

# Hyperion Essbase Release 6.1

## *Installation and Migration*

Congratulations on receiving Hyperion® Essbase® Release 6.1.

This booklet contains information on:

- Installing and migrating, including a plan for migrating calc scripts, report scripts, ESSCMD scripts, MaxL scripts, and API programs.
- Platform support and hardware requirements.

For information on Hyperion Essbase Release 6.1 new features and documentation, see the *Hyperion Essbase New Features* booklet.



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# Installing Hyperion Essbase Release 6.1

If you are a new user, see “[Installation Roadmap](#)” on page 7. For detailed installation information, see the *Hyperion Essbase Installation Guide*. For platform information, see “[Platform Support and Hardware Requirements](#)” on page 23.

## What’s Changed in the Installation

Please note the following installation and platform-related changes implemented for Release 6.1.

### Default Installation Directory

The default directory for new installations is `C:\HYPERION\ESSBASE` (`/home/hyperion/essbase` on UNIX). Formerly, the default directory was `C:\ESSBASE` (`/home/essbase` on UNIX). If you are installing on a computer that already has Hyperion Essbase software installed, the default directory will be whatever is specified in your existing `$ARBORPATH` environment variable.

### Automatic MaxL Installation

Upon installation of Release 6.1, MaxL is automatically installed to the `bin` directory. To launch the MaxL Command Shell, type `essmsh` at the operating-system command prompt. MaxL documentation is installed to the `Docs\Techref\MaxL` directory (`docs/techref/maxl` on UNIX). To launch the MaxL documentation, open `maxlref.htm` in your Web browser.

For more information, refer to the *Hyperion Essbase Installation Guide*.

### Java Installation on Windows Systems

When you install Hyperion Essbase, you can include Java™ as part of the installation. In Release 6.1, using custom-defined macros and custom-defined functions requires Java. If you choose not to install Java, custom-defined macros and functions are not enabled.

## Java Installation on UNIX Systems

In Release 6.1, Java is required for using custom-defined macros and custom-defined functions. On UNIX systems you are not given the option of installing Java. You must manually install the Java. For information about installing Java on UNIX systems, see the *Hyperion Essbase Installation Guide*.

## SQL Interface Installation Changes

Hyperion Essbase Release 6.1 provides version 3.6 of the MERANT-branded ODBC drivers and a sample `odbc.ini` file to support new versions of Oracle and DB2 while dropping support for older versions. Formerly, version 3.11 was provided with Release 6.0 and versions 3.02 and 3.10 were provided with Release 5.x.

Instead of providing DB2 `bnd` files as was done with previous versions, DB2 users can use the native IBM ODBC provided with the DB2 client.

Hyperion Essbase does not install the GlobalC files under the `dlls/locale` directory in Release 6.1. These files are installed in the `$(ARBORPATH)/locale` directory for all platforms.

## Sample Custom-Defined Functions

Release 6.1 of Hyperion Essbase automatically installs sample custom-defined functions (CDFs) as a Java class called `Statistics`, which is in a Java Archive (`.jar`) file. Refer to the online *Technical Reference* in the `DOCS` directory for documentation about these sample functions.

## Hyperion Essbase Toolbar

The `esstoolb.xls` file, which contains the Hyperion Essbase Spreadsheet Add-in toolbar for Excel, has been updated with a new toolbar without the button for the obsolete feature, SQL Drill-Through.

You need to replace the toolbar in Excel only if you have an existing Hyperion Essbase toolbar installed. If this is your first Hyperion Essbase installation, you must open `esstoolb.xls` one time to install the Hyperion Essbase toolbar, as stated in the *Hyperion Essbase Installation Guide* and *Hyperion Essbase Spreadsheet Add-in User's Guide for Excel*.

Use the following steps to replace the old toolbar with the new one:

1. Open Excel.
2. Select View > Toolbars > Customize.
3. In the **Customize** dialog box, scroll down the list and select **Hyperion Essbase**.
4. Click **Delete**. A dialog box is displayed to confirm deletion of the Hyperion Essbase toolbar.
5. Click **OK**.
6. In the **Customize** dialog box, click **Close**.
7. To open the spreadsheet containing the new toolbar, select File > Open.
8. In the **Open** dialog box, navigate to the directory where `esstoolb.xls` is installed. The default directory is `C:\Hyperion\Essbase\client\sample`.
9. Select `esstoolb.xls` and click **Open**. A dialog box is displayed, indicating that the file contains macros.
10. Click **Enable Macros**. The Hyperion Essbase toolbar without the SQL Drill-Through button is displayed in Excel. The next time you open Excel, you will see this toolbar.

