create or edit the security platform XML configuration file, based on the type of external authentication directory.

For detailed information about the configuration file, see "Configuring the Security Platform" in the *Technical Reference*, "Security Platform Reference."

Sample XML configuration files are located in the following locations:

essbase\bin\css_config.xml

under the Analytic Services installation

common\CSS\2.5.x\configuration\css-full.xml

under the Hyperion home directory in Program Files.

8. Edit the Analytic Services essbase.cfg configuration file to point to the location of the XML configuration file.

This procedure is described in detail in "Selecting the Authentication Module" in the *Technical Reference*, "Security Platform Reference."

9. Edit the Administration Services file OlapAdmin.properties to point to the URL of the XML configuration file.

The OlapAdmin.properties file is located in the eas\server directory of the Administration Services installation.

In the OlapAdmin.properties file, the reference to the XML configuration file can be to a file on the file system or to a URL; for example,

SECURITY_CONFIGURATION=file://srv1/net/essbase/bin/my.xml

SECURITY_CONFIGURATION=http://localhost:8080/config.xml

SECURITY_CONFIGURATION=file:///c:/essbase/bin/config.xml

SECURITY_CONFIGURATION=file://localhost/c:/my.xml

Note: Use standard URL encoding whenever you refer to the XML configuration file. For example, the URL encoded value for a space is \$20, so if the URL contains spaces, replace them with \$20.

10. Using Administration Services Console, first create a user for Administration Services, and then create a user for Analytic Services. For both users, use the "Search" feature to ensure that each user exists in the external authentication repository.

For information about creating users, see "Creating Users for External Authentication" on page 74.

11. Using Administration Services Console, add the properly configured Analytic Server to the Administration Services user properties, and map the Administration Services user to the external Analytic Services user.

You can use the User Setup Wizard or the Administration Server User Properties window. For detailed instructions, see "Creating Users on Administration Servers" in *Essbase Administration Services Online Help*.

Note: When mapping the user, you do not need to enter a password because the user is externally authenticated.

- **12.** Close and then reopen Administration Services Console.
- **13.** Connect as the externally authenticated Administration Services user.

Note: Because all Hyperion products that use the security platform must point to the same XML configuration file, it is recommended that you keep the XML configuration file in the directory HYPERION_HOME\common\CSS\2.5.x\configuration.

Selecting a Deployment Scenario

To select a deployment scenario, answer the following questions and then consider the sample deployment scenarios:

- Which operating system will run Analytic Server?
- Which operating system will run Administration Services?
- Which authentication provider hosts the corporate user accounts?
- Will Analytic Server and Administration Server run on one computer or on separate computers?

For descriptions of deployment scenarios for Analytic Server and Administration Server, see *Essbase Administration Services Installation Guide*.

Scenario 1: Analytic Server and Administration Services on Separate Computers, Using LDAP or Active Directory

The following figure shows deployment on separate computers:

Figure 5: Analytic Server and Administration Services on Separate Computers, Using LDAP



The XML configuration file resides on the Analytic Server computer. The Analytic Server essbase.cfg file contains a reference to the file URL of the XML configuration; for example,

AUTHENTICATIONMODULE CSS file:///C:/essbase/bin/my.xml

The Administration Server OlapAdmin.properties file also contains a reference to the file URL of the XML configuration; for example,

SECURITY_CONFIGURATION=file://net/srvr1/essbase/bin/my.xml

Both Analytic Server and Administration Server can be installed on a supported UNIX or Windows platform. The directory server can be on UNIX, a Windows NT 4.0 server, or a Windows 2000 server.

When deploying with LDAP, you can use a secure SSL connection as an option. Setting up the LDAP server to operate over SSL is vendor-specific; see your client LDAP administrator for information.

To enable the security platform for SSL, you must configure the <authProtocol></authProtocol> elements in the XML configuration file. For detailed information about configuring this file, see "Configuring the Security Platform" in the *Technical Reference*, "Security Platform Reference."

