Hyperion® Essbase®

Release 6.1

Installation Guide

Hyperion Solutions Corporation

Contents

Chapter 4: Application Manager and Spreadsheet Add-in Installation 79

Contents

Introduction

Welcome to the *Hyperion Essbase Installation Guide*. This guide helps you install Hyperion® Essbase® OLAP Server, the Hyperion Essbase sample applications, Hyperion Essbase Application Manager, Hyperion Essbase Spreadsheet Add-in, Hyperion Essbase Application Programming Interface (API), and Hyperion Essbase SQL Interface. It also provides information about hardware and network-protocol requirements.

This introduction contains the following topics:

Who Should Read This Book

This book is for Hyperion Essbase system administrators who need to install and configure Hyperion Essbase server software on a Windows NT, Windows 2000, Windows 95, Windows 98, or UNIX platforms. It also assists Hyperion Essbase system administrators in setting up sample applications, working with network protocols, and helping client users install client software.

This book is also for client users who need to install client software.

What's in This Book

This book describes the following:

- How to install server software from the Hyperion Essbase CD-ROM to Windows NT, Windows 2000, Windows 95, Windows 98, and UNIX servers.

- How to upgrade or register a server when new options or additional ports are licensed.

- How to set up the sample applications for client users.

- How to install client software on a network or local drive, from the network or CD-ROM. This includes Hyperion Essbase Application Manager, Hyperion Essbase Spreadsheet Add-in, and the Runtime Client.

- How to install the Hyperion Essbase API software.

- How to install the Hyperion Essbase SQL Interface software.

- How to use a different network protocol.

- How to set up your computer to use non-English versions of Hyperion Essbase.

- How to configure a stand-alone computer to run Personal Essbase.

- How to uninstall Hyperion Essbase software.

Additional information can be found in the readme.txt file.

What You Should Know Before You Start

Before you begin, make sure you have all the software, the documentation, and the Registration Card. These items are provided in the Hyperion Essbase package. Then do the following:

1. Read the *Hyperion Essbase Start Here* booklet.

2. If you are upgrading, determine whether you will be installing on a new computer or on the existing computer that is currently running Hyperion Essbase. If on the current computer, determine whether you will be installing in the existing directory or in a new directory.

3. If you are upgrading from Release 5.x on the current computer, first back up your 5.x application and database files to another directory.

4. Know the operating system of your server and your installed network protocol.

5. Ensure that you have the disk space and the memory that is required for the Hyperion Essbase products you plan to install, as documented in the *Hyperion Essbase Start Here* booklet.

6. Install Hyperion Essbase products in the following order:

   a. Hyperion Essbase OLAP server and sample applications

   b. Hyperion Essbase SQL Interface

   c. Hyperion Essbase Application Manager

   d. Hyperion Essbase Spreadsheet Add-in for 1-2-3

   e. Hyperion Essbase Spreadsheet Add-in for Excel

   f. Hyperion Essbase Runtime Client

   g. Hyperion Essbase Application Programming Interface (API).

   Note: It is not required that you install all of the above products. On Windows platforms, you can install these products simultaneously from the CD-ROM.

Conventions Used in This Book

This book uses several formatting styles to indicate actions that you should take or types of information that you need. The following table lists each document convention.

Table i: Document Conventions

Example	Description
1, **2**, **3**	Numbered items indicate procedures to follow in a specific order.
●	Bulleted items indicate a list of related items.
Product	Dimension names and member names appear in regular font.
\ESSBASE	Names of files and directories appear in `This Font`.

Table i: Document Conventions (Continued)

Example	Description
Enter	Specific text that you must type as well as keyboard keys appear in **bold** type.
Hyperion Essbase System Login dialog box	Names of dialog boxes and their controls, such as text boxes, and list boxes, appear in regular font.
Hyperion Essbase Installation Guide	Titles of books appear in *italics*. Italics also indicate important terms and special emphasis.
File > Open	The greater than symbol (>) indicates a menu followed by an individual menu command in that menu.

Additional Documentation Sources

In addition to the *Hyperion Essbase Installation Guide* for Release 6.1, the Hyperion Essbase documentation set includes the following:

- The *Hyperion Essbase Start Here* booklet, which provides late-breaking information as well as the most important installation and migration information for Release 6.1 of Hyperion Essbase.

- The *Hyperion Essbase Documentation Roadmap*, which lists all the Hyperion Essbase documentation and tells you where to access the online information.

- The *Hyperion Essbase New Features* booklet, which contains the documentation roadmap and describes the new features that are provided in Release 6.1 of Hyperion Essbase.

- The *Hyperion Essbase Quick Path Card (QPC)* for Release 6.0, which provides an overview of the tasks involved in creating, using, and maintaining Hyperion Essbase databases.

- The *Hyperion Essbase OLAP Server Database Administrator's Guide*, which explains the architecture of Hyperion Essbase, how to design databases, how to design calculations, how to set up Hyperion Essbase security, how the database is stored, and how to optimize Hyperion Essbase. The online *Hyperion Essbase OLAP Server Database Administrator's Guide* includes the information for Release 6.1 of Hyperion Essbase, while the printed version does not.

- The Hyperion Essbase Application Manager online help file, which explains how to use the Application Manager user interface.

- The online *Technical Reference* in the `DOCS` directory, which lists and describes Hyperion Essbase functions, calculation commands, report commands, MaxL syntax, ESSCMD commands, and configuration file (`.CFG` file) settings for Release 6.1.

- The *Hyperion Essbase Quick Technical Reference* for Release 6.0, which provides syntax for Hyperion Essbase functions, calculation commands, report commands, ESSCMD commands, and configuration file (`.CFG` file) settings.

- The *Hyperion Essbase Spreadsheet Add-in User's Guide* for Release 6.1, which explains how to use Hyperion Essbase Spreadsheet Add-in features with Microsoft Excel or Lotus 1-2-3 for Windows. This guide is provided in the `\ESSBASE\DOCS\CLIENT` directory in `.PDF` format for online viewing and printing in Adobe Acrobat Reader (Version 3.0.1 or later). Adobe Acrobat Reader is provided on the Hyperion Essbase CD-ROM, and can also be downloaded from `http://www.adobe.com`.

- The Hyperion Essbase Spreadsheet Add-in online help files, which explain how to use Hyperion Essbase Spreadsheet Add-in and provide all the spreadsheet macros and VBA functions.

- The online *API Reference* in the `DOCS` directory for Release 6.1, which lists and describes programmatic functions available through Hyperion Essbase API, and provides information to help you start programming with these functions.

- The *Hyperion Essbase MaxL User's Guide*, which provides a conceptual overview of Maxl and its components. It also provides examples to help you get started in using MaxL to manage security and to perform administrative tasks on Hyperion Essbase databases. This guide is provided in the `\ESSBASE\DOCS\CLIENT` directory in .PDF for online viewing and printing in Adobe Acrobat Reader.

- The *Hyperion Essbase SQL Interface Guide*, which contains information on how to set up systems to load data by means of Hyperion Essbase SQL Interface. This guide is provided in the `\ESSBASE\DOCS\CLIENT` directory in `.PDF` format for online viewing and printing in Adobe Acrobat Reader (Version 3.0.1 or later). Adobe Acrobat Reader is provided on the Hyperion Essbase CD-ROM, and can also be downloaded from `http://www.adobe.com`.

Hyperion Essbase HTML Documents

The Hyperion Essbase API and Hyperion Essbase Application Manager products include the online *API Reference*, the *Technical Reference*, the *Hyperion Essbase OLAP Server Database Administrator's Guide*, and a Documentation Roadmap in HTML format. To view these documents, you must have the following:

- Hyperion Essbase API or Hyperion Essbase Application Manager installed with the documentation on your server or client computer, or access to the HTML documentation on the CD-ROM or on a network drive.

- A Web browser such as Netscape Navigator (Version 4.0 or later) or Microsoft Internet Explorer (Version 4.0 or later) installed on your computer.

Note: If you installed the Hyperion Essbase OLAP Server or Hyperion Essbase Application Manager, the *MaxL Language Reference* is installed to `Docs\Techref\Maxl`. If you selected to install the complete online HTML documentation, this documentation is part of the *Technical Reference*, and you should follow the steps below to view. If you did not select the HTML documentation option, you can still view the standalone *MaxL Language Reference* by launching `maxlref.htm` in your Web browser.

➤ To view Hyperion Essbase HTML documentation:

1. Start your browser.

2. Open `\ESSBASE\DOCS\INDEX.HTM` wherever Hyperion Essbase API or Hyperion Essbase Application Manager is installed (either on the local area network or your local computer); for example,

   `C:\HYPERION\ESSBASE\DOCS\INDEX.HTM`

   The `INDEX.HTM` starting page is displayed.

   - You can also access the HTML documentation from the Hyperion Essbase CD-ROM. From the root of the CD-ROM, open `DOCS\INDEX.HTM`.

   - The links in the Hyperion Essbase Publications List work only for documents you selected to install when you installed the Hyperion Essbase API or Hyperion Essbase Application Manager.

From the starting page, you can link to the *API Reference*, the *Technical Reference*, the *Hyperion Essbase OLAP Server Database Administrator's Guide*, and the Documentation Roadmap.

Figure i: HTML Documentation Starting Page: Access by Opening INDEX.HTM
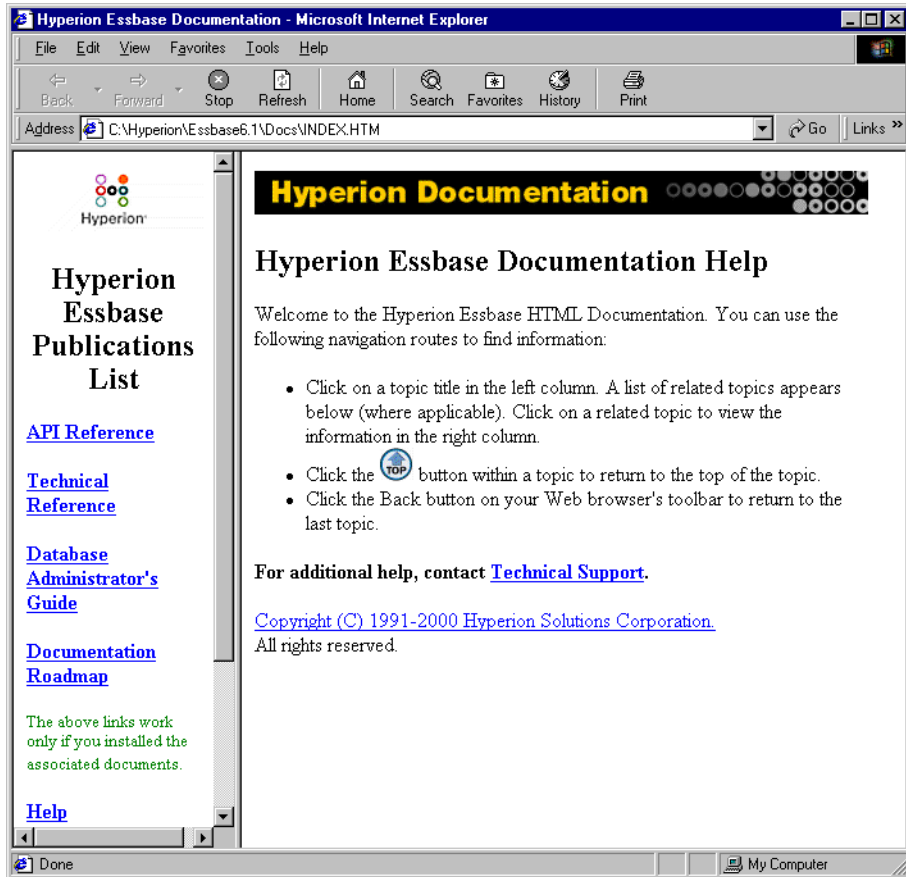
Using a Recommended Web Browser

It is recommended that you use Microsoft Internet Explorer (Version 4.0 or later) or Netscape Navigator (Version 4.0 or later) to view Hyperion Essbase HTML documents.

Acquiring a Recommended Web Browser

If you have a Web browser and are connected to the Internet, you can download recommended browsers from the Web sites shown in the following table:

Table ii: Web Browsers

Product	Web Site
Microsoft Internet Explorer	www.microsoft.com/windows/ie/download/
Netscape Navigator	home.netscape.com/download/

Microsoft Internet Explorer is included with Windows platforms. Netscape Navigator can be downloaded for free from Netscape's Web site. You can also purchase either browser from your software dealer.

Note: After you obtain a Web browser, you do not need to have Internet connectivity to read Hyperion Essbase HTML documents because they are installed on your local or network drive.

You can telephone Microsoft at (800) 426-9400 or Netscape at (650) 937-2555.

You are responsible for the legal licensing of these browsers.

Ordering Printed Documentation

A catalog of the printed documentation is available from the Hyperion Solutions Support Web page at http://www:hyperion.com. You can order printed manuals by calling Hyperion Solutions Client Support at 1-877-901-4975 between 8:00 A.M.-8:00 P.M., EST. You must request each manual by its full name and part number.

Product Components and Software Registration

Welcome to the Hyperion Essbase family of products. Hyperion Essbase operates in a client-server environment. When you set up the Hyperion Essbase system, you create a Hyperion Essbase OLAP Server and configure clients to access the server.

This chapter contains the following topics:

- "Verifying Your Shipment" on page 19
- "Registering Hyperion Essbase Software" on page 21
- "Identifying the Installation Steps" on page 23

Hyperion Essbase product components include base system components and add-on products, which you license separately.

Verifying Your Shipment

The Hyperion Essbase base system contains the following items:

- The Hyperion Essbase OLAP Server software, containing the Hyperion Essbase server, the sample applications, and the setup program.

- The Hyperion Essbase Application Manager software, which is a Hyperion Essbase administration tool.

- The Hyperion Essbase Spreadsheet Add-in software for the Spreadsheet Add-in platform of your choice, enabling your spreadsheet application to work with the Hyperion Essbase server.

- A Software Registration Letter, containing the license number of your server.

- The *Hyperion Essbase Start Here* booklet, containing information that you should read before installing Hyperion Essbase, especially if you are

- Migrating from an earlier release.

- This book, *Hyperion Essbase Installation Guide*.

If you purchased additional Hyperion Essbase products with your base system, you will also receive documentation for the Hyperion Essbase products you licensed. The documentation set is described in "Additional Documentation Sources" on page xiv.

Adding Hyperion Essbase Integral Products

Hyperion Essbase has several add-on products that are an integral part of Hyperion Essbase although you license them separately. They include the following:

- Hyperion Essbase SQL Interface

- Hyperion Essbase Currency Conversion

- Hyperion Essbase Spreadsheet Toolkit (including VBA for Excel for Windows)

- Hyperion Essbase Runtime Client

- Hyperion Essbase Partitioning

For more information, contact your software provider.

Note: If you licensed one or more of these Hyperion Essbase products with your base system, your Hyperion Essbase Release 6.1 license number enables access to these products when you install the base system.

Adding Separate Hyperion Essbase Products

Hyperion Essbase also has several products that are independent of the base system. They contain their own installation programs and documentation. You license them separately. These products include the following:

- Hyperion Integration Server

- Hyperion Essbase Application Programming Interface (API)

- Microsoft SQL Server Interface

For more information, contact your software provider.

Registering Hyperion Essbase Software

Each Hyperion Essbase installation requires a license number. The Software Registration Letter lists your license number. This license number is unique for your server license. Your license number is encoded to identify and enable the options and capacity that you licensed. The letter lists all of the options you licensed and the number of ports available.

Note: Keep this letter in a secure place for future reference.

When you receive your Hyperion Essbase shipment, verify that the correct options and number of ports are available. If the shipment does not contain the correct options, contact your software provider.

Entering License Numbers

During the installation of the Hyperion Essbase OLAP server and Hyperion Essbase Application Manager, you are prompted to enter your license number. Enter the license number exactly as it appears on your Software Registration Letter—as a sequence of sixteen alphanumeric digits followed by a single hyphen and the remaining digits.

When you license additional products that are integral to Hyperion Essbase or extend their capacity, you will receive a new license number that reflects the additional options. Table 1 summarizes the integral products and ports that you can add. These products and port additions do not require you to install anything, but do require you to register the license number you received when you licensed the product.

Table 1: Integral Product Registration Summary

Additions to Hyperion Essbase	Install and Register	Register Only
Adding an Integral Product		
Hyperion Essbase SQL Interface		✔
Hyperion Essbase Currency Conversion		✔
Hyperion Essbase Spreadsheet Toolkit (including VBA for Excel for Windows)		✔

Table 1: Integral Product Registration Summary (Continued)

Additions to Hyperion Essbase	Install and Register	Register Only
Hyperion Essbase Partitioning		✔
Hyperion Essbase Runtime Client		✔
Adding Ports		
Licensing additional ports		✔

➤ To register a new license number:

1. Stop the Hyperion Essbase server.

   If you are not sure how to stop the server, see Chapter 44, "Running Hyperion Essbase, Applications, and Databases," in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

2. Run the REGISTER utility. On Windows platforms, REGISTER resides in the \HYPERION\ESSBASE\BIN directory on the server. On UNIX platforms it resides in the /hyperion/essbase/bin directory on the server.

3. Enter the new license number.

4. Start the Hyperion Essbase server.

Be sure that you read the README.TXT file included with the Hyperion Essbase installation. You can find this file in the \ESSBASE directory after installation is complete.

Installing and Registering Separate Products

When you license a separate product from Hyperion Solutions, you will need to install it from its CD-ROM. During the installation, you are asked for your license number. Enter the license number that you received with the product; for example,

if you have licensed Hyperion Integration Server (HIS), type the number exactly as it appears on the HIS Software Registration Letter. Table 2 summarizes the integral products and ports that you can add.

Table 2: Add-on Product Registration Summary

Adding a Separate Product	Install and Register	Register Only
Hyperion Integration Server	✔	
Hyperion Essbase Application Programming Interface (API)	✔	
Microsoft SQL Server Interface	✔	

The license number that you enter is embedded in the following Hyperion Essbase system files and validated each time you use Hyperion Essbase:

- `essbase.exe`

- `esssvr.exe`

- `essadmin.exe`

- `essexcln.xll`

- `lsx123.dll`

The remaining chapters in this guide describe the installation steps for different platforms. The software must be installed in a specific order.

Identifying the Installation Steps

Before installing Hyperion Essbase, you should establish a working client-server environment based on a Named Pipes Services or TCP/IP protocol. Hyperion Essbase clients cannot communicate with the Hyperion Essbase server if the environment is not properly established. For information on supported network configurations, see Chapter 9, "Network Configuration Notes."

The following steps list the order in which the Hyperion Essbase system components must be installed:

1. The Hyperion Essbase OLAP Server software and sample applications on the server computer

   Note: The sample applications contain examples that are useful when learning to use Hyperion Essbase. You should install the sample applications to ensure that these learning aids are available.

2. Hyperion Essbase SQL Interface on the server computer

3. Hyperion Essbase Application Manager on a client computer

4. Hyperion Essbase Spreadsheet Add-in on a client computer

5. Hyperion Essbase Runtime Client on a client computer

6. Hyperion Essbase API on a software development environment

   Note: It is not required that you install all of the above products. On Windows platforms, you can install products simultaneously from the CD-ROM, and the installation program will install them in the correct order.

Be sure that you read the online *Hyperion Essbase Installation Guide* and README.TXT file included with the Hyperion Essbase installation for the latest information. You can find the *Hyperion Essbase Installation Guide* in the \essbase\docs\client directory after you have installed Hyperion Essbase. You can find the README.TXT file in the \ESSBASE directory after installation is complete.

Windows Server Installation

Hyperion Essbase OLAP Server is available for Windows NT or Windows 2000-based Pentium computers. Personal Essbase is available for Windows 95, Windows 98, Windows NT, and Windows 2000 (Personal Essbase for Windows NT and Windows 2000 is available only for computers with Intel microprocessors).

Read this chapter for information on system requirements, directories created, environment settings, and starting the Hyperion Essbase server on Windows platforms.

If you are installing Personal Essbase, first skip to "About Installing Personal Essbase" on page 47 and "Limitations of a Personal Essbase Server" on page 48 to learn how to successfully configure Personal Essbase client and server software on the same computer.

This chapter contains the following topics:

Windows Server Requirements

The Hyperion Essbase server and Personal Essbase server for Windows platforms require a system that meets specific requirements. These requirements are described in Table 3.

Table 3: Hyperion Essbase Server Windows System Requirements

Component	Requirements
Microprocessor	Pentium or higher
RAM	64 MB [1]
Windows version for Hyperion Essbase server	Windows NT 4.0 or Windows 2000 on Pentium
Windows version for Personal Essbase server	Windows 95 B, Windows 98, Windows NT 4.0, or Windows 2000 with Pentium
Disk space	Approximately 60–80 MB for the server software and the sample applications See Chapter 5, "Sample Applications."
Network protocol	Named Pipes or TCP/IP
Java™ platform	Java Runtime Environment version 1.2.2 or later, Java API for XML Parsing version 1.01

[1] The base recommendation for running Hyperion Essbase and its sample applications is 64 MB. Start with this amount, and then allocate additional memory per Table 4 to accommodate your Hyperion Essbase application.

Table 4: Allocating Additional Memory for Hyperion Essbase Server on Windows Platforms

Hyperion Essbase Component	Approximate Amount of Memory Required
Code and static data	10 MB
Database outline	400 bytes per member
Index, data, data file, and calculator caches	Per the settings shown in the "Database Cache Settings Migration" table in the *Hyperion Essbase Start Here* booklet.

About Installing Server Software on Windows

If you are upgrading from Release 5.x, first back up your 5.x application and database files to another directory.

You can install Hyperion Essbase server and client software at the same time from the CD-ROM. You can also install client software from a network drive.

Some of the new features in Hyperion Essbase Release 6.1 require new license numbers. See Chapter 1, "Product Components and Software Registration," for information on the software registration process.

Installing Hyperion Essbase SQL Interface or Hyperion Essbase Application Programming Interface is treated separately. See Chapter 8, "SQL Interface Installation" or Chapter 7, "API Installation."

See the *Hyperion Essbase Start Here* booklet for important information on migrating your applications.

Network Protocol Files

Network protocol files implement the TCP/IP or Named Pipes protocol that you select when you install Hyperion Essbase server or client software. The network protocol file for server software is ESSNET.DLL. Additionally, the client software (for example, Hyperion Essbase Spreadsheet Add-in) is installed with a separate ESSNET.DLL. Network protocol files reside in the BIN directory with the Hyperion Essbase program files.

If you have more than one Hyperion Essbase server computer and the servers use different network protocols, you must install the client software in multiple directories, one for each network protocol.

For example, you can install Hyperion Essbase Spreadsheet Add-in for a Named Pipes server in N:\HYPERION\ESSBASE, and Hyperion Essbase Spreadsheet Add-in for a TCP/IP server in T:\HYPERION\ESSBASE. The two installations use different ESSNET.DLL files.

Security

The ESSBASE.SEC file stores information about users, passwords, groups, privileges, and applications. Each time you successfully start the Hyperion Essbase Agent, ESSBASE.EXE (ESSBASE on UNIX platforms), Hyperion Essbase makes a backup copy of the security file (ESSBASE.BAK). If you attempt to start the Agent and a password prompt is not displayed or your password is rejected, no backup file is created. You can restore from the last successful startup by copying ESSBASE.BAK to ESSBASE.SEC. Both files are in the BIN directory where you installed the Hyperion Essbase server.

Release Compatibility

It is recommended that you install the Release 6.1 server with Release 6.1 client products. Client products include Hyperion Essbase Application Manager, Hyperion Essbase Spreadsheet Add-in, and Hyperion Essbase Runtime Client. Release 5.x or Release 6.0 clients work with the Release 6.1 server, but with feature limitations. For example, you cannot take advantage of the attribute dimension feature of Release 6.0 if you use Hyperion Essbase Application Manager Release 5.0.2 with a Release 6.0 server.

Using versions of a client that are later than the server version is not recommended or supported.

CAUTION: If you install one Release 6.1 client, you should make all clients on the same computer, including Hyperion Essbase Application Manager and Hyperion Essbase Spreadsheet Add-in, Release 6.1. Release 6.1 clients share .DLL files that may not work with earlier clients.

Installing Server Software on Windows

The Hyperion Essbase server installation program, SETUP.EXE, performs the following operations:

- Copies Hyperion Essbase files to the \ESSBASE\BIN directory (or to the directory you specify) on your hard disk

- Copies, if you choose, Hyperion Essbase sample application files to the \ESSBASE\APP directory (or to the directory you specify) on your hard disk

- Installs an ESSNET file for supported network protocols: TCP/IP or Named Pipes

- Installs, if you choose, the Java Runtime Environment to the \ESSBASE\JAVA\JRE directory and sets the JVMODULELOCATION parameter in the essbase.cfg file

- Creates new directories for a new installation

- Updates existing directories if you have a previous release of Hyperion Essbase installed

- Updates, if you choose, the Windows environment settings

To enable the Java-based features of Hyperion Essbase, you must install Java on the computer running the Hyperion Essbase server. For more information about installing Java, see "Manually Installing Java" on page 196.

Installation Procedure

Install Hyperion Essbase server software on Windows platforms by running the installation program from the root directory of the CD-ROM.

➤ To install server software from the Hyperion Essbase CD-ROM to a computer running Windows NT, Windows 95, Windows 98, or Windows 2000:

   1. Insert the CD-ROM into the CD-ROM drive.

   2. Run SETUP from the root directory of the CD-ROM.

   3. Follow the prompts, and provide the information requested.

   To cancel installation at any time, click the **Cancel** button and then the **Exit Setup** button.

4. When prompted, enter your license number exactly as it is shown on your registration letter.

See Chapter 1, "Product Components and Software Registration," for more information on registration.

5. When the **Select Components** dialog box is displayed, select the **Server products** check box.

This selection installs the Hyperion Essbase server and sample applications, as well as Hyperion Essbase SQL Interface (if that is included in your license agreement). To narrow the selection, go to step 6. To continue, go to step 7.

The Java Runtime Environment (JRE) and Java API for XML Parsing (JAXP) is included as an optional installation component. The JRE and JAXP must be installed to enable the Java-based features of Hyperion Essbase. If you have already installed a compatible version of the JRE, you must configure it to run with Hyperion Essbase. For more information, see "Manually Installing Java" on page 196.

The installation program displays the product components for your license agreement and operating system.

6. Click the **Change** button to view selected components or to select a subset of server components in the **Select Sub-components** dialog box (see Figure 1). Leave all options selected to select all server products, or deselect the server products that you do not want to install.

Figure 1: Selecting Server ProductsSelecting Server Products
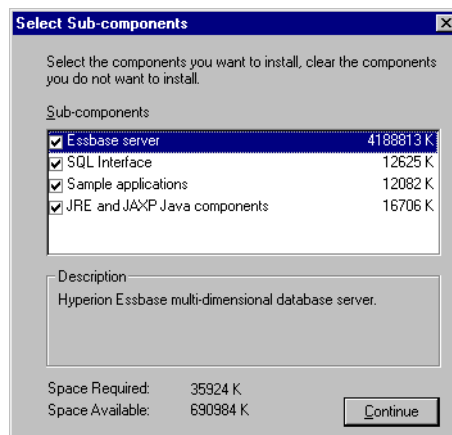
7. When you finish selecting your options, click **Continue**, and then click **Next** in the **Server Products** dialog box.

8. In the **Choose Server Destination Location** dialog box, specify the directory where you want to install the server products that you have selected, and click **Next**.

   Unless another installation of Hyperion Essbase exists on the computer, the default directory is C:\HYPERION\ESSBASE. Click Browse to select or type the name of another directory. If you type the name of a directory that does not exist, the installation program creates the directory for you.

   Figure 2: Choosing Where to Install Server Products
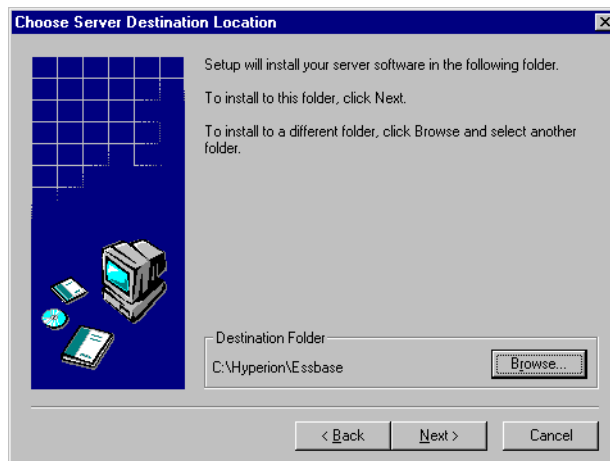
9. In the **Choose Network Protocol** dialog box, select your network protocol, and click **Next**.

10. In the **Update Environment** dialog box, select the environment updates that you want the installation program to perform, and click **Next**.

    a. If you are installing the Hyperion Essbase server, select whether the installation program updates environment variables and adds a program group to the Start menu.

    b. If you are installing Hyperion Essbase SQL Interface, select whether Open Database Connectivity (ODBC) registry information is to be updated.

    Your old ODBC registry information will be appended to, but not overwritten, if you select **Yes**.

11. In the **Check Setup Information** dialog box, review the panel that summarizes your installation choices, and do one of the following:

- To allow the installation program to begin copying files, click **Next**.

- To revise your choices, click **Back**.

- To exit the installation program, click **Cancel**.

12. In the **Setup Complete** dialog box, leave the check box selected and click **Finish** to view the Readme file.

13. If you chose to let the installation program update the `Path` and `%ARBORPATH%` environment variables, do one of the following to allow the environment changes to take effect:

- On Windows NT or Windows 2000, log out and log in again, or reboot your computer.

- On Windows 95 or Windows 98, reboot your computer.

Directories Created

The installation program creates a directory structure including the following:

```
HYPERION
    ESSBASE
            APP
            BIN
            DOCS
                TECHREF
                    MAXL
            JAVA
            LOCALE
            PERLMOD
```

If you select to install the Java Runtime Environment to enable custom-defined functions and macros, a JAVA directory with files and subdirectories is also created under ESSBASE.

In addition to a Readme file and the subdirectories listed above, the ESSBASE directory contains an *.ISU file for each installed server or client component and a file named Essunins.dll, which facilitates uninstalling the software.

CAUTION: Do not move, rename, or delete the *.ISU files in the ESSBASE directory. Do not rename the ESSBASE directory or any subdirectories or files beneath it. Alteration of the installed Hyperion Essbase files and directories prevents their successful uninstallation. In the event that you want to move Hyperion Essbase to another directory or revert to an earlier release, you will need to completely uninstall it first. For more information about uninstalling, see Chapter 10, "Advanced Installation Topics."

The BIN directory contains the Hyperion Essbase server software. This now includes MaxL, a linguistic interface you can use via the MaxL Command Shell (essmsh.exe) or the Essbase Perl module (Essbase.pm) to automate most Hyperion Essbase system-administration tasks.

The APP directory stores Hyperion Essbase application files as they are created. Each application is stored in a subdirectory under the APP directory. Each database in an application is stored in a separate subdirectory under the subdirectory of the application.

For example, suppose that you create two applications on the server: Finance and Marketng. Then you add two databases to the Finance application, Currency and Main, and two databases to the Marketng application, Product and Sales. The server directory structure looks like this:

```
C:\HYPERION\ESSBASE
      APP
          FINANCE
                CURRENCY
                MAIN
          MARKETNG
                PRODUCT
                SALES
      BIN
      DOCS
          TECHREF
                MAXL
      JAVA
      LOCALE
      PERLMOD
```

Note: Hyperion Essbase stores an activity log file for each application in the directory of each application. (In this example, there are log files in the FINANCE and MARKETNG directories.) Log files track all user requests made to the application or to databases within the application.