To check that you have the correct version of the Hyperion Essbase toolbar, select View > Toolbars. A toolbar named Hyperion Essbase is displayed in the list.

## System Files Installed

With client installations, Microsoft files and libraries are added to the system directory if they do not already exist. See [“Windows System File Updates” on page 26](#) for more information.

## Uninstalling Hyperion Essbase

You can now uninstall Hyperion Essbase from Windows platforms using the Add/Remove Programs icon in the Control Panel. Hyperion Essbase components (for example, Application Manager, the Windows NT server, and Spreadsheet Add-ins) must be uninstalled individually.

# Installation Roadmap

This section provides an overview of the steps required to set up the environment, communications, and Hyperion Essbase software. For detailed installation information, see the *Hyperion Essbase Installation Guide*.

## Preparing for Installation of Release 6.1

Hyperion Essbase Application Manager, Hyperion Essbase Spreadsheet Add-in, and the Runtime Client on Windows platforms include the ability to install the client software from a network drive. You install a master copy to the network drive and then each client user installs from the master copy. You can run the client software from either a local hard disk or from the network drive.

Installation preparation for Release 6.1 includes the following steps:

1. Set up a server computer with minimum hardware requirements as described in the *Hyperion Essbase Installation Guide*.
2. Install and establish network communications software on the server computer.
3. Configure the Windows client computer as described in the *Hyperion Essbase Installation Guide*.
4. Install and establish network communications software on the client.
5. Independent of Hyperion Essbase, ensure that the client can communicate with the server. (For example, issue the Ping command under TCP/IP.)
6. Be sure to install Hyperion Essbase to a directory path that does not contain spaces. For example, specifying `C:\Program Files\Essbase` may cause problems when you run the software.
7. When installing Hyperion Essbase on a Windows platform, be sure to specify a directory name that has a maximum of 8 alphanumeric characters for the name (for example, `\ESSBASE\61`). For example, `\ESSBASE\6.1.0` is a directory name that may cause problems.

# Steps for Installing Hyperion Essbase OLAP Server

Installing the Hyperion Essbase OLAP Server software involves three main steps:

1. Install Hyperion Essbase OLAP Server software and sample applications,
2. Define the default Hyperion Essbase System Supervisor name and password.
3. Install Hyperion Essbase SQL Interface for the server, if applicable to your license.

See the *Hyperion Essbase Installation Guide* for more detailed installation instructions.

# Steps for Installing Hyperion Essbase Client

The following steps highlight the major stages in installing Hyperion Essbase on a Windows-based client computer.

1. Install Hyperion Essbase Application Manager on the Windows client computer. (If the system administrator has installed a master copy to the network drive, you can install from the network using this master copy.)
2. Connect to the Hyperion Essbase OLAP Server using the default Hyperion Essbase System Supervisor name and password.
3. Load data into the sample applications.
4. Add other user names and passwords.
5. Install the Hyperion Essbase Spreadsheet Add-in on the client computer.

**Note:** Hyperion Essbase Spreadsheet Add-in does not support multiple instances of Excel.

6. Connect to Hyperion Essbase OLAP Server and the Sample Basic database.
7. Retrieve data from the sample applications.

See the *Hyperion Essbase Installation Guide* for more detailed installation instructions.



# Migrating from Release 6.0

To upgrade from Release 6.0, you may install with the previous settings using a one-click installation feature. There are no data compatibility issues when migrating from Release 6.0 to Release 6.1.

# Migrating from Release 5.x

This section describes compatibility between Release 6.1 and previous 5.x releases of Hyperion Essbase. For additional migration information, see [“What’s Changed in the Installation” on page 4](#).

**CAUTION:** If you are installing over a previous release of Hyperion Essbase, your old Sample Basic will be overwritten. If you wish to keep the old release, you must rename it first.

Before you install Release 6.1, back up all Hyperion Essbase Release 5.x files. You can then revert to Release 5.x if you have problems.

Please note the following installation and platform-related changes implemented after Release 5.x.

# Sample Hyperion Essbase Spreadsheet Add-in Files

Sample Hyperion Essbase Spreadsheet Add-in files with the file extension `.wk4`, now have the file extension `.123`, to match the file extensions of 32-bit Lotus 1-2-3. The sample Hyperion Integration Server Drill-Through files, `Essdt.xls` and `Essdt.123`, have replaced `Dtreport.xls` and `Dtreport.wk4`, respectively.