If disk space and RAM permit, the directory server and Administration Server can be combined into one server.

All supported LDAP scenarios have the following requirements:

- All users in the directory must have the same prefix, such as cn or uid.
- All groups in the directory must have the same prefix, such as cn or ou.
- Referrals between directories are not supported.
- Users and groups in the directory should exist under nodes, such as ou=People and ou=Groups, for optimum retrieval performance.

6

Scenario 2: Analytic Server and Administration Server on the Same Computer, Using LDAP or Active Directory

The following figure shows deployment on the same computer:

Figure 6: Analytic Server and Administration Server on the Same Computer, Using LDAP or Active Directory



The XML configuration file resides on the computer with Analytic Server and Administration Server. The Analytic Server essbase.cfg file and the Administration Server OlapAdmin.properties file contain pointers to the local file location of the XML configuration file.

Analytic Server and Administration Server can be installed on a supported UNIX or Windows platform. The directory server can be on UNIX, a Windows NT 4.0 server, or a Windows 2000 server.

When deploying with LDAP, you can use a secure SSL connection as an option. Setting up the LDAP server to operate over SSL is vendor-specific; see your client LDAP administrator for more information.

To enable the security platform for SSL, you must configure the <authProtocol></authProtocol> elements in the XML configuration file. For detailed information about configuring this file, see "Configuring the Security Platform" in the *Technical Reference*, "Security Platform Reference." All supported LDAP scenarios have the following requirements:

- All users in the directory must have the same prefix, such as cn or uid.
- All groups in the directory must have the same prefix, such as cn or ou.
- Referrals between directories are not supported.
- Users and groups in the directory should exist under nodes, such as ou=People and ou=Groups, for optimum retrieval performance.

Scenario 3: Analytic Server, Administration Server, and Configuration on Separate Computers, Using LDAP or Active Directory

The following figure shows LDAP or Active Directory deployment with Analytic Server and Administration Server on separate computers, where the security platform configuration file is hosted on a separate Web server:

Figure 7: Analytic Server and Administration Server on Separate Computers, Using LDAP or Active Directory



The XML configuration file resides on the Analytic Server computer. The Analytic Server essbase.cfg file contains a reference to the URL of the XML configuration; for example,

AUTHENTICATIONMODULE CSS http://websvrl:8080/my.xml

The Administration Server OlapAdmin.properties file also contains a reference to the URL of the XML configuration; for example,

SECURITY_CONFIGURATION=http://websvr1:8080/my.xml

Analytic Server and Administration Server can be installed on a supported UNIX or Windows platform. The directory server can be on UNIX, a Windows NT 4.0 server, a Windows 2000 server, or a Windows 2003 server.

When deploying with LDAP, you can use a secure SSL connection as an option. Setting up the LDAP server to operate over SSL is vendor-specific; see your client LDAP administrator for more information.

To enable the security platform for SSL, you must configure the <authProtocol></authProtocol> elements in the XML configuration file. For detailed information about configuring this file, see "Configuring the Security Platform" in the *Technical Reference*, "Security Platform Reference."

All supported LDAP scenarios have the following requirements:

- All users in the directory must have the same prefix, such as cn or uid.
- All groups in the directory must have the same prefix, such as cn or ou.
- Referrals between directories are not supported.
Scenario 4: UNIX Analytic Server and Administration Server on the Same Computer, Using NT LAN Manager

The following graphic shows NT LAN Manager deployment with Analytic Server and Administration Server on a single UNIX computer:

Figure 8: UNIX Analytic Server and Administration Server on the Same Computer, Using NT LAN Manager



In this scenario, Analytic Server on UNIX needs to authenticate users from a Windows NT LAN Manager domain controller. The Hyperion Remote Authentication Module is required because the external authentication mechanism depends on the NTLM support library file (css-2_5_x.dll) for NTLM authentication, and dlls are not supported on UNIX.

You can obtain the Remote Authentication Module from the Hyperion Download Center or from the Hyperion Hub CD. Download the compressed installation . exe file and follow the prompts.