The DOCS\TECHREF\MAXL directory contains the *MaxL Language Reference*, which you will need in order to use MaxL, the new multi-dimensional access language for Hyperion Essbase.

The JAVA directory contains the Java software to support the Java-based features of Hyperion Essbase. If you choose to automatically install Java from the Hyperion Essbase installation program, this directory contains the Java Runtime Environment and the Java API for XML Parsing.

The LOCALE directory contains the character-set files necessary for all the languages that Hyperion Essbase supports, including English. For non-English versions, you also need to create the ESSLANG environment variable. For more information about ESSLANG, see Chapter 10, "Advanced Installation Topics."

The PERLMOD directory contains the files and documentation you need to add the Essbase Perl Module (essbase.pm) to Perl, enabling you to embed MaxL statements in Perl programs. You must install Perl yourself. For more information, see the MaxL Language Reference in the DOCS\TECHREF\MAXL directory, and the README file included in the PERLMOD directory.

Optimizing Network Throughput on Windows NT

On Windows NT servers, a network setting enables you to optimize the performance of networked applications. Hyperion Essbase performance improves significantly on Windows NT with this setting enabled.

➤ To enable the Maximize Throughput for Network Applications setting:

1. Exit Hyperion Essbase.

2. Start the Windows NT **Control Panel**.

3. Double-click the **Network** icon.

4. Select the **Services** tab.

5. In the **Network Services** list box, double-click **Server**.

   The **Server** dialog box is displayed.

   If you see a message that you Cannot Configure the Software Component, then your Windows NT computer is probably a Windows NT Workstation configuration, not a Windows NT server configuration, and you cannot change the network settings.

   Figure 3: Choosing Maximize Throughput for Network Applications
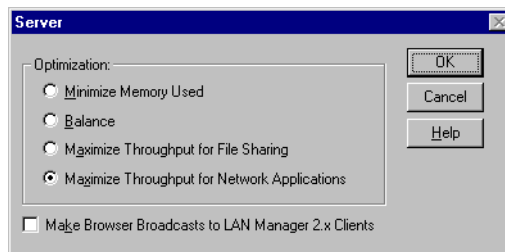
6. Select **Maximize Throughput for Network Applications**.

7. Click **OK**.

   The **Services** tab of the **Network** dialog box is displayed.

8. Click **Close**.

9. Restart Windows NT.

Starting the Hyperion Essbase Server

Before you can access the Hyperion Essbase server, the proper network protocol must be installed and running on your Windows NT or Windows 2000 computer.

See Chapter 9, "Network Configuration Notes," for information on network protocols.

➤ To start Hyperion Essbase:

1. From a command prompt, type **ESSBASE** and press **Enter**.

   If you encounter any errors during startup:

   ● Check your path and environment settings.

   ● Make sure the appropriate network protocol is installed and running on your Windows NT or Windows 2000 computer.

2. Take one of the following steps:

   ● If this is a first-time installation, enter the following items:

     – Company name. The name you enter is embedded in your server license registration.

     – Your name. The name you enter will be designated as the Hyperion Essbase system supervisor. Use this name for your initial login from the Essbase client to the Essbase server.

     – System password. This password is required when you start the Hyperion Essbase server. It is also required to gain access to the server from clients using the system supervisor account.

   You are asked to confirm your choices. Type **Y** to verify your entries, or **N** to retype them.

   See Chapter 4, "Application Manager and Spreadsheet Add-in Installation," for information on Hyperion Essbase Application Manager.

   See the *MaxL Language Reference* in the DOCS\TECHREF\MAXL directory for information on MaxL.

   ● If this is not a first-time installation, enter the system password that you specified when you first ran Hyperion Essbase.

   The Hyperion Essbase window then displays the following message:

   ```
   Waiting for Client Requests...
   ```

You can now use the Hyperion Essbase window to perform high-level supervisor operations. See "Using Hyperion Essbase Agent Commands" on page 39 for a list of available commands. For more information on starting and stopping the server, see "Running Hyperion Essbase, Applications, and Databases" in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

Automating the Server Startup

On Windows 95, Windows 98, Windows NT 4.0, and Windows 2000, you can place the Hyperion Essbase server program in a startup folder so it will start automatically when Windows boots. You can also specify the server password, to avoid having to enter it each time the Hyperion Essbase server starts.

➤ To automate the server startup on Windows platforms, take the following actions:

1. Find the Windows Start Menu customization controls.

- On Windows NT, Windows 95, or Windows 98, select Start > Settings > Taskbar > Start Menu Programs tab.

- On Windows 2000, select Start > Settings > Taskbar & Start Menu > Advanced tab.

2. Click **Add** and specify the location of the Hyperion Essbase Agent program file, ESSBASE.EXE. If you installed Hyperion Essbase to the default directory, this is C:\HYPERION\ESSBASE\BIN\ESSBASE.EXE.

If you want the Hyperion Essbase system password to be automatically entered each time Hyperion Essbase starts, type the password after ESSBASE.EXE on the command line. For example, type

C:\HYPERION\ESSBASE\BIN\ESSBASE.EXE *password*

where *password* is your Hyperion Essbase system password.

3. Click **Next**, and then double-click the StartUp or Startup folder.

4. Enter **Hyperion Essbase 6.1**, or your server name, and click **Finish**.

Automating an Application or Database Startup

You can also automatically start up an application or database. When the Hyperion Essbase server is started, Hyperion Essbase starts any application or database that is defined with an automatic startup setting. You define startup settings in Hyperion Essbase Application Manager using the Application Settings dialog box and the Database Settings dialog box.

Note: See Hyperion Essbase Application Manager online Help for more information.

Using Hyperion Essbase Agent Commands

Hyperion Essbase has a server console called the Agent. When you start the main Hyperion Essbase program (ESSBASE.EXE), the Agent console is displayed. Use this console to perform high-level server operations. Pressing the Enter key in the Agent console provides a list of all available commands.

You can use the following commands in the Agent:

Table 5: Windows Platform Agent Commands

Commands	Description
START *APPNAME*	Starts the specified application.
STOP *APPNAME*	Stops the specified application.
USERS	Displays a list of all users that are connected to the server. The total number of connections is displayed, as well as the number of ports available.
LOGOUTUSER *USER*	Disconnects a user from the server and frees a port. This command requires the Hyperion Essbase system password.
PASSWORD	Changes the system password that is required to start the Hyperion Essbase server. This command requires you to enter the old Hyperion Essbase system password.
VERSION	Displays the server software version number.
HELP	Lists all valid Agent commands and their respective functions.

Table 5: Windows Platform Agent Commands (Continued)

Commands	Description
PORTS	Displays the number of ports that are installed on the server and how many are in use. Number of available ports = number of licensed ports + 1 system administrator port.
DUMP *FILENAME*	Dumps information from the Hyperion Essbase security system to a specified file in ASCII format. If you do not supply a path with the file name, the file is saved to the `\ESSBASE\BIN` directory (`/essbase/bin` on UNIX systems). This command requires the Hyperion Essbase system password.
QUIT/EXIT	Shuts down all open applications and quits Hyperion Essbase.

To learn more about the Agent, see "Running Hyperion Essbase, Applications, and Databases" in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

Running Hyperion Essbase Agent as a Windows NT or Windows 2000 Service

The Hyperion Essbase Agent (`ESSBASE.EXE`) can run as a Windows NT or Windows 2000 service. Running the Agent as a service lets you start and stop the Agent from the Windows NT or Windows 2000 Control Panel. Running the Agent as an automatic service starts the Agent as a service when you start Windows NT or Windows 2000.

This section contains the following topics:

● "Installing Hyperion Essbase Agent as an Automatic Service" on page 41

● "Setting the System Environment to Run Hyperion Essbase Agent as an Automatic Service" on page 42

- "Verifying that Hyperion Essbase Agent Is Running as an Automatic Service" on page 43

- "Stopping the Running of Hyperion Essbase Agent as a Service" on page 43

- "Restarting the Running of Hyperion Essbase Agent as a Service" on page 44

- "Resetting Hyperion Essbase Agent as an Automatic Service" on page 45

- "Removing Hyperion Essbase Agent as a Service" on page 46

Note: The Windows NT or Windows 2000 Task Manager does not let you terminate any process started as a service. If the Hyperion Essbase Agent is started as a service, and if it or the server hangs, you must shut down the server computer to stop the Hyperion Essbase Service.

Installing Hyperion Essbase Agent as an Automatic Service

To install the Hyperion Essbase Agent as a service that starts automatically when you start Windows NT or Windows 2000, type the following from the command line:

```
ESSBASE.EXE -SERVICE INSTALL
```

You should get a message that Hyperion Essbase has been installed as a service. The Hyperion Essbase Agent is now listed as ESSBASE SERVICE in the Services dialog box of the Windows NT Control Panel (on Windows 2000, the service is listed in Control Panel > Administrative Tools > Services). The Hyperion Essbase Agent is also set to start automatically when you start Windows NT or Windows 2000.

Setting the System Environment to Run Hyperion Essbase Agent as an Automatic Service

To run the Hyperion Essbase Agent as a Windows NT or Windows 2000 service, the operating system needs to know where Hyperion Essbase is located and needs to add the `ARBORPATH`\BIN directory to the system-wide `PATH` variable. On Windows NT 4.0 or Windows 2000, take the following actions:

1. Select Start > Settings > Control Panel > System.

2. Find the Windows environment variable controls.

   - On Windows NT, choose the **Environment** tab.

   - On Windows 2000, choose the **Advanced** tab, and click the **Environment Variables** button.

3. Set the following system variables:

   - `ARBORPATH=C:\HYPERION\ESSBASE`, or wherever Hyperion Essbase is installed.

   - Add `%ARBORPATH%/BIN` to the Path variable.

4. Reboot your computer to allow these changes to take effect.

The Hyperion Essbase Agent now runs as a Windows NT or Windows 2000 service. It also starts automatically when you start Windows NT or Windows 2000.

Verifying that Hyperion Essbase Agent Is Running as an Automatic Service

➤ To verify that the Hyperion Essbase Agent is running as an automatic Windows NT or Windows 2000 service after you reboot, perform the following actions:

1. Select Start > Settings > Control Panel.

2. Open the **Services** dialog box.

   - On Windows NT, double-click **Services**.

   - On Windows 2000, double-click **Administrative Tools**, then double-click **Services**.

   You should see the Hyperion Essbase Agent listed as ESSBASE SERVICE in the list of services. The **Startup** (or **Startup Type**) field for Essbase 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 Hyperion Essbase Agent as an Automatic Service" on page 45.

Stopping the Running of Hyperion Essbase Agent as a Service

➤ To stop the Hyperion Essbase Agent from the Control Panel, complete the following steps:

1. Select Start > Settings > Control Panel.

2. Open the **Services** dialog box.

   - On Windows NT, double-click **Services**.

   - On Windows 2000, double-click **Administrative Tools**, then double-click **Services**.

   Find ESSBASE SERVICE in the list of services.

3. Highlight, but do not double-click, ESSBASE SERVICE.

4. Stop the service.

- On Windows NT, click **Stop**.

- On Windows 2000, select Action > Stop.

The **Service Control** message box is displayed. After a delay it disappears, and the **Status** field for Essbase Service is changed.

Note: Stopping the Essbase Service can take some time, depending on how many application servers are running. The time it takes is the same amount it would take to stop ESSBASE.EXE if it were running from the command line or as a background process.

Restarting the Running of Hyperion Essbase Agent as a Service

If you have stopped the Essbase Service, you can start it again from the Services dialog box of the Control Panel. Do the following:

1. Select Start > Settings > Control Panel.

2. Open the **Services** dialog box.

- On Windows NT, double-click **Services**.

- On Windows 2000, double-click **Administrative Tools**, then double-click **Services**.

The **Services** dialog box is displayed. Hyperion Essbase is listed as ESSBASE SERVICE in the list of services.

3. Highlight, but do not double-click, ESSBASE SERVICE.

4. Start the Hyperion Essbase Service.

- On Windows NT, click the **Start** button.

- On Windows 2000, select Action > Start.

The **Service Control** message box is displayed. After a delay it disappears, and the **Status** field entry for Essbase Service is changed.

Resetting Hyperion Essbase Agent as an Automatic Service

When you install the Hyperion Essbase Agent as a Windows NT or Windows 2000 service, it is listed as Essbase Service in the list of services. However, if someone disables it or sets it to manual startup, you can reset the Essbase Service to start automatically. Complete the following steps:

1. Select Start > Settings > Control Panel.

2. Open the **Services** dialog box.

- On Windows NT, double-click **Services**.

- On Windows 2000, double-click **Administrative Tools**, then double-click **Services**.

The **Services** dialog box is displayed. Find ESSBASE SERVICE in the list of services.

3. Double-click ESSBASE SERVICE.

4. Set the Hyperion Essbase service to log on automatically as a system account.

On Windows NT,

a. Click the **Automatic** option in the **Service** dialog box.

b. Under the **Log On As** section, select **System Account**.

On Windows 2000,

a. In the **Essbase Service Properties** dialog box, select **Automatic** from the **Startup type** drop-down list box.

b. In the **Log On** tab, select **Local System account**.

This sets the Essbase Service for automatic startup, and uses the system account.

Removing Hyperion Essbase Agent as a Service

To remove the Hyperion Essbase Agent as a Windows NT or Windows 2000 service, type the following from the command line:

ESSBASE.EXE -SERVICE REMOVE

The system displays a message that Hyperion Essbase has been removed as a service.

Removing the Essbase Service removes it from the list of Windows NT or Windows 2000 registered services. It does not uninstall Hyperion Essbase. You can still start the Hyperion Essbase server. See "Restarting the Running of Hyperion Essbase Agent as a Service" on page 44.

Anticipating the Next Step

After you have successfully started the Hyperion Essbase server, install Hyperion Essbase Application Manager and verify that you can connect to the server from there.

To run Personal Essbase, which runs the Hyperion Essbase server and the client software on the same computer, you may need to configure your system to bypass the network. See "Configuring and Running Personal Essbase" on page 47 for information on how to do this. See Chapter 4, "Application Manager and Spreadsheet Add-in Installation," for information on Hyperion Essbase Application Manager.

If you installed the sample applications, you need to load data into them. The sample applications are provided as examples of basic Hyperion Essbase databases. The *Hyperion Essbase Spreadsheet Add-in User's Guide* uses the Sample Basic database in a step-by-step tutorial on the spreadsheet features.

See Chapter 5, "Sample Applications," for information on loading data into the sample applications and preparing them for use.

Configuring and Running Personal Essbase

You install Personal Essbase for Windows 95, Windows 98, Windows NT, and Windows 2000 the same way you install regular Hyperion Essbase server and client software. Read the following section to understand limitations of, and guidelines for, Personal Essbase. For step-by-step installation instructions, see "Installing Server Software on Windows" on page 29.

About Installing Personal Essbase

To successfully install Personal Essbase, you must install the Hyperion Essbase server and client components in the same root Hyperion Essbase directory. By default, this directory is C:\HYPERION\ESSBASE.

If you have previously installed either Hyperion Essbase client software or a Hyperion Essbase server on your computer, and the installation was *not* Personal Essbase, you must reinstall both the server and the client software when you install Personal Essbase.

When installing on a Personal Essbase computer, you must install Release 6.1 client and server software. The combination of a 5.x client and a 6.1 server is not recommended.

If you install Personal Essbase on a computer with a dual-boot configuration (for example, Windows 95 and Windows NT 4.0), do not mix the installations across operating systems. For example, if you install Personal Essbase for Windows 95 on a computer that has Hyperion Essbase installed on a Windows NT partition, do not install Personal Essbase for Windows 95 in the same directory where Hyperion Essbase or Personal Essbase is installed for Windows NT. From within each operating system, you must independently specify the $ARBORPATH and PATH settings for the Hyperion Essbase program files.

A basic Personal Essbase installation includes the following components:

● A one-port Hyperion Essbase OLAP Server for Windows NT, Windows 95, Windows 98, or Windows 2000 (including MaxL and ESSCMD)

● Hyperion Essbase Application Manager, including MaxL and ESSCMD

● Hyperion Essbase Spreadsheet Add-in for your spreadsheet application: Excel 97, Excel 2000, or Lotus 1-2-3 Millennium Release 9.1 or 9.5

Limitations of a Personal Essbase Server

Personal Essbase, although having functionality similar to Hyperion Essbase, is restricted in some ways:

- Only one application and two databases are allowed to run simultaneously. A system exceeding this configuration is not recommended and is not supported.

- Disk volumes are not supported. The database must fully reside on the disk that contains the Hyperion Essbase server software.

- Hyperion Essbase SQL Interface is not supported.

- Only one port with a local connection (client and server on the same computer) is allowed.

- The Personal Essbase license allows only Personal Essbase clients to connect to the Personal Essbase server. However, Personal Essbase clients may also connect to other Hyperion Essbase servers on the network. See Chapter 1, "Product Components and Software Registration," for more information on Hyperion Essbase licenses.

Connecting to a Personal Essbase Server

After you have installed Personal Essbase server and client software, you are ready to use Hyperion Essbase Spreadsheet Add-in, Hyperion Essbase Application Manager, or MaxL to connect to the Hyperion Essbase server.

➤ To connect to the Hyperion Essbase server using Application Manager, complete the following procedure:

1. Restart your computer to enable changes to the environment.

2. Start Hyperion Essbase by running ESSBASE.EXE.

3. In Hyperion Essbase, select Server > Connect, and enter the name of your Personal Essbase server.

For example, select Local as the server name:

Figure 4: Entering Your Personal Essbase Server Name Local
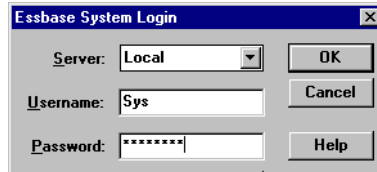
You have several choices of server names to use when connecting:

● The default or alias name defined in the Windows HOSTS file.

● For example, enter localhost or Local as the Hyperion Essbase server name.

● The computer name, as defined by the operating system for networking. In the following Windows NT 4.0 example, the computer name is ASPEN.

Figure 5: Using the Computer Name ASPEN
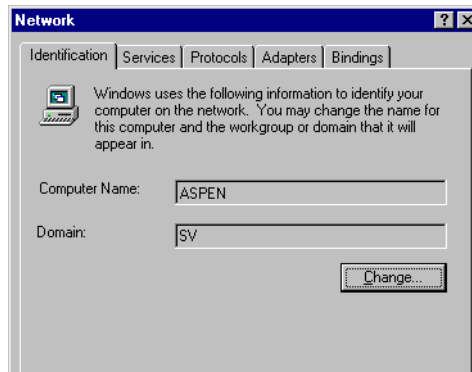
If you use Named Pipes, using LOCAL as the Hyperion Essbase server name is faster than using the computer name.

● The default loopback IP address as defined in the HOSTS file. For example, enter 127.0.0.1 as the Hyperion Essbase server name. For more information, see "Configuring the Windows Hosts File" on page 51.

- If you use TCP/IP and the MS Loopback Adapter, you can use the alias name that you mapped in the HOSTS file to the IP address for the MS Loopback Adapter. See "Configuring the Windows Hosts File" on page 51.

- If you have not mapped the IP address in the HOSTS file, and if you have a network adapter card, use the IP address assigned to your network adapter card.

- If you have not mapped the IP address in the HOSTS file, and if you do not have a network adapter card, use the IP address assigned to the MS Loopback Adapter.

4. Click **OK**.

Troubleshooting Personal Essbase Communication

If you have any of the following problems after installing Personal Essbase,

- You cannot start the Personal Essbase server (Essbase.exe). You see an empty console window, or the following message is found in Essbase.log:

  `Network Error [10047]: Unable To Create Host Server Socket`

- You can start the Personal Essbase server, but you cannot connect to the server using client software, such as Hyperion Essbase Application Manager. You see the following message:

  `Network Error [11002]: Unable To Locate [] In Hosts File`

then you need to make sure of the following:

- You have an appropriate HOSTS file in your Windows system directory. See "Configuring the Windows Hosts File" on page 51.

- You have installed a supported network protocol (TCP/IP or Named Pipes), which is bound to a network adapter. If you are using a stand-alone computer that has no network interface card (NIC), you must simulate network connectivity by binding your network protocol to the appropriate Microsoft adapter. See "Working Without a Network Interface Card (Windows 95 and Windows 98)" on page 51, or "Working Without a Network Interface Card (Windows NT and Windows 2000)" on page 54.

Configuring the Windows Hosts File

Make sure you have a HOSTS file in your Windows system directory. If you do not have a HOSTS file, complete the following steps:

1. Copy the sample file HOSTS.SAM from your Windows system directory (for example, C:\WINDOWS or C:\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS) and save it as HOSTS.

2. If necessary, edit the HOSTS file as follows:

   ● On Windows 95 or Windows 98, make sure HOSTS contains the following line:

     ```
     127.0.0.1    localhost
     ```

     This is the default loopback IP address. You can optionally change localhost to any desired alias name for the Personal Essbase server.

   ● On Windows NT or Windows 2000, optionally add a line to HOSTS that maps the IP address of the MS Loopback Adapter to a name. For example, if the IP address of the MS Loopback Adapter is 149.22.15.1, you can map it to LOCALLOOP as follows:

     ```
     149.22.15.1    LOCALLOOP
     ```

   Leave at least one space between the IP address and the alias name.

   Note: Names in the HOSTS file are case-sensitive.

3. Save the changes to the HOSTS file.

   The HOSTS file should not have a file name extension. If the text editor adds an extension to the HOSTS file, remove the extension from the file name using Windows Explorer.

Working Without a Network Interface Card (Windows 95 and Windows 98)

If you are using a stand-alone Windows 95 or Windows 98 computer that has no network interface card (NIC), you can simulate network connectivity by binding the network protocol to adapter software. The following steps show you how to configure the TCP/IP network protocol to use the Microsoft Dial-Up adapter provided with Windows 95 and Windows 98. These instructions assume that:

- TCP/IP and Dial-Up Networking are installed on your computer.

  TCP/IP and Dial-Up Networking are included with your Windows 95 or Windows 98 installation. However, you might have to rerun the installation to choose the TCP/IP and Dial-Up Networking options.

- Your computer does *not* have a network card that is bound to TCP/IP.

  If your computer has a network card installed, complete steps 1–3 in the previous section, "Configuring the Windows Host File", to verify that the network card is bound to TCP/IP.

➤ To set up the Dial-Up Adapter, complete the following steps on your Windows 95 or Windows 98 computer:

1. Open the Control Panel by selecting Settings > Control Panel from the Start menu.

2. Double-click the **Network** icon.

3. In the **Network** dialog box, select the **Configuration** tab, and select **TCP/IP** from the list of installed network components.

   If TCP/IP is not listed, click **Add**, choose **Protocol**, click **Add**, and select **Microsoft** from the list box on the left, and **TCP/IP** from the list box on the right.

   If your computer has a network card installed, check to see if the network card is bound to TCP/IP. For example, check that the Network dialog box has a binding entry similar to:

   ```
   TCP/IP -> AMD PCNET Family Ethernet Adapter (PCI&ISA)
   ```

If your network card is bound to TCP/IP, you do not need to complete the remaining steps in this section. Click **Add**.

The **Select Network Component Type** dialog box is displayed:

Figure 6: Selecting Adapter
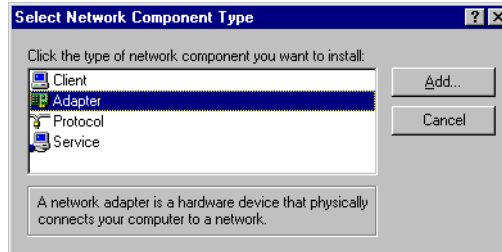
4. Select **Adapter**, and click **Add**.

5. In the **Select Network Adapters** dialog box, select **Microsoft** in the **Manufacturers** list box, and select **Dial-Up Adapter** in the **Network Adapters** list box.

6. Click **OK**.

7. Check that the **Network** dialog box has the binding entry TCP/IP -> Dial-Up Adapter, as follows:

Figure 7: Checking for the Binding Entry TCP/IP -> Dial-Up Adapter
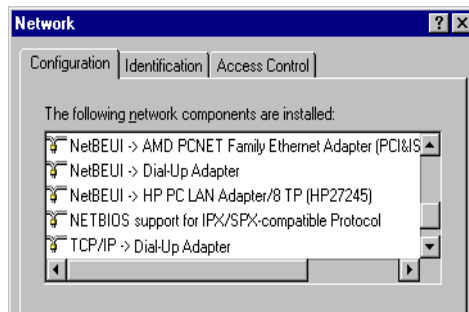
8. Click **OK** in the **Network** dialog box.

Windows prompts you to restart your computer to enable the settings. If it is convenient to restart your computer now, click **Yes**.

Working Without a Network Interface Card (Windows NT and Windows 2000)

If you are using a stand-alone Windows NT or Windows 2000 computer that has no network interface card (NIC), you can simulate network connectivity by binding the network protocol to adapter software. The following steps show you how to configure the TCP/IP or Named Pipes network protocol to use the Microsoft Loopback adapter provided with Windows NT and Windows 2000.

These instructions assume that you have either TCP/IP or Named Pipes (NetBEUI) installed as a protocol on your Windows NT Workstation. You can use this method whether or not you have a network interface card.

To use this method to bypass the network on Windows NT or Windows 2000, you need to do the following:

- Install the Microsoft Loopback Adapter.

- If you use TCP/IP, configure Microsoft Loopback with TCP/IP.

Installing the Microsoft Loopback Adapter

➤ To install the Microsoft Loopback Adapter on Windows NT 4.0:

1. Select Start > Settings > Control Panel > Network > Adapters tab.

2. If the **Network Adapter** list box does not contain **MS Loopback Adapter**, click **Add**, and select **MS Loopback Adapter** from the list of available adapters.

3. Click **OK**.

   If you are prompted for settings such as Frame Type, click **OK** to accept the defaults. These prompts occur if you have IPX/SPX installed. IPX/SPX is *not* required for Personal Essbase.

   Windows NT prompts you to insert the "Windows NT Workstation CD-ROM" into the CD-ROM drive.

4. Insert the CD-ROM and click **OK**. MS Loopback Adapter is added to the **Network Adapters** list box in the **Adapters** dialog box.

5. Click **Close**.

   If you use only Named Pipes as a network protocol, Windows installs the Microsoft Loopback Adapter and prompts you to reboot your computer so the new settings can take effect.

6. Restart your computer.

   If you use TCP/IP, see

➤ To install the Microsoft Loopback Adapter on Windows 2000:

1. Select Start > Settings > Control Panel > Add/Remove Hardware.

2. In the Add/Remove Hardware Wizard, click **Next**, then select **Add/Troubleshoot a device**, and click **Next**.

   Windows 2000 searches for available devices.

3. If Microsoft Loopback Adapter is not already listed as an installed device, select **Add a new device** and click **Next**.

4. Select **No, I want to select the hardware from a list**, and click **Next**.

5. Select **Network Adapters** from the list of hardware types, and click **Next**.

6. Select **Microsoft** from the list of manufacturers, and select **Microsoft Loopback Adapter** from the list of network adapters.

7. Click **Next**.

8. After Windows 2000 installs the Microsoft Loopback Adapter, click **Finish**.

Configuring Microsoft Loopback with TCP/IP

If you use TCP/IP as a network protocol (either alone or with Named Pipes) and you need to configure it with the Microsoft Loopback Adapter, complete the following steps that are appropriate for your operating system:

On Windows NT 4.0:

1. In the Microsoft TCP/IP Properties dialog box, click the **IP Address** tab, if it is not already active.

2. In the **IP Address** page of the **Microsoft TCP/IP Properties** dialog box, select **MS Loopback Adapter** from the **Adapter** list box.

3. Enter the IP Address and Subnet Mask for the MS Loopback Adapter.

    The MS Loopback Adapter has a default IP address. You may give it a fictitious IP address, or the IP address of your computer, but its IP address must be different than the IP address for the network adapter, if you have one. The subnet mask for MS Loopback is the same as for the network adapter, if you have one. See your network administrator for the correct addresses.

4. Select the **DNS** tab, and fill in the Host Name, Domain, and DNS Service Search Order for the MS Loopback Adapter. Contact your network administrator for the correct information.

5. Click **Add**, and click **OK**.

    Windows installs the MS Loopback Adapter and prompts you to reboot your computer so the new settings can take effect.

6. Restart your computer.

On Windows 2000:

1. Select Start > Settings > Control Panel > Network and Dial-up Connections.

2. Right-click the **Local Area Connection** icon and select **Properties**. Verify that Microsoft Loopback Adapter is shown in the **Connect using:** field.

3. Verify that the **Internet Protocol (TCP/IP)** component is checked. If it is not, select it.

4. Select **Internet Protocol (TCP/IP)** and click **Properties**.

5. Enter the IP Address and Subnet Mask for the Microsoft Loopback Adapter.

    The Microsoft Loopback Adapter has a default IP address. You may give it a fictitious IP address, or the IP address of your computer, but its IP address must be different than the IP address for the network adapter, if you have one. The subnet mask for Microsoft Loopback is the same as for the network adapter, if you have one. See your network administrator for the correct addresses.

6. Type the DNS server address information. Contact your network administrator for the correct information.

7. Click **OK** twice.

Chapter 3

UNIX Server Installation

The Hyperion Essbase OLAP Server is available for the following UNIX platforms:

- Solaris from Sun Microsystems
- AIX from IBM
- HP-UX from Hewlett Packard
- Linux from Red Hat

Note: Linux is not supported for Hyperion Essbase Release 6.1.

Read this chapter for information on system requirements, directories, setting your environment, and running the Hyperion Essbase server on UNIX.

This chapter contains the following sections:

UNIX Server Requirements

The Hyperion Essbase server for UNIX requires a system that meets minimal hardware and software requirements. See the sections to find the system requirements for your UNIX platform.