## Cache Memory Locking Installation Requirements

For information on direct I/O and no-wait I/O, see Chapter 40 of the *Hyperion Essbase OLAP Server Database Administrator's Guide*. For information on enabling or disabling Cache Memory Locking, see Chapter 41 of the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

Platform	Direct I/O	No-Wait I/O	Cache Memory Locking
Windows 95	Not supported	Not supported	Not supported
Windows 98	Not supported	Not supported	Not supported
Windows 2000	Supported	Supported	Supported <sup>1</sup>
Windows NT	Supported	Supported	Supported <sup>1</sup>
AIX	Supported	Not supported	Not supported
Solaris	Supported	Not supported	Supported <sup>2</sup>
HP-UX	Supported <sup>3</sup>	Supported	Not supported

1. On Windows NT and Windows 2000, the Hyperion Essbase Agent must be started by an administrator or power user to enable Cache Memory Locking (optional). Specifically, a power user is one who can run processes with the `SE_INC_BASE_PRIORITY_NAME` privilege set.
2. After the server software is installed, the root user must run a script, `root.sh` to enable Cache Memory Locking (optional). For more information, see [“Release 6.1 UNIX Server Installation Changes” on page 11](#).
3. Direct I/O not supported on HFS on HP-UX.

## Outline Synchronization Installation Requirements

To use this release for outline synchronization, you must:

- Delete existing `.chg` files from all Hyperion Essbase server computers.
- Install this release on all server computers sharing partitions, and on any client computers used for outline synchronization editing.

## Release 6.1 UNIX Server Installation Changes

As of Release 6.0, you are not required to install and run Hyperion Essbase from an account called `arbor`. Any user can install, but this user must be the person who starts Hyperion Essbase.

After installing Hyperion Essbase on Solaris, you can take advantage of the Cache Memory Locking feature by running the Bourne shell script, `root.sh`, from the `root` account. The script is located in `$ARBORPATH/bin`. This sets the server to run in Superuser mode so it can lock memory. If you choose not to run this script, Cache Memory Locking will not be enabled.

