Hyperion[®] Analyzer

Release 6.5

Administrator's Guide



Hyperion Solutions Corporation

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Contents



Preface

Welcome to the Hyperion Analyzer Administrator's Guide. This preface discusses the following topics:

- "Purpose" on page ix
- "Audience" on page ix
- "Document Structure" on page x
- "Where to Find Documentation" on page x
- "Conventions" on page xi
- "Additional Support" on page xiii

Purpose

This guide provides you with all the information that you need to administer Hyperion Analyzer. It explains the Hyperion Analyzer features and options, and contains the concepts, processes, procedures, formats, tasks, and examples that you need to use the software.

Audience

This guide is for administrators who are responsible for administering and supporting Hyperion Analyzer.

Document Structure

This document contains the following information:

Chapter 1, "Administrating Hyperion Analyzer," introduces the tasks involved with the administration of Hyperion Analyzer.

Chapter 2, "Application Overview," introduces Hyperion Analyzer and its components.

Chapter 3, "Hyperion Analyzer Utilities," describes the various utilities included with Hyperion Analyzer.

Chapter 4, "Managing Security and Access," describes how to set up and manage security.

Chapter 5, "Configuration Options," describes the configurations available for Hyperion Analyzer.

Chapter 6, "HTML Web Client Templates, Tags, and Actions," describes the templates, tags, and actions for the HTML Web Client.

Chapter 7, "IBM WebSphere Application Server," describes administering Hyperion Analyzer on IBM WebSphere.

Glossary contains a list of key terms and their definitions.

Index contains a list of Hyperion Analyzer terms and their page references.

Where to Find Documentation

All Hyperion Analyzer documentation is accessible from the following locations:

- The HTML Information Map can be accessed by starting any Hyperion Analyzer client and selecting Information Map from the Help button or from the Help menu command.
- Online help is accessible from the component that it documents. Start the product and click the Help button or menu command.
- The Hyperion Solutions Web site is located at http://www.hyperion.com.
- Access to the Hyperion Download Center is through http://hyperion.subscribenet.com.

- > To access the documentation from the Hyperion Solutions Web site:
 - 1. Log on to http://www.hyperion.com.
 - 2. Select **Support** from the menu bar.
 - 3. Enter your username and password, and click Login.

Tip: If you do not have a username and password, click **Register** on the login page to request them.

- 4. Select Software/Documentation.
- 5. From the **Product** list box, select **Hyperion Analyzer**.
- 6. From the **Display** list box, select **Documentation**, then click **Submit**.
- > To access documentation from the Hyperion Download Center:
 - 1. Log on to http://hyperion.subscribenet.com.
 - 2. In the Login ID and Password text boxes, type your assigned login ID name and password. Then click Login.
 - **3.** If you are a member on multiple Download Center accounts, select the account that you want to use for the current session.
 - 4. In the **Product List**, select **Hyperion Analyzer**.
 - 5. In the New Releases tab, select Hyperion Analyzer Release 6.5.

Conventions

The following table shows the conventions used in this document:

Item	Meaning
>	Arrows indicate the beginning of a procedure consisting of sequential steps or one-step procedures.
Brackets []	In examples, brackets indicate that the enclosed elements are optional.
Bold	Bold in procedural steps highlights major interface elements.

Table i: Conventions Used in This Document

Item	Meaning
CAPITAL LETTERS	Capital letters denote commands and various IDs. (Example: CLEARBLOCK command)
Ctrl + 0	Keystroke combinations shown with the plus sign (+) indicate that you should press the first key and hold it while you press the next key. Do not type the + sign.
Example text	Courier font indicates that the material shown is a code or syntax example.
<i>Courier italics</i>	Courier italic text indicates a variable field in command syntax. Substitute a value in place of the variable shown in Courier italics.
ARBORPATH	When you see the environment variable <i>ARBORPATH</i> in italics, substitute the value of <i>ARBORPATH</i> from your site.
Italics	Italics in a product-related term in the body of a book indicates that the term is also included in the glossary of the book.
<i>n</i> , <i>x</i>	Italic n stands for a variable number; italic x can stand for a variable number or an alphabet. These variables are sometimes found in formulas.
Ellipses ()	Ellipsis points indicate that text has been omitted from an example.
Mouse orientation	This document provides examples and procedures using a right-handed mouse. If you use a left-handed mouse, adjust the procedures accordingly.
Menu options	Options in menus are shown in the following format. Substitute the appropriate option names in the placeholders, as indicated.
	Menu name > Menu command > Extended menu command
	For example: 1. Select File > Desktop > Accounts .

Table i: Conventions Used in This Document (Continued)

Additional Support

In addition to providing documentation and online help, Hyperion offers the following support for product information.

How to Order Printed Documentation

To order printed documentation:

- Visit the Hyperion Solutions Web site at http://www.hyperion.com.
- In the United States, call Hyperion Solutions Customer Support at 877-901-4975.
- From outside the United States, including Canada, call Hyperion Solutions Customer Support at 203-703-3600. Clients who are not serviced by support from North America should call their local support centers.

Education Services

Hyperion offers a variety of training options, including instructor-led training, custom training, and eTraining. This education covers all Hyperion applications and technologies and is geared to administrators, end users, and information systems (IS) professionals.

Instructor-led training is delivered in formats and in locations suited to Hyperion's diverse, global customers. Hyperion Authorized Training Centers are certified to deliver courses developed by Hyperion. Custom Education Services—training on the configured and tailored applications that employees use on the job—is another option to enhance user productivity and to ensure smooth day-to-day operations. A service called *eTraining*—including computer-based training, Web-based training, and interactive Virtual Classroom training—provides a cost-effective means of giving users a hands-on introduction to product features and functions. Computer-based training (CBT) and Web-based training (WBT) provide high-quality, self-paced training at the user's convenience, regardless of location.

For more information about training, contact your Regional Education Manager or visit the Hyperion Solutions Web site at http://www.hyperion.com to see a list of all training classes.

Consulting Services

Hyperion Consulting Services assists customers in maximizing the use of, and the return on investment in, Hyperion products. Experienced Hyperion consultants and Hyperion Alliance Partners assist organizations in tailoring solutions to their particular requirements, such as reporting, analysis, modeling, and planning. Specific services include implementation consulting, custom business solutions, data integration, and technical consulting. Additionally, Hyperion offers a variety of Services Packages and Reviews.

For more information about Consulting Services, Services Packages and Reviews, as well as the services offered by Alliance Partners, contact your local consulting services representative, or visit the Hyperion Solutions Web site at http://www.hyperion.com to see a list of all Hyperion Alliance Partners.

Technical Support

Hyperion provides Web-based and telephone support to ensure that clients resolve product issues quickly and accurately. This support is available for all Hyperion products at no additional cost to clients with a current maintenance agreement.

- For Web-based support, or to see complete information on available support options, visit the Hyperion Solutions Web site at http://www.hyperion.com.
- In the United States, call 877-901-4975 for Hyperion Solutions Customer Support.
- From outside the United States, including Canada, call Hyperion Solutions Customer Support at 203-703-3600. Clients who are not serviced by support from North America should call their local support centers.

Documentation Feedback

Hyperion strives to provide complete and accurate documentation. We value your opinions on this documentation and want to hear from you. Send us your comments by completing the survey available at http://www.hyperion.com.

Administrating Hyperion Analyzer

Hyperion Analyzer administration consists of the following tasks:

Installation and Redeployment

The Hyperion Analyzer Installation Guide describes installation and installation options essential to installing and configuring Hyperion Analyzer. This guide includes procedures for establishing a Hyperion Analyzer repository, executing silent installations, and installing Hyperion Analyzer samples. Redeployment follows the same process as installation, and administrators reconfiguring or redeploying Hyperion Analyzer are also encouraged to consult the *Hyperion Analyzer Installation Guide*.

Managing Security and Access

Administrators may choose to use the default Hyperion Analyzer authentication and security, Hyperion Essbase authentication and external authentication methods to validate users and logons. All security and authentication protocols are managed via Hyperion Analyzer Administration Tools. For more information, see Chapter 4, "Managing Security and Access".

Managing Users, User Groups, Database Connections

Hyperion Analyzer Administration Tools is the primary interface for managing users, user groups and database connections. In addition, administrators can assign pre-defined roles that control user access to the Hyperion Analyzer system.

Optimizing the Hyperion Analyzer System

System Administrators can use the Java-based Hyperion Analyzer Analysis Server Console to monitor, maintain and optimize the Hyperion Analyzer System. This console provides statistics on server logons, data hits, and data response times. Administrators can also manually disconnect users idle in excess of a time limitation, and show, clear and export console output.

Education and Training

Hyperion Analyzer provides Administrators with tools to support user training and education. Significant among these tools are:

- The Hyperion Analyzer Sample Report Group
- Hyperion Analyzer API Toolkit Samples
- Documentation deliverables in HTML and PDF.

Hyperion Analyzer Resources

Hyperion Analyzer Administration Tools

The Hyperion Analyzer Administration Tools client provides a 100% Java graphical interface for managing users, users groups and database connections via a supported Web browser. It is also instrumental in setting authentication services for the Hyperion Analyzer system.

Hyperion Analyzer Analysis Server Console

System Administrators can use the Java-based Hyperion Analyzer Analysis Server Console to monitor, maintain and optimize the Hyperion Analyzer System. This console provides statistics on server logons, data hits, and data response times. Administrators can also manually disconnect users idle in excess of a time limitation, and show, clear and export console output.

Hyperion Analyzer Setup.cmd Installation Wizard

A Setup.cmd installation wizard is delivered with Hyperion Analyzer that enables Evaluation, Typical and Custom installations of Hyperion Analyzer on Windows NT, and Sun Solaris operating systems.

Hyperion Analyzer Batch Import/Export Utility

The new batch import/export utility enables administrators to import reports, report groups, user IDs, point of view definitions and personal variable definitions. See Chapter 3, "Hyperion Analyzer Utilities", for more information.

The batch import/export utility is also instrumental in migrating from certain releases of Hyperion Analyzer to the current release.

Hyperion Analyzer Save As Web Page Batch Utility

The new Hyperion Analyzer Save As Web Page Batch Utility automates the process of publishing Hyperion Analyzer reports to the Web, using JSP templates. See Chapter 3, "Hyperion Analyzer Utilities", for more information.

Administrating Hyperion Analyzer

Chapter

Application Overview

Hyperion Analyzer consists of the following components:

- Four client applications
- An analysis server
- A repository
- An API Toolkit

The **repository** centrally stores Hyperion Analyzer system data, user IDs, user preferences, and report definitions in relational database tables.

The **Hyperion Analyzer Analysis Server** communicates report definitions and system information between the repository, Web clients, and Hyperion Analyzer Administration Tools.

The **Hyperion Analyzer Administration Tools** client provides a 100-percent Java graphical interface for managing users, users groups, and database connections using a supported Web browser. It also provides access to several administration utilities.

The **Hyperion Analyzer Java Web Client** is an easy-to-use graphical interface that enables online analysis of both Hyperion Essbase and relational data. You can design and format custom analysis applications without "coding."

The **Hyperion Analyzer Windows Client** is the same easy-to-use Java Web Client interface and functionality delivered as a standalone Java application for supported Microsoft Windows operating systems.

The **Hyperion Analyzer HTML Web Client** is a 100-percent HTML thin client used by way of a supported Web browser. It is engineered for information consumers who do not require advanced design and content-creation capabilities. The **Hyperion Analyzer API Toolkit** enables developers to incorporate the Hyperion Analyzer Java Web Client look and feel and functionality into their own custom Web applications.

Hyperion Analyzer Architecture

The following illustration represents the architecture of Hyperion Analyzer and illustrates how the different components work together.



Figure 1: Hyperion Analyzer Architecture Diagram

Repository Tables

The repository centrally stores Hyperion Analyzer system data, user IDs, user preferences and report definitions in relational database tables.

The repository is multi-user and is typically installed in shared local area network locations rather than on individual user desktops. This kind of installation enables users to log on to any machine on the network or Intranet. Users can also access their own reports and user preferences without copying files or performing import/export tasks.

For security and system integrity, repository tables cannot be edited or manipulated.

Table	Function
TBLAUTHSRVR	Records the server address of the authenticating server.
TBLAUTHTYPE	Records the authentication server type definition.
TBLDATABASES	Records the database connections available to client applications.
TBLDBTYPE	Records the data source definitions for TBLDATABASES records.
TBLEXTERNALGROUPS	Records the mapping between external authentication directory server groups and Hyperion Analyzer user groups.
TBLGLOBALDB	Records global connection definition for TBLDATABSES records.
TBLOBJECTS	Records the types of objects in the repository: Database, Report, Report Group, User, or User Group, etc.
TBLOBJINSTANCEPERMISSIONS	Records the object instance permissions definition.
TBLOBJLINKSOPS	Records additional properties of TBLOBJLINKS records.

Table 1: Repository Tables

Table	Function
TBLOBJLINKS	Records data required to maintain links between objects.
TBLOBJTYPEPERMISSIONS	Records object type permission definitions.
TBLOBJTYPES	Records the object type IDs for the TBLOBJ table.
TBLPARENTCHILD	Records report-report group relationship data.
TBLPERMSINROLESMAP	Records the relationship between objects and roles.
TBLREPORTGROUPS	Records report group definitions.
TBLREPORTS	Records report definitions.
TBLREPORTSTATE	Records the report content definition and global formatting data.
TBLREPORTTYPE	Records report type definitions.
TBLROLES	Records role definitions.
TBLSYSTEMPROPS	Records system level java properties affecting all users.
TBLUSERANDGROUPHASROLEMAP	Records user and user group – role relationship data.
TBLUSERCREDENTIALS	Records the token created during any form of authentication.
TBLUSERGROUPS	Records user group definitions.
TBLUSERS	Records user ID definitions.
TBLUSERSINUSERGROUPMAP	Records user-user group relationships.

Applet Parameters

There are two kinds of applet parameters:

- **Applet modifiers** define the applet to the browser. The World Wide Web Consortium codifies applet modifiers.
- **Applet parameters** pass values to the applet. Applet parameters are applet-specific.

Applet Modifiers	Modifier Description
WIDTH	Amount of horizontal space used by Applet. The WIDTH modifier allows expression in terms of a percentage.
HEIGHT	Amount of vertical space used by Applet. The HEIGHT modifier allows expression in terms of a percentage.
CODE	The Applet's main class name. Changing this value prevents the correct classes from being loaded.
CODEBASE	The URL of the Applet's main class.
NAME	The name of this instance of the Applet. The NAME modifier enables multiple Applets on the same page to locate each other and communicate.
ARCHIVE	The URL of the .JAR archive containing the classes. Netscape browsers download the archive and use the classes therein to accelerate startup. Should not be changed when specified in the Applet.html. Locally installed classes should omit this modifier.

Table 2: Applet Modifiers

Table 3: Applet Parameters

Applet Parameter	Description
BGColor	Sets an RGB color for the Applet