Note: The Remote Authentication Module enables communication between NT LAN Manager and UNIX-based applications. When Analytic Server is installed on Windows platforms, the Remote Authentication Module is not required, unless you want to link domains that do not have trust relationships.

The XML configuration file resides on the computer with Analytic Server and Administration Server. The Analytic Server essbase.cfg file and the Administration Server OlapAdmin.properties file contain pointers to the local file location of the XML configuration file.

Other Deployment Scenarios

Many variations are possible from the deployment scenarios pictured in the preceding sections, because multiple authentication providers can be used. Several other scenarios are described in the *Technical Reference*, in the "Security Platform Reference" section, under "Security Platform Deployment Scenarios." Because those scenarios do not mention Analytic Server or Administration Server specifically, please replace occurrences of "Hyperion Application" or "Application Server" with whatever combination of Analytic Server and Administration Server you are deploying.

Creating Users for External Authentication

The external user must be created twice, once for Administration Services and once for Analytic Services. Then you map the Administration Services user to the Analytic Services user. For detailed instructions, see "Creating Users on Administration Servers" and "Creating Users on Administration Servers" in *Essbase Administration Services Online Help*.

The user name must already exist in the external authentication repository. For example, if the Windows NT domain login name for user John Doe is jdoe, then you must create the user as jdoe. For LDAP or Active Directory, create the user names as specified by the <loginattribute></loginattribute> element in the security platform XML configuration file. For example, if the login attribute is configured as follows:

```
<loginattribute>cn</loginattribute>
```

then you must create users using the format of the Common Name attribute in the LDAP or Active Directory store.

Note: External users must be created with valid Analytic Services user names. For example, if the external directory contains user names with characters that Analytic Services does not allow, you must make changes to the names in the external directory. As an alternative, if Active Directory or LDAP is being used, you can change the login attribute in the XML configuration file so that another version of the name is used.

For information about creating external users with MaxL, see the "Security Platform Reference" section of the *Technical Reference*, under "MaxL Statements for External User Management."

Chapter

Configuring Third-Party Components

This chapter explains how to configure third-party components that are not installed with Administration Services. It includes the following topics:

- "About Third-Party Components" on page 75
- "Enabling Support for Third-Party Databases" on page 76
- "Deploying Administration Server on Third-Party Application Servers" on page 79

About Third-Party Components

Administration Services requires the following third-party components:

- A relational database management system (RDBMS)
- An application server
- Java Runtime Environment

By default, all the components that you need to run Administration Services are automatically installed by the Administration Services installer program. This release also supports the substitution of certain third-party products within the existing framework. If you plan to substitute the default components with supported third-party products, you can choose not to install the default components during installation.

Administration Services is a Java application and therefore requires a Java Runtime Environment (JRE) to execute the program. This release requires JRE version 1.4.1 and installs this version automatically on all platforms.

Enabling Support for Third-Party Databases

This release supports the following relational databases:

- MySQL 4.0.12PRO
- Oracle 8i and 9i
- IBM DB2 7.2 and 8.1

The relational database that you choose is used only to store Log Analyzer information. For more information about Log Analyzer, see *Essbase Administration Services Online Help*.

By default, the Administration Server installation automatically installs, configures, and starts the MySQL database. For other supported databases, you can specify which database to use and provide configuration information for the database during installation. The installer prompts you for the database name/SID, host name, port number, and user ID. You can also modify configuration information manually after installation, as described in the sections below.

For more information about the MySQL database, see "Installing Administration Services Software" on page 35.

Note: Third-party databases do not have to be installed on the same computer as Administration Server.

Configuring an Oracle Database

Follow this procedure if you need to modify configuration information for the database after installation.

To enable Oracle support:

- 1. In Oracle, create an Oracle user with permissions to create tables.
- 2. Navigate to EASPATH\eas\server and back up the dao.properties file.

Note: The directory where you install Administration Services is referred to as the *EASPATH* directory.