Solaris Server Requirements

The Hyperion Essbase server for Solaris requires a system with the following minimal hardware and software requirements:

Table 6: Hyperion Essbase Server Solaris System Requirements

Component	Requirement
Server platform	Sun SPARC or ULTRASPARC machines
Solaris version	7 or 8
Physical memory	128 MB RAM (256 or more MB recommended) Large databases have greater memory requirements.
Swap space	At least 2 X amount of physical memory is recommended when physical memory is less than .5 GB. Contact your system administrator or hardware vendor for optimum swap configuration.
Disk space	• 52 MB • Server software uses 32 MB • Sample applications use 9 MB as shipped and use 20 MB after they are fully loaded with default settings • See the *Hyperion Essbase OLAP Server Database Administrator's Guide* for information about sizing your databases.
Network protocol	TCP/IP (included with Solaris)
Thread type	POSIX Kernel Threads (included with Solaris)
Java™ platform	Java Runtime Environment version 1.2.2 or later, Java API for XML Parsing version 1.01

AIX Server Requirements

The Hyperion Essbase server for AIX requires a system with the following minimal hardware and software requirements:

Table 7: Hyperion Essbase Server AIX System Requirements

Component	Requirement
Server platform	RS 6000 PowerPC machines
AIX version	4.3.3 or higher
Physical memory	128 MB RAM (256 or more MB recommended) Large databases have greater memory requirements.
Swap space	At least 2 X amount of physical memory is recommended when physical memory is less than .5 GB. Contact your system administrator or hardware vendor for optimum swap configuration.
Disk space	• 53 MB • Server software uses 33 MB • Sample applications use 9 MB as shipped and use 20 MB after they are fully loaded with default settings. • See the *Hyperion Essbase OLAP Server Database Administrator's Guide* for information about sizing your databases.
Network protocol	TCP/IP (included with AIX)
Thread type	POSIX Kernel Threads (included with AIX)
Java platform	Java Runtime Environment version 1.2.2 (or later), Java API for XML Parsing version 1.01

3

HP-UX Server Requirements

The Hyperion Essbase server for HP-UX requires a system with the following minimal hardware and software requirements:

Table 8: Hyperion Essbase Server HP-UX System Requirements

Component	Requirement
Server platform	PA-RISC machines
HP-UX version	11.0. See Readme.txt for required patches
Physical memory	128 MB RAM (256 or more MB recommended) Large databases have greater memory requirements.
Swap space	At least 2 X amount of physical memory is recommended when physical memory is less than .5 GB. Contact your system administrator or hardware vendor for optimum swap configuration.
Disk space	• 51 MB • Server software uses 31 MB • Sample applications use 9 MB as shipped and use 20 MB after they are fully loaded with default settings. • See the *Hyperion Essbase OLAP Server Database Administrator's Guide* for information about sizing your databases.
Network protocol	TCP/IP (included with HP-UX)
Thread type	POSIX Kernel Threads (included with HP-UX)
Java platform	Java Runtime Environment version 1.2.2 (or later), Java API for XML Parsing version 1.01

Red Hat Linux Server Requirements

Note: Although this guide contains information about Red Hat Linux,
Hyperion Essbase Release 6.1 does not support Red Hat Linux.

The Hyperion Essbase server for Red Hat Linux requires a system with the
following minimal hardware and software requirements:

Table 9: Hyperion Essbase Server Red Hat Linux System Requirements

Component	Requirement
Server platform	Intel-compatible machines
Red Hat Linux version[1]	6.1
Physical memory	128 MB RAM (256 or more MB recommended). Large databases have greater memory requirements.
Swap space	At least 2 X amount of physical memory generally recommended when physical memory is less than .5 GB. Contact your system administrator or hardware vendor for optimum swap configuration.
Disk space	• 26 MB • Server software uses 11 MB • Sample applications use 13 MB as shipped and use 20 MB after they are fully loaded with default settings. • See the *Hyperion Essbase OLAP Server Database Administrator's Guide* for information about sizing your databases.
Network protocol	TCP/IP (included with Linux)
Thread type	Linux POSIX Threads (included with Linux)

1 Red Hat Linux is not available for Hyperion Essbase Release 6.1

About Hyperion Essbase on UNIX

The following table describes how Hyperion Essbase operates in a UNIX environment.

Multithreading	Hyperion Essbase uses a multithreaded architecture to ensure high performance in a client-server environment. To accomplish this on UNIX platforms, Hyperion Essbase uses POSIX Kernel Threads on Solaris, AIX, and HP-UX.
Symmetric Multiprocessing	Hyperion Essbase supports SMP (symmetric multiprocessing). An SMP server is beneficial where more than one Hyperion Essbase application is defined on a single server machine.
File systems and direct I/O	By default, Hyperion Essbase uses direct I/O. For those file systems that do not support direct I/O (for example, HFS on HP-UX), Hyperion Essbase uses buffered I/O.
X-Windows	If you have X Windows installed, Hyperion Essbase does not use it.
	When you run Hyperion Essbase, the Hyperion Essbase Agent becomes the active terminal, unless you started Hyperion Essbase in the background. When you start a Hyperion Essbase application, it runs in the background. Messages from the application appear in the Hyperion Essbase Agent terminal (if it is running in the foreground) and are also entered in the *appname*.LOG file.
	If you want to view these messages from a telnet session, use the Tail command to redirect messages to another window at a set interval. We recommend using `tail -f` *logfile* to view logged messages as they are posted to the file. Press Ctrl + C to stop viewing the file.
	You can also run the Hyperion Essbase Agent in the background. For more information, see "Starting Hyperion Essbase in the Background" on page 74.

Before You Install on UNIX

Before you install server products on any UNIX platform, complete the following tasks:

● Apply the latest patches for your operating system.

● Create an account that has Read/Write/Execute access to the target directory for Hyperion Essbase (/home/hyperion/essbase is the default installation directory). This account should belong to the Hyperion Essbase system administrator. Give this account the same default directory you are using for Hyperion Essbase (for example, /home/hyperion/essbase). Ideally, the system administrator account owns the target directory.

> **Note:** As of Release 6.0, you are no longer required to install and run Hyperion Essbase from an account called arbor. Any user can install the product, but it should be the same user account that starts Hyperion Essbase.

● If you are upgrading from Release 5.x on the current computer, first back up your 5.x application and database files to another directory.

Installing Server Software on UNIX

On UNIX, you can install server software from the CD-ROM in either of the following ways:

● From the root directory of the CD-ROM. You do this by running setup.sh (or SETUP.SH) and selecting the product to install. You can install only one product at a time.

● From a network copy of the CD-ROM. This option is useful if the system you are installing to does not have a CD-ROM drive, or if you do not have access to a CD-ROM but the server software has been copied to an accessible network drive. You do this by copying the appropriate product directory from the network (for example, /solaris/server), and then running essinst (or ESSINST) in the product directory.

To enable the Java-based features of Hyperion Essbase, you must also manually install Java on the computer running the Hyperion Essbase server. For more information about installing Java, see "Manually Installing Java" on page 196.

Installing from the CD-ROM Root Directory

➤ To install Hyperion Essbase server products on UNIX from the root directory of the CD-ROM, do the following:

1. Log in as the Hyperion Essbase system administrator account. For example, log in as **admin** if you created a user account called **admin** that owns the target installation directory /home/hyperion/essbase.

2. Insert the CD-ROM into your CD-ROM drive.

3. Change to the root directory of the CD-ROM (for example, cd /cdrom).

4. Use the ls command to find setup.sh (or SETUP.SH).

Some UNIX CD-ROM drivers list file names in uppercase. Others list them in lowercase. See whether setup.sh is in uppercase or lowercase.

5. Type ./setup.sh or ./SETUP.SH, depending on what you learned in step 4. You must run Setup separately for each Hyperion Essbase product you want to install. Setup does the following:

● Asks you which product to install: API, Server, or SQL Interface

● Runs the script essinst (or ESSINST) to install that product

6. Follow the prompts and provide the information requested.

To cancel installation at any time, press Ctrl + C.

7. When prompted, enter your license number exactly as it appears on your registration letter.

See Chapter 1, "Product Components and Software Registration," for more information on software registration.

8. When prompted, type the directory where you want to install Hyperion Essbase.

If this is the first installation of Hyperion Essbase, the installation program uses /home/hyperion/essbase/ as the default directory. You can select another directory, and if it does not exist, the installation program will attempt to create it for you.

The installation program decompresses the server.tz files, and copies files to the directory you select (or default to), and to subdirectories it creates under that directory. Do not create these subdirectories yourself.

9. Update your environment before you use Hyperion Essbase. See "Updating the Environment Settings (All UNIX Systems)" on page 69.

Installing from the CD-ROM Product Directory

If you do not have access to the CD-ROM, you must copy the appropriate directory of the CD-ROM for your platform (for example, `cdrom/solaris`) from a network copy before completing these instructions.

Note: If you have access to the CD-ROM, it is recommended that you install from the root directory of the CD-ROM. See "Installing from the CD-ROM Root Directory" on page 64.

3

➤ To install Hyperion Essbase server products on UNIX from the CD-ROM product directory, or a copy of it, do the following:

1. Log in as the Hyperion Essbase system administrator account. For example, log in as **admin** if you created a user account called **admin** that owns the target installation directory `/home/hyperion/essbase`.

2. Change to the appropriate directory for the product you want to install. For example, `cd /cdrom/solaris/sqlifc` to install Hyperion Essbase SQL Interface on Solaris.

3. Use the `ls` command to find `essinst` (or `ESSINST`).

   See whether `essinst` is in uppercase or lowercase.

4. Type `./essinst` or `./ESSINST`, depending on what you learned in step 3. `essinst` (or `ESSINST`) installs the product from your current directory.

5. Follow the prompts and provide the information requested.

   To cancel installation at any time, press Ctrl + C.

6. When prompted, enter your license number exactly as it appears on your registration letter.

   See Chapter 1, "Product Components and Software Registration," for more information on software registration.

7. When prompted, type the directory where you want to install Hyperion Essbase.

   If this is the first installation of Hyperion Essbase, the installation program uses /home/hyperion/essbase as the default directory. You can select another directory, and if it does not exist, the installation program will attempt to create it for you.

   The installation program decompresses the server.tz files, and copies files to the directory you select (or default to), and to subdirectories it creates under that directory. Do not create these subdirectories yourself.

8. Update your environment before you use Hyperion Essbase. See "Updating the Environment Settings (All UNIX Systems)" on page 69.

root.sh Shell Script

Note: The text in the following paragraph is more current than the information in the printed version.

After you install the Hyperion Essbase server on a Solaris system, run the Bourne shell script, root.sh, from the root account. The script, located in $ARBORPATH/bin, performs post-installation tasks. Solaris users, if you do not run the script, you will not be able to turn on the Cache Memory Locking database setting.

To run root.sh, log in as user root, and enter the following commands:

```
$ su -
Password: (enter your password)
# cd /home/hyperion/essbase/bin
# sh ./root.sh
# exit
```

The script does the following:

● Sets the effective uid bit to root.

● Changes ownership of ESSSVR, the application server process, so that it will run as root. This is necessary to enable use of the optional Cache Memory Locking setting.

- Creates symbolic links in `/usr/lib` to the following shared libraries in `$ARBORPATH/bin`:

Solaris	Linux
libesssd.so.1	libesssd.so
libessapi.so.1	libessapi.so
libessnet.so.1	libessnet.so
libessotl.so.1	libessotl.so
libessshr.so.1	libessshr.so
libesssql.so.1	libessutl.so
libessutl.so.1	libesssvrd.so
libesssvrd.so.1	libesssm.so
libesssm.so.1	libessdvrq.so
libessdvrq.so.1	libglobalc.so
libglobalc.so	

3

- On Solaris only, asks you whether you have installed the Hyperion Essbase SQL Interface module. If you have not, the program ends and the task is complete. If you have installed Hyperion Essbase SQL Interface, `root.sh` prompts you for the path to the `libodbc.so` shared library. Enter the full path except for the file name; for example, `/home/hyperion/essbase/bin`.

  See Chapter 8, "SQL Interface Installation," on installing SQL Interface.

Directories Created (All UNIX Systems)

The installation program creates the following directory structure:

```
essbase
    bin
    app
    docs
        techref
            maxl
    locale
    perlmod
```

The `bin` directory contains the Hyperion Essbase server software. This now includes MaxL, a linguistic interface you can use via the MaxL Command Shell (`essmsh`) or the Essbase Perl module (`Essbase.pm`) to automate most Hyperion Essbase system-administration tasks.

The `app` directory stores Hyperion Essbase applications as they are created. Each application is stored in a directory under the `app` directory. Each database in an application is stored in a directory under the application directory.

For example, suppose you create two applications on the server: Finance and Marketng. Then you add two databases to the Finance application: Currency and Main, and two databases to the Marketng application: Product and Sales. The server directory structure appears as follows:

```
essbase
     app
         Finance
               Currency
               Main
         Marketng
               Product
               Sales
     bin
     docs
        techref
               maxl
     java
     locale
     perlmod
```

Note: Hyperion Essbase stores an activity log file for each application in each application's directory. (In the example, there are log files in the `Finance` and `Marketng` directories.) Log files track all user requests made to the application or to databases within the application.

The `docs/techref/maxl` directory contains the *MaxL Language Reference*, which you will need in order to use MaxL, the new multi-dimensional access language for Hyperion Essbase.

The `JAVA` directory contains the Java software to support the Java-based features of Hyperion Essbase.

The `locale` directory contains the character-set files necessary for all the languages Hyperion Essbase supports, including English. For non-English versions, you also need to create the ESSLANG environment variable. For more information about ESSLANG, see Chapter 10, "Advanced Installation Topics."

The `perlmod` directory contains the files and documentation you need to add the Essbase Perl Module (`Essbase.pm`) to Perl, enabling you to embed MaxL statements in Perl programs. You must install Perl yourself. For more information, see the MaxL Language Reference in the `docs/techref/maxl` directory, and the `README` file included in the `perlmod` directory.

Updating the Environment Settings (All UNIX Systems)

The installation program does not update the environment files `.cshrc` or `.profile`. Because the format of these files varies depending on the shell you use, you need to update the appropriate file for your system manually.

Read `hyperionenv.doc` in your Arborpath directory for the environment setting for the Hyperion Essbase server. If you are installing on Solaris, also run `root.sh` from the `$ARBORPATH/bin` directory, where `$ARBORPATH` is the directory where you installed the Hyperion Essbase server. See "root.sh Shell Script" on page 66. The default installation directory is /home/hyperion/essbase.

If you are installing SQL Interface on any UNIX platform, you must take additional steps to set your environment. See Chapter 8, "SQL Interface Installation," for details.

After installation and updating the environment, log out and log in again to enable the new settings to take effect. Then begin to use Hyperion Essbase.

Setting the $ARBORPATH Variable (Mandatory)

The installation program creates a file, `hyperionenv.doc`, with the shared library information you need in your global environment. If you installed Hyperion Essbase to /home/hyperion/essbase, you see the following:

```
ARBORPATH=/home/hyperion/essbase
```

where "home" is the name of your home directory, and "essbase" is the name of your Hyperion Essbase directory.

You need to add this setting to your environment in the appropriate format for your system. For example:

In the C shell, add the following to your `.cshrc` environment file:

```
setenv ARBORPATH "/home/hyperion/essbase"
```

In the Bourne or Korn shell, add the following to your `.profile` environment file:

```
ARBORPATH=/home/hyperion/essbase; export ARBORPATH
```

Setting the Library Path Variables (Mandatory)

You need to update the system library path setting to include the `$ARBORPATH/bin` directory. Add this setting to your environment in the appropriate format for your shell.

If Hyperion Essbase SQL Interface has been installed, you also need to add `$ARBORPATH/dlls` to the library path setting. For more information about Hyperion Essbase SQL Interface environment settings, see Chapter 8, "SQL Interface Installation."

Solaris

On Solaris, you need to update the `LD_LIBRARY_PATH` setting to include the `$ARBORPATH/bin` directory.

In the C shell, set `LD_LIBRARY_PATH` path as follows in the `.cshrc` file:

```
setenv LD_LIBRARY_PATH "$LD_LIBRARY_PATH:/usr/lib:$ARBORPATH/bin"
```

If SQL Interface has been installed, also include `$ARBORPATH/dlls`, as follows:

```
setenv LD_LIBRARY_PATH
"$LD_LIBRARY_PATH:/usr/lib:$ARBORPATH/bin:$ARBORPATH/dlls"
```

In the Bourne or Korn shell, set `LD_LIBRARY_PATH` as follows in the `.profile` file:

```
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/lib:$ARBORPATH/bin;
export LD_LIBRARY_PATH
```

If SQL Interface has been installed, also include `$ARBORPATH/dlls`, as follows:

```
LD_LIBRARY_PATH=
$LD_LIBRARY_PATH:/usr/lib:$ARBORPATH/bin:$ARBORPATH/dlls;
export LD_LIBRARY_PATH
```

Note: The actual path you specify depends on your environment.

HP-UX

On HP-UX, you need to update the SHLIB_PATH setting to include the $ARBORPATH/bin directory.

In the C shell, add the following to the .cshrc file:

```
setenv SHLIB_PATH "$SHLIB_PATH:/usr/lib:$ARBORPATH/bin"
```

If SQL Interface has been installed, also include $ARBORPATH/dlls, as follows:

```
setenv SHLIB_PATH
"$SHLIB_PATH:/usr/lib:$ARBORPATH/bin:$ARBORPATH/dlls"
```

In the Bourne or Korn shell, add the following to the .profile file:

```
SHLIB_PATH=$SHLIB_PATH:/usr/lib:$ARBORPATH/bin; export SHLIB_PATH
```

If SQL Interface has been installed, also include $ARBORPATH/dlls, as follows:

```
SHLIB_PATH=$SHLIB_PATH:/usr/lib:$ARBORPATH/bin:$ARBORPATH/dlls
export SHLIB_PATH
```

Note: The actual path you specify depends on your environment.

AIX

On AIX, you need to update the LIBPATH setting to include the $ARBORPATH/bin directory.

In the C shell, add the following to the .cshrc file:

```
setenv LIBPATH "$LIBPATH:/usr/lib:$ARBORPATH/bin"
```

If SQL Interface has been installed, also include $ARBORPATH/dlls, as follows:

```
setenv LIBPATH "$LIBPATH:/usr/lib:$ARBORPATH/bin:$ARBORPATH/dlls"
```

In the Bourne or Korn shell, add the following to the .profile file:

```
LIBPATH=$LIBPATH:/usr/lib:$ARBORPATH/bin; export LIBPATH
```

If SQL Interface has been installed, also include $ARBORPATH/dlls, as follows:

```
LIBPATH=$LIBPATH:/usr/lib:$ARBORPATH/bin:$ARBORPATH/dlls;
export LIBPATH
```

Note: The actual path you specify depends on your environment.

Red Hat Linux

Although this guide contains information about Red Hat Linux, it is not supported on Release 6.1 of Hyperion Essbase.

On Red Hat Linux, you need to update the LD_LIBRARY_PATH setting to include the $ARBORPATH/bin directory.

In the C shell, set LD_LIBRARY_PATH path as follows in the .cshrc file:

```
setenv LD_LIBRARY_PATH "$LD_LIBRARY_PATH:/usr/lib:$ARBORPATH/bin"
```

In the Bourne or Korn shell, set LD_LIBRARY_PATH as follows in the .profile file:

```
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/lib:$ARBORPATH/bin;
export LD_LIBRARY_PATH
```

Note: The actual path you specify depends on your environment.

Adding Hyperion Essbase to the Path (Optional)

For convenience, you might want add Hyperion Essbase to the path so you can quickly access Hyperion Essbase components. For example:

In the C shell, edit the .cshrc file:

```
set path=($PATH /usr/bin $ARBORPATH/bin)
```

In the Bourne or Korn shell, edit the .profile file:

```
PATH=$PATH:/usr/bin:$ARBORPATH/BIN; export PATH
```

Now, from the UNIX command prompt, you can get to the Hyperion Essbase directory by issuing the following command:

```
cd $ARBORPATH
```

Removing Extraneous Files (All UNIX Systems, Optional)

As an option, you can remove extraneous files from the `/home/hyperion/essbase` directory and the temporary directory.

Note: This section assumes you installed Hyperion Essbase to the default directory, `/home/hyperion/essbase`.

When you install the Hyperion Essbase server, the `server.tz` files are moved to the `/home/hyperion/essbase` directory and the `readme.txt` file is moved to the `/home/hyperion/essbase/bin` directory. When `server.tz` files are decompressed, the decompressed files are stored momentarily in the `/essbase` directory, then moved to the appropriate directory. If you select not to install an option, such as the sample applications, or if you have not licensed an option, such as currency conversion, extra files will be left in the `/essbase` directory after installation. In any case, the `server.tz` files are left there.

When installation is complete, you can delete any files in the temporary directory. You can also delete from `/essbase` all files that have not been moved into subdirectories, including the `server.tz` files. However, do *not* delete any subdirectories under `/essbase` or any files in those subdirectories.

Starting the Hyperion Essbase Server

You can start the Hyperion Essbase server in the foreground or in the background.

Before you can access the Hyperion Essbase server, you must be logged in to the UNIX server on an account that has at least Read/Write/Execute access to the Hyperion Essbase directories. Ideally, this is the same account that was used to install Hyperion Essbase.

Starting Hyperion Essbase in the Foreground

➤ To start the Hyperion Essbase server in the foreground:

1. From the command prompt, type

   `$ARBORPATH/bin/ESSBASE`

   or, if your path includes `$ARBORPATH/bin`, type

   `ESSBASE`

   If you encounter any errors during startup, check your path and environment settings.

2. Do one of the following:

- If this is a first-time installation, enter the following items:

  – Company name. The name you enter is embedded in your server license registration.

  – Your name. The name you enter is designated as the Hyperion Essbase system supervisor. Use this name for your initial login from Hyperion Essbase Application Manager.

  – System password. This password is required when you start the Hyperion Essbase server. It is also required to gain access to the server from Hyperion Essbase Application Manager using the system supervisor account.

  – You are asked to confirm your choices. Type Y to verify your entries, or N to retype them.

- If this is not a first-time installation, enter the system password that you specified when you first ran Hyperion Essbase.

  The Hyperion Essbase Agent then displays the following message:

  ```
  Waiting for Client Requests...
  ```

You can now use the Hyperion Essbase Agent to perform high-level supervisor operations. See "Using Hyperion Essbase Agent Commands" on page 75 for a list of available commands.

Starting Hyperion Essbase in the Background

To start Hyperion Essbase as a background process:

From the command prompt, type

```
$ARBORPATH/bin/ESSBASE password -b &
```

or, if your path already includes $ARBORPATH/bin, type

```
ESSBASE password -b &
```

You can start Hyperion Essbase without using the ampersand (&) at the end of the command, but if you do not type the &, the command prompt is not returned after the server is started.

Secure Password Script

To hide the Hyperion Essbase system password from the UNIX process listing created by the ps -ef utility on Solaris and HP-UX, you must create a simple shell script and use it to launch the Hyperion Essbase Agent. Create a shell script named essbase.secure, consisting of the following lines:

```
#!/bin/sh
PASS=$1
ESSBASE -b -secure << EOF &
${PASS}
EOF
```

After creating this script, launch the Agent as follows to start it in the background with *<password>* secured from process listing details:

```
essbase.secure <password>
```

Shutting Down Hyperion Essbase

To shut down the server when Hyperion Essbase is running in the foreground, type EXIT.

To shut down the server from any terminal connected to it, use the SHUTDOWNSERVER command in ESSCMD.

For more information about starting and stopping the Hyperion Essbase server, see "Running Hyperion Essbase, Applications, and Databases" in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

For information on stopping an application or a process, see "Stopping an Application" on page 45-6 in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

Using Hyperion Essbase Agent Commands

Hyperion Essbase has a server process called the Agent. When you start the main Hyperion Essbase program (ESSBASE), the Agent becomes the active terminal, unless you start Hyperion Essbase in the background. The Agent acts as a console for high-level server operations. Pressing the Enter key in the Agent terminal provides a list of all available commands.

Note: The Agent commands are available only when Hyperion Essbase is started in the foreground.

You can use the following commands in the Agent:

Table 10: Hyperion Essbase Server Agent Commands

Commands	Description
START *APPNAME*	Starts the specified application.
STOP *APPNAME*	Stops the specified application.
USERS	Displays a list of all users that are connected to the server. The total number of connections is displayed, as well as the number of ports available.
LOGOUTUSER *USER*	Disconnects a user from the server and frees a port. This command requires the Hyperion Essbase system password.
PASSWORD	Changes the system password that is required to start the Hyperion Essbase server. This command requires you to enter the old Hyperion Essbase system password.
VERSION	Displays the server software version number.
HELP	Lists all valid Agent commands and their respective functions.
PORTS	Displays the number of ports that are installed on the server and how many are in use.
DUMP *FILENAME*	Dumps information from the Hyperion Essbase security system to a specified file in ASCII format. If you do not supply a path with the file name, the file is saved to the `\ESSBASE\BIN` directory (`/essbase/bin` on UNIX systems). This command requires the Hyperion Essbase system password.
QUIT/EXIT	Shuts down all open applications and quits Hyperion Essbase.

To learn about the Agent, see "Running Hyperion Essbase, Applications, and Databases" in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

Anticipating the Next Step

When you have successfully started the Hyperion Essbase server, install Hyperion Essbase Application Manager on a client computer to verify you can connect to the Hyperion Essbase server from there.

Note: See Chapter 4, "Application Manager and Spreadsheet Add-in Installation," for information on Hyperion Essbase Application Manager.

If you installed the sample applications, you need to load data into them. The sample applications are provided as examples of basic Hyperion Essbase databases. The *Hyperion Essbase Spreadsheet Add-in User's Guide* uses the Sample Basic database in a step-by-step tutorial on the spreadsheet features.

Note: See Chapter 5, "Sample Applications," for information on loading data into the sample applications and preparing them for use.

3

Application Manager and Spreadsheet Add-in Installation

This chapter tells you, the client user or system administrator, how to install or share Hyperion Essbase client software for Windows, and how to connect to the Hyperion Essbase OLAP Server. Client software includes Hyperion Essbase Spreadsheet Add-in, Hyperion Essbase Application Manager, and the Runtime Client. This chapter describes the following:

- For system administrators, how to install the client software to a network drive that is running Windows 95, Windows 98, Windows NT 4.0, or Windows 2000

- For system administrators and client users, how to install the client software to a client hard drive that is running Windows 95, Windows 98, Windows NT 4.0, or Windows 2000

- For client users, how to start Hyperion Essbase Spreadsheet Add-in and Hyperion Essbase Application Manager, and connect to a Hyperion Essbase server

This chapter contains the following sections:

System Requirements

Before you can install Hyperion Essbase Spreadsheet Add-in or Hyperion Essbase Application Manager from a network drive, the software must be installed to a network drive.

The Hyperion Essbase client software requires a Windows-based computer with the following:

Table 11: Client Software Windows System Requirements

Component	Requirement
Microprocessor	Pentium or higher
Windows version	Windows 95, Windows 98, Windows NT 4.0, or Windows 2000
Excel version	Excel 97, Excel 2000
1-2-3 version	Lotus 1-2-3 Millennium Releases 9.1 and 9.5
RAM	16 MB
Disk space	• 24 MB for Hyperion Essbase Application Manager • 17 MB for Hyperion Essbase Spreadsheet Add-in
Network protocol	TCP/IP or Named Pipes (NetBEUI)

Also, you should identify the following before installing client software:

- The client operating environment: Windows 95, Windows 98, Windows NT 4.0, or Windows 2000

- The network protocol that you use

- If installing from a network drive, where the software resides on the network

Upgrading from Hyperion Essbase 5.x

When you install a Release 6 client, the default directory for installation is C:\HYPERION\ESSBASE. With Hyperion Essbase 5.x, the default directory was C:\ESSBASE.

You can use Release 5.x client software with a Release 6.x server, but the new features of Release 6 or 6.1 are not available for Release 5.x Hyperion Essbase Spreadsheet Add-in or Release 5.x Hyperion Essbase Application Manager.

Running Release 5.x of the Hyperion Essbase server with any Release 6.x client software does not work and is not supported.

CAUTION: Do *not* modify Release 6.1 outlines with Hyperion Essbase Release 5.x Application Manager. If you save a Release 6.1 database outline that contains new Release 6.1 features, such as attribute dimensions, with the Release 5.x Outline Editor, the new features are stripped from the outline.

Unless you choose to update environment variables manually, the client installation program updates your $ARBORPATH variable to point to the new Hyperion Essbase directory, and your PATH to include the BIN directory beneath the new Hyperion Essbase directory.

To install Release 6.1 clients successfully, do the following:

● Install all clients in the same directory. This includes Hyperion Essbase Application Manager and Hyperion Essbase Spreadsheet Add-in.

● If you install Hyperion Essbase Application Manager and Hyperion Essbase Spreadsheet Add-in, make sure both are Release 6.1 if you install them on the same computer. Release 6.1 clients share `.DLL` files that may not work with earlier clients.

For backwards compatibility, you can use Release 5.x Hyperion Essbase SQL Drill-Through with Hyperion Essbase Release 6.1. If you choose to do so, ensure that you:

– Install Hyperion Essbase Spreadsheet Add-in Release 6.x first.

– Use Hyperion Essbase SQL Drill-Through 5.0.2 Patch 9 or later.

– Install Hyperion Essbase SQL Drill-Through to the same directory as the Hyperion Essbase Spreadsheet Add-in Release 6.x.

● If you decide to run Release 5.x of Hyperion Essbase Spreadsheet Add-in for Excel for Windows with the Release 6.x server, make sure the spreadsheet application points to `ESSEXCLN.XLL` (Excel) or `ESS123.12A` (Lotus 1-2-3) in the correct directory. If necessary, remove the add-in from Excel or 1-2-3, and then add it again, pointing it to the correct directory. See .

● Move any client application files that you have created to the new location. For example, if your old installation is in `C:\ESSBASE5`, and your new installation is in `C:\HYPERION\ESSBASE6`, copy the `C:\ESSBASE5\CLIENT` directory and its contents to `C:\HYPERION\ESSBASE6\CLIENT`. Using MS-DOS, you can use the following command (all on one line):

```
XCOPY C:\ESSBASE5\CLIENT\*.* C:\HYPERION\ESSBASE6\CLIENT\*.* /S
```

When you have successfully copied all files, you can delete the old `CLIENT` directory.

Choosing Among Client Software Installation Options

Before installing Hyperion Essbase client software, decide which of the following you want to do:

Figure 8: Overview of Client Software Installation Options
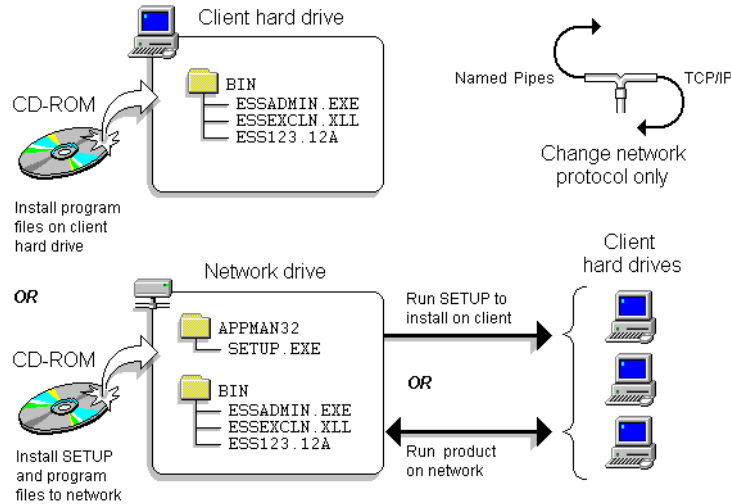
- Install from the CD-ROM to a client hard drive. This option is for anyone who has access to the CD-ROM. See "Installing Client Software from CD-ROM to Your Hard Drive" on page 84.

- Install from the CD-ROM to a network drive. This option is for the system administrator. Two things are installed to the network: a product installation that can be shared on the network, and a SETUP program that can be used to install software on client hard drives. See "Installing Client Software From CD-ROM to a Network Drive" on page 90.

- Install from a network to a client hard drive. This option is available for client users, if the system administrator previously installed software to a network drive. See "Installing Client Software From the Network to Your Hard Drive" on page 87.

● Set up the client computer to use shared executables located on the network drive. This option is available for client users, if the system administrator previously installed software to a network drive. See "Setting Up Your Computer to Share Client Software on the Network Drive" on page 94.

● Change the network protocol. This option is for the system administrator. Everyone who uses a shared executable on a network drive must use the same network protocol file. See "Changing the Network Protocol" on page 95.