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
```

# Compatibility Between Client and Server

Hyperion Essbase OLAP Server Release 6.1 provides backward compatibility with Release 5.0 clients. This includes Hyperion Essbase Application Manager as well as Hyperion Essbase Spreadsheet Add-in.

Hyperion Essbase Application Manager releases prior to Release 5.0 do not work with the Release 6.1 server, and this combination is not supported. Hyperion Essbase Spreadsheet Add-in releases prior to 5.0 may work with the Release 6.1 server, but this combination also is not supported.

Because a Release 5.0 client lacks many features of a Release 6.1 client, you should upgrade to Release 6.1 clients when you upgrade to the Release 6.1 server.

If you need to phase your upgrades, use the following order:

1. Install the Release 6.1 server and Hyperion Essbase Application Manager.
2. Install the Release 6.1 Hyperion Essbase Spreadsheet Add-in.

Combining pre-Release 6.0 servers with Release 6.1 clients is not recommended and is not supported.

**More information:** *Hyperion Essbase OLAP Server Database Administrator's Guide*, *Hyperion Essbase Spreadsheet Add-in User's Guide for Excel* or *Hyperion Essbase Spreadsheet Add-in User's Guide for 1-2-3*.

# Migrating Databases: Release 5.x to Release 6.1

The next sections tell you how to migrate databases from Hyperion Essbase Release 5.x to Release 6.1

## Release 5.x Files That Migrate

This section lists the files that migrate *for each database*. The following files migrate from Release 5.x to Release 6.1 files of the same name:

ESSxxxxxx . IND	Index file
ESSxxxxx . PAG	Data File
dbname . ESM	Persistent database root file

The *dbname.TCT* file does not need migration because its format has not changed from Release 5.x to Release 6.x.

## When Does Hyperion Essbase Migrate the Files?

When Hyperion Essbase migrates databases depends on whether you specified “Allow Database to Start” and “Start When Application Starts” in the Database Settings dialog box, or in ESSCMD (SETDBSTATE). This section assumes that you set your database to start when its application starts. The Hyperion Essbase kernel checks for the presence of files resulting from previous unsuccessful migrations, restarting the migration process if necessary.

Hyperion Essbase migrates the *ESSxxxxxx . IND*, *ESSxxxxx . PAG*, and the *dbname . ESM* files when you start the application containing the database *dbname*. After these files are migrated, they are not backward-compatible with Release 5.x.

## Steps for Migrating Applications and Databases

After migration, you can restore Hyperion Essbase Release 5.x databases only by restoring from backups. Therefore, it is important to back up Release 5.x databases before starting the migration process.

To migrate, proceed in the following order for each database:

1. Run the **VALIDATE** command in ESSCMD against the Release 5.x database. **VALIDATE** prompts you to specify a name for the error log file that it will use.  
If **VALIDATE** returns errors, revert to a backup that is free of those errors.
2. Back up all application files, database files, and the security file.

3. If you are using LROs in a production environment, run the LISTLINKEDOBJECTS command in ESSCMD before migrating to Release 6.1. The LISTLINKEDOBJECTS command returns a list of LROs contained in the databases. In Release 6.1, the VALIDATE command checks specifically for LRO errors, and you may need information on LROs after migrating.
4. Stop the Hyperion Essbase OLAP Server, if it is running.
5. Install Hyperion Essbase OLAP Server Release 6.1 to the same ESSBASE directory as the Release 5.x Hyperion Essbase installation.
6. Start the Hyperion Essbase Agent (ESSBASE.EXE).

If you want to change database settings, this is a convenient point at which to do so. If you change the settings now, you will not have to restart the database to make the settings effective. See [“Database Settings Migration” on page 15](#) for information on the default settings.

7. Select a database or load an application. The server migrates the files listed in [“Release 5.x Files That Migrate” on page 13](#).
8. Run the VALIDATE command in ESSCMD against the Release 6.1 database. VALIDATE prompts you to specify a name for the error log file that it will use.
9. If VALIDATE returns only LRO-related errors to the log file after migration, you must restore data from a Release 5.x backup and re-create the LROs:
  - a. Either restore data from a backup of the database that does not contain LROs, or reload from a database export.
  - b. Restart the database in Hyperion Essbase Release 6.1.

Hyperion Essbase migrates the database to Release 6.1 format if the database was restored.
  - c. Run the VALIDATE command.
  - d. Re-create the LROs, using the information from the LISTLINKEDOBJECTS output as a guide. You may need to review the output from LISTLINKEDOBJECTS manually to verify its completeness.
10. Upon successful completion, unload the database and then back up the Release 6.1 database files.

## Database Settings Migration

**CAUTION:** Memory requirements for Release 6.x Hyperion Essbase databases have changed from prior releases.

In previous releases of Hyperion Essbase, the file system for the operating system cached the index files and data files (page files). The file system cache itself used a great deal of memory. In Hyperion Essbase Releases 6.0 and 6.1, Hyperion Essbase caches the index files and data files using the index cache and an important new cache, the data file cache. Because Hyperion Essbase now caches the index and data files, the memory previously allocated by the file system to the file system cache must now be allocated to the Hyperion Essbase caches to maintain or improve performance.