- **3.** Copy the contents of the dao.properties.oracle file into the dao.properties file.
- 4. In a text editor, open the dao.properties file and replace the following values:
 - Replace eas.user and eas.password with the user connection values for the Oracle user created in step 1.
 - Replace HOSTNAME with the hostname where Oracle is currently running and replace SID_NAME with the Oracle SID to be connected. Both of these values are Oracle-specific.
- **5. Optional:** Replace port number 1521 with the port number for the Oracle database.

Note: If Oracle is running on the default port, you can skip this step and proceed to the next step.

6. Navigate to *EASPATH*\eas\server\dbms and run the InitDB.exe file. This file creates the required tables in Oracle.

Tip: You can ensure that the tables are created correctly by viewing the InitDB.log file.

7. Restart Administration Server and Administration Services Console.

See "Starting Administration Services" on page 53.

Configuring an IBM DB2 Database

Follow this procedure if you need to modify configuration information for the database after installation.

- To enable IBM DB2 support:
 - 1. In DB2, create a DB2 user with permissions to create tables.
 - 2. Navigate to EASPATH\eas\server and back up the dao.properties file.

Note: The directory where you install Administration Services is referred to as the *EASPATH* directory.

- **3.** Copy the contents of the dao.properties.db2 file into the dao.properties file.
- 4. In a text editor, open the dao.properties file and replace the following values:
 - Replace eas.user and eas.password with the user connection values for the DB2 user created in step 1.
 - Replace HOSTNAME with the hostname where DB2 is currently running and replace DB_NAME with the DB2 database name.

CAUTION: The DB2 database name must be uppercase. For example, DBNAME.

5. Optional: Replace port number 50000 with the port number for the DB2 database.

Note: If DB2 is running on the default port, you can skip this step and proceed to the next step.

6. Navigate to *EASPATH*\eas\server\dbms and run the InitDB.exe file. This file creates the required tables in DB2.

Tip: You can ensure that the tables are created correctly by viewing the InitDB.log file.

7. Restart Administration Server and Administration Services Console.

See "Starting Administration Services" on page 53.

Changing the JDBC Password

In some cases, it might be necessary to change the JDBC password without connecting to Administration Server.

- ► To change the JDBC password:
 - 1. In a text editor, navigate to the EASPATH\eas\server directory and open the dao.properties file.

Note: The directory where you install Administration Services is referred to as the *EASPATH* directory.

- 2. Change the value of the eas.password field in the dao.properties file. The new password will be in an unencrypted format.
- **3.** Start Administration Services.

When Administration Services is started, Administration Server finds and encrypts the unencrypted password in the dao.properties file.

Deploying Administration Server on Third-Party Application Servers

This release supports the following application servers:

- Apache Tomcat Server 4.1.30
- BEA WebLogic Server 8.1
- IBM WebSphere Application Server 5.1

By default, the Administration Server installation automatically installs and configures Apache Tomcat Server. If you decide to use a supported third-party server, you must manually install it and configure it to work with Administration Server. For more information about Apache Tomcat, see "Installing Administration Services Software" on page 35.

Deploying on a WebLogic Server

- To deploy Administration Server on a WebLogic Server running on Windows or UNIX:
 - 1. If it is not already installed, install WebLogic Server.
 - 2. Install Administration Server to the computer hosting WebLogic Server.
 - **3.** Follow the steps below to create a domain in WebLogic Server:
 - a. Launch the WebLogic Configuration Wizard:
 - On Windows platforms, launch:

weblogic81\common\bin\config.cmd

• On UNIX platforms, launch:

weblogic81/common/bin/config.sh

- **b.** Accept the defaults and click **Next** until you reach the **Configure Administrative Username and Password** panel.
- **c.** Enter the username and password (for example, enter eas for the username and password for the password).
- **d.** In the **Configure Server Start Mode and Java SDK** panel, choose either development mode or production mode. Select the default SDK value.
- **e.** In the bottom-right corner of the **Create WebLogic Configuration** panel, rename the configuration, for example, to easdomain.
- f. Click Create.
- **4.** Navigate to the following location:

WEBLOGIC_INSTALLDIR\user_projects\domains\easdomain

5. Follow the configuration steps described next for your platform:

Note: The directory where you install WebLogic is referred to as *WEBLOGIC_INSTALLDIR*. Substitute the value of WEBLOGIC_INSTALLDIR from your site.