Installing Client Software from CD-ROM to Your Hard Drive

This option is for anyone who has access to the Hyperion Essbase CD-ROM. If you are a client user running a Windows system, you can install client software on your computer's hard drive from the CD-ROM. If you are a system administrator, you can install client software on your client users' hard drives from the CD-ROM. Client software includes:

● Hyperion Essbase Application Manager

● Hyperion Essbase Spreadsheet Add-in for Excel or 1-2-3

● Hyperion Essbase Runtime Client

➤ To install any or all of the above products on your client computer's hard drive, complete the following steps:

1. Insert the CD-ROM into your CD-ROM drive.

2. Run SETUP from the root directory of the CD-ROM.

3. Follow the prompts, and provide the information requested.

   To cancel installation at any time, click the **Cancel** and **Exit Setup** buttons.

4. When prompted, you can optionally enter your license number. See Chapter 1, "Product Components and Software Registration," for more information on registration.

5. In the **Select Components** dialog box, select the **Client products** check box. This will install all the client product choices for your license agreement and operating system.

Figure 9: Selecting to Install Client Products
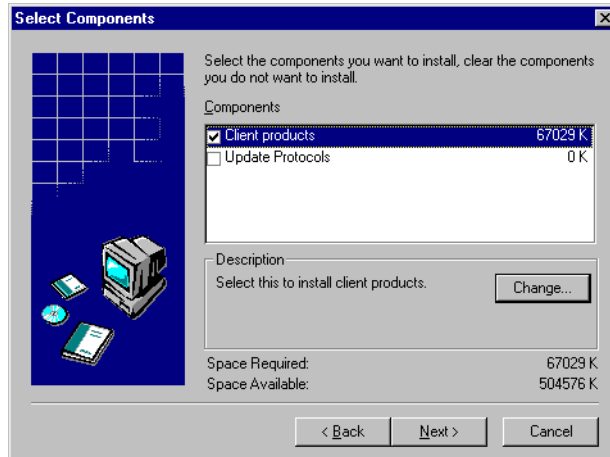
6. Select the **Change** button to view selected components, or choose a subset of client components. Leave all options checked to select all client products, or clear those client products you do not want to install.

Figure 10: Selecting Which Client Products to Install
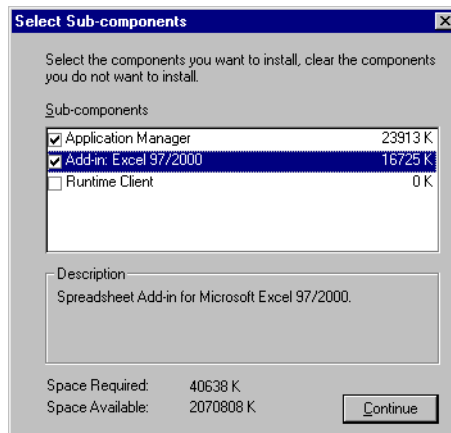
7. When you finish selecting options, click **Continue** and **Next**.

8. In the **Client Setup and Destination Directory** dialog box, select **Local**, specify the directory where you want to install the client products you selected, and select **Next**.

Note: The default directory is `C:\HYPERION\ESSBASE`. Select **Browse** to select or type another directory. If you select or type a directory that does not exist, the installation program will create it for you.

Figure 11: Choosing a Local Client Installation
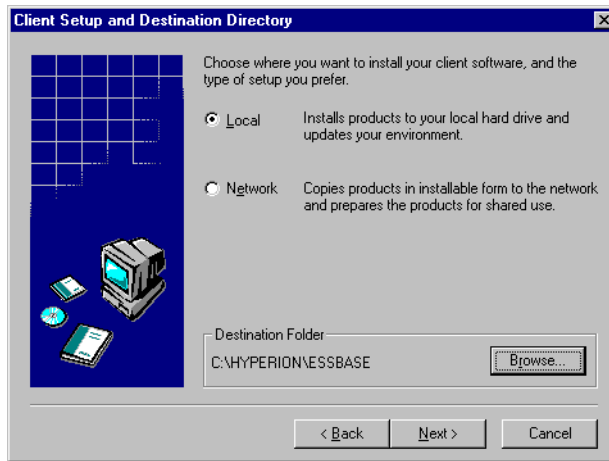
9. In the **Choose Network Protocol** dialog box, select your network protocol, and select **Next**.

10. If you are installing Hyperion Essbase Application Manager, the **Install HTML Documentation** dialog box is displayed. Review the size requirements for the available online documents, select the HTML documentation to install, and select **Next**.

Note: It is recommended that the system administrator install or copy the HTML documentation to a network drive, so all client users can access it from there. The installation program creates an `\ESSBASE\DOCS` directory with numerous subdirectories. To view the documentation, open the `INDEX.HTM` file in the `DOCS` directory. You can also access the HTML documentation in the `DOCS` directory of the CD-ROM itself. To learn more about HTML documentation, see "Hyperion Essbase HTML Documents" on page xvi in the Introduction.

11. In the **Update Environment** dialog box, choose which environment updates you want the installation program to perform, and select **Next**. You can control whether or not the installation program does the following:

- Creates an ARBORPATH environment variable, and adds a statement to the PATH environment variable. If you choose not to let the installation program update the environment, then you must do it yourself. The update is needed to enable the system to find Hyperion Essbase files.

- Adds a program group to the Windows Start menu.

12. In the **Check Setup Information** dialog box, review the summary of your installation choices. Select **Back** to revise your choices, **Cancel** to exit the installation program, or **Next** to let the installation program begin copying files.

13. In the **Setup Complete** dialog box, leave the check box selected and select **Finish** to view the Readme file.

14. If you selected to let the installation program update the PATH and ARBORPATH environment variables, do one of the following:

- On Windows NT or Windows 2000, log out and log in again, or reboot your computer, to allow the environment changes to take effect.

- On Windows 95 or Windows 98, reboot your computer to let the environment changes take effect.

Installing Client Software From the Network to Your Hard Drive

Before you can install client software from a network drive, it must be installed to a network drive.

If you are a Hyperion Essbase system administrator, see "Installing Client Software From CD-ROM to a Network Drive" on page 90 for instructions on how to install the client software to a network drive from the CD-ROM.

You should know the following before installing client software from a network drive:

- Your client operating environment: Windows 95, Windows 98, Windows NT 4.0, or Windows 2000.

- The network protocol you use: TCP/IP or Named Pipes.

- Where the client software resides on the network.

➤ To install client software from the network to your client computer's hard drive, complete the following steps:

1. Using Windows Explorer, browse to the appropriate location for SETUP, where *N:\HYPERION\ESSBASE* is the name of the network drive and directory where your system administrator installed the client software:

   - For Hyperion Essbase Application Manager:

     *N:\HYPERION\ESSBASE***APPMAN32**\SETUP

   - For Hyperion Essbase Spreadsheet Add-in for Excel:

     *N:\HYPERION\ESSBASE***ESSEXC32**\SETUP

   - For Hyperion Essbase Spreadsheet Add-in for 1-2-3:

     *N:\HYPERION\ESSBASE***ESSLOT32**\SETUP

2. Double-click SETUP to start the installation program.

   Note: If you are installing a Hyperion Essbase Spreadsheet Add-in, the installation program detects whether you have the correct version of Excel or 1-2-3 for the add-in you are installing.

3. Follow the directions on your screen.

4. When prompted to **Choose Installation Type**, choose **Install to client**, and select **Next**.

Figure 12: Choosing to Install Client Software on Your Client Computer's Hard Drive

5. If you are installing Hyperion Essbase Application Manager, the **Install HTML Documentation** dialog box is displayed. Review the size requirements for the available online documents, select the HTML documentation to install, and select **Next**.

    Note: It is recommended that the system administrator install or copy the HTML documentation to a network drive, so all client users can access it from there. The installation program creates an \ESSBASE\DOCS directory with numerous subdirectories. To view the documentation, open the INDEX.HTM file in the DOCS directory. You can also access the HTML documentation in the DOCS directory of the CD-ROM itself. To learn more about HTML documentation, see "Hyperion Essbase HTML Documents" on page xvi in the Introduction.

6. When prompted to **Choose Destination Location**, specify the directory in which to install the client software.

    The default is C:\HYPERION\ESSBASE, but it might be different if you have previously installed Release 6.x. Select **Browse** to specify a different location.

    Note: Install all client software in the same directory. See "Upgrading from Hyperion Essbase 5.x" on page 81 for more information.

7. When prompted to **Choose Network Protocol**, choose a network protocol, and select **Next**. See your system administrator if you are not sure which option to choose.

    Figure 13: Choosing the TCP/IP Network Protocol
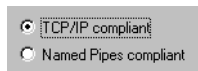
8. In the **Update Environment** dialog box, choose which environment updates you want the installation program to perform, and select **Next**. You can control whether or not the installation program does the following:

    ● Creates the ARBORPATH environment variable, and adds a statement to the PATH environment variable. If you choose not to let the installation program to update the environment, then you must do it yourself. This update is needed to enable the system to find Hyperion Essbase files.

    ● Adds a program group to the Windows **Start** menu.

9. When prompted to **Check Setup Information**, review the summary of your installation choices. Select **Next** to allow the installation program to begin copying files. Select **Back** to revise your choices, or select **Cancel** to exit the installation program.

10. If you selected to let the installation program update the PATH and ARBORPATH environment variables, do one of the following:

    ● On Windows NT or Windows 2000, log out and log in again, or reboot your computer, to allow the environment changes to take effect.

    ● On Windows 95 or Windows 98, reboot your computer to let the environment changes take effect.

    Note: You might not need to reboot if you previously installed Hyperion Essbase software to the same directory where you are currently installing software.

Installing Client Software From CD-ROM to a Network Drive

If your client users are running Windows systems, you can install Hyperion Essbase Application Manager or Hyperion Essbase Spreadsheet Add-in from the CD-ROM to a network drive, so that client users can install it from there. Use this option if you have many client users, or if it is difficult for your client users to share the CD-ROM.

➤ To install Hyperion Essbase Application Manager or Hyperion Essbase Spreadsheet Add-in from the CD-ROM to a network drive, do the following:

1. Insert the CD-ROM into your CD-ROM drive. The installation program should automatically start. If it does not, run SETUP from the root directory of the CD-ROM.

2. Follow the prompts, and provide the information requested.

    Note: To cancel installation at any time, select **Cancel** and **Exit Setup**.

3. When prompted, optionally enter your license number. See Chapter 1, "Product Components and Software Registration," for more information on registration.

4. In the **Select Components** dialog box, select the **Client products** check box. This will install all the client product choices for your license agreement and operating system.

Figure 14: Selecting to Install Client Products
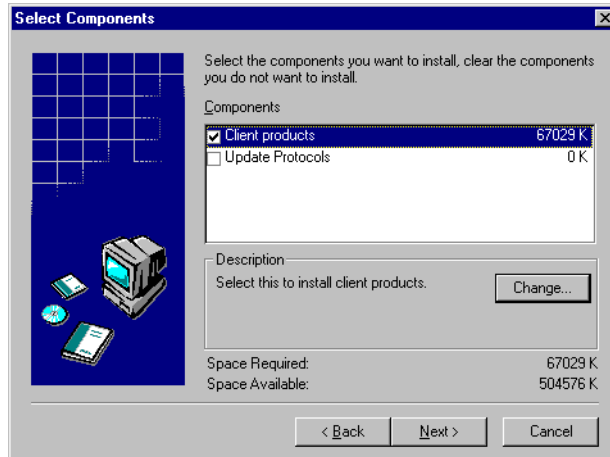
5. Select the **Change** button to view selected components, or choose a subset of client components. Leave all options checked to select all client products, or clear those client products you do not want to install.

Figure 15: Selecting Which Client Products to Install
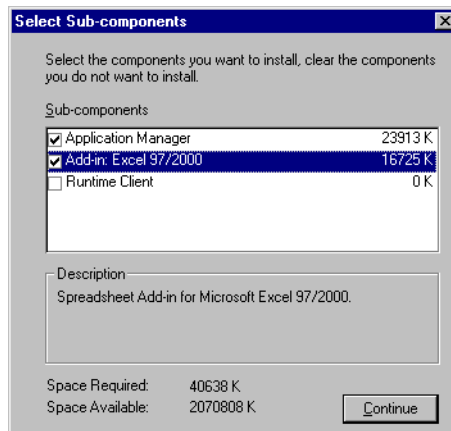
6. When you finish selecting your options, click **Continue** and **Next**.

7. In the **Client Setup and Destination Directory** dialog box, select **Network**, specify the directory where you want to install the client products you selected, and select **Next**.

   Note: The default directory is C:\HYPERION\ESSBASE. Click **Browse** to specify the network directory, or type it in. If you specify a directory that does not exist, the installation program will create it for you.

   Figure 16: Choosing to Install Client Products to a Network Drive
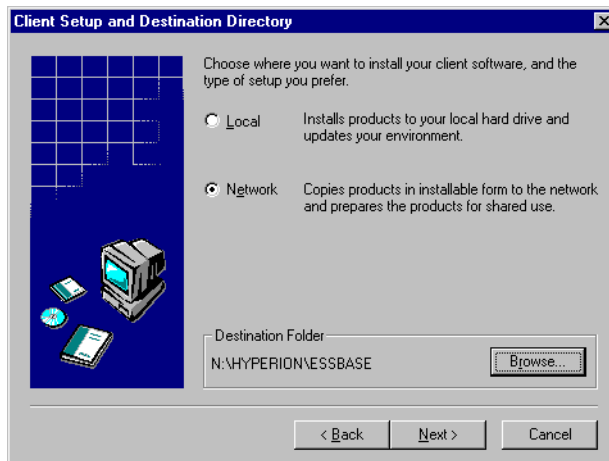
8. In the **Choose Network Protocol** dialog box, select your network protocol, and select **Next**.

9. If you are installing Hyperion Essbase Application Manager, the **Install HTML Documentation** dialog box is displayed. Review the size requirements for the available online documents, select the HTML documentation to install, and select **Next**.

   Note: It is recommended that you install the online HTML documentation to a network drive, so all client users can access it from there. You can also make it available by copying the DOCS directory from the root directory of the CD-ROM to a network drive. To view the HTML documentation, open the INDEX.HTM file in the DOCS directory. To learn more about HTML documentation, see "Hyperion Essbase HTML Documents" on page xvi in the Introduction.

10. In the **Update Environment** dialog box, choose which environment updates you want the installation program to perform, and select **Next**. You can select whether or not the installation program does the following:

- Creates an ARBORPATH environment variable, and adds a statement to the PATH environment variable. This enables the system running Hyperion Essbase to find Hyperion Essbase files.

  – If you will run this network installation of Hyperion Essbase on your own client computer, this update is required. If you choose not to let the installation program update your environment variables, you must update them yourself.

  – If you are installing Hyperion Essbase client software to the network drive so that client users can share it, this update is not required. Client users will update their own environments when they install or share products from the network drive.

- Adds a program group to the Windows **Start** menu.

11. In the **Check Setup Information** dialog box, review the summary of your installation choices. Select **Back** to revise your choices, **Cancel** to exit the installation program, or **Next** to let the installation program begin copying files.

12. In the **Setup Complete** dialog box, leave the check box selected and select **Finish** to view the Readme file.

13. If you selected to let the installation program update the PATH and ARBORPATH environment variables, do one of the following:

- On Windows NT or Windows 2000, log out and log in again, or reboot your computer, to allow the environment changes to take effect.

- On Windows 95 or Windows 98, reboot your computer to let the environment changes take effect.

4

Setting Up Your Computer to Share Client Software on the Network Drive

➤ To set up your computer to run Hyperion Essbase Application Manager or Hyperion Essbase Spreadsheet Add-in on the network drive, complete the following steps:

1. Using Windows Explorer, browse to the appropriate location for SETUP, where *N:\HYPERION\ESSBASE* is the name of the network drive and directory where your system administrator installed the client software:

- For Hyperion Essbase Application Manager:

  *N:\HYPERION\ESSBASE***APPMAN32****SETUP

- For Hyperion Essbase Spreadsheet Add-in for Excel:

  *N:\HYPERION\ESSBASE***ESSEXC32****SETUP

- For Hyperion Essbase Spreadsheet Add-in for 1-2-3:

  *N:\HYPERION\ESSBASE***ESSLOT32****SETUP

2. Double-click SETUP to start the installation program:

Note: If you are installing Hyperion Essbase Spreadsheet Add-in, the installation program detects whether you have the correct version of Excel or 1-2-3 for the add-in you are installing.

3. Follow the directions on your screen.

4. When prompted to **Choose Installation Type**, select **Set up client to use shared executables**, and select **Next**.

Figure 17: Choosing to Set Up Your Computer to Run the Client Software on the Network Drive
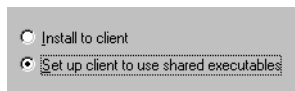
5. The program detects where the network installation of the client software resides. If it cannot find it, you are prompted for the directory. Click **Browse** to specify the location.

> **Note:** The Hyperion Essbase shared executable files are in the *N:\HYPERION\ESSBASE***BIN** directory, where *N:\HYPERION\ESSBASE* is the network drive and directory where your system administrator installed the client software.

6. In the **Check Setup Information** dialog box, review the summary of your installation choices. Select **Back** to revise your choices, **Cancel** to exit the installation program, or **Next** to let the installation program begin updating your environment.

This type of installation automatically creates or updates the ARBORPATH environment variable, and adds a statement to the PATH environment variable. This update is needed to enable the system to find shared Hyperion Essbase files.

7. In the **Setup Complete** dialog box, leave the check box selected and select **Finish** to view the Readme file.

8. Do one of the following to allow the environment changes to take effect:

- On Windows NT or Windows 2000, log out and log in again, or reboot your computer.

- On Windows 95 or Windows 98, reboot your computer.

Changing the Network Protocol

If you are a client user, changing the network protocol is something you rarely do. If you installed client products on your client computer's hard drive, speak to your system administrator before changing your network protocol.

If you set up your client computer to run client products on the network drive, do not change the network protocol. Everyone who uses a shared executable on a network drive must use the same network protocol file. Only the system administrator should change the protocol of a shared network installation.

Network Protocol Files

The network protocol file implements the TCP/IP or Named Pipes protocol you selected on installing the client software on your client computer's hard drive, or that the system administrator selected on installing the client software to a network drive. The network protocol file, ESSNET.DLL, resides in the BIN directory with the client software. This can be on your client computer's hard drive or on a network drive, depending on which installation option you selected.

Note: For more information on network protocols, see Chapter 9, "Network Configuration Notes."

➤ To install a different network protocol file, complete the following steps:

1. Run SETUP from the CD-ROM (follow steps 1 to 4 of "Installing Client Software from CD-ROM to Your Hard Drive" on page 84).

2. In the **Select Components** dialog box, select the **Update Protocols** check box, and click **Next**.

3. When prompted to **Choose Network Protocol**, choose a network protocol and click **Next**. See your system administrator if you are not sure which option to choose.

Figure 18: Choosing the TCP/IP Network Protocol
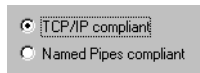
4. The program detects where the installation of the client software resides. If it cannot find it, you are prompted for the directory. Click **Browse** to specify the location.

5. In the **Check Setup Information** dialog box, review the summary of your installation choices. Select **Back** to revise your choices, **Cancel** to exit the installation program, or **Next** to let the installation program begin copying files.

6. In the **Setup Complete** dialog box, select **Finish**.

Directories and Files Created

When you install Hyperion Essbase client products to a client computer's hard drive or to a network drive, some or all of the directories described in the following table are created under `\HYPERION\ESSBASE` (this is the default installation directory; if you select another location, the directories are created there). Which directories are created depends on which client products you install and which installation type you select.

When you set up your computer to run client software on the network drive, the installation program, `SETUP`, does not create any directories on your client computer's hard drive. It installs only Windows system files on your client computer's hard drive. You run the program files that are on the network drive. They are in the directories described in the following table:

Table 12: Directories Created Under \HYPERION\ESSBASE

Directory:	Created with:	Details:
BIN	All Hyperion Essbase product installations	Contains Hyperion Essbase program files for running local and shared network installations, including: • `ESSADMIN.EXE`, the executable file for Hyperion Essbase Application Manager. • `ESSEXCLN.XLL`, the Hyperion Essbase Spreadsheet Add-in file the installation program adds to Excel to point Excel to the correct `BIN` directory. • `ESS123.12A`, the Hyperion Essbase Spreadsheet Add-in file the installation program adds to 1-2-3 to point 1-2-3 to the correct `BIN` directory.

CLIENT	All Hyperion Essbase product installations	The Hyperion Essbase sample spreadsheets reside in `CLIENT\SAMPLE`. If you create applications and databases, and store them on your computer's hard drive, they reside in the `CLIENT` directory as follows:
		
		`CLIENT`
		    `APPNAME`
		            `DBNAME`
		
		where `APPNAME` is the name of the application and `DBNAME` is the name of the database.

Table 12: Directories Created Under \HYPERION\ESSBASE (Continued)

Directory:	Created with:	Details:
DOCS	Local and network installations of some Hyperion Essbase products	If you install the online HTML documentation with the Hyperion Essbase API or Application Manager, several subdirectories are created under DOCS. To view the HTML documentation, open the INDEX.HTM file. See "Hyperion Essbase HTML Documents" on page xvi in the Introduction.

The DOCS\TECHREF\MAXL directory contains the *MaxL Language Reference*, which you will need in order to use MaxL, the new multi-dimensional access language for Hyperion Essbase. This is installed automatically with Hyperion Essbase OLAP Server and Hyperion Essbase Application Manager.

If you install the corresponding products, the following documents are provided in DOCS\CLIENT in .PDF format for online viewing and printing in Adobe Acrobat Reader (Version 3.0.1 or later):

• The *Hyperion Essbase Spreadsheet Add-in User's Guide*. The file is named ESSEXCEL.PDF or ESS123W.PDF, depending on which add-in you are using.

• The *Hyperion Essbase SQL Interface Guide*. The file is named ESSQLINT.PDF.

• The *Hyperion Essbase Quick Path Card (QPC)*. The file is named ESSQPC.PDF.

• The *MaxL User's Guide*. The file is named ESSMAXL.PDF.

Adobe Acrobat Reader is provided on the Hyperion Essbase CD-ROM, or you can download it from http://www.adobe.com. On the CD-ROM, the Acrobat Reader executable file is located in the ADOBE directory under the appropriate platform and language-version subdirectories. |

Table 12: Directories Created Under \HYPERION\ESSBASE (Continued)

Directory:	Created with:	Details:
`LOCALE`	Local and network installations of some Hyperion Essbase products	Contains the character-set files necessary for all the languages Hyperion Essbase supports, including English. For non-English versions, you also need to create the ESSLANG environment variable. For more information about ESSLANG, see Chapter 10, "Advanced Installation Topics."
`PERLMOD`	All installations of Hyperion Essbase Application Manager and the Hyperion Essbase server.	Contains the files and documentation you need to add the Essbase Perl Module (`Essbase.pm`) to Perl, enabling you to embed MaxL statements in Perl programs. You must install Perl yourself. For more information, see the *MaxL Language Reference* in the `DOCS\TECHREF\MAXL` directory, and the `README` file included in the `PERLMOD` directory.
`APPMAN32`	Network installations of Hyperion Essbase Application Manager	Installation directory for installing Hyperion Essbase Application Manager on a client computer's hard drive. Contains `SETUP.EXE`.
`ESSEXC32`	Network installations of Hyperion Essbase Spreadsheet Add-in for Excel	Installation directory for installing Hyperion Essbase Spreadsheet Add-in for Excel on a client computer's hard drive. Contains `SETUP.EXE`.
`ESSLOT32`	Network installations of Hyperion Essbase Spreadsheet Add-in for 1-2-3	Installation directory for installing Hyperion Essbase Spreadsheet Add-in for 1-2-3 on a client computer's hard drive. Contains `SETUP.EXE`.
`RUNTIME`	Network installations of Hyperion Essbase Runtime Client	Installation directory for installing Hyperion Essbase Runtime Client on a client computer's hard drive. Contains `SETUP.EXE`.

4

In addition to a Readme file and the subdirectories listed above, the ESSBASE directory contains an *.ISU file for each installed server or client component, and a file named Essunins.dll, which facilitates uninstalling the software.

CAUTION: Do not move, rename, or delete the *.ISU files in the ESSBASE directory. Do not rename the ESSBASE directory or any subdirectories or files beneath it. Alteration of the installed Hyperion Essbase files and directories prevents their successful uninstallation. In the event that you want to move Hyperion Essbase to another directory or revert to an eariler release, you will need to completely uninstall it first. For more information about uninstalling, see Chapter 10, "Advanced Installation Topics."

Starting Hyperion Essbase Application Manager

After you install Hyperion Essbase Application Manager on your hard drive or set up your operating environment to run Hyperion Essbase Application Manager on the network drive, reboot and start Windows. If you selected during the installation to add icons to the Start menu program group, the following are available when you select Start > Programs > Hyperion Solutions > Hyperion Essbase 6.0:

Table 13: Program Icons

Icon	Program	Where To Get Information
	Hyperion Essbase Application Manager	*Hyperion Essbase Database Administrator's Guide*
	Hyperion Essbase Application Manager Help	Click the Help button in any dialog box.
	ESSCMD	*Hyperion Essbase Database Administrator's Guide*

Table 13: Program Icons

Icon	Program	Where To Get Information
n/a	MaxL Command Shell	The *MaxL Language Reference* in the `Docs\Techref\Maxl` directory, and the *MaxL User's Guide* in the `Docs\Client` directory.

To run Hyperion Essbase Application Manager, select Start > Programs > Hyperion Solutions > Hyperion Essbase 6.0 > Essbase Application Manager.

The Hyperion Essbase Application Manager desktop is displayed as shown in Figure 19.

Figure 19: Application Manager Desktop
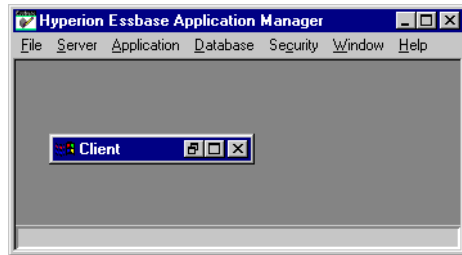
If your `$ARBORPATH` environment variable is not correct or if the `ESSBASE.MDB` file is missing, you see the error message shown in Figure 20 when you start Hyperion Essbase Application Manager:

Figure 20: Cannot Initialize Essbase Error Message
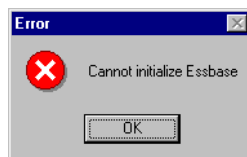
Connecting to the Server With Hyperion Essbase Application Manager

After you start Hyperion Essbase Application Manager, try connecting to the Hyperion Essbase server to verify that you can establish a connection. To connect to the server: Italica

1. Select Server > Connect to open the **Essbase System Login** dialog box.

Figure 21: Logging in Using the Server Name
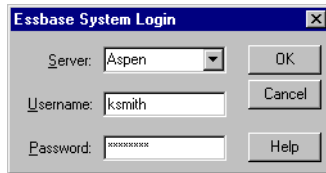
2. From the **Server** list box, select the server name to connect to, or enter it in the **Server** text box. The server name is defined by the server operating system and by the network protocol. In Figure 21, for example, the server name is Aspen.

An alternate way to enter the server name, if you use TCP/IP, is to enter its IP address. See "Specifying an IP Address as a Server Name" on page 103 for more information. See your network administrator for your server's IP address.

Figure 22: Logging in Using the Server IP Address
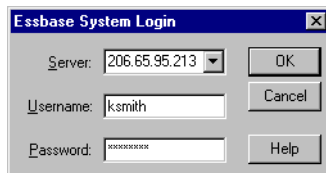
3. Enter your user name and password in the text boxes. If you do not know your user name and password, or if you are unable to connect to the server, contact your Hyperion Essbase system administrator. If you or the system administrator just installed the Hyperion Essbase server software, the only user that exists on the server is the user name of the Hyperion Essbase system supervisor, and you should use the Hyperion Essbase system password. See the installation chapter for your server for more information.

4. Click **OK**. The Application Desktop window is displayed on the Application Manager desktop. For example, if the server name is Aspen, the desktop looks like the example shown in Figure 23.

Figure 23: Application Desktop Window for the Aspen Server
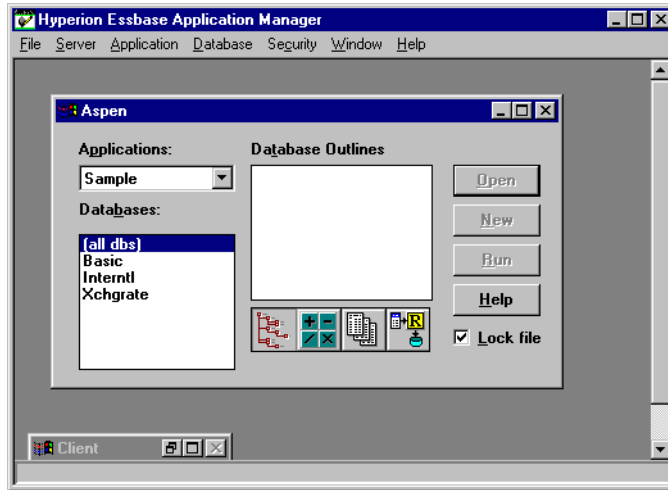
Note: If you cannot connect to the server, see "Troubleshooting Application Manager Connections to the Server" on page 104.

Specifying an IP Address as a Server Name

When connecting to a Hyperion Essbase server from any Hyperion Essbase client, you normally use the server machine's computer name, as defined by the operating system. You can also use the IP address of the server machine, if it is a TCP/IP-enabled machine.

From ESSCMD, or from any client login dialog box, you can enter the IP address in place of the server name. Enter the IP address in dotted notation as follows:

```
A.B.C.D
```

where A, B, C, and D are integers in decimal, hexadecimal, or octal format.

To specify an IP address using decimals, simply enter the IP address, beginning with any digit except 0 (zero). For example,

```
149.22.15.154
```

To specify an IP address using octals, enter the IP address with a leading 0 (zero). For example,

```
0225.26.17.232
```

To specify an IP address using hexadecimals, enter the IP address with a leading 0x or 0X. For example,

```
0x95.16.F.9A
```

Troubleshooting Application Manager Connections to the Server

This section helps you determine why you cannot connect to the server and how to correct the problem.

- Hyperion Essbase Application Manager can find the server machine but cannot connect to the Hyperion Essbase server. This error message can be displayed if Hyperion Essbase is not running on the server, or if the network protocols for the server and the client are different or are not correctly installed and running.

In this case, the error message shown in Figure 24 is displayed.

Figure 24: Cannot Locate Hyperion Essbase on the Server Machine
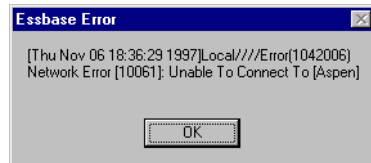
If you see this message,

a. Reboot your computer and try again.

b. Verify that Hyperion Essbase is running on the server machine.

c. Ensure that your network protocol is correctly installed. See "Checking the Network Protocol" on page 105.

● Hyperion Essbase Application Manager cannot find the server name you entered. This error message can be displayed if you enter an invalid server name, or if the network protocols for the server and the client are different, or are not correctly installed and running. In this case, the error message shown in Figure 25 is displayed.

Figure 25: Cannot Locate the Server Machine
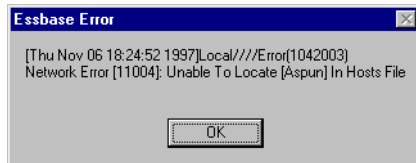
If you see this message,

a. Reboot your computer and try again.

b. Verify that the server name you entered is correct.

c. Ensure that your network protocol is correctly installed. See "Checking the Network Protocol" on page 105.

● A similar error, Network Error: Unable to Connect to *Server-name,* is displayed if the network protocols for the server and the client are different or are not correctly installed and running.