**Note:** Because the index cache and the data file cache are specific to a database, if you are running multiple databases concurrently on a server, your memory requirements may increase substantially.

**Note:** On Windows NT with NTFS only: to obtain accurate index and data file size information, use Application Manager or the LISTFILES ESSCMD command. The index and data file size information provided by the Windows NT operating system may be inaccurate.

For information on estimating the memory and disk requirements for each of your databases, see the *Hyperion Essbase OLAP Server Database Administrator's Guide* (Chapter 15, "Estimating Disk and Memory Requirements for a Database").

All Hyperion Essbase Release 6.1 database settings, except the cache sizes, retain their Release 5.x values. For example, if you had Bitmap Compression enabled in Release 5.x as the Data Compression Type, Bitmap Compression is enabled automatically in Release 6.1 after migration. If you did not specify a value for a particular setting in Release 5.x, the default value is used in Release 6.1. For more information on database settings, see the *Hyperion Essbase OLAP Server Database Administrator's Guide*.

The following table shows the cache settings, listed *in priority order* from highest priority to lowest priority. For example, allocating adequate memory to the index cache is top priority, followed by the index page, the data file cache, and so on. To override the migration defaults, before you start the database, use SetDbStateItem in ESSCMD or select Database > Settings in the Application Manager.

Cache Settings in priority order	Minimum Value	Default Value	Release 6.1 Migration Default	Recommended Value
<b>Index Cache Size</b>	1 Megabyte = 1048576 bytes	10 Megabyte = 10485760 bytes <sup>1</sup>	If the current value is less than the default value, then it is replaced by the default value; otherwise, the current value is retained.	Combined size of all ESS*.IND files if possible; as large as possible otherwise.
<b>Index Page Size</b>	1 Kilobyte = 1024 bytes	8 Kilobytes = 8192 bytes with Direct I/O; 1 Kilobyte = 1024 bytes Buffered I/O	When Direct I/O is in effect, Hyperion Essbase ignores the Index Page Size setting and always employs an Index Page Size of 8 Kilobytes. If Buffered I/O is in effect, the current value is used.	When Direct I/O is in effect, Hyperion Essbase ignores the Index Page Size setting and always employs an Index Page Size of 8 Kilobytes. If Buffered I/O is in effect, then use the same value that you were using with pre-Release 6.x versions of Hyperion Essbase.
<b>Data File Cache Size</b>	8 Megabytes = 8388608 bytes	32 Megabytes = 33554432 bytes <sup>1</sup>	Default value is used.	Combined size of all ESS*.PAG files if possible; as large as possible otherwise.
<b>Data Cache Size</b>	3 Megabytes = 3145728 bytes	3 Megabytes = 3145728 bytes <sup>1</sup>	If the current value is less than the default value, it is replaced by the default value; otherwise, the current value is retained.	0.125 * Data File Cache Size value. <b>Note:</b> Certain calculations require a larger Data Cache Size in Release 6.x. In general, if you have to choose between allocating memory to the Data File Cache or allocating it to the Data Cache, choose the Data File Cache.
<b>Cache Memory Locking</b>	Not applicable	Disabled	Disabled	If you want to give Hyperion Essbase Kernel priority usage of the system RAM, enable Cache Memory Locking, being careful to leave at least one third of the system RAM for non-Hyperion Essbase Kernel use. Otherwise, disable Cache Memory Locking.

- To specify a different default value for all newly created databases, use the ESSBASE.CFG file settings INDEXCACHESIZE, DATAFILECACHESIZE or DATACACHESIZE. For more information, see the online *Technical Reference* in the DOCS directory.



## Sample Basic Outline Migration

The Sample Basic outline has changed to reflect attribute-related features. The outline contains five new attribute dimensions and a new member, Profit per Ounce, in the Scenario dimension. If you are upgrading to Release 6.1, you must clear existing data from Sample Basic and reload from `CALCDAT.TXT` after installing the Release 6.1 server and sample applications.

## Opening Retrieval Wizard Files in Query Designer

Hyperion Essbase Query Designer (EQD) replaces Retrieval Wizard for creating queries. If you have Retrieval Wizard (`.WIZ`) files, the EQD may not properly translate Retrieval Wizard subsets to EQD member filters, which could cause the following problems.

- The EQD does not interpret parentheses within the subsets. It ignores them.
- When the subset contains both AND and OR conditions, with or without parentheses, the EQD may not group the conditions to be processed as you expect them. This can affect the result of the retrieval.

After opening Retrieval Wizard files, make sure the nodes in the navigation panel define the member filters as you want them. If necessary, you can manually promote, demote, or move nodes around or add new nodes.

For example, the following subset from the Retrieval Wizard,

(Flavor is Apple AND Container is glass) OR Flavor is Grape

will be interpreted in the EQD as:

```
|__Flavor is Apple
  |__Container is Glass
  |__Flavor is Grape
```

You need to change the member filters in the EQD to:

```
|__Flavor is Apple
  |__Container is Glass
  |__Flavor is Grape
```

# Migrating Hyperion Essbase Between Computers

- **To move Hyperion Essbase Release 6.1 to a different computer, or to migrate Hyperion Essbase to Release 6.1 on a different computer, follow these steps:**
1. Run the VALIDATE command in ESSCMD against the database you are migrating. VALIDATE prompts you to specify a name for the error log file that it will use.  
If VALIDATE returns errors, revert to a backup that is free of those errors.
  2. Back up the security file (ESSBASE.SEC).
  3. Back up all application and database files on the original server (that is, the server from which you are migrating).
  4. Install Hyperion Essbase on the new server computer. If you are migrating to a newer version of Hyperion Essbase, install that version to the new server. See the *Hyperion Essbase Installation Guide* for more information.
  5. Copy the ESSBASE.CFG file from the ESSBASE\BIN directory on the original server to the same directory on the new server using the file system.
  6. On the new server, define your disk volumes. To allocate a new volume, place SETDBSTATEITEM 23 in the ESSBASE.CFG file and follow the prompts. You can also use the Database Settings dialog box in Application Manager or the alter database statement in MaxL.  
  
Consider carefully how you configure your disk volumes. Any changes you make to your SETDBSTATEITEM setting after you have loaded data on the new server are reflected only in new data loads; changes are not retroactive. For information on SETDBSTATEITEM, see the *Hyperion Essbase OLAP Server Database Administrator's Guide* and the online *Technical Reference* in the DOCS directory.
  7. Using Application Manager or ESSCMD, create new applications and databases on the new server.  
  
The names of the applications and database you create do not need to be the same as the ones on the original server. However, if you make changes to the names, make sure that these changes are reflected in script files, spreadsheet macros, and API-based applications. In addition, make sure that these changes are clearly communicated to the user base.  
  
**CAUTION:** Do not move the application directory to the new server through a file transfer via the operating system or via FTP.
  8. On a client or server computer that has connectivity to both the original and new Hyperion Essbase servers, open Application Manager.

9. Select File > Open, click Client, and select the original server, application, and database.
10. Open the original outline (.OTL) file, and select File > Save As.
11. Save the .OTL file to the new application and database on the new server.

At this point, you should avoid making changes to the outline if you want to be able to import the data file that you will export from the original application.

12. Move all calc scripts, rules files, and report scripts to the new server using one of the following procedures:
  - Repeat steps 6–9 of this procedure.
  - Move the files to the new server via the file system or via FTP.

If you are migrating between different server platforms, be sure to use the procedure described in steps 6–9 of this procedure. If you are migrating between the same server platforms, calc script and report script files can be moved using the operating system. If you move these files via the operating system, check to make sure that they function properly after moving them.

**CAUTION:** Data load rules files are binary files and should always be migrated as described in steps 6–9.

13. Export data from the application on the original server in one of the following ways:
  - Choose All Data, Input Level Data, or 0 Level Data, depending on the size of your data set as well as how the database was initially loaded.
  - Use the initial data load files that were used to populate the database on the original server.
14. Import data to the new application on the new server.
15. Recalculate your database if:
  - You loaded input-level data from data load files, or
  - You exported only partial data from the database (for example, if you chose “0 Level” or “Input Level” data only)
16. Repeat these steps for all other databases on the original server that you want to migrate to the new server.
17. Migrate security information by recreating user filters, groups, and permissions on the new server.

**CAUTION:** If you move the security file (ESSBASE.SEC and its backup ESSBASE.BAK) between computers, it may not work properly.

# Migrating from 16-bit to 32-bit Lotus 1-2-3 Spreadsheet Add-in

Because of differences between 16-bit and 32-bit releases of Lotus 1-2-3, you must migrate workbooks that contain Hyperion Essbase macros so that your existing macros work properly with 32-bit Lotus 1-2-3. For more information on macro differences between these two releases, see the Lotus 1-2-3 documentation.

## Specifying Optional Parameters

You must now specify information for all optional parameters for macros. For example, the syntax for the `EssRetrieve` macro is:

```
{EssRetrieve sheetName, range, lock, statusCell}
```

where *sheetName*, *range*, *lock*, and *statusCell* are optional parameters.

You must now specify information for each parameter. If you leave any parameters of a macro blank or enter invalid syntax, the macro will fail and may produce unpredictable behavior.

### Using NULL as a Parameter

Instead of entering a specific parameter for each macro, you can enter NULL as a parameter to implement active sheets, cells, and so forth. For example, with the `EssZoomIn` macro, the syntax is:

```
{EssZoomIn sheetName, range, selection, level, across, statusCell}
```

In previous versions of this macro, you could enter a comma in place of a parameter in order to use, for example, an active sheet or cell. Hyperion Essbase would have returned information for the current sheet or cell. You must now enter either a specific parameter or NULL in order for the macro to work. For example:

```
{EssZoomIn NULL, A1..E6, A2, 1, 0, NULL}
```

where the first NULL tells Hyperion Essbase to use the currently active sheet, and the last NULL indicates that you do not wish to have the error code displayed.

## SheetName Parameter

When you specify a workbook file name for the *sheetName* parameter, you must now specify the entire directory path or use NULL as the parameter. For example, the following example would no longer be valid syntax for the EssCalculate macro:

```
{EssCalculate <<SAMPLE.123>>A,Calc2,0,H6}
```

In this example, you would need to specify the entire path for <<SAMPLE.123>> (or use NULL to use the active sheet). For example:

```
{EssCalculate <<C:\ESSBASE\CLIENT\SAMPLE\SAMPLE.123>>A,Calc2,0,H6}
```

or

```
{EssCalculate NULL,Calc2,0,H6}
```

You can also enter a default Lotus 1-2-3 sheet name (such as A, B, C) instead of specifying a file name or using NULL for the *sheetName* parameter. For example:

```
{EssCalculate A,Calc2,0,H6}
```

In this case, Hyperion Essbase would use sheet “A” from the active workbook.

## Sheet Macros that Call Hyperion Essbase Functions

To call Hyperion Essbase functions from the sheet, you must use the Lotus 1-2-3 LET command. Sheet macros that call Hyperion Essbase functions require:

- the LET command followed by the cell reference
- the @ sign before the function
- parentheses around the parameters
- quotation marks (") around string arguments

For example:

```
{LET H38,@EssCell ("Year","100-10","NULL","NULL","NULL","NULL",  
"NULL","NULL","NULL","NULL","NULL",  
"NULL","NULL","NULL","NULL") }
```

**Note:** The LET command is explained in the Lotus 1-2-3 documentation.

**Note:** You must place quotation marks around all string arguments and NULL. Do not place quotation marks around numeric parameters (for example, 1), but do place quotation marks around numeric member names (for example, “100-10”).

On the other hand, Hyperion Essbase macros do not work with parentheses and do not require quotation marks around strings. For example:

```
{EssRetrieve NULL,<<SAMPLE.123>>A:A1..G20,2,H6}
```

## Modified or Deleted Macros

The following macros have been modified or deleted:

- **EssSetShOption Macro**—The EssSetShOption macro includes a new parameter, *statusCell*. See the Hyperion Essbase Spreadsheet Add-in Help for the new syntax for this macro.
- **EssSetSheetOpt Macro**—The EssSetSheetOpt macro will no longer be updated after Hyperion Essbase Release 5. Use the EssSetShOption macro to set individual spreadsheet options.
- **EssSetGlobalOpt Macro**—The EssSetGlobalOpt macro will no longer be updated after Hyperion Essbase Release 5. Use the EssSetGlobalOption macro to set individual spreadsheet options.
- **EssCell Function**—The syntax for the EssCell function has changed. See the Hyperion Essbase Spreadsheet Add-in Help for the new syntax for this macro.

# Platform Support and Hardware Requirements

Hyperion Essbase Release 6.1 supports the following server and client platforms. Except where noted, these are minimum requirements.

**Note:** Windows NT 3.5.1 is no longer a supported platform.

## Server Platforms

Windows Version	Windows NT 4.0 on Pentium or better or equivalent computers <sup>1</sup> Windows 2000 on Pentium or later computers Windows 95B and Windows 98 on Pentium or better or equivalent computers (Personal Essbase only)
AIX Version	4.3.3 or higher on RS 6000 PowerPC computers
HP-UX Version	11.0 on PA-RISC computers. See Readme.txt for required patches.
Solaris Version	7 and 8 (SUN OS 5.6 and 5.7) on Sun SPARC or ULTRASPARC computers
Red Hat Linux Version <sup>2</sup>	6.1 on Pentium or better or equivalent computers
RAM	64 MB or greater (128 MB or greater for UNIX platforms) base recommendation <sup>3</sup>
Disk Space	26–50 MB for the server software and sample applications 15–20 MB for the SQL Interface software and samples
Network Protocol	TCP/IP or Named Pipes (TCP/IP only for Windows 95 and Windows 98)
Java™ Platform	Java Runtime Environment version 1.2.2 or later, Java API for XML Parsing version 1.01

1. Personal Essbase for Windows NT and Windows 2000 on Intel computers is also available.
2. Red Hat Linux Version is not supported in Hyperion Essbase Release 6.1.
3. The base recommendation for running Hyperion Essbase and its sample applications is a 64 MB minimum. On UNIX platforms, base requirement is 128 MB of physical memory (256 MB recommended), and at least twice the MB of physical memory for swap space (when physical memory is less than .5 GB). Contact your system administrator or hardware vendor for optimum swap configuration.

**Note:** Start with the base amount of RAM for your platform, and then allocate additional memory to accommodate your applications.

## Client Platforms

Microprocessor	Pentium or better or equivalent, for Hyperion Essbase Spreadsheet Add-in and Hyperion Essbase Application Manager
Windows Version	Windows 95B, Windows 98, Windows NT 4.0, or Windows 2000.
Excel Version	Excel 97, Excel 2000
Lotus 1-2-3 Version	Lotus 1-2-3 Millennium Releases 9.1 and 9.5
Display	Resolution of at least 640 x 480 (800 x 600 or more recommended)
RAM	16 MB for Hyperion Essbase Spreadsheet Add-in and Application Manager on Windows 95, Windows 98, Windows NT 4.0, or Windows 2000
Disk Space	24 MB for Hyperion Essbase Application Manager 17.5 MB for Hyperion Essbase Spreadsheet Add-in for 1-2-3 16.7 MB for Hyperion Essbase Spreadsheet Add-in for Excel 9 MB for Hyperion Essbase Runtime Client
Network Protocol	TCP/IP or Named Pipes

## API Client Development Platforms

Windows Version	Windows 95 or 98 on Pentium or better or equivalent computers Windows NT 4.0 on Pentium or better or equivalent computers Windows 2000 on Pentium or better or equivalent computers