The directory where you install Essbase Administration Services is referred to as *EASPATH*. Substitute the value of EASPATH from your site. The default is c:\hyperion on Windows and /home/hyperion on UNIX.

For Windows platforms:

a. From the WEBLOGIC_INSTALLDIR\user_projects\domains\ easdomain directory, open the following file:

startweblogic.cmd

- **b.** Insert the following text after "@REM Call WebLogic Server":
 - set PATH=*EASPATH*\eas\server\bin;%PATH%

For example:

set PATH=c:\hyperion\eas\server\bin;%PATH%

This ensures that all the .dll files are retrieved from the correct location.

• set JAVA_OPTIONS=-DEAS_HOME=EASPATH

For example:

set JAVA_OPTIONS=-DEAS_HOME=c:\hyperion

This ensures that all Administration Services-related files are retrieved from the correct location.

• set ARBORPATH=*EASPATH*\eas\server

For example:

set ARBORPATH=c:\hyperion\eas\server

• set ESSLANG=ESSLANGvalue

For example, with an English ESSLANG value:

set ESSLANG=English_UnitedStates.Latin1@Binary

For UNIX platforms:

a. From the WEBLOGIC_INSTALLDIR/user_projects/domains/ easdomain directory, open the following file:

startWebLogic.sh

- **b.** Add the following text:
 - For Solaris and Linux:

LD_LIBRARY_PATH=*EASPATH*/eas/server/bin: \$LD_LIBRARY_PATH

• For HP-UX:

SHLIB_PATH=EASPATH/eas/server/bin:\$SHLIB_PATH

• For AIX:

LIBPATH=EASPATH/eas/server/bin:\$LIBPATH

- For all UNIX platforms:
 - JAVA_OPTIONS="-DEAS_HOME=EASPATH"

This ensures that all Administration Services-related files are retrieved from the correct location.

- ARBORPATH=*EASPATH*/eas/server
- ESSLANG=ESSLANGvalue

For example, with an English ESSLANG value:

ESSLANG=English_UnitedStates.Latin1@Binary

6. Start WebLogic Server. To do so, execute startweblogic.cmd (Windows) or startWebLogic.sh (UNIX).

7. Connect to the WebLogic administration console using the following URL:

http://machineName:7001/console

By default, WebLogic runs on port 7001 on *machineName*; if the port is different, specify the appropriate port value when connecting.

If prompted for a username and password, provide the username and password specified in step 3c.

Note: On Windows, if you are accessing the WebLogic administration console locally, you can start the administration console using the Windows Start menu. You can also run the administration console on Windows to connect to WebLogic Server on UNIX.

8. Follow the steps below to deploy Administration Services for your platform:

For Windows:

- a. From the WebLogic Server Admin Console, select **Deployments > Web** Application Modules.
- **b.** Click **Deploy a new Web Application Module**.
- **c.** Click **upload your file** and then click **Browse**.
- d. Navigate to the following directory:

EASPATH\eas\deployments\tomcat\4.1.30\webapps

Where EASPATH is the directory to which Essbase Administration Services is installed. The default is c:\hyperion on Windows and /home/hyperion on UNIX.

e. Select the eas.war file, and then click **Open** and **Upload**.

Note: If you are accessing WebLogic remotely, you must first copy the .war file to your local machine and then browse to the appropriate local directory to select the .war file.

f. Navigate to myserver > upload, select eas.war, and click Target Module and later on Deploy.

After a brief wait, you will see Administration Server messages in the WebLogic Server window. These messages indicate that Administration Services is deployed and ready to be used. By default, WebLogic runs on port 7001; therefore, use *machineName* : 7001 when connecting to Administration Server.