If you see this message,

a. Reboot your computer and try again.

b. Ensure that your network protocol is correctly installed. See "Checking the Network Protocol" on page 105.

Checking the Network Protocol

If you suspect that the network protocol for Hyperion Essbase Application Manager is not correctly installed, do the following:

1. See "Changing the Network Protocol" on page 95.

2. See Chapter 9, "Network Configuration Notes." for more information on network protocols.

3. See your network protocol vendor documentation for more detailed information.

Note: Client users, do not change the network protocol if you set up your computer's operating environment to run Hyperion Essbase Application Manager on the network drive. All users running—and sharing—client software on a network drive must use the same network protocol file. Only the Hyperion Essbase system administrator should change the protocol of a shared network installation.

Starting Hyperion Essbase Spreadsheet Add-in and Connecting to the Server

After installing Hyperion Essbase Spreadsheet Add-in on your computer's hard drive, or setting up your computer to run Hyperion Essbase Spreadsheet Add-in on the network drive, do the following:

1. Reboot Windows to let the changes to your environment take effect.

2. Run Excel or 1-2-3. The Hyperion Essbase startup screen is displayed.

If the startup screen is not displayed, and **Essbase** is not on the Excel or 1-2-3 menu, see "Troubleshooting the Spreadsheet Add-in" on page 109 to correct the problem.

3. Select Essbase > Connect to connect to the Hyperion Essbase server.

The **Essbase System Login** dialog box shown in Figure 26 is displayed.

Figure 26: Entering the Server Name in the
Essbase System Login Dialog Box

4. Enter your server name, user name, and password, and then click **OK**.

An alternate way to enter the server name, if you use TCP/IP, is to enter its IP address. See your network administrator for your server's IP address.

Figure 27: Entering the IP Address in the
Essbase System Login Dialog Box
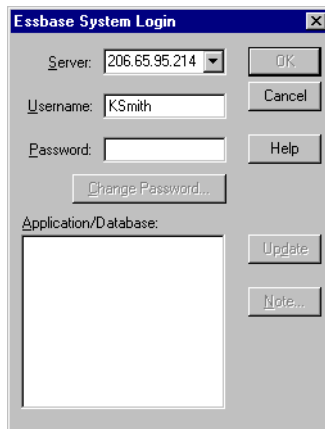
5. After you connect to the server, select the application and database to connect to, and then click **OK**.

See the *Hyperion Essbase Spreadsheet Add-in User's Guide* for more information about connecting to Hyperion Essbase servers and databases.

Installing the Hyperion Essbase Toolbar (Optional—Excel Only)

The Hyperion Essbase Spreadsheet Add-in for Excel provides a convenient toolbar that displays buttons for accessing most of the common Hyperion Essbase commands without having to open the Hyperion Essbase menu. To use the Hyperion Essbase toolbar, you must first install it by opening an Excel file that is provided as part of the default Hyperion Essbase installation. For more information on using the toolbar, see "Using the Hyperion Essbase Toolbar" in the *Hyperion Essbase Spreadsheet Add-in User's Guide*.

➤ To install the Hyperion Essbase toolbar:

1. Start Excel.

2. Select File > Open.

3. Open the `ESSTOOLB.XLS` file from the `\ESSBASE\CLIENT\SAMPLE` directory.

   Depending on how software is installed on your computer, this file may not be available or may be located in a different directory. Contact your Hyperion Essbase system administrator for more information.

A blank spreadsheet is displayed similar to the one shown in Figure 28.

Figure 28: ESSTOOLB.XLS File
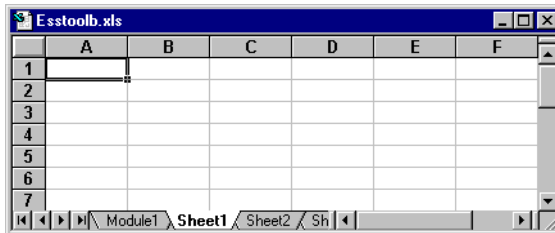
Note: If two Excel dialog boxes are displayed in sequence when you open the ESSTOOLB.XLS file, click **Enable Macros** on the first dialog box, and click **OK** on the second.

4. Select File > Close to close the ESSTOOLB.XLS file. You do not need to modify or save the file.

You should not have to perform the toolbar installation procedure again unless you delete the Hyperion Essbase toolbar from the Toolbars dialog box in Excel. If you delete the toolbar, perform the installation procedure again.

Note: If you have toolbars turned off in Excel, you will not see the Hyperion Essbase toolbar immediately. You must enable toolbars first. For more information, see "Using the Hyperion Essbase Toolbar" in the *Hyperion Essbase Spreadsheet Add-in User's Guide for Excel*.

Troubleshooting the Spreadsheet Add-in

The installation program automatically adds Hyperion Essbase Spreadsheet Add-in to Excel or 1-2-3. This adds **Essbase** to the spreadsheet program's menu bar, and points the spreadsheet program to the appropriate Hyperion Essbase Spreadsheet Add-in file, located in the BIN directory.

As a troubleshooting measure, you should know how to use the Excel or 1-2-3 add-in facility to add the appropriate add-in file to Excel or 1-2-3. The Spreadsheet Add-in file is in the BIN directory on your computer's hard drive if you selected to install the Spreadsheet Add-in locally, or in the BIN directory on the network drive if you selected to set up your computer to run the Spreadsheet Add-in there.

● ESS123.12A is the add-in file for Lotus 1-2-3 Millennium Releases 9.1 and 9.5.

● ESSEXCLN.XLL is the add-in file for Excel 97 and Excel 2000.

> **Note:** ESSXLEQD.XLA is an additional add-in file for Hyperion Essbase Query Designer for Excel. This add-in, which loads automatically when Hyperion Essbase Query Designer is started, enables Excel and EQD to synchronize workbook and worksheet operations, including creating, deleting, and moving the workbooks.

If Hyperion Essbase Spreadsheet Add-in is not properly installed or configured after the installation program completes, use the following steps to isolate the problem.

● Reboot your computer.

● Check your environment.

● Remove and manually add Hyperion Essbase Spreadsheet Add-in.

● Install Hyperion Essbase Spreadsheet Add-in again.

Reboot Your Computer

On Windows 95 and Windows 98, reboot your computer. On Windows NT 4.0 or Windows 2000, log out and log in again, or reboot your computer. This ensures that changes to your environment settings take effect.

Check Your Environment

If the message shown in Figure 29 is displayed, you may have a problem with your
PATH and ARBORPATH environment variables.

Figure 29: File Not Found Error Message
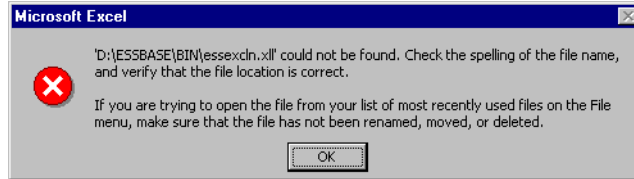
Type PATH at the MS-DOS command prompt. Make sure that \ESSBASE\BIN,
or the BIN directory of the directory you specified during setup, is in the PATH
statement.

Type SET and check your ARBORPATH setting. It should indicate the drive and
directory you specified during setup; for example,

ARBORPATH=C:\HYPERION\ESSBASE

Remove and Manually Add the Add-in

If problems persist, or the Hyperion Essbase startup screen is not displayed when
you start the spreadsheet program, remove Hyperion Essbase Spreadsheet Add-in
from the spreadsheet program, exit and restart the spreadsheet program, and
manually add the add-in as described in the following steps.

➤ To manually add Hyperion Essbase Spreadsheet Add-in to Excel:

1. In Excel, choose Tools > Add-Ins.

   The **Add-Ins** dialog box is displayed.

2. Click **Browse**.

   A file selection dialog box is displayed.

3. To complete this step, you must know whether you are running Hyperion Essbase Spreadsheet Add-in from your computer's hard drive or from a network drive.

   Choose the file ESSEXCLN.XLL in the BIN directory where you installed Hyperion Essbase Spreadsheet Add-in on your computer's hard drive, or where your system administrator installed Hyperion Essbase Spreadsheet Add-in on a network drive.

4. Click **OK** twice to close the dialog boxes and start Hyperion Essbase Spreadsheet Add-in. The Hyperion Essbase startup screen is displayed, and **Essbase** is added to the Excel menu.

➤ To manually add Hyperion Essbase Spreadsheet Add-in to Lotus 1-2-3:

   1. In 1-2-3, choose File > Add-Ins > Manage Add-Ins.

      The **Manage Add-ins** dialog box is displayed.

   2. Click **Register**.

   3. Choose the file ESS123.12A in the BIN directory where you installed Hyperion Essbase Spreadsheet Add-in on your computer's hard drive (if you installed it there), or in the BIN directory where your system administrator installed Hyperion Essbase Spreadsheet Add-in on a network drive (if you selected to set up your computer's operating environment to run the add-in there).

   4. Click **Open**.

   5. Select the ESS123.12A add-in file, and click **Done** to close the **Manage Add-Ins** dialog box and start Hyperion Essbase Spreadsheet Add-in. Make sure there is a check mark next to the ESS123.12A add-in file.

      The Hyperion Essbase startup screen is displayed, and **Essbase** is added to the 1-2-3 menu.

Install the Add-in Again

If the problem persists, uninstall Hyperion Essbase Spreadsheet Add-in and run the installation program again. Accept the default settings. Be sure to specify the correct network protocol.

Sample Applications

The Hyperion Essbase OLAP Server installation includes four sample applications.

● The main application used in the documentation is called Sample. It contains three databases: Basic, Interntl, and Xchgrate. The latter two contain specific features corresponding to the Hyperion Essbase Currency Conversion option.

● The second application, called Demo, contains one database, Basic, referred to in the online *Technical Reference* in the DOCS directory and in some of the documentation for Hyperion Essbase Report Writer.

● The third application, called Samppart, is the first of two applications designed to show the features of Hyperion Essbase Partitioning. Samppart contains a Company database that is the target of a partitioned database.

● The fourth application, called Sampeast, is the second of two applications designed for Partitioning. Sampeast contains an East database that is the source of data for a partitioned database.

Note: In some licensing instances, installation of the sample applications may be restricted to the main application (Sample) and its three databases (Basic, Interntl, and Xchgrate). Please refer to your license agreement for details.

If you selected to install the sample applications during your server installation, you must perform additional steps to prepare them for use in your organization. This chapter contains the following sections:

● "Accessing the Sample Applications" on page 114

● "Preparing the Sample Basic Database" on page 116

● "Preparing the Sample Interntl Database" on page 120

● "Preparing the Sample Xchgrate Database" on page 122

- "Preparing the Demo Basic Database" on page 124
- "Providing User Access to the Sample Applications" on page 126
- "Setting the Environment for the Partitioning Sample Applications" on page 127
- "Preparing the Samppart Company Database" on page 138
- "Preparing the Sampeast East Database" on page 140

Accessing the Sample Applications

If you are upgrading your server installation from a release of Hyperion Essbase prior to Release 5, you might not see the Release 6.0 sample applications in the Application Desktop window the first time you restart the Hyperion Essbase server and Hyperion Essbase Application Manager, even if you installed the sample applications.

Even though they exist in the `\ESSBASE\APP` directory on the server, the Hyperion Essbase Agent has not yet been informed that these applications exist. This occurs because the installation program does not modify your security file (`ESSBASE.SEC`). The security file maintains the current list of applications and databases on your server and all user and security definitions.

➤ To obtain access to the Hyperion Essbase sample applications in Release 6.0, complete the following steps:

1. Open Hyperion Essbase Application Manager.

2. Connect to the server in which the sample applications are installed. See Chapter 4, "Application Manager and Spreadsheet Add-in Installation" if you are unsure how to do this.

3. In the Application Desktop window, view the list of available applications in the **Applications** list box.

Figure 30: Viewing Available Applications in the Application Desktop Window
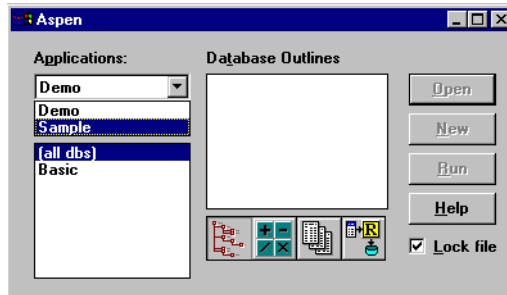
The list of applications in the **Applications** list box should match the subdirectories in the \ESSBASE\APP directory on the server. Make a note of the missing applications.

This example assumes that the Samppart and Sampeast applications are missing from the list of applications.

4. Select File > New > Application. The **Create New Application** dialog box is displayed.

5. In the **Application name** text box, enter the name of the missing application; for example, **Samppart**.

Figure 31: Entering Samppart in the Create New Application Dialog Box
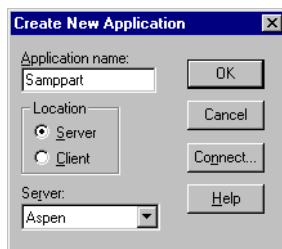
6. Click **OK**. Hyperion Essbase recognizes the application and adds it to the list box.

   If you attempt to create an application that is already viewable in the list box in Hyperion Essbase Application Manager, you see the error shown in Figure 32.

   Figure 32: Error Message When Trying to Create an Existing Application
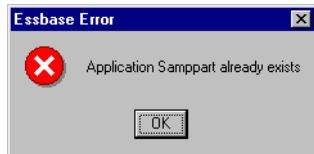
7. Select File > New > Application. The **Create New Application** dialog box is displayed.

8. In the **Application name** text box, enter the name of the application; for example, **Sampeast**.

9. Click **OK**. Hyperion Essbase recognizes the application and adds it to the list box.

If necessary, repeat steps 4–6 for each application you need to access, substituting the appropriate application name where appropriate, such as Sample or Demo.

When you have access to the sample applications, you are ready to prepare them for use by other users.

Preparing the Sample Basic Database

The first database in the Sample application is called Basic. To prepare it for use, you need to load data into it.

➤ To load data into the Sample Basic database:

1. Open Hyperion Essbase Application Manager.

2. Connect to the server in which the Sample application is installed. This example uses a server called Aspen. See Chapter 4, "Application Manager and Spreadsheet Add-in Installation" if you are unsure how to do this.

3. Select the application called Sample from the **Applications** list box.

4. Select the database called Basic from the **Databases** list box as shown in Figure 33.

Figure 33: Selecting the Basic Database
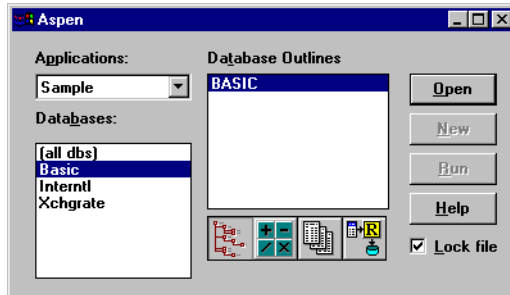
5. Select Database > Load Data.

The **Data Load** dialog box is displayed as shown in Figure 34.

Figure 34: Data Load Dialog Box Before Selecting a Data File
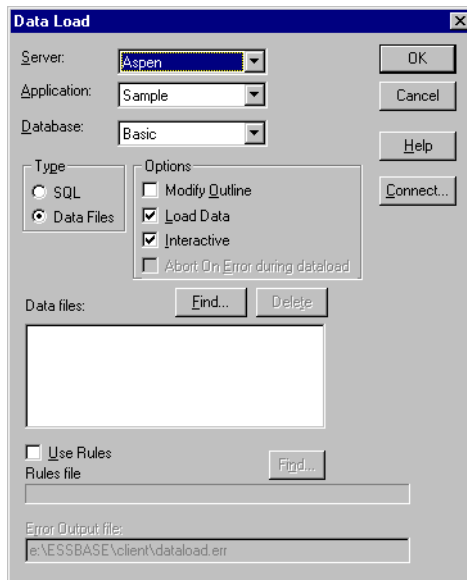
The **Data Load** dialog box is described in detail in the Hyperion Essbase Application Manager online help, and in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

6. Click the **Find** button above the **Data files** list box to locate a data file to load. The **Open Server Data File Objects** dialog box is displayed.

7. Ensure that **List Objects of Type** is Text files.

8. Select the text file named **CALCDAT** from the **Objects** list box as shown in Figure 35.

Figure 35: Selecting the CALCDAT Text File
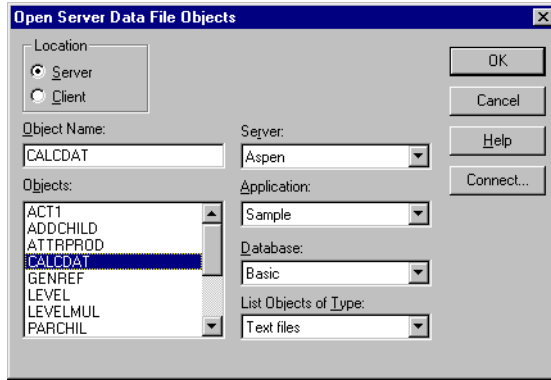
9. Click **OK** to close the dialog box.

   Hyperion Essbase updates the **Data Load** dialog box to display the data file you selected as shown in Figure 36.

   Figure 36: Data Load Dialog Box with CALCDAT Data File Selected
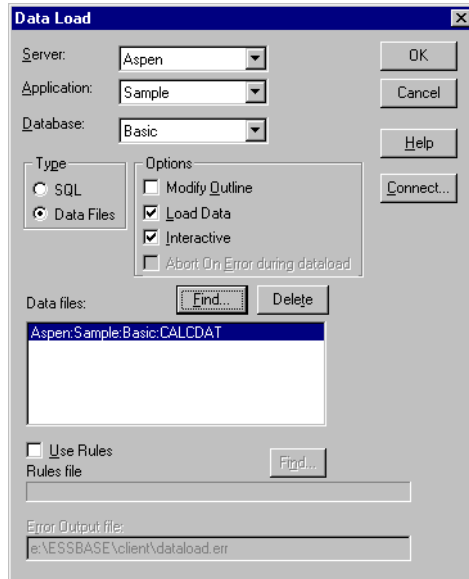
10. Click **OK** to load the selected file.

The data file is a large, fully calculated data set. It should take several minutes to load, and then the **Data Load Completed** dialog box is displayed as shown in Figure 37.

Figure 37: Message that Hyperion Essbase Has Finished Loading CALCDAT Data File

Data Load Completed

Close

Help

The following files loaded with no errors:

Sample:Basic:CALCDAT

The following files contained errors, but may have partially loaded data:

The following files contained errors, and did not load any data:
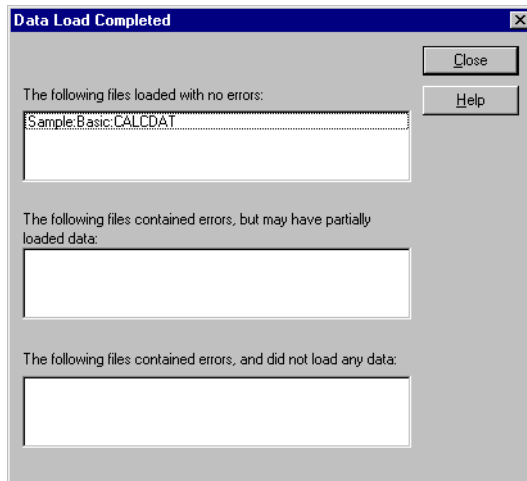
11. Click **Close**.

Preparing the Sample Interntl Database

The second database in the Sample application is called Interntl. To prepare it for use, you need to load data into it.

➤ To load data into the Sample Interntl database:

1. Open Hyperion Essbase Application Manager.

2. Connect to the server in which the Sample application is installed. This example uses the server Aspen. See "Application Manager and Spreadsheet Add-in Installation" on page 4-79, if you are unsure how to do this.

3. Select the application called Sample from the **Applications** list box.

4. Select the database called Interntl from the **Databases** list box.

5. Select Database > Load Data. The **Data Load** dialog box is displayed.

The **Data Load** dialog box is described in detail in the Hyperion Essbase Application Manager online help, and in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

6. Click the **Find** button above the **Data files** list box to locate a data file to load. The **Open Server Data File Objects** dialog box is displayed.

7. Ensure that **List Objects of Type** is Text files.

8. Select the text file named **CURRCALC** from the **Objects** list box.

9. Click **OK** to close the dialog box.

Hyperion Essbase updates the **Data Load** dialog box to display the data file you selected as shown in Figure 38.

Figure 38: Data Load Dialog Box with CURRCALC Data File Selected
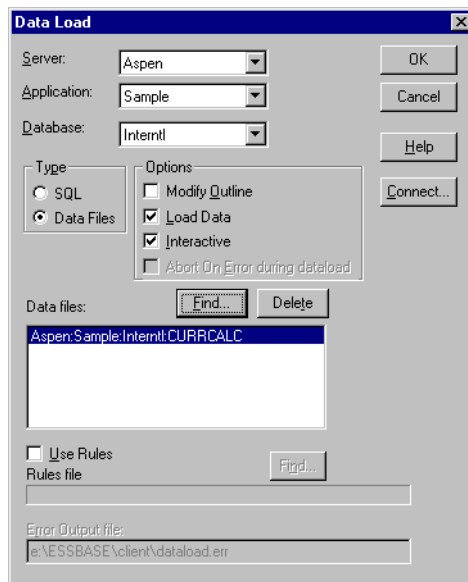
10. Click **OK** to load the selected file. The data file is a large fully calculated data set. It takes several minutes to load, and then the **Data Load Completed** dialog box is displayed.

11. Click **Close**.

Preparing the Sample Xchgrate Database

The third database in the Sample application is called Xchgrate. To prepare it for use, you need to load data into it.

➤ To load data into the Sample Xchgrate database:

1. Open Hyperion Essbase Application Manager.

2. Connect to the server in which the Sample application is installed. This example uses the server Aspen. See Chapter 4, "Application Manager and Spreadsheet Add-in Installation" if you are unsure how to do this.

3. Select the application called Sample from the **Applications** list box.

4. Select the database called Xchgrate from the **Databases** list box.

5. Select Database > Load Data. The **Data Load** dialog box is displayed.

   The **Data Load** dialog box is described in detail in the Hyperion Essbase Application Manager online help, and in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

6. Click the **Find** button above the **Data files** list box to locate a data file to load. The **Open Server Data File Objects** dialog box is displayed.

7. Ensure that **List Objects of Type** is Text files.

8. Select the text file named **RATES** from the **Objects** list box.

9. Click **OK** to close the dialog box.

Hyperion Essbase updates the **Data Load** dialog box to display the data file you selected.

Figure 39: Data Load Dialog Box with RATES Data File Selected
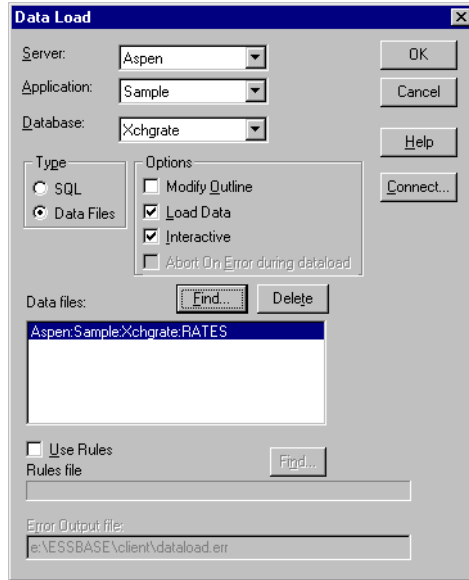
10. Click **OK** to load the selected file. The data file contains currency exchange rates, and should take less than one minute to load. The **Data Load Completed** dialog box is displayed.

11. Click **Close**.

Preparing the Demo Basic Database

Note: In some licensing instances, installation of the sample applications may be restricted to the main application (Sample) and its three databases (Basic, Interntl, and Xchgrate). In this case, you will not see the Demo Basic database. Please refer to your license agreement for details.

The Demo application contains one database called Basic. To prepare it for use, you need to load data into it.

➤ To load data into the Demo Basic database:

1. Open Hyperion Essbase Application Manager.

2. Connect to the server in which the Sample application is installed. This example uses the server Aspen. See Chapter 4, "Application Manager and Spreadsheet Add-in Installation" if you are unsure how to do this.

3. Select the application called Demo from the **Applications** list box.

4. Select the database called Basic from the **Databases** list box.

5. Select Database > Load Data. The **Data Load** dialog box is displayed.

   The **Data Load** dialog box is described in detail in the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

6. Click the **Find** button above the **Data files** list box to locate a data file to load. The **Open Server Data File Objects** dialog box is displayed.

7. Ensure that **List Objects of Type** is Text files.

8. Select the text file named **DATA** from the **Objects** list box.

9. Click **OK** to close the dialog box.

Hyperion Essbase updates the **Data Load** dialog box to display the data file you selected.

Figure 40: Data Load Dialog Box with DATA Data File Selected
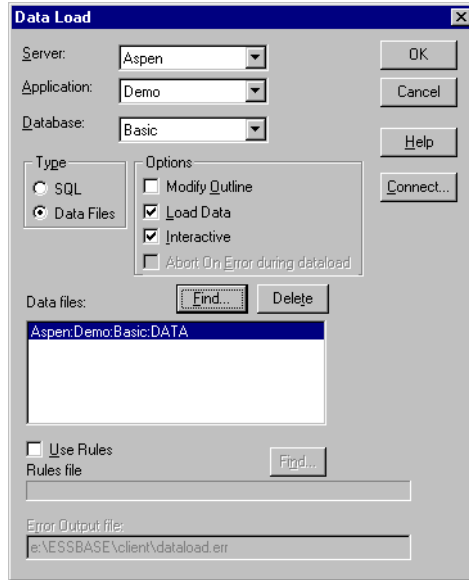
10. Click **OK** to load the selected file.

The data file takes a minute or two to load, and then the **Data Load Completed** dialog box is displayed.

11. Click **Close**.

Providing User Access to the Sample Applications

Hyperion Essbase provides a comprehensive security system for a secure multi-user environment. By default, the sample applications are created with a security access level of None, which means that no user can connect to the database, unless the user is defined as a supervisor.

The system supervisor, defined when the Hyperion Essbase server was installed, automatically has supervisor privilege. Therefore, the system supervisor can make the sample applications available to other users.

➤ To provide all users with write access to the database:

1. Log in using the system supervisor account.

2. Open Hyperion Essbase Application Manager.

3. Connect to the server in which the Sample application is installed. See Chapter 4, "Application Manager and Spreadsheet Add-in Installation" if you are unsure how to do this.

4. Select the application called Sample from the **Applications** list box.

5. Select Application > Settings. The **Application Settings** dialog box is displayed as shown in Figure 41.

   Figure 41: Choosing Write Access for the Sample Application
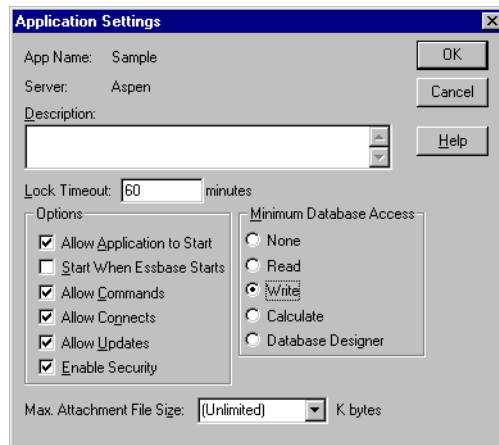
6. Click the **Write** option from the **Minimum Database Access** group, and click **OK** to save the setting.

   Hyperion Essbase closes the dialog box and returns you to the Application Desktop window.

7. Select the application called Demo from the Applications list box.

8. Select Application > Settings. The **Application Settings** dialog box is displayed.

9. Click the **Write** option from the **Minimum Database Access** group, and click **OK** to save the setting.

The Sample and Demo applications are now ready for use. If you want to use the Partitioning applications, continue on to "Setting the Environment for the Partitioning Sample Applications" on page 5-127. Otherwise, your next step might be to create the appropriate user names to be able to log in to Hyperion Essbase. See the *Hyperion Essbase OLAP Server Database Administrator's Guide* for information on creating users.

Setting the Environment for the Partitioning Sample Applications

Note: In some licensing instances, installation of the sample applications may be restricted to the main application (Sample) and its three databases (Basic, Interntl, and Xchgrate). Please refer to your license agreement for details.

Hyperion Essbase includes two sample applications and databases that show the features of Hyperion Essbase Partitioning:

- Samppart, Company

- Sampeast, East

These applications and databases include partition definitions stored in .DDB files. The .DDB files define the map between member combinations in the target database, Company, and the source database, East. The *Hyperion Essbase OLAP Server Database Administrator's Guide* describes Partitioning, member combinations, and the differences between target and source databases.

For these applications to work in your environment, you need to match or change the information contained in the .DDB files. To use the applications, you must do the following:

- Create a user named **partitionuser**. This is necessary because the sample partitioning databases were created with that user name.

- Change the server name that is embedded in the applications.

Note: Do not go into the .DDB files to change this information. Instead, complete the steps in the following sections. "Creating the Partition User" on page 5-128 describes how to create the required user name, so that your users can use these applications. "Changing the Server Name in the Sample Partition Definitions" on page 5-132 describes how to change the embedded server name to your server name.

Creating the Partition User

Because the Samppart and Sampeast applications were designed by a user called *partitionuser*, you must create a user called partitionuser to work with these applications. Partitionuser must have Application Designer access to these applications on the server in which they are installed. If you are unsure how to do this, complete the following steps:

1. Open Hyperion Essbase Application Manager.

2. Using a user name that is a supervisor or that has Create/Delete Users, Groups privilege, connect to the server on which the Samppart and Sampeast applications are installed.

3. Select Security > Users/Groups.

The User/Group Security dialog box is displayed as shown in Figure 42.

Figure 42: User/Group Security Dialog Box
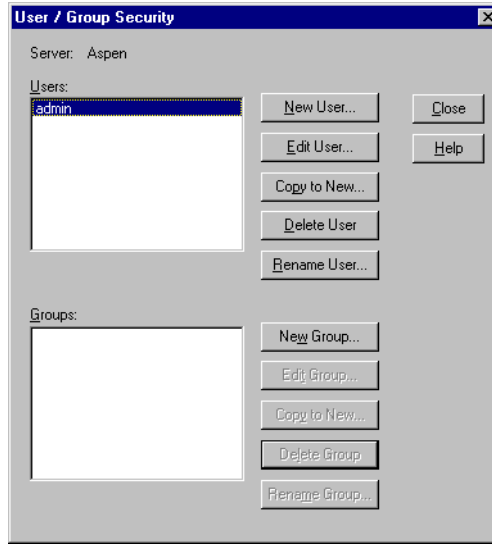
4. Click the **New User** button.

Hyperion Essbase displays the New User dialog box as shown in Figure 43.

Figure 43: New User Dialog Box
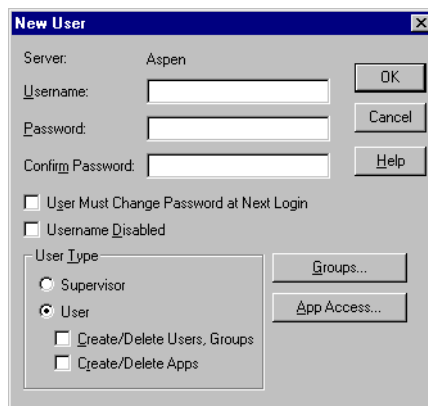
5. In the text box, type `partitionuser`. Be sure to use all lowercase letters.