AIX Version	4.3.3 or higher on RS 6000 PowerPC computers
HP-UX Version	11.0 on PA-RISC computers
Solaris Version	7 and 8 (Sun OS 5.7 and 5.8) on Sun SPARC or ULTRASPARC computers
RAM	Same as for server platforms
Disk Space	15 MB for 32-bit Hyperion Essbase API on Windows NT, Windows 95, Windows 98, or Windows 2000 on Pentium 5 MB for AIX 6 MB for HP-UX 6 MB for Solaris



# SQL Source Connectivity

## Supported ODBC Drivers

MERANT ODBC driver version 3.6 is provided with Hyperion Essbase Release 6.1 SQL Interface. However, Hyperion Solutions also tests and supports some non-MERANT Windows NT drivers. These non-MERANT drivers are not provided with SQL Interface. Hyperion Solutions has tested the following database configurations. This table applies only to Release 6.1.

Database Server (Database Client)	Windows NT 4.0 <sup>1</sup> /Windows 2000	Solaris7/8 Sun OS 5.7/5.8	AIX 4.3	HP-UX 11.0 <sup>2</sup>
DB2 UDB 6.1	DB2 6.1 ODBC	DB2 6.1 ODBC	DB2 6.1 ODBC	DB2 6.1 ODBC
DB2 UDB 7.1	DB2 7.1 ODBC	DB2 7.1 ODBC	DB2 7.1 ODBC	DB2 7.1 ODBC
Informix ESQL /c 9.x	MERANT 3.6	MERANT 3.6	MERANT 3.6	MERANT 3.6
Oracle 8.04 (SQL*Net 8.0)	MERANT 3.6	MERANT 3.6	MERANT 3.6	MERANT 3.6
Oracle 8i (SQL*Net 8.0)	MERANT 3.6 Oracle 8i ODBC	MERANT 3.6	MERANT 3.6	MERANT 3.6
MS SQL Server 6.5.201 (no Client required)	MS SQL Server 6.5 ODBC	Not tested	Not tested	Not tested
MS SQL Server 7.0 (no Client required)	MS SQL Server 7.0 ODBC Microsoft Driver	Not tested	Not tested	Not tested
Sybase 11.x	MERANT 3.6	MERANT 3.6	MERANT 3.6	MERANT 3.6
Access 97	Microsoft Driver	Not available	Not available	Not available

1. Not tested.
2. MERANT 3.6 ODBC drivers are supported only on HP-UX computers using 32-bit relational database client software.

Check <http://www.essbase.com> for the latest information regarding ODBC drivers.

# Windows System File Updates

On Windows NT 4.0, Windows 2000, Windows 95, Windows 98, and Windows Millennium, the installation program updates the client or server system environment to run Hyperion Essbase Release 6.1 software. Microsoft system files are installed to the Windows system directory (for example, C:\Windows\System on Windows 95, or C:\Winnt\System32 on Windows NT 4.0) if the files do not already exist, or if the version shipped with Hyperion Essbase is newer.

The following table lists Windows system files installed with each Hyperion Essbase component. A check mark in a column indicates that the system file is installed with the specified Hyperion Essbase component. These files will be installed to your system directory only if the files do not already exist, or if older versions exist.

File	Windows Servers	Application Manager	Excel Add-in	1-2-3 Add-in	Runtime Client	API	SQL Interface	File Version
ATL.DLL			✓	✓				2.00.7024
CTL3D32.DLL		✓						2.31.000
MFC42.DLL			✓	✓	✓			4.21.7022 <sup>1</sup>
MSVCRT.DLL	✓		✓	✓	✓			5.00.7022 <sup>2</sup>
MSVCIRT.DLL	✓		✓	✓	✓			5.00.7022
MTXDM.DLL							✓	1997.11.532.0

1. Do not use file versions 6.00 through 6.00.8336, as these file versions may cause memory allocation problems.
2. Do not use file versions 6.00 through 6.00.8266, as these file versions may cause memory allocation problems.



# Where to Get More Information

Except for late-breaking news and migration information, each topic in this booklet is described in more detail in the documentation.

For information on new features and documentation, see the *Hyperion Essbase New Features* booklet.

For answers or comments on technical documentation:

Hyperion Essbase Technical Publications  
Phone: 408-744-9500  
FAX: 408-744-0400  
E-mail: TechPubs@hyperion.com

For answers to technical questions on the product, performance, and platform specifics, contact your authorized technical support provider or:

Hyperion Essbase Client Support  
Phone: 877-901-HYSL in North America  
E-mail: client\_support@hyperion.com  
Internet: <http://support.hyperion.com>

Clients in Europe, Asia, or other areas should call their local support phone number.

Visit the Hyperion Solutions Web Site Home Page at <http://www.hyperion.com>

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U.S. Patent Number: 5,359,724

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