For UNIX:

- a. From the WebLogic Server Admin Console, select **Deployments > Web** Application Modules.
- **b.** Click **Deploy a new Web Application Module**.
- c. Browse to the following directory:

EASPATH\eas\deployments\tomcat\4.1.30\webapps

Where EASPATH is the directory to which Essbase Administration Services is installed. The default is c:\hyperion on Windows and /home/hyperion on UNIX.

Note: If you are accessing WebLogic remotely, you must first copy the .war file to your local machine and then browse to the appropriate local directory to select the .war file.

- d. Select the eas.war file, and then click **Target Module**.
- e. On the next screen, click **Deploy**.

After a brief wait, you will see Administration Server messages in the WebLogic Server window. These messages indicate that Administration Services is deployed and ready to be used. By default, WebLogic runs on port 7001; therefore, use *machineName*:7001 when connecting to Administration Server.

9. Repeat step 8 on page 83 to deploy Administration Services documentation (easdocs.war) and the Deployment Services servlet (eds.war), selecting the appropriate .war file from the same location as eas.war.

Note: The Deployment Services servlet (eds.war) is used only for the Data Preview Grid feature in Administration Services Console. If you do not plan to use this feature, you do not need to deploy this servlet.

Other tasks such as undeploying Administration Services, redeploying Administration Services, and changing the default port number can also be accomplished using the WebLogic Server Admin Console.

Deploying on a WebSphere Application Server

To deploy Administration Server on a WebSphere Application Server running on Windows or UNIX:

- **1.** If it is not already installed, install WebSphere Application Server.
- **2.** Install Administration Server to the computer hosting WebSphere Application Server.
- **3.** Follow the configuration steps described next for your platform:

For Windows:

a. Back up the SetupCmdLine.bat file that is located in the \bin directory where WebSphere is installed; for example:

c:\program files\websphere\appserver\bin

b. In the original SetupCmdLine.bat file, edit the WAS_PATH entry by prepending the location with the installed Administration Server \bin directory, for example:

SET WAS_PATH=c:\hyperion\eas\server\bin;{original
information}

The example above assumes that Administration Services is installed in c:\hyperion.

C. In the original SetupCmdLine.bat file, set ARBORPATH as follows:

SET ARBORPATH=c:\hyperion\eas\server

The example above assumes that Administration Services is installed in c:\hyperion.

d. In the original SetupCmdLine.bat file, set ESSLANG, using the ESSLANG value that was used when Administration Server was installed on the system:

SET ESSLANG=ESSLANGvalue

For example, with an English ESSLANG value:

SET ESSLANG=English_UnitedStates.Latin1@Binary

e. Save the SetupCmdLine.bat file and close it.

For UNIX:

a. Back up the setupCmdLine.sh file that is located in the /bin directory where WebSphere is installed; for example

/voll/websphere/AppServer/bin/setupCmdLine.sh

b. In the original setupCmdLine.sh file, *under the appropriate section for your platform*, edit the WAS_LIBPATH by prepending the location with the installed Administration Server /bin directory, for example:

```
WAS_LIBPATH=/vol1/Hyperion/eas/server/bin:{original information}
```

The example above assumes that Administration Services is installed in /voll/Hyperion.

c. In the original setupCmdLine.sh file, set ARBORPATH as follows:

export ARBORPATH=/vol1/Hyperion/eas/server

The example above assumes that Administration Services is installed in /voll/Hyperion.

d. In the original setupCmdLine.sh file, set ESSLANG using the ESSLANG value that was used when Administration Server was installed on the system:

export ESSLANG=ESSLANGvalue

For example, with an English ESSLANG value:

export ESSLANG=English_UnitedStates.Latin1@Binary

- e. Save the setupCmdLine.sh file and close it.
- 4. Start WebSphere Application Server.

Using a command shell, go to the following directory:

WEBSPHERE_INSTALLDIR/AppServer/bin

Where *WEBSPHERE_INSTALLDIR* is the location where WebSphere is installed.