6. In the text box, enter a password.

For example, type any word such as `password`. Hyperion Essbase displays asterisks in the place of the characters you type.

7. In the **Confirm Password** text box, type your password again.

Hyperion Essbase displays asterisks in the place of the characters you type.

Figure 44: Entering New User Name and Password
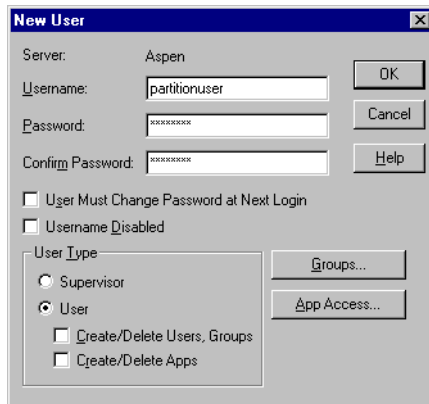
8. Click the **App Access** button.

Hyperion Essbase displays the dialog box shown in Figure 45.

Figure 45: User/Group Application Access Dialog Box
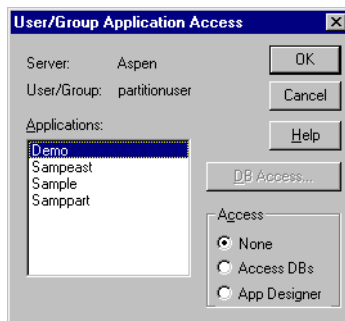
9. Select the **Sampeast** application, then click **App Designer** in the group.

10. Select the **Samppart** application, then click **App Designer** in the **Access** group.

Figure 46: Selecting Samppart Application and App Designer Privilege
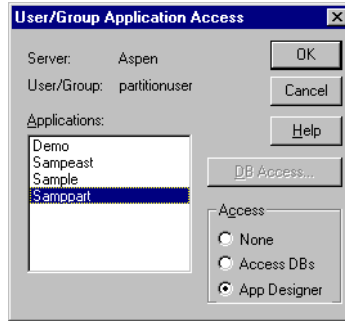
11. Click **OK** to return to the **New User** dialog box.

12. Click **OK** to return to the **User/Group Security** dialog box.

13. Click **Close**.

Logging in as partitionuser

After creating the "partitionuser" user name, log out of the server and log in again as **partitionuser**.

➤ To log out and log in again as **partitionuser**:

1. If you are still logged in, select Server > Disconnect. The **Logout** dialog box is displayed.

2. Click **OK** to log out.

3. Select Server > Connect.

   Hyperion Essbase displays the **Essbase System Login** dialog box.

4. In the **Username** text box, type **partitionuser**.

5. In the **Password** text box, enter the password.

Figure 47: Logging In as partitionuser
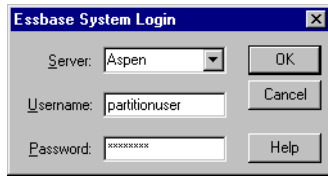
6. Click **OK**.

The Application Desktop window is displayed, and you are ready to continue setting up the Samppart and Sampeast applications.

Changing the Server Name in the Sample Partition Definitions

The following steps change the embedded server name in the partition definition files (.DDB) to your server name. The .DDB files shipped with Samppart and Sampeast are based on the server name "localhost."

The following steps change the server name in the Samppart Company .DDB file.

1. In the Application Desktop window, select the Samppart application and Company database.

Figure 48: Selecting Samppart Application and Company Database
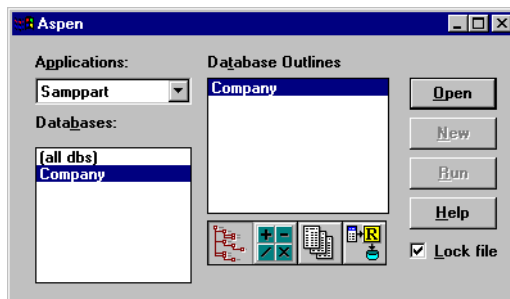
2. Select Database > Partition Manager.

After a brief pause, Hyperion Essbase displays the **Partition Manager** dialog box.

Note: If the Partition Manager dialog box does not appear or if it contains no definition entries, contact your Hyperion Essbase system administrator. Your server must be registered with a license number supporting Partitioning.

3. Select the first definition entry, labeled **Localhost: SampEast: East** under the **Source Cube** heading as shown in Figure 49.

Figure 49: Selecting Localhost: SampEast: East
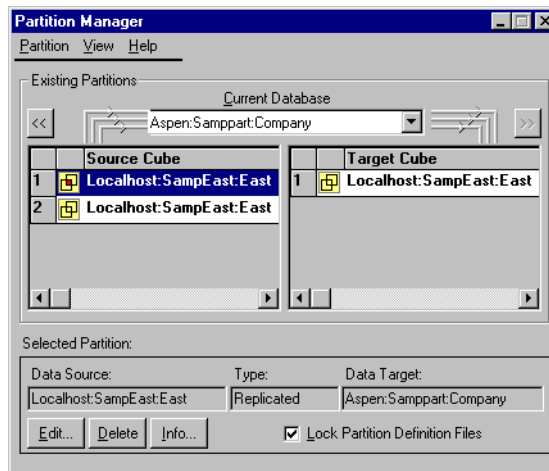
4. Click the **Edit** button.

The **Dangling Remote Reference** dialog box is displayed. Because you are not connected to a server named Localhost, Hyperion Essbase warns you before it allows you to edit the definition.

Figure 50: Dangling Remote Reference Dialog Box for
Localhost: Sampeast: East
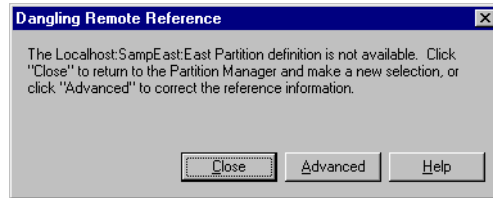
5. Click **Advanced**.

The **Fix Dangling Partition Reference** dialog box is displayed.

6. Click **Correct the invalid partition reference** in the **Action** group.

7. In the **Server** text box in the **Reconnect** group, replace Localhost with your server name, such as Aspen, as shown in Figure 51.

Figure 51: Replacing Server Name Localhost with Server Name Aspen
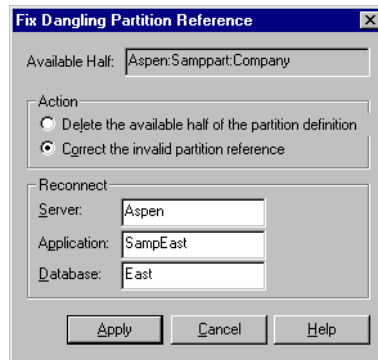
8. Click **Apply**.

Hyperion Essbase displays the **Partition Manager** dialog box. See Figure 49.

9. Select the second definition entry, **Localhost: Sampeast: East** in the **Source Cube** list.

10. Repeat steps 4–8 for this definition.

11. Select the first definition entry, **Localhost: Sampeast: East** in the **Target Cube** list.

12. Repeat steps 4–8 for this definition.

13. Select Partition > Close to return to the Application Desktop window.

Now you have changed the server name in the Samppart Company .DDB file.

Continue with the following steps to change the server name in the Sampeast East .DDB file.

1. In the Application Desktop window, select the Sampeast application and East database.

Figure 52: Selecting Sampeast Application and East Database
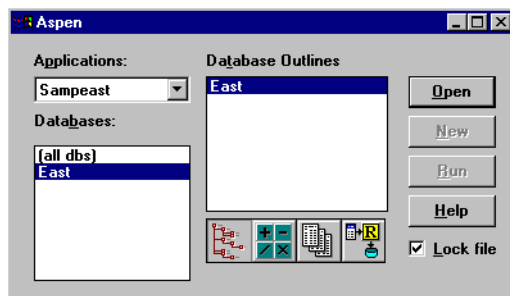
2. Select Database > Partition Manager. After a brief pause, the **Partition Manager** dialog box is displayed.

3. Select the first definition entry, **Localhost: Samppart: Company** in the
   Source Cube list.

Figure 53: Selecting Localhost: Samppart: Company
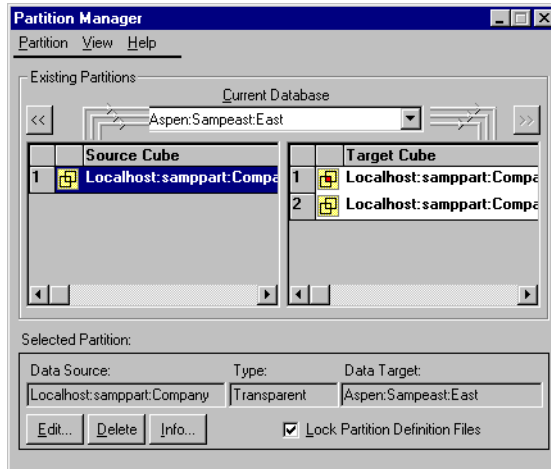
4. Click **Edit**.

   The **Dangling Remote Reference** dialog box is displayed. Because you are
   not connected to a server named Localhost, Hyperion Essbase warns you
   before it allows you to edit the definition.

*Figure 54: Dangling Remote Reference Dialog Box for Localhost: Samppart:
Company*
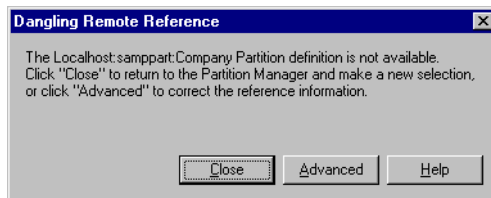
5. Click **Advanced**. The **Fix Dangling Partition Reference** dialog box
   is displayed.

6. Click **Correct the invalid partition reference** in the **Action** group.

Figure 55: Replacing Server Name Localhost

7. In the **Server** text box in the **Reconnect** group, replace Localhost with your server name.

8. Click **Apply**. The **Partition Manager** dialog box is displayed.

9. Select the first definition entry, **Localhost: Samppart: Company** in the **Target Cube** list.

10. Repeat steps 4–8 for this definition.

11. Select the second definition entry, **Localhost: Samppart: Company** in the **Target Cube** list.

12. Repeat steps 4–8 for this definition.

13. Select Partition > Close to return to the Application Desktop window.

Now you have changed the server name in the Sampeast East .DDB file.

Preparing the Samppart Company Database

Note: In some licensing instances, installation of the sample applications may be restricted to the main application (Sample) and its three databases (Basic, Interntl, and Xchgrate). In this case, you will not see the Samppart Company database. Please refer to your license agreement for details.

After setting up the environment for the Samppart and Sampeast databases, you need to load data into each database. This section shows you how to load the Samppart Company database.

➤ To load data into the Samppart Company database:

1. Open Hyperion Essbase Application Manager.

2. Connect to the server in which Samppart is installed.

   Note: You can log in as "partitionuser" or as a user with supervisor privilege.

3. Select **Samppart** from the **Applications** list box.

4. Select **Company** from the **Databases** list box.

5. Select Database > Load Data.

   The **Data Load** dialog box is displayed.

6. Click the **Find** button above the **Data files** list box to locate a data file to load.

   The **Open Server Data File Objects** dialog box is displayed.

7. Ensure that **List Objects of Type** is Text files.

8. Select the text file named **CALCCOMP** from the **Objects** list box.

9. Click **OK** to close the dialog box.

Hyperion Essbase updates the **Data Load** dialog box to display the data file you selected. See the example shown in Figure 56.

Figure 56: Data Load Dialog Box with CALCCOMP Data File Selected
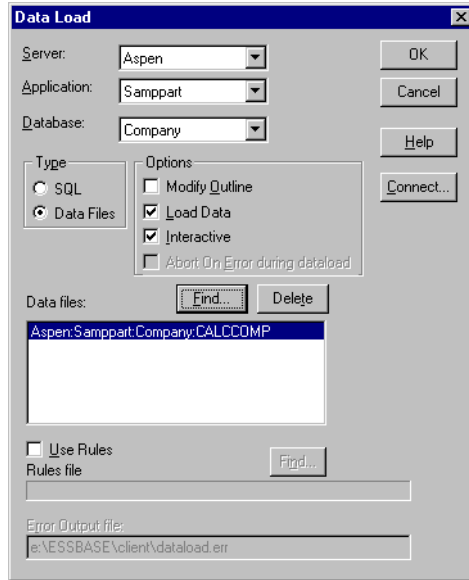
10. Click **OK** to load the selected file.

The data file is a large fully calculated data set. It should take about a minute to load, and then the **Data Load Completed** dialog box is displayed.

11. Click **Close**.

Preparing the Sampeast East Database

Note: In some licensing instances, installation of the sample applications may be restricted to the main application (Sample) and its three databases (Basic, Interntl, and Xchgrate). In this case, you will not see the Sampeast East database. Please refer to your license agreement for details.

After setting up the environment for the Samppart and Sampeast databases, you need to load data into each database. This section shows you how to load the Sampeast East database.

➤ To load data into the Sampeast East database:

1. Open Hyperion Essbase Application Manager.

2. Connect to the server in which the Sampeast application is installed.

   You can log in as "partitionuser" or as a user with supervisor privilege.

3. Select **Sampeast** from the list box.

4. Select **East** from the list box.

5. Select Database > Load Data. The dialog box is displayed.

6. Click the **Find** button above the list box to locate a data file to load. The dialog box is displayed.

7. Ensure that is Text files.

8. Select the text file named **CALCEAST** from the list box.

9. Click **OK** to close the dialog box.

Hyperion Essbase updates the dialog box to display the data file you selected.

Figure 57: Data Load Dialog Box with CALCEAST Data File Selected
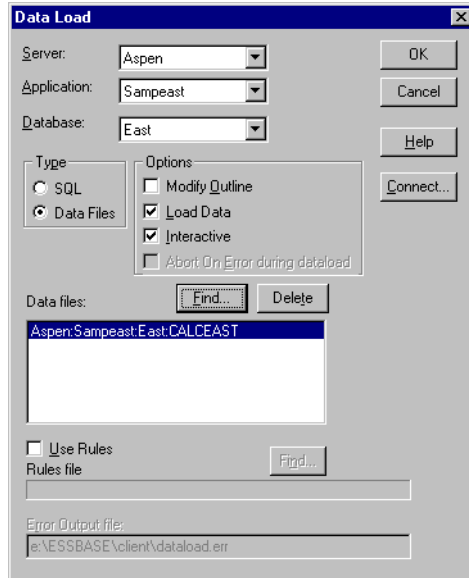
10. Click **OK** to load the selected file.

The data file is a small fully calculated data set. It should take about a minute to load, and then the dialog box is displayed.

11. Click **Close**.

Runtime Client Installation

This chapter tells you, the client user, how to install the Hyperion Essbase Runtime Client from a network drive. If you do not need a full client installation, for example, of the Hyperion Essbase Spreadsheet Add-in, the Runtime Client installation is provided so that you can install only the Hyperion Essbase files that are required to run applications made using the Hyperion Essbase Application Programming Interface. For example, a third-party Hyperion Essbase partner may write a specialized application that relies on the Hyperion Essbase API libraries; when you install the Runtime Client, all Hyperion Essbase library files are provided. Then you need to install the application files from the third-party vendor.

● Install the Runtime Client to the Windows 95, Windows 98, Windows NT 4.0, or Windows 2000 client operating environments

● Manually update your client environment settings if you do not want the installation program to change your environment automatically

This chapter contains the following sections:

Before You Install

Before you can install the Runtime Client from a network drive, a system administrator must install it to a network drive.

The Runtime Client requires a Windows-based computer with the following:

Table 14: Runtime Client Windows System Requirements

Component	Requirement
Microprocessor	Pentium or higher
Windows Version	Windows 95, Windows 98, Windows NT 4.0, or Windows 2000
RAM	32 MB
Disk Space	9 MB
Network Protocol	TCP/IP or Named Pipes

Also, you should know the following before installing the Runtime Client from a network drive:

● Your client operating environment: Windows 95, Windows 98, Windows NT 4.0, or Windows 2000

● The network protocol you use

● Where the Runtime Client software resides on the network

About Installing the Runtime Client from a Network Drive

When installing from a network drive, the Runtime Client installation program provides the following options:

Figure 58: Runtime Client Installation Options
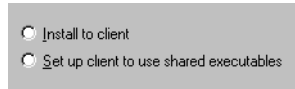
- **Install to client** installs the Runtime Client software on your hard drive. See .

- **Set up client to use shared executables** sets up your computer's operating environment to use the Runtime Client previously installed on a network drive by the system administrator. You install only Windows system files on your hard drive. See .

Network Protocol Files for the Runtime Client

The network protocol file implements the TCP/IP or Named Pipes protocol you selected on installing the Runtime Client (or other client software) on your computer's hard drive, or that the system administrator selected on installing the Runtime Client (or other client software) to a network drive. The network protocol file is called ESSNET.DLL, and it resides in the BIN directory with the Runtime Client software. This can be on your computer's hard drive or on a network drive, depending on which installation option you chose.

Note: For more information on network protocols, see Chapter 9, "Network Configuration Notes."

Directories and Files on the Network Drive

When the Hyperion Essbase system administrator installs the Runtime Client to a network drive, the installation program, SETUP.EXE, installs the following on the network drive:

- An installation folder for installing the Runtime Client on your client computer's hard drive. This contains the Hyperion Essbase installation program (SETUP.EXE) and Windows system files for setting up your computer's environment.

- Program files for using the Runtime Client from the network drive.

If the system administrator installs the Runtime Client to the network drive N, and accepts the default directory \HYPERION\ESSBASE, the installation program creates the following directories:

```
N:\HYPERION\ESSBASE
     BIN
     LOCALE
     RUNTIME
```

The installation program, SETUP.EXE, is in the RUNTIME directory.

The program files for the Runtime Client are in the BIN directory.

The LOCALE directory contains the character-set files necessary for all the languages Hyperion Essbase supports, including English.

Installing the Runtime Client from the Network to Your Client Hard Drive

➤ To install the Runtime Client from the network to your client computer's hard drive, complete the following steps:

   1. Using Windows Explorer, browse to the appropriate location for SETUP, where *N:\HYPERION\ESSBASE* is the name of the network drive and directory where the Hyperion Essbase system administrator installed the Runtime Client. For example,

   N:\ESSBASE\RUNTIME\SETUP.EXE

   2. Double-click SETUP to start the installation program.

   3. Follow the directions on your screen.

   4. When the program prompts you to **Choose installation type**, select **Install to client** and click **Next**.

   5. When the program prompts you to **Choose Destination Location**, specify the directory where you want to install the Runtime Client.

   The default is C:\HYPERION\ESSBASE. Click **Browse** to specify a different location.

   Install all client software in the same directory. See "About Installing the Runtime Client from a Network Drive" on page 145 for more information.

   6. When prompted, choose a network protocol. See your Hyperion Essbase System Administrator if you are not sure which option to choose.

   Figure 59: Choosing a TCP/IP Network Protocol for the Runtime Client

   ⦿ TCP/IP compliant
   ○ Named Pipes compliant
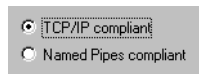
7. In the **Update Environment** dialog box, choose whether you want the installation program to update the environment by creating an ARBORPATH environment variable, and adding ARBORPATH\Bin to the PATH environment variable.This enables the system to find Hyperion Essbase files.

8. When prompted to **Check Setup Information**, review the summary of your installation choices. Select Next to allow the installation program to begin copying files. Select Back to revise your choices, or select Cancel to exit the installation program.

9. In the **Setup Complete** dialog box, leave the check box selected and select **Finish** to view the Readme file.

10. If you chose to let the installation program update the PATH and ARBORPATH environment variables, do one of the following:

   ● On Windows NT or Windows 2000, log out and log in again, or reboot your computer, to allow the environment changes to take effect.

   ● On Windows 95 or Windows 98, reboot your computer to allow the environment changes take effect.

Directories Created When You Install the Runtime Client on a Client Hard Drive

When you install the Runtime Client on your client hard drive, the installation program, SETUP.EXE, creates the following directories:

```
HYPERION\ESSBASE
      BIN
      LOCALE
```

The Runtime Client program files are in the BIN directory.

The LOCALE directory contains the character-set files necessary for all the languages Hyperion Essbase supports, including English.

Setting up Your Computer to Use the Runtime Client on the Network Drive

➤ To set up your computer to use the Runtime Client from the network drive, complete the following steps.

1. Using Windows Explorer, browse to the appropriate location for SETUP, where *N:\HYPERION\ESSBASE* is the name of the network drive and directory where the Hyperion Essbase system administrator installed the Runtime Client. For example,

   N:\ESSBASE\RUNTIME\SETUP.EXE

2. Double-click SETUP to start the installation program.

3. Follow the directions on your screen.

4. When the program prompts you to **Choose installation type**, select **Set up client to use shared executables** and click **Next**.

   Figure 60: Choosing to Set Up Your Computer to Use the Runtime Client from the Network Drive
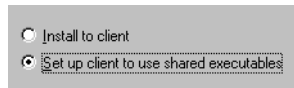
   The program detects where the network installation of the Runtime Client resides. If it cannot find it, you are prompted for the directory. Click **Browse** to display and specify the location.

   Note: The Hyperion Essbase shared runtime files are in the BIN directory.

   In the **Check Setup Information** dialog box, review the summary of your installation choices.

   Click **Back** to revise your choices, **Cancel** to exit the installation program, or **Next** to let the installation program begin updating your environment.

   This type of installation automatically creates or updates the ARBORPATH environment variable, and adds a statement to the PATH environment variable. This update is needed to enable the system to find shared Hyperion Essbase files.

5. Choose one of the following steps to allow the environment changes to take effect:

- On Windows NT or Windows 2000, log out and log in again, or reboot your computer.

- On Windows 95 or Windows 98, reboot your computer.

You might not need to reboot if you previously installed client software to the same directory where you are installing the Runtime Client.

Directories Used When You Set Up Your Computer to Use the Runtime Client on the Network Drive

When you set up your computer to use the Runtime Client on the network drive, the installation program, SETUP.EXE, does not create any directories on your client computer's hard drive. It installs only Windows system files on your client computer's hard drive. You use the program files that are on the network drive.

The network drive has the following directories:

```
ESSBASE
        BIN
        LOCALE
```

The Runtime Client program files are in the BIN directory.

The LOCALE directory contains the character-set files necessary for all the languages Hyperion Essbase supports, including English.

Manually Updating the Environment

If you do not want the installation program to update your computer's environment, you may need to set up the environment manually.

Keep these points in mind as you apply the following steps to manually update your environment settings:

- The following instructions assume that you installed the Runtime Client to `C:\HYPERION\ESSBASE`. If you installed the Runtime Client to a different drive and directory, substitute the letter of that drive and name of that directory.

- If you set up your computer to use the Runtime Client from a network drive, substitute `C:\HYPERION\ESSBASE` with the letter of the drive and name of the directory where the Runtime Client is installed on the network.

Manually Updating the Environment on Windows 95 and Windows 98

➤ To update your environment settings on Windows 95 and Windows 98:

1. Add the following environment variable to your `AUTOEXEC.BAT` file:

   `ARBORPATH=C:\HYPERION\ESSBASE`

   Do not put a space before or after the equal sign (=) in the `$ARBORPATH` environment setting.

2. Add `C:\HYPERION\ESSBASE\BIN` to your `PATH` statement.

3. Remove references to installations of Hyperion Essbase in other directories.

   Tip: You can type `SET` from a `DOS` command prompt to view your current environment settings.

4. Reboot your computer.

Manually Updating the Environment on Windows NT and Windows 2000

To manually update the environment settings on Windows NT 4.0 or Windows 2000, complete the following steps:

1. Select Start > Settings > Control Panel > System.

2. Find the Windows environment variable controls.

- On Windows NT, choose the **Environment** tab.

- On Windows 2000, choose the **Advanced** tab, and click the **Environment Variables** button.

3. Set the following system variables:

- ARBORPATH=C:\HYPERION\ESSBASE, or wherever Hyperion Essbase is installed.

- Add %ARBORPATH%/BIN to the Path variable, or C:\HYPERION\ESSBASE\BIN, depending on where Hyperion Essbase is installed.

   Note: You are changing System settings, which affect all users who access your machine.

4. Remove outdated ARBORPATH system variables or ESSBASE\BIN Path settings.

5. Reboot your computer, or log out and log in, to allow the changes to take effect.

API Installation

The Hyperion Essbase Application Programming Interface (API) is available for
the following platforms:

● Windows NT, Windows 95, Windows 98, and Windows 2000

● AIX

● HP-UX

● Solaris

● Linux

Note: Linux is not supported on Release 6.1 of Hyperion Essbase.

This chapter contains the following sections:

● "API System Requirements" on page 154

● "Installing the API" on page 156

● "Directories Created" on page 160

● "Updating Your Environment Variables" on page 161

Note: You must enter your license number during installation. See
Chapter 1, "Product Components and Software Registration" on
software registration.

API System Requirements

The API requires a system that meets minimal hardware and software requirements. See the following section that is appropriate for your platform.

Windows API Requirements

The Hyperion Essbase API requires a system with at least the following:

Table 15: Windows API System Requirements

Component	Requirement
Microprocessor	Pentium or higher
Windows platform	Windows NT 4.0, Windows 2000, Windows 95, and Windows 98
RAM	64 MB RAM (128 or more MB recommended).
Disk space	15 MB

AIX API Requirements

The API for AIX requires a system with at least the following:

Table 16: AIX API System Requirements

Component	Requirement
System	PowerPC, including RS 6000
AIX	AIX 4.3 or higher
RAM	Physical memory: 64 MB (256 MB recommended) Swap space: 2x physical memory, when physical memory is less than .5GB. Contact system administrator or hardware vendor for optimum swap configuration.
Disk space	7 MB
Thread type	POSIX Kernel Threads (included with AIX)

HP-UX API Requirements

The API for HP-UX requires a system with at least the following:

Table 17: HP-UX API System Requirements

Component	Requirement
System	PA-RISC machines
HP-UX	HP-UX 11.0
RAM	Physical memory: 64 MB (256 MB recommended)
	Swap space: 2x physical memory, when physical memory is less than .5GB. Contact system administrator or hardware vendor for optimum swap configuration.
Disk space	9 MB
Thread type	POSIX Kernel Threads (included with HP-UX)

Solaris API Requirements

The API for Solaris requires a system with at least the following:

Table 18: Solaris API System Requirements

Component	Requirement
System	Sun SPARC or ULTRASPARC machines
Solaris	Solaris 7 or 8
RAM	Physical memory: 64 MB (256 MB recommended)
	Swap space: 2x physical memory, when physical memory is less than .5GB. Contact system administrator or hardware vendor for optimum swap configuration.
Disk space	8 MB
Thread type	POSIX Kernel Threads (included with Solaris)

7

Red Hat Linux API Requirements

The API for Red Hat Linux requires a system with at least the following:

Table 19: Red Hat Linux API System Requirements

Component	Requirement
System	Intel compatible machines
Linux	Red Hat Linux 6.1
RAM	Physical memory: 64 MB (256 MB recommended) Swap space: 2x physical memory, when physical memory is less than .5 GB. Contact system administrator or hardware vendor for optimum swap configuration.
Disk space	7 MB
Thread type	Linux POSIX Threads (included with Linux)

Installing the API

On each supported platform, install the API from the CD-ROM. See the following section that is appropriate for your platform.

Installing the API on Windows Platforms

➤ To install the API on Windows 95, Windows 98, Windows NT 4.0, or Windows 2000, complete the following steps:

1. Insert the CD-ROM into your CD-ROM drive.

   The installation program should start automatically. If it does not, run SETUP from the root directory of the CD-ROM.

2. Follow the prompts, and provide the information requested.

   To cancel installation at any time, click the **Cancel** and **Exit Setup** buttons.

3. In the **Select Components** dialog box, select the **API products** check box. This will install the API for 32-bit Windows platforms.

4. When you finish, select **Continue** and **Next**.

5. When prompted for the destination directory name, specify where you want to install the API. The default is `C:\HYPERION\ESSBASE`. You can install to a network drive and then share the library files with other programmers.

6. In the **Choose Network Protocol** dialog box, select your network protocol, and select **Next**.

   Hyperion Essbase creates an `ESSNET` file that corresponds to your network protocol.

7. In the **Install HTML Documentation** dialog box, review the size requirements for the available online documents, select which ones to install, and select **Next**.

   Note: Instead of installing the HTML documentation locally, you can copy the `DOCS` directory from the root directory of the CD-ROM to a network drive, so that all programmers can access the online HTML documentation from there. Or, you can access the HTML documentation in the `DOCS` directory of the CD-ROM itself. To view the HTML documentation, open the `INDEX.HTM` file in the `DOCS` directory. To learn more about HTML documentation, see "Hyperion Essbase HTML Documents" on page xvi in the Introduction.

8. In the **Check Setup Information** dialog box, review the summary of your installation choices. Select Back to revise your choices, Cancel to exit the installation program, or Next to let the installation program begin copying files.

9. In the **Setup Complete** dialog box, leave the check box selected and select **Finish** to view the Readme file.

Installing the API on UNIX

You must complete certain tasks before you can install the API on UNIX. These tasks are described in "Before You Install the API on UNIX" on page 158.

You can install either from the root directory or from a product directory of the CD-ROM. See "Installing the API on UNIX from the CD-ROM" on page 158.

Before You Install the API on UNIX

Before you install the API on any UNIX platform, do the following:

1. Create an account which has Read/Write/Execute access to the target directory for the Hyperion Essbase installation. This account should belong to the Hyperion Essbase system administrator. Give this account the same default directory you are using for Hyperion Essbase (for example, /home/hyperion/essbase). Ideally, the system administrator account will own this target directory.

    Note: With Release 6.0, you are no longer required to install and run Hyperion Essbase from an account called arbor. Any user can install, but this should be the same user account that will start Hyperion Essbase.

2. Create a target directory for the Hyperion Essbase files; for example,

    /home/hyperion/essbase

    If you do not create a target directory, the installation program prompts you for permission to create it. If you want to use, or fall back to, a previous version of Hyperion Essbase, install Release 6.0 to a different directory than the previous version. Do not create directories under /essbase. The installation program creates the appropriate subdirectories.

3. Apply the latest patches for your operating system.

Installing the API on UNIX from the CD-ROM

➤ To install the API on UNIX from either the root directory or a product directory of the CD-ROM, do the following:

1. Log in to the UNIX server as the Hyperion Essbase system administrator account. For example, log in as **admin** if you created a user account called **admin** that owns the target installation directory /home/hyperion/essbase.

2. Insert the CD-ROM into your CD-ROM drive.

3. Depending on the directory from which you want to install, do one of the following:

   If you want to install from the root directory (recommended), do the following:

   a. Change to the root directory of the CD-ROM (for example, `cd /cdrom/essbase_6`).

   b. Use the `ls` command to find `setup.sh` (or `SETUP.SH`).

      Some UNIX CD-ROM drivers list file names in uppercase. Others list them in lowercase. See whether the file name is in uppercase or lowercase.

   c. Type `./setup.sh` or `./SETUP.SH`, depending on what you learned in step b.

   d. When prompted, choose to install the API.

   If you want to install from the product directory, do the following:

   a. Change to the CD-ROM directory for the product you want to install (for example, `cd /solaris/api`).

   b. Use the `ls` command to find `essinst` (or `ESSINST`).

      Some UNIX CD-ROM drivers list file names in uppercase. Others list them in lowercase. See whether the file name is in uppercase or lowercase.

   c. Type `./essinst` or `./ESSINST`, depending on what you learned in step b.