From this directory in the command shell, type the following command:

On Windows:

startServer server1

On UNIX:

./startServer.sh server1

5. Launch the WebSphere Administrative Console, using the following URL:

http://machineName:9090/admin

By default, WebSphere runs on port 9090 on *machineName*; if the port is different, specify the appropriate port value when connecting.

Note: If you are prompted to log in, you do not need to supply a user ID. Leave this field blank and click OK.

- **6.** Follow the steps below to define the location of the Administration Services installation. If a referenced link or button is not visible, scroll until it is displayed.
 - a. Under the Servers node, select Application Servers.
 - **b.** Click **server1**.
 - c. Under Additional Properties, select Process Definition.
 - d. Under Additional Properties, select Java Virtual Machine.
 - **e.** Under **General Properties**, for **Generic JVM Arguments**, enter the following information for your platform:

For Windows:

-DEAS_HOME=c:\hyperion -Dorg.apache.xerces.xni. parser.XMLParserConfiguration=org.apache.xerces.parsers. StandardParserConfiguration

The example above assumes that Essbase Administration Services is installed in $c:\$

For UNIX:

-DEAS_HOME=/vol1/Hyperion -Dorg.apache.xerces.xni. parser.XMLParserConfiguration=org.apache.xerces.parsers. StandardParserConfiguration

The example above assumes that Essbase Administration Services is installed in /vol1/Hyperion.

Note: All information starting with "-Dorg.apache..." in the examples above must be entered *exactly* as shown, all as one entry. Any typing error will result in WebSphere not starting properly.

- f. Under the General Properties table, click Apply.
- **g.** From the toolbar, click **Save**.
- h. Under Save to Master Configuration, click Save.

- **7.** Follow the steps below to install Administration Services as a new WebSphere application:
 - a. Under the Applications node, select Install New Application.
 - **b.** Choose one of the following steps, depending on the location of the eas.war file:
 - If your browser and the eas.war file are on the same machine, select Local path and browse to and select the eas.war file in the following directory:

For Windows:

```
c:\hyperion\eas\deployments\tomcat\4.1.30\webapps 
\eas.war
```

The example above assumes that Administration Services is installed in c:\hyperion.

For UNIX:

```
/vol1/Hyperion/eas/deployments/Tomcat/4.1.30/
webapps/eas.war
```

The example above assumes that Administration Services is installed in /voll/Hyperion.

Note: The WebSphere server may be on another machine.

- If the eas.war file resides on the machine running the WebSphere server and if your browser is on a different machine, select **Server path** and enter the absolute path to the location of the eas.war file on the server machine.
- **c.** For **Context Root**, enter /eas (you will need to remember this later when you connect).
- d. Click Next.
- **e.** Accept all defaults and click **Next** or **Continue** until the final installation screen displays.

- f. Click Finish.
- g. Click Save to Master Configuration.
- h. Click Save.
- **8.** Repeat step 7 on page 89 to deploy Administration Services documentation and the Deployment Services servlet, making the following modifications:
 - To deploy documentation, select the easdocs.war file from the same location as eas.war. For the **Context Root**, enter /easdocs.
 - To deploy the Deployment Services servlet, select the eds.war file from the same location as eas.war. For the **Context Root**, enter /eds.

Note: The Deployment Services servlet (eds.war) is used only for the Data Preview Grid feature in Administration Services Console. If you do not plan to use this feature, you do not need to deploy this servlet.

9. After everything is installed, **stop WebSphere Application Server and then** restart it.

Connecting to WebSphere Application Server Through Administration Services Console

- **1.** To start Administration Services Console on a WebSphere Application Server, launch Administration Services Console.
- **2.** In the **Essbase Administration Services Login** dialog box, type the following in the Administration Server text box:

machineName:9080/eas

Note: The default port number that is used by WebSphere Application Server is 9080. If you are using a different port number than the default number, use that number instead to connect to WebSphere Application Server.

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