4. Follow the prompts and provide the information requested.

   Note: To cancel installation at any time, press Ctrl + C.

5. When prompted, enter your license number exactly as it appears on your registration card.

   See Chapter 1, "Product Components and Software Registration" for more information on software registration.

6. When prompted, type the directory where you want to install the API.

The installation program uses /home/hyperion/essbase/ as the default directory. You can choose another directory, and if it does not exist, the installation program attempts to create it for you.

7. Answer whether you want to install the online HTML documentation.

Note: The installation program decompresses the api.tz file, and the docs.tz file if you choose to install the online HTML documentation, and copies files to the directory you choose (or to the default directory), and to subdirectories it creates under that directory. Do not create these subdirectories yourself.

8. Update your environment before you use the API. See "Updating Your Environment Variables" on page 161.

Directories Created

The API installation program creates the following directory structure:

Windows and Windows NT	UNIX
C:\HYPERION\ESSBASE	/home/hyperion/essbase
API	api
INCLUDE	include
LIB	lib
REDIST	redist
LOCALE	locale
DOCS	docs

This assumes you accepted the default directory, C:\HYPERION\ESSBASE or /home/hyperion/essbase, during installation.

Note: When you install the online HTML documentation, the installation program creates a DOCS directory (/docs directory on UNIX platforms). It contains numerous subdirectories, as well as the INDEX.HTM (or index.htm) file you open to view the HTML documentation. To learn more about HTML documentation, see "Hyperion Essbase HTML Documents" on page xvi in the Introduction.

For a listing of files supplied with or required by the Hyperion Essbase API in order to compile programs, see the online *API Reference* in the DOCS directory. On Solaris and Linux, you can create soft links to supplied library files.

The LOCALE directory (locale on UNIX) contains the character-set files necessary for all the languages that Hyperion Essbase supports, including English. For non-English versions, you also need to create the ESSLANG environment variable. For more information about ESSLANG, see Chapter 10, "Advanced Installation Topics,"

Updating Your Environment Variables

You may need to update your environment variables to use the API. Read the following section that is appropriate for your platform.

Setting Your Environment on Windows Platforms

Add the LIB and INCLUDE directories to your PATH statement. For example, if you installed Hyperion Essbase to the default directory, add the following to your PATH statement:

```
C:\HYPERION\ESSBASE\API\LIB
C:\HYPERION\ESSBASE\API\INCLUDE
```

Setting Your Environment on AIX and Solaris

To link and run your program, add the following to the LIBPATH variable:

```
$ARBORPATH/api/lib
```

For example, if you are using the C shell, the .cshrc file might look like this:

```
setenv ARBORPATH /essbase
setenv
    /opt/SUNWspro/lib:/usr/openwin/lib:/usr/lib:$ARBORPATH/api/lib
```

On Solaris, you can create soft links to supplied library files. For example, you can create .so files as soft links to the supplied .so.1 files, as follows:

```
ln -s libessnet.so.1 libessnet.so
```

See the online *API Reference* in the DOCS directory for more information on the files you need to compile, link, and distribute your programs.

7

Setting Your Environment on HP-UX

Hyperion Essbase on HP-UX uses the environment variables LPATH (for linking) and SHLIB_PATH (at run time).

If you are using static libraries, you do not need to use environment variables. If you are using dynamic libraries, you need to add the following path to your LPATH search path environment variable to link your program:

/home/*hyperion*/*essbase*/api/lib

where */home* is the name of your home directory and */hyperion*/*essbase* is the directory where you chose to install the API.

All shared library (.sl) files should be located in a directory specified in the LPATH search path. For example, the LPATH variable can be set to:

.:/lib:/usr/lib:$ARBORPATH/api/lib

You must do one of the following to run your program:

● Store the shared library files in the same directory from which you linked.

● Link your program with the +s flag. The +s flag allows you to put the .sl files at any location and use the SHLIB_PATH environment variable to search for it at run time.

See the online *API Reference* in the DOCS directory for information on the files you need to compile, link, and distribute your programs.

Setting Your Environment on Red Hat Linux

To link and run your program, add the following to the LD_LIBRARY_PATH variable:

$ARBORPATH/api/lib

For example, if you are using the C shell, the .cshrc file might look like this:

setenv ARBORPATH "/home/hyperion/essbase"
setenv LD_LIBRARY_PATH
"$LD_LIBRARY_PATH:/usr/lib:$ARBORPATH/api/lib"

See the online *API Reference* in the DOCS directory for more information on the files you need to compile, link, and distribute your programs.

SQL Interface Installation

This chapter tells you, the Hyperion Essbase system administrator, how to install Hyperion Essbase SQL Interface from CD-ROM. It tells you what to do before you install SQL Interface and how to set environment variables after you install it.

For installations on UNIX, this chapter also tells you what to do after you install and before you link your drivers to SQL Interface.

After you install SQL Interface, and set your environment variables, you must configure your data source. You may need to configure your ODBC driver. For this information, see the *Hyperion Essbase SQL Interface Guide*. This guide, `Essqlint.pdf`, is provided in the `\ESSBASE\DOCS\CLIENT` directory in `.PDF` format for online viewing and printing in Adobe Acrobat Reader (Version 3.0.1 or later).

Note: Adobe Acrobat Reader is provided on the Hyperion Essbase CD-ROM in the `ADOBE` directory under the appropriate platform and language-version subdirectories. You can also download Acrobat Reader from `http://www.adobe.com`. To install Acrobat Reader, launch the executable file, follow the prompts, and provide the information requested.

This chapter contains the following sections:

Before You Install SQL Interface

Before you install SQL Interface, consider the following information:

- On Windows NT and Windows 2000, you can install SQL Interface when you install the Hyperion Essbase server or you can install it separately. On UNIX, you must install SQL Interface after you install the Hyperion Essbase server. On every installation, you are asked for your license number. For more information on software registration, see Chapter 1, "Product Components and Software Registration."

- On all platforms, it is recommended that you install your server, update your environment, and verify that it is working before you install SQL Interface.

- If you are using Hyperion Essbase 6.1, you must install Release 6.1 of SQL Interface. Earlier releases of SQL Interface are not tested and verified to work with Release 6 of the Hyperion Essbase server.

- On Windows NT and Windows 2000, each MERANT ODBC driver has its own help file. You can access it using the ODBC Administrator. See the *Hyperion Essbase SQL Interface Guide*.

- The MERANT ODBC drivers come with a document called *MERANT DataDirect Connect ODBC Reference*. This reference is in PDF format for online viewing and printing in Adobe Acrobat Reader (Version 3.0.1 or later).

Installing SQL Interface on Windows NT and Windows 2000

You can install Hyperion Essbase SQL Interface on Windows NT and Windows 2000 from the Hyperion Essbase CD-ROM, either at the same time you install the Hyperion Essbase OLAP Server, or after you have installed the Hyperion Essbase OLAP Server.

The following workflow is an overview of tasks required to effectively install Hyperion Essbase SQL Interface on Windows NT and Windows 2000.

Workflow for Installing SQL Interface on Windows NT or Windows 2000

1. Make sure the RDBMS (relational database management system) environment is set up correctly before installing Hyperion Essbase SQL Interface. You must be able to connect to the RDBMS from the Hyperion Essbase server machine before SQL Interface can work. Make sure of the following:

   a. The RDBMS server is installed and running. You must set the environment variables required to run the RDBMS. For more information, see your RDBMS documentation.

   b. The RDBMS database client software is installed on the machine where Hyperion Essbase is (or will be) installed; for example, the correct version of Client Application Enabler (CAE) for DB2 is installed, or the correct version of Open Client for Sybase is installed.

   c. You can connect to the RDBMS.

   d. You can issue a query to the RDBMS using an RDBMS client utility.

2. See the *Hyperion Essbase Start Here* booklet for information on tested and supported SQL Interface platforms and ODBC drivers.

3. Install the Hyperion Essbase OLAP Server first, or install it together with SQL Interface. Do not attempt to install SQL Interface before installing the Hyperion Essbase OLAP Server. For detailed instructions on installing the server software (including SQL Interface) from CD-ROM, see Chapter 2, "Windows Server Installation."

4. Install Hyperion Essbase SQL Interface from the CD-ROM, if you did not install it with the Hyperion Essbase OLAP Server. For step-by-step instructions on installing SQL Interface from the CD-ROM, see Chapter 2, "Windows Server Installation."

5. Configure the ODBC data source. Before you can access relational data using Hyperion Essbase SQL Interface, you must use the ODBC Administrator (ODBCAD32.EXE) to tell Hyperion Essbase what data sources are available and which drivers it should use. For detailed instructions, see the *Hyperion Essbase SQL Interface Guide* (ESSQLINT.PDF), which is installed in the ESSBASE\DOCS\CLIENT directory when you install SQL Interface.

8

Directories and Files on Windows NT and Windows 2000

If you accept the default during installation, the installation program places all SQL Interface program files in the C:\HYPERION\ESSBASE\BIN directory on your Windows NT or Windows 2000 server. This includes ESSSQL.DLL, the ODBC driver files and their corresponding help (.HLP) files, and .BND and .LIC files. If you choose to install SQL Interface in a different directory from the default, the installation program stores the files in the BIN directory in the appropriate path.

The SQL Interface installation program also installs the *Hyperion Essbase SQL Interface Guide* in .PDF format in the DOCS\CLIENT directory, and installs ODBC driver files and their corresponding help and .PDF files in the ODBCDocs directory.

Installing SQL Interface on UNIX

Install Hyperion Essbase SQL Interface on UNIX (AIX, HP-UX, and Solaris) from the Hyperion Essbase CD-ROM after you have installed the Hyperion Essbase OLAP Server. Before installing SQL Interface, ensure that your RDBMS environment is set correctly. After installing SQL Interface, set up the environment and the ODBC drivers.

Note: The following workflow is an overview of tasks required to effectively install Hyperion Essbase SQL Interface on UNIX..

Workflow for Installing SQL Interface on UNIX

1. Make sure the RDBMS (relational database management system) environment is set up correctly before installing Hyperion Essbase SQL Interface. See "Setting Up RDBMS Before Installing SQL Interface on UNIX" on page 167.

2. Install the Hyperion Essbase OLAP Server. See Chapter 3, "UNIX Server Installation."

3. Install SQL Interface from the CD ROM. See "Installing SQL Interface on UNIX from the CD-ROM" on page 169.

4. Set up the ODBC driver you plan to use. Steps vary depending on platform/driver configurations. For examples, see "Setting Up ODBC Drivers Before Linking Them to SQL Interface" on page 172.

5. Run inst-sql.sh to link SQL Interface to your ODBC driver.

6. Complete post-installation tasks, including setting the library path and configuring the .odbc.ini file. See "After You Link SQL Interface to Your ODBC Driver on UNIX" on page 176.

7. Consult the *Hyperion Essbase SQL Interface Guide* in your DOCS/CLIENT directory to learn more about SQL Interface, and how to configure your ODBC data source. See "Configuring the Data Source and ODBC Driver" on page 181.

Setting Up RDBMS Before Installing SQL Interface on UNIX

You must be able to connect to the RDBMS from the Hyperion Essbase server machine before SQL Interface can work. Make sure of the following:

1. The RDBMS server is installed and running. You must set the environment variables required to connect to the RDBMS.

   Examples of Setting RDBMS Environment Variables (Solaris):

   for Oracle:

   ● Set ORACLE_HOME and ORACLE_SID.

   ● Make sure that LD_LIBRARY_PATH contains the Oracle library path ($ORACLE_HOME/lib).

   ● Make sure that the path contains the Oracle bin; for example, ($ORACLE_HOME/bin).

   for Informix:

   ● Set INFORMIXDIR and INFORMIXSERVER.

   ● Make sure that LD_LIBRARY_PATH contains the Informix library path ($INFORMIXDIR/lib).

   ● Make sure that the path contains the Informix bin.

8

for Sybase:

- Set SYBASE and DSQUERY.

- Make sure that LD_LIBRARY_PATH contains the Sybase library path ($SYBASE/lib).

- Make sure that the path contains the Sybase bin ($SYBASE/bin).

for DB2:

- Set DB2INSTANCE and INSTHOME.

- Make sure that LD_LIBRARY_PATH contains the DB2 library path ($INSTHOME/sqllib/lib).

- Make sure that the path contains the DB2 bin ($INSTHOME/sqllib/bin).

  Note: Library path variable names vary across UNIX platforms. For more information, see your RDBMS documentation.

2. The RDBMS client software is installed on the machine where the Hyperion Essbase OLAP Server is (or will be) running.

3. You can connect to the RDBMS.

4. You can issue a query to the RDBMS using an RDBMS client utility.

See the *Hyperion Essbase Start Here* booklet for information on tested and supported SQL Interface platforms and ODBC drivers.

Also, set the environment variables required to run your RDBMS.

Installing SQL Interface on UNIX from the CD-ROM

You have already:

- Installed RDBMS server and client software, and verified that they are working.

- Installed Hyperion Essbase OLAP Server from the CD-ROM.

You are now ready to install SQL Interface from the CD-ROM.

➤ To install Hyperion Essbase SQL Interface from either the top directory or a product directory of the CD-ROM, do the following:

1. Log in as the Hyperion Essbase system administrator account. For example, log in as **admin** if you created a user account called **admin** that owns the target installation directory /home/hyperion/essbase.

2. Insert the CD-ROM into your CD-ROM drive.

3. Change to the root directory of the CD-ROM (for example, cd /cdrom).

4. Use the ls command to find setup.sh (or SETUP.SH).

   Some UNIX CD-ROM drivers list file names in uppercase. Others list them in lowercase. See whether setup.sh is in uppercase or lowercase.

5. Enter ./setup.sh or ./SETUP.SH, depending on what you learned in step 4.

6. When prompted for which product to install, choose SQL Interface. Follow the prompts and provide the information requested.

   Note: To cancel installation at any time, press **Ctrl + C**.

7. When prompted, enter your license number exactly as it appears on your registration card.

   See Chapter 1, "Product Components and Software Registration" for more information on software registration.

8

8. If prompted, type the directory where you want to install SQL Interface. Install it in the same directory where you installed Hyperion Essbase.

9. Read the next section to learn about directories and files created by `setup`. Then, you will be ready to set up your environment. This includes setting up the ODBC driver, running `inst-sql.sh` to link SQL Interface to the ODBC driver, setting the library path for Hyperion Essbase, and editing the `.odbc.ini` file.

Directories and Files Created

The SQL Interface installation program installs files into the `$ARBORPATH/bin` and `$ARBORPATH/dlls` directories.

If you accept the default during installation, the SQL Interface installation program:

● Copies the `.odbc.ini` file into the `$ARBORPATH/bin` directory on your UNIX server machine. This lets Hyperion Essbase know which drivers are installed.

If you accepted the default directory during installation, `$ARBORPATH` is `/home/hyperion/essbase`.

● Installs MERANT ODBC drivers files to an `$ARBORPATH/dlls` directory on your UNIX server machine.

● Installs Hyperion Essbase SQL Interface files to the `$ARBORPATH/bin` directory. These include:

   – `libesssql.insolv.a`   on AIX

   – `libesssql.insolv.sl`   on HP-UX

   – `libesssql.so.1`   on Solaris

When the installation program installs the Hyperion Essbase server on UNIX, it installs:

- The SQL Interface library file:
    - `libesssql.a`   on AIX
    - `libesssql.sl`   on HP-UX
    - `libesssql.so`   on Solaris

- A stub ODBC drivers file:
    - `libesssql.arbor.a`   on AIX
    - `libesssql.arbor.sl`   on HP-UX
    - `libesssql.arbor.so.1`   on Solaris

After you install the Hyperion Essbase server, the SQL Interface library file symbolically links to the stub ODBC drivers file. After you install SQL Interface and run the shell script, `inst-sql.sh`, the script links the library file to the MERANT ODBC drivers file. See "Linking SQL Interface to the ODBC Driver on UNIX" on page 174.

About Setting Your Environment on UNIX

On UNIX, you run `essinst`, or `setup.sh` (which runs `essinst`), to install SQL Interface. Then, you run `inst-sql.sh` to symbolically link the SQL Interface library file to your MERANT ODBC drivers file. Before and after you run `inst-sql.sh`, you must set the proper environment for your ODBC driver.

The following sections address setting your environment on UNIX:

- "Setting Up ODBC Drivers Before Linking Them to SQL Interface" on page 172
- "Linking SQL Interface to the ODBC Driver on UNIX" on page 174
- "After You Link SQL Interface to Your ODBC Driver on UNIX" on page 176

8

Setting Up ODBC Drivers Before Linking Them to SQL Interface

After you install SQL Interface on AIX, HP-UX, or Solaris, you must set up your ODBC driver before you link SQL Interface to your ODBC driver by running `inst-sql.sh`.

To set your environment so you can link SQL Interface to the driver you chose, complete the steps after you run `setup.sh`, but before you run `inst-sql.sh`. The steps you take depend on the driver and platform you use. Examples for the following configurations are provided in this section:

For information about setting up MERANT Oracle or Informix drivers, see the *MERANT DataDirect Connect ODBC Reference*. Also see Oracle or Informix documentation.

Setting Up the MERANT DB2 Driver on AIX or Solaris

To set the environment so you can link SQL Interface to the MERANT DB2 driver, complete the following steps after you run `setup.sh`, but before you run `inst-sql.sh`:

1. Log in as the instance owner, and make sure you have Read or Read/Write access to `$ARBORPATH`.

2. Set the DB2 environment variable, for example, `INSTHOME`, to point to the home directory of your DB2 instance. An *instance* corresponds to one or more databases. For every database you want to connect to, you must ensure that an instance corresponding to that database exists.

3. Set the environment variable DB2INSTANCE to point to the instance name, and set LIBPATH.

Here is a Bourne shell example:

```
DB2INSTANCE=inst1
LIBPATH=/lib:/usr/lib:/home/essbase/bin:$INSTHOME/sqllib/lib:
export INSTHOME DB2INSTANCE LIBPATH
```

where INSTHOME is the environment variable that you defined in step 2, and "inst1" is the instance name.

For more information about setting environment variables for the MERANT DB2 driver, see the *MERANT DataDirect Connect ODBC Reference*. Also see DB2 documentation.

Setting Up the IBM DB2 Driver on AIX

To set your environment so you can link SQL Interface to the IBM DB2 driver, complete the following steps after you run setup.sh, but before you run inst-sql.sh:

1. Make sure you have the relational client software for DB2 installed on the same AIX machine that you are using for SQL Interface.

2. Create a configuration file, esssql.cfg, as described in the *Hyperion Essbase SQL Interface Guide*.

Here is an example of an esssql.cfg file:

```
[
Description "IBM DB2 Call Level Interface"
DriverName db2.o
Database 1
Password 1
UserId 1
SingleConnection 0
UpperCaseConnection 0
IsQEDriver 0
]
```

3. Set the environment variable INSTHOME to point to the home directory of your DB2 instance.

8

4. Define DB2 *instance* names for SQL Interface. An *instance* corresponds to one or more databases. For every database you want to connect to:

   a. You must ensure that an instance corresponding to that database exists.

   b. You must have Read or Read/Write access to the driver manager library, `libodbc.a` in `INSTHOME/sqllib/odbclib/lib`.

   c. You must include the instance in the LIBPATH as shown in step 6.

5. Log in as the Hyperion Essbase system administrator account. This is the account used to install and run Hyperion Essbase. You should have Read or Read/Write access to the driver manager library, `libodbc.a`, in `INSTHOME/sqllib/odbclib/lib`.

6. Set the environment variables `DB2INSTANCE` and `LIBPATH` as in the following Bourne shell example:

```
DB2INSTANCE=inst1
LIBPATH=/lib:/usr/lib:/home/essbase/bin:$INSTHOME/sqllib/lib:
export INSTHOME DB2INSTANCE LIBPATH
```

where INSTHOME is the environment variable that you defined in step 3, and "inst1" is the instance name.

For more information about setting environment variables for the IBM DB2 driver, see IBM documentation.

Linking SQL Interface to the ODBC Driver on UNIX

You have done the following:

- Installed and configured your RDBMS. See "Setting Up RDBMS Before Installing SQL Interface on UNIX" on page 167.

- Installed SQL Interface. See "Installing SQL Interface on UNIX from the CD-ROM" on page 169.

- Set up the ODBC driver you selected during installation. See "Setting Up ODBC Drivers Before Linking Them to SQL Interface" on page 172.

You are ready to link SQL Interface to your ODBC driver by running `inst-sql.sh`.

`essinst`, or `setup.sh` (which runs `essinst`), places `inst-sql.sh` in the `$ARBORPATH` directory. The default is `/home/hyperion/essbase`. Running `inst-sql.sh` ensures that server processes can access the software necessary for SQL Interface.

`inst-sql.sh` uses the `odbc.ini`, `odbcinst.ini`, and template (extension `.tmpl`) files in the `$ARBORPATH/setup` directory to create a set of files that point Hyperion Essbase to the correct driver product.

The script handles the following for you:

- Ensures root privileges are not accidentally granted to a user-level script.

- Checks for the availability of the Hyperion Essbase server.

- Checks for the availability to the Hyperion Essbase server of supported database systems.

- Provides default environment extensions as shell files in the `$ARBORPATH/bin` directory.

- Provides initialization files in the `$ARBORPATH/bin` directory for access by the driver software.

- Creates and dynamically compiles an extra library if needed.

- Generates the shell scripts `odbc.csh` for the C shell, and `odbc.sh` for the Bourne or Korn shell. These files contain commands that update the library path to specify the correct environment variables for Hyperion Essbase. After you run `inst-sql.sh` to link SQL Interface to the ODBC driver, you can optionally use these scripts to update your library path, or you can do it manually. See

8

➤ To run `inst-sql.sh`, do the following:

1. Using the Hyperion Essbase system administrator account (this is the account used to install and run Hyperion Essbase), enter the following command:

```
sh inst-sql.sh
```

2. Supply information when the script prompts you for it.

When the script finishes, the command prompt appears.

3. Enter the following command:

```
exit
```

After You Link SQL Interface to Your ODBC Driver on UNIX

You have linked SQL Interface to your ODBC driver by running `inst-sql.sh`. See "Linking SQL Interface to the ODBC Driver on UNIX" on page 174.

You are ready to complete the following post-installation tasks:

● Set the library path, either manually or by using the `odbc.sh` or `odbc.csh` shell scripts. See "Setting the Library Path on UNIX" on page 177.

● If you are using the MERANT DB2 driver, bind files in the `/ESSBASE/bin` directory. See "Binding Files for the MERANT DB2 driver on AIX or Solaris" on page 179,

● Complete the configuration of your ODBC drivers by editing the `.odbc.ini` file. Some examples are provided. See "Editing .odbc.ini Driver Files" on page 180.

● Configure the ODBC data source and (if applicable) configure your non-MERANT ODBC driver. See the *Hyperion Essbase SQL Interface Guide*, located in the `DOCS/CLIENT` directory.

Setting the Library Path on UNIX

On UNIX, you must add the $ARBORPATH/dlls directory to the library path before you can use SQL Interface. If your installation of SQL Interface is an upgrade to a pre-existing installation, you may not have to re-set the library path.

Alternatively, you can use shell scripts created by inst-sql.sh to update your library path. See .

- On Solaris, add the $ARBORPATH/dlls directory to the LD_LIBRARY_PATH variable:

  For example, if you are using the C shell, the .cshrc file might look like this:

  ```
  setenv ARBORPATH /hyperion/essbase
  setenv LD_LIBRARY_PATH /usr/lib:$ARBORPATH/dlls
  ```

- On AIX, add the $ARBORPATH/dlls directory to the LIBPATH variable:

  For example, if you are using the C shell, the .cshrc file might look like this:

  ```
  setenv ARBORPATH /hyperion/essbase
  setenv LIBPATH /usr/lib:$ARBORPATH/dlls
  ```

- On HP-UX, add the $ARBORPATH/dlls directory to the SHLIB_PATH variable:

  For example, if you are using the C shell, the .cshrc file might look like this:

  ```
  setenv ARBORPATH /hyperion/essbase
  setenv SHLIB_PATH /usr/lib:$ARBORPATH/dlls
  ```

  The .profile file, if you are using the Bourne or Korn shell, might look like this:

  ```
  ARBORPATH=/home/hyperion/essbase
  export ARBORPATH
  SHLIB_PATH=$SHLIB_PATH:$ARBORPATH/dlls
  export SHLIB_PATH
  PATH=/usr/bin:/etc:/usr/sbin:/usr/ucb:$ARBORPATH/dlls:
        /usr/bin/X11:/sbin:.export PATH
  ```

  Note: HP-UX uses SHLIB_PATH to search for shared library files at runtime, and LPATH to link to shared library files while compiling.

- For more information, see your UNIX documentation.

8

Using Shell Scripts to Set the Library Path (Optional)

The script that links SQL Interface to your ODBC driver (`inst-sql.sh`) also creates shell scripts which you can use to automatically update the library path for Hyperion Essbase. `inst-sql.sh` generates the following files and places them in the `$ARBORPATH/setup` directory:

- `odbc.csh` for the C shell

- `odbc.sh` for the Bourne and Korn shell.

These files contain commands that specify the correct environment variables for Hyperion Essbase. `$ARBORPATH/dlls` is added to the library path, and `ODBCINI` is set to `$ARBORPATH/bin/.odbc.ini`.

To use these scripts so that Hyperion Essbase environment variables are available to your shell environment every time you log in, do one of the following after you run `inst-sql.sh`:

- In the C shell, use the **source** command against odbc.csh in the `.login` or `.cshrc` file. For example, edit the `.login` or `.cshrc` file to include this line:

  `% source $ARBORPATH/setup/odbc.csh`

- In the Bourne or Korn shell, use the **.** (dot) command against `odbc.sh.` in the `.profile` file. For example, edit the `.profile` file to include this line:

  `% . $ARBORPATH/setup/odbc.sh`

Binding Files for the MERANT DB2 driver on AIX or Solaris

➤ To bind files so the DB2 driver can understand the MERANT commands on AIX or Solaris, after you run `inst-sql.sh`, complete the following:

1. Change to the `$ARBORPATH/bin` directory.

For example:

```
cd /home/hyperion/essbase/bin
```

2. Start the DB2 command-line interface.

For example:

```
db2
```

3. Connect to the DB2 database.

For example:

```
CONNECT TO DATABASENAME
```

4. Bind all files, or at least the `.bnd` files, in your `$ARBORPATH/bin` directory.

For example:

```
BIND iscsso.bnd
```

File names may change for new driver versions. For the files you need to bind, list all files with the `bnd` extension in the `$ARBORPATH/bin` directory.

It is recommended that you bind all the files in the `bin` directory.

5. Grant user privileges for accessing data.

For more information about binding and granting privileges, see the *MERANT DataDirect Connect ODBC Reference*.

8

Editing .odbc.ini Driver Files

To complete your ODBC driver setup after installing Hyperion Essbase SQL Interface, you need to modify `.odbc.ini` to include the correct driver and data source names. Examples are provided for the IBM DB2 driver on AIX, and for the MERANT DB2 driver on Solaris.

Editing .odbc.ini for the IBM DB2 Driver on AIX

To set up your `.odbc.ini` file for DB2 Version 5 on AIX, after you run `inst-sql.sh`, do the following:

Note: On AIX, `inst-sql.sh` prompts you to choose between the MERANT DB2 driver and the IBM Call-Level Interface (CLI) for DB2 driver. `inst-sql.sh` links SQL Interface to different libraries depending on which DB2 driver you choose. If you want to switch DB2 drivers sets after you run `inst-sql.sh`, re-install SQL Interface.

In `$ARBORPATH` (the directory where Hyperion Essbase is installed), modify `.odbc.ini` to include the correct driver and data source name.

Here is an example of an `.odbc.ini` file:

```
[ODBC Data Sources]
DB25SAMP=IBM DB2 ODBC DRIVER

[DB25SAMP]
Driver=/home/db2inst/sqllib/lib/db2.o
Database=dbname

[ODBC]
Trace=0
TraceFile=odbctrace.out
InstallDir=/home/db2inst/sqllib/odbclib
```

In these examples, `/home/db2inst` is the `$INSTHOME` directory. You cannot use environment variables in `.ini` files.

For more information on instances and other IBM-specific details, see the IBM manual, *DATABASE 2—Installing and Using AIX Clients*. See your IBM representative for the latest ordering information.

Editing .odbc.ini for the MERANT Oracle Driver on Solaris

To set up your `.odbc.ini` file for Oracle 8 on Solaris, do the following after you run `inst-sql.sh`:

In `$ARBORPATH` (the directory where Hyperion Essbase is installed), modify `.odbc.ini` to include the correct driver and data source name.

For example:

```
[ODBC Data Sources]
Oracle8=MERANT 3.60 Oracle 8 Driver

[Oracle8]
Driver=/home/hyperion/essbase/dlls/ARor815.so
Description=Oracle8
ServerName=<name>
```

where *<name>* is the appropriate Oracle server name.

Configuring the Data Source and ODBC Driver

You have already:

- Installed SQL Interface

- Set up the ODBC driver for your platform/driver configuration

- Linked SQL Interface to the ODBC driver using `inst-sql.sh`

- Set the library path for Hyperion Essbase

- Completed ODBC driver setup by editing the `odbc.ini` file

- Bound files in `ESSBASE/bin`, if you are using the DB2 driver

You are now ready to configure the data source. You may also need to configure your ODBC driver. To do these things, see the *Hyperion Essbase SQL Interface Guide*. This guide, `Essqlint.pdf`, is provided in the `\ESSBASE\DOCS\CLIENT` directory in `.PDF` format for online viewing and printing in Adobe Acrobat Reader (Version 3.0.1 or later).

8

Network Configuration Notes

This chapter provides information on the supported TCP/IP and Named Pipes network configurations. It serves as a checklist to help you ensure that the basic elements are installed and running on the client and server machines.

Refer to your network and operating system documentation for detailed information on installing the software and services required to run Hyperion Essbase. Your software provider assumes no liability and does not guarantee the accuracy of this information.

This chapter contains the following sections:

TCP/IP Support

The following protocol stacks have been tested and are supported with Hyperion Essbase:

Client Support:

- Microsoft Windows 95 or Windows 98 Native TCP/IP

Server Support:

- Windows NT or Windows 2000 Native TCP/IP from Microsoft
- Microsoft Windows 95 or Windows 98 Native TCP/IP (Personal Essbase only)
- HP-UX Native TCP/IP from Hewlett Packard
- AIX Native TCP/IP from IBM
- Solaris Native TCP/IP from Sun Microsystems
- Linux Native TCP/IP from Red Hat

Note: Check the conventional memory requirements of these drivers to ensure that you have sufficient memory available.

TCP/IP Protocol Stacks Tested and Supported with Hyperion Essbase

Client	Server	
	Windows NT Native TCP/IP	**Windows 95/98 Native TCP/IP (Personal Essbase)**
Windows 95/98 Native TCP/IP		✔ ✔

✔ Connectivity is tested and supported with Hyperion Essbase.

General TCP/IP Installation Procedures

This section provides general steps for installing TCP/IP.

Server

TCP/IP is included with Windows and UNIX platforms. As part of defining the Windows or UNIX computer with the TCP/IP protocol, the computer name and IP address are defined during the operating system's installation.

Client

➤ To install TCP/IP on a client machine, follow these steps:

1. Install one of the supported protocol stacks.

2. For each server on the network, update the client HOSTS file to contain an entry for the server. For example, the following entry would be made for the server MAPLE at IP address 198.137.238.10:

   ```
   198.137.238.10    MAPLE
   ```

The HOSTS file specifies the IP address of the server so the client can communicate with the server. A *host* is any device attached to the network that uses TCP/IP. To receive and deliver packets successfully between hosts, TCP/IP relies on information in the HOSTS file.

Different TCP/IP vendors store HOSTS files in different locations, and some vendors allow you to change the location. The following describes the individual requirements for the protocol stacks supported by Hyperion Essbase:

FTP: In the installation directory, FTP stores the file PCTCP.INI in which you specify the location of the HOSTS file. To set the location (in this case, to C:\PCTCP\HOSTS), add the following line to the [pctcp kernel] section of the .INI file:

```
host-table=C:\PCTCP\HOSTS
```

If you specified HOSTS during installation, this line is added automatically.

9

Troubleshooting Common Connection Problems

Before attempting an Hyperion Essbase client-server connection, you should test the protocol installation to ensure the connection is installed properly.

Use the PING command on the server to check that it is running and visible to your PC client. If the PING command is successful but the TELNET command is not, then there may be a problem with the inet daemon. If the PING command is unsuccessful on the server, you might have a routing or hardware problem.

Named Pipes Support

The following protocol stacks are tested and supported with Hyperion Essbase:

Client Support:

- Microsoft LAN Manager (NetBEUI)
- Microsoft Windows 95/98 Native NetBEUI

Server Support:

- Windows NT/2000 Native Named Pipes (NetBEUI)
- Microsoft LAN Manager (NetBEUI)

Named Pipes Protocol Stacks Tested and Supported with Hyperion Essbase

Client	Windows NT/2000 Server NetBEUI
Windows 95/98 Native NetBEUI	✔ ✔

✔ Connectivity is tested and supported with Hyperion Essbase.

Novell Using Named Pipes Support

Hyperion Essbase supports the Named Pipes protocol stack on Novell Netware LANs (local-area networks). Novell currently supports Named Pipes services for PC clients connecting to Windows NT servers, but does not offer support for UNIX servers.

Windows Clients

This section contains information on connecting the Windows 95 or Windows 98 client computer to Windows NT or Windows 2000 servers using Named Pipes.

Connecting from Windows 95 or Windows 98 to Windows NT

To connect from Windows 95 or Windows 98 to Windows NT or Windows 2000 using Named Pipes, you might need to connect to the Windows NT or Windows 2000 server independently of Hyperion Essbase before attempting to connect to the Hyperion Essbase server. To connect to the Windows NT or Windows 2000 server:

1. Open **Network Neighborhood** from your Windows 95 or Windows 98 desktop.

2. Locate the server name in the list. Double-click the server name.

3. If prompted, enter the password for the server, then click **OK**.

   Figure 61: Entering the Server Password
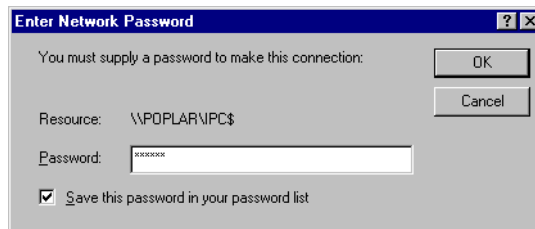
   When you are connected to the server, the server window appears showing one or more directories to which you have access.

4. Close the server window and **Network Neighborhood**.

Now you are ready to connect to Hyperion Essbase.

Increasing Connections on Windows 95 or Windows 98

When connecting from Windows 95 or Windows 98 to Windows NT or Windows 2000 using Named Pipes, if you see the error message, Network error: Cannot receive data, try increasing the maximum number of connections on your Windows 95 or Windows 98 machine:

1. Select Start > Settings > Control Panel.

2. Double-click the **Network** icon.

   The **Network** dialog box appears.

3. In the list box entitled **The following network components are installed**, locate and double-click the option for NetBEUI.

   If you have more than one NetBEUI option, choose one of them.

   The **NetBEUI Properties** dialog box appears.

4. Click the **Advanced** tab.

5. Select **Maximum Sessions** in the **Property** list box.

6. Increase the **Value** of the maximum sessions setting.

You may need to experiment with this setting. In the example below, the setting was increased from 10 to 20.

Figure 62: Increasing the Maximum Sessions Value to 20
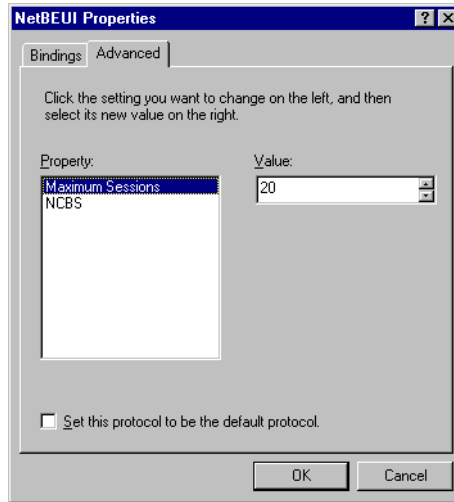
7. When done, click **OK**.

8. Click **OK** to close the **Network** dialog box.

9. Close **Control Panel**.

If prompted, reboot your machine.

Windows Servers

Novell supports Named Pipes service in its IPX protocol environment.

Note: The Novell Named Pipes environment does not require the Windows NT server to log in to the file server.

After installing Windows NT or Windows 2000, install the NWLINK IPX/SPX driver on the Windows NT or Windows 2000 server. Select the Network options during installation or configuration of Windows NT or Windows 2000, and select NWLINK IPX/SPX.

9

UNIX Server

Novell does not currently provide Named Pipes requestors for UNIX.

LAN Manager Using Named Pipes Support

Hyperion Essbase supports the Named Pipes protocol stack on Microsoft LAN Manager LANs. Microsoft currently provides Named Pipes services for PC clients connecting to Windows NT servers, but does not offer support for UNIX servers.

Windows Clients

LAN Manager workstations must meet the following requirements:

- Workstations must use LAN Manager 2.0 Enhanced (or above) drivers and have Named Pipes permission.
- Users executing "Net Logon" must attach to the appropriate server machine in the correct domain.

Windows Servers

LAN Manager support for Named Pipes service under Windows NT or Windows 2000 is built-in, using NetBEUI.

UNIX Server

LAN Manager does not support Named Pipes service to UNIX.

Advanced Installation Topics

This chapter describes how to update the Hyperion Essbase environment manually, how to configure Hyperion Essbase to use a non-English language, how to install Java components for Hyperion Essbase manually, and how to uninstall Hyperion Essbase software. It contains the following sections:

- "The Hyperion Essbase Environment" on page 191

- "Configuring Client and Server for Non-English Hyperion Essbase" on page 195

- "Manually Installing Java" on page 196

- "Advanced Configuration Options for Java" on page 204

The Hyperion Essbase Environment

This section explains the changes that are made to your system when you install Hyperion Essbase products, locally or to the network, using Windows NT 4.0, Windows 2000, Windows 95, or Windows 98.

When you install Hyperion Essbase products on UNIX platforms, you must update the environment manually. To learn how to update the UNIX environment for the Hyperion Essbase OLAP server, see Chapter 3, "UNIX Server Installation." To learn how to update the UNIX environment for SQL Interface, see Chapter 8, "SQL Interface Installation." To learn how to update the UNIX or Windows environment for Hyperion Essbase Application Programming Interface, see Chapter 7, "API Installation."

Environment Updates on Windows Platforms

When you install Hyperion Essbase products on Windows platforms, the installation program updates the following aspects of your computer's operating environment automatically:

- Registry keys are added to enable the system to detect the location of Hyperion Essbase components.

- If you install Hyperion Essbase Spreadsheet Add-in, it is automatically added to the latest version of Microsoft Excel or Lotus 1-2-3 installed on your computer. The installation program adds **Essbase** to the Excel or 1-2-3 menu bar, and points Excel or 1-2-3 to the appropriate add-in file in the Hyperion Essbase BIN directory.

  Note: ESSEXCLN.XLL is the Add-in file for Excel. ESS123.12A is the add-in file for Lotus 1-2-3. ESSXLEQD.XLA is an additional add-in file for Hyperion Essbase Query Designer for Excel.

When you install Hyperion Essbase products (except for the API) on Windows platforms, the installation program optionally updates the following aspects of your client computer's operating environment. You can select to perform these environment updates during installation, or you can perform these tasks manually.

- The $ARBORPATH system environment variable is created (or updated) to specify the root installation directory for Hyperion Essbase, and $ARBORPATH\Bin is added to the beginning of the path statement. These updates are required for running Hyperion Essbase. If you are re-installing Hyperion Essbase to the last pre-existing location, you may not need to update $ARBORPATH and Path.

- Program and help icons are added to the Hyperion Essbase 6.1 program group in the Windows Start Menu.

Manually Updating the Environment on Windows Platforms

To run Hyperion Essbase, the operating system needs to know where Hyperion Essbase is located. If you chose not to let the installation program create or update the $ARBORPATH environment variable and add the $ARBORPATH\BIN directory to the system-wide PATH variable, you can do it manually. This section explains the following:

Manually Updating the Environment on Windows NT and Windows 2000

➤ To update the environment settings manually on Windows NT 4.0 or Windows 2000, complete the following steps:

1. Select Start > Settings > Control Panel > System.

2. Find the Windows environment variable controls.

   - On Windows NT, choose the **Environment** tab.

   - On Windows 2000, choose the **Advanced** tab, and click the **Environment Variables** button.

3. Set the following system variables:

   - ARBORPATH=C:\HYPERION\ESSBASE, or wherever Hyperion Essbase is installed.

   - Add %ARBORPATH%/BIN to the Path variable, or C:\HYPERION\ESSBASE\BIN, depending on where Hyperion Essbase is installed.

   Note: You are changing System settings, which affect all users who access your machine.

4. Remove other, outdated `ARBORPATH` system variables or `ESSBASE\BIN` Path settings.

5. Reboot your computer, or log out and log in, to allow the changes to take effect.

Manually Updating the Environment on Windows 95 and Windows 98

➤ To update the environment settings manually on Windows 95 and Windows 98, complete the following steps:

1. Add the following environment variable to your `AUTOEXEC.BAT` file:

`ARBORPATH=C:\HYPERION\ESSBASE`

where *C:\HYPERION\ESSBASE* is the local or network directory where Hyperion Essbase is installed.

Do not put a space before or after the equals sign (=) in the `$ARBORPATH` environment setting.

2. Add `C:\HYPERION\ESSBASE\BIN` to your PATH statement.

where *C:\HYPERION\ESSBASE* is the directory where Hyperion Essbase is installed.

3. Remove references to installations of Hyperion Essbase in other directories.

Tip: You can type `SET` from an MS-DOS command prompt to view your current environment settings.

4. Reboot your computer.

Configuring Client and Server for Non-English Hyperion Essbase

To use non-English versions of Hyperion Essbase successfully, you must set the `ESSLANG` variable to be the same on both the client computers and the server computer.

Create the `ESSLANG` environment variable to point Hyperion Essbase clients and servers to the correct Uniscape code page (installed in the `ESSBASE\LOCALE` directory). If no `ESSLANG` value is set, the default is United States English.

You can create the `ESSLANG` variable as a user variable or a system variable. If `$ARBORPATH` is defined as a system variable, create `ESSLANG` as a system variable also. If `$ARBORPATH` is defined as a user variable, create `ESSLANG` as a user variable.

`ESSLANG` settings should follow this format: `ESSLANG`=*<locale>* where *<locale>* is a supported Uniscape GlobalC locale of the format:

<Language>_<Territory>.<code page name>@<sort sequence>

Examples of ESSLANG Settings:

```
ESSLANG=German_Germany.Latin1@Default
ESSLANG=French_France.Latin1@Default
ESSLANG=Spanish_Spain.Latin1@Spanish
ESSLANG=Italian_Italy.Latin1@Default
ESSLANG=Portuguese_Portugal.Latin1@Default
ESSLANG=Norwegian_Norway.Latin1@Danish
ESSLANG=Swedish_Sweden.Latin1@Swedish
ESSLANG=Danish_Denmark.Latin1@Danish
ESSLANG=Finnish_Finland.Latin1@Finnish
ESSLANG=Japanese_Japan.MS932@binary
ESSLANG=CanadianFrench_French-Canada.Latin1@Default
ESSLANG=TraditionalChinese_Taiwan.MS950@Binary
ESSLANG=SimplifiedChinese_China.MS936@Binary
ESSLANG=Albanian_Albania.ISO-8859-2@Default
ESSLANG=Arabic_SaudiArabia.ISO-8859-6@Default
ESSLANG=Bulgarian_Bulgaria.ISO-8859-5@Default
ESSLANG=Byelorussian_Belarus.ISO-8859-5@Default
ESSLANG=Catalan_Catalonia.Latin1@Default
ESSLANG=Croatian_Croatia.ISO-8859-2@Croatian
ESSLANG=Czech_CzechRepublic.ISO-8859-2@Czech
ESSLANG=Dutch_Netherlands.Latin1@Default
ESSLANG=Estonian_Estonia.ISO-8859-4@Estonian
```

10

```
ESSLANG=Farsi_Iran.ISO-8859-6@Default
ESSLANG=Greek_Greece.ISO-8859-7@Default
ESSLANG=Hebrew_Israel.ISO-8859-8@Default
ESSLANG=Hungarian_Hungary.ISO-8859-2@Hungarian
ESSLANG=Korean_Korea.MS949@Binary
ESSLANG=Latvian_Latvia.ISO-8859-4@Latvian
ESSLANG=Lithuanian_Lithuania.ISO-8859-4@Lithuanian
ESSLANG=Macedonian_Macedonia.ISO-8859-5@Default
ESSLANG=Romanian_Romania.ISO-8859-2@Romanian
ESSLANG=Russian_Russia.ISO-8859-5@Default
ESSLANG=Serbian_Yugoslavia.ISO-8859-2@Default
ESSLANG=CyrillicSerbian_Yugoslavia.ISO-8859-5@Default
ESSLANG=Slovak_Slovakia.ISO-8859-2@Slovak
ESSLANG=Slovenian_Slovenia.ISO-8859-2@Slovenian
ESSLANG=Thai_Thailand.MS874@Thai
ESSLANG=Turkish_Turkey.ISO-8859-9@Turkish
ESSLANG=Ukrainian_Ukraine.ISO-8859-5@Ukrainian
ESSLANG=Vietnamese_VietNam.MS1258@Vietnamese
```

Manually Installing Java

Hyperion Essbase requires that you install both the Java™ Runtime Environment (JRE) and the Java API for XML Parsing (JAXP) on computers running the Hyperion Essbase server to support the Java-based features in the product. The Java Virtual Machine (JVM) is a component of the JRE.

To install Java to work with Hyperion Essbase, you must perform the following steps:

● Install the Java Runtime Environment (JRE).

● Install the Java API for XML Parsing (JAXP).

● Set the JVMMODULELOCATION parameter in the essbase.cfg file.

● On UNIX systems, set environment variables.

Note: You may need to install operating system patches to support the JRE. For more information, see .

If you have already installed a supported version of the Java Runtime Environment, you do not have to reinstall the JRE. However, you must verify that the JAXP component is installed, set the JVMMODULELOCATION parameter, and, on UNIX systems, set additional environment variables.

For more information about supported versions of the JRE, see "Windows Server Requirements" on page 26 or "UNIX Server Requirements" on page 58.

Installing the Java Runtime Environment

The Java Runtime Environment is required by Hyperion Essbase to enable Java-based features, such as custom-defined macros and custom-defined functions. The JRE must be installed on the computer running Hyperion Essbase server.

Note: After installing the JRE, you must install the JAXP package and set the JVMMODULELOCATION parameter to enable the Java-based functions of Hyperion Essbase. For installation on UNIX systems, you must also set environment variables.

Installing the JRE on Windows Systems

The Java Runtime Environment installation packages for Windows systems are self-installing executables that walk you through the installation of the JRE.

➤ To install the Java Runtime Environment on Windows systems:

1. Insert the Hyperion Essbase CD-ROM into your CD-ROM drive.

2. Change to the root directory of the CD-ROM (for example, `cd /cdrom`).

3. Change to the directory containing the Java Runtime Environment (JRE) installer for the Windows system:

   - For Windows 95 and Windows 98, change to the directory, `\win32\server\win9x\jre\`

   - For Windows NT and Windows 2000, change to the directory, `\win32\server\nt\jre\`

4. Run the `setup.exe` file in the directory.

5. Follow the on-screen installation instructions to complete the installation of the JRE.

   After the JRE installation is complete, install the JAXP package. For more information, see "Installing the Java API for XML Parsing" on page 199.

Installing the JRE on UNIX Systems

The Java Runtime Environment installation packages and installation procedures for each of the supported platforms are substantially different. Readme files and installation instructions from the JRE providers are included in .txt or .htm files with each package. Review these instructions carefully. You may need to refer to the web site of the JRE provider for additional information about installing the JRE.

➤ To install the Java Runtime Environment on UNIX systems:

1. Log in as the Hyperion Essbase system administrator account. For example, log in as **admin** if you created a user account called **admin** that owns the target installation directory, /home/hyperion/essbase.

2. Insert the CD-ROM into your CD-ROM drive.

3. Change to the root directory of the CD-ROM (for example, cd /cdrom).

4. Change to the directory containing the Java Runtime Environment (JRE) install package for the operating system:

   ● For Solaris, change to the directory, /solaris/server/jre/

   ● For AIX, change to the directory, /aix/server/jre/

   ● For HP-UX, change to the directory, /hpux/server/jre/

5. Decompress the .tar file into a temporary directory using the UNIX tar utility.

6. Review the readme file in the directory for system requirements and installation instructions to complete the installation of the JRE.

   Note: Use of the JRE requires operating system patches on some platforms. Review the readme file for patch requirements and verify that you have installed the correct patch level to support the JRE you are installing.

7. Set any environment variables specified by the readme or installation instructions for the JRE you have installed.

   After the JRE installation is complete, install the JAXP package. For more information, see "Installing the Java API for XML Parsing" on page 199.

Installing the Java API for XML Parsing

The JAXP is required by Hyperion Essbase to enable Java-based features such as custom-defined macros and custom-defined functions. You must install the JAXP on the computer running Hyperion Essbase server. Installation of the JAXP is required for all supported operating systems.

➤ To install Java API for XML Parsing:

1. Log on to the computer that runs Hyperion Essbase.

   - On Windows systems, log on with an account you use to run Hyperion Essbase.

   - On UNIX systems, log on with the Hyperion Essbase system administrator account. For example, log in as **admin** if you created a user account called **admin** that owns the target installation directory, `/home/hyperion/essbase`.

2. Insert the CD-ROM into your CD-ROM drive.

3. Change to the root directory of the CD-ROM (for example, `cd /cdrom`).

4. Change to the directory containing the JAXP installation package for the operating system:

   - For Windows 95 and Windows 98, change to the directory, `\win32\server\win9x\jaxp\`

   - For Windows NT and Windows 2000, change to the directory, `\win32\server\nt\jaxp\`

   - For Solaris, change to the directory, `/solaris/server/jaxp/`

   - For AIX, change to the directory, `/aix/server/jaxp/`

   - For HP-UX, change to the directory, `/hpux/server/jaxp/`

5. In the \jaxp directory, perform one of the following steps:

- For Windows systems, run the setup.exe file and install the software into the *JREHOME*\lib\ext directory.

- For UNIX systems, locate the .zip file and use an unzip utility, such as WinZip™ or Info-ZIP, to decompress the .zip file into the *JREHOME*\lib\ext directory.

JREHOME represents the installation directory for the Java Runtime Environment.

- On Windows Systems, the default *JREHOME* location is C:\Program Files\JavaSoft\JRE\1.3\

- On Solaris, the default *JREHOME* location is /usr/j2se/jre/

- On AIX, the default *JREHOME* location is /usr/java130/jre/

- On HP-UX, the default *JREHOME* location is /opt/java1.2/jre/

In addition to these changes, you must set the JVMMODULELOCATION to enable Hyperion Essbase to find and load Java. For more information, see "Setting JVMMODULELOCATION" on page 200.

Setting JVMMODULELOCATION

JVMMODULELOCATION is a setting in the essbase.cfg file that enables you to designate a specific installation of the Java Runtime Environment for use with Hyperion Essbase. This setting is particularly useful if you have multiple versions of Java installed on the computer running Hyperion Essbase server.

To set the JVMMODULELOCATION parameters, you must specify the full path and filename of the Java Virtual Machine (JVM) library. The location and name of this library varies, depending on the JRE version and the operating system you are using. The default locations for the JVM are shown in the following table.

Table 20: Default Locations and Names of JVM Library Files

Operating System (JRE version)	Default Location and Name of JVM Library File
Windows systems (JRE 1.3)	C:\Program Files\JavaSoft\JRE\1.3\bin\hotspot\jvm.dll
Solaris (JRE 1.3)	/usr/j2se/jre/lib/sparc/client/libjvm.so [1]
AIX (JRE 1.2)	/usr/java120/jre/bin/classic/libjvm.a
HP-UX (JRE 1.2)	/opt/java1.2/jre/bin/PA_RISC/classic/libjvm.sl [2]

[1] Do not set JVMMODULELOCATION to this location. See the following caution note for details.

[2] The directory, PA_RISC, may be PA_RISC2.0, depending on the processor used by the computer running HP-UX.

CAUTION: On Solaris, do not set the JVMMODULELOCATION to point directly to the `libjvm.so` file, or the JVM will crash when Hyperion Essbase attempts to load it. Set JVMMODULELOCATION to the symbolic link for this file. The default location for the symbolic link is `/usr/j2se/jre/lib/sparc/libjvm.so`.

➤ To set JVMMODULELOCATION:

1. On the computer that runs Hyperion Essbase server, change to the *ARBORPATH*\bin directory.

2. Locate the `essbase.cfg` file in this directory and open the file in a text editor. If the file does not exist, create and open a new text file named `essbase.cfg`.

3. In the `essbase.cfg` file, add a new line to the end of the file and type the following text:

   JVMMODULELOCATION *FullpathAndFilenameOfJvmLibraryFile*

   Do not include spaces in the path and filename. Do not enclose the parameter in quotation marks. A semicolon is not required at the end of the line.

   On Windows systems, be sure to specify the path and filename without spaces, as in the following example:

```
JVMMODULELOCATION c:\progra~1\javasoft\jre\1.3\bin\hotspot\jvm.dll
```

4. Save the changed text file as `essbase.cfg`.

5. Close the file and exit the text editor.

On UNIX systems, you must update additional environment variables to enable the JVM to work with Hyperion Essbase in addition to these changes. For more information, see "Updating the Environment for Java on UNIX Systems" on page 202.

Updating the Environment for Java on UNIX Systems

On AIX and HP-UX, you must update environment variables to enable Hyperion Essbase to use the Java Runtime Environment.

Updating Environment Variables for Java on Solaris

On Solaris, if you are using version 1.3 of the Java Runtime Environment, you must set an ESS_JVM_OPTION.

In the C shell, add the following text to the `.cshrc` file:

```
setenv ESS_JVM_OPTION1 "-XX:+AllowUserSignalHandlers"
```

In the Bourne or Korn shell, add the following text to the `.profile` file:

```
ESS_JVM_OPTION1=-XX:+AllowUserSignalHandlers;
export ESS_JVM_OPTION1;
```

Updating Environment Variables for Java on AIX

On AIX, you must update the LIBPATH setting to include the *JREHOME*/bin/ and the *JREHOME*/bin/classic/ directories. The default directory location for *JREHOME* is shown in the following examples.

Note: These LIBPATH directory entries must be added to the beginning of the LIBPATH environment variable.

In the C shell, add the following text to the .cshrc file:

```
setenv LIBPATH "/usr/java120/jre/bin:
/usr/java120/jre/bin/classic:$LIBPATH"
```

In the Bourne or Korn shell, add the following text to the .profile file:

```
LIBPATH=/usr/java120/jre/bin:/usr/java120/jre/bin/classic:
$LIBPATH; export LIBPATH;
```

Updating Environment Variables for Java on HP-UX

On HP-UX, you must update the SHLIB_PATH setting to include the *JREHOME*/lib/PA_RISC/ and the *JREHOME*/lib/PA_RISC/classic/ directories. The default directory location for *JREHOME* is shown in the following examples.

Note: The directory, PA_RISC, may be PA_RISC2.0, depending on the processor used by the computer running HP-UX.

In addition, due to a problem with the Just In Time compiler in release 1.2.2 of the JRE for HP-UX, you must also set an ESS_JVM_OPTION.

In the C shell, add the following text to the .cshrc file:

```
setenv SHLIB_PATH "$SHLIB_PATH:/opt/java1.2/jre/bin/PA_RISC:
/opt/java1.2/jre/bin/PA_RISC/classic"
setenv ESS_JVM_OPTION1 "-Djava.compiler=NONE"
```

In the Bourne or Korn shell, add the following text to the .profile file:

```
SHLIB_PATH=$SHLIB_PATH:/opt/java1.2/jre/bin/PA_RISC:
/opt/java1.2/jre/bin/PA_RISC/classic; export SHLIB_PATH;
ESS_JVM_OPTION1=-Djava.compiler=NONE; export ESS_JVM_OPTION1;
```

Advanced Configuration Options for Java

If you are having difficulties getting Hyperion Essbase to work with Java, it may be necessary to set start-up options for the Java Virtual Machine (JVM). You can make Hyperion Essbase use specific JVM start-up options when it loads the JVM by setting the environment variables ESS_JVM_OPTION1 through ESS_JVM_OPTION9. For Solaris and HP-UX, you must set one of these options so that Hyperion Essbase can work with the JVM.

For examples of setting ESS_JVM_OPTION environment variables, see "Updating Environment Variables for Java on Solaris" on page 202 and "Updating Environment Variables for Java on HP-UX" on page 203.

Note: Use and support of ESS_JVM_OPTION settings is likely to change in future releases of Hyperion Essbase.

Uninstalling Hyperion Essbase

You can uninstall Hyperion Essbase from Windows 95, Windows 98, Windows NT 4.0, and Windows 2000 platforms. This section helps you determine conditions for uninstalling Hyperion Essbase, and shows you how to uninstall Hyperion Essbase server and client software from your computer or from a network drive.

This section contains the following sub-sections:

- "Guidelines for Uninstalling" on page 204
- "What You Can Uninstall" on page 205
- "Instructions for Uninstalling" on page 206

Guidelines for Uninstalling

Before uninstalling Hyperion Essbase software, read the following guidelines:

- Do not manually delete, move, rename or alter Hyperion Essbase files and directories. This causes problems with uninstalling.
- Use the Windows Add/Remove Programs icon in the Control Panel to uninstall software, as described in "Instructions for Uninstalling" on page 206.
- If you want to reinstall Hyperion Essbase, uninstall the existing version first.

- You must uninstall Hyperion Essbase software components separately. They should be uninstalled in the following order (assuming you installed all components): API, Runtime Client, Spreadsheet Add-in for Excel, Spreadsheet Add-in for 1-2-3, Application Manager, SQL Interface, Hyperion Essbase OLAP server. This is the reverse of the recommended installation order.

- If you previously set up your client computer to share Hyperion Essbase client software on a network drive, and you want to install Hyperion Essbase to your local hard drive, uninstall the shared configuration first.

- If you perform two or more Hyperion Essbase installations on or from the same computer, note that the uninstaller removes only the last installation. Therefore, for ease of removal, it is recommended that system administrators who install software locally use a different computer to install software to a network drive for shared use.

- The uninstall program works only for Hyperion Essbase Release 6.0 and Release 6.1; you cannot uninstall earlier releases using the Windows Add/Remove Programs method.

What You Can Uninstall

You can uninstall all types of Hyperion Essbase Release 6.0 and Release 6.1 installations. This includes the following:

- Local installations of Hyperion Essbase OLAP server, Hyperion Essbase API, and Hyperion Essbase SQL Interface software on Windows NT 4.0 and Windows 2000.

- Local installations of Hyperion Essbase client software on Windows 95, Windows 98, Windows NT, and Windows 2000. Client software includes Hyperion Essbase Application Manager, Hyperion Essbase Spreadsheet Add-in, and the Hyperion Essbase Runtime Client.

- Network installations of Hyperion Essbase client software on Windows 95, Windows 98, Windows NT, and Windows 2000.

- Shared-use configurations, in which a local client computer is set up to run shared executables on the network. This type of uninstallation does not remove the software from the network drive; rather, it removes from the client hard drive the environment and registry settings which enable shared use.

- Local installations of Personal Essbase client and server software on Windows 95, Windows 98, Windows NT, and Windows 2000.

10

Instructions for Uninstalling

To uninstall Hyperion Essbase, use the Windows Add/Remove Programs icon in the Control Panel.

➤ To uninstall Hyperion Essbase from Windows NT 4.0, Windows 95, Windows 98, and Windows 2000,

1. Select Start > Settings > Control Panel > Add/Remove Programs.

2. Complete the following step that is appropriate for your operating system:

- On Windows 95, Windows 98, and Windows NT 4.0:

  On the **Install/Uninstall** tab, select the Hyperion Essbase program you wish to remove, and click **Add/Remove**.

- On Windows 2000:

  Select **Change/Remove Programs**, select the Hyperion Essbase program you wish to remove, and click **Change/Remove**.

3. Click **Yes** to confirm that you want to remove the program.

4. If a **Remove Shared File?** prompt appears, click **Yes To All**.

   Note: The prompt appears because Hyperion Essbase products are uninstalled individually, and many Hyperion Essbase files are shared with other Hyperion Essbase products. For example, ESSAPIN.DLL is installed with the Hyperion Essbase OLAP Server, as well as with client software and the Application Programming Interface. Clicking Yes To All makes uninstalling faster, and does not disrupt other programs installed on your computer.

Windows removes the program and associated files. If some elements of the program could not be removed, a **Details** button is present.

5. Click **Details** for more information.

6. Click **OK**.

Index

Symbols

+s flag (UNIX), 162

A

access privileges, assigning, 126
accessing
    add-on products, 20
    online HTML documentation, xvi, 92
    sample applications, 114, 126
activity log files
    UNIX servers, 62, 68
    Windows servers, 34
adding
    Essbase Excel toolbar, 108
    IP addresses, 50
    server licenses, 21
    Spreadsheet Add-in to Excel or 1-2-3, 110
add-on products, 20
Agent
    console commands
        UNIX, 76
        Windows, 38
AIX servers, 57
    API
        installing, 158
        library path, 161
        system requirements, 154
    LIBPATH setting, 72
    multithreading, 62
    system requirements, 59
AllowUserSignalHandlers option for Java, 202
API. *See* Application Programming Interface
api.tz, 160

APP directory
    UNIX servers, 67
    Windows servers, 33
Application Desktop window, 103
    available applications in, 115
    changing server names, 132
application files
    default location on UNIX servers, 67
    default location on Windows servers, 33
    migrating from Release 5.x, 82
    stored on client hard drive, 97
Application Manager
    creating partition user, 128
    default directories on network drive, 99
    desktop, 101
    installing
        as shared on network drive, 94
        to hard disk, 84
        to network drive, 90
    online help icon, 100
    program files, 97
    running, 100
    sample applications, 114
    shared network installation, 94
    Spreadsheet Add-in and, 81
    Start Menu icon, 100
    system requirements, 80
    troubleshooting connections, 104
    upgrading, 81
Application Programming Interface (API)
    API directory, 160
    as an add-on product option, 20, 23
    default directories, 160
    files required to compile programs, 161
    installation media, 156

D

directories created, 32
installation overview, 27
Windows system files, Runtime Client shared
installation, 150

X

X Windows, 62
Xchgrate database
connecting to, 122
introduced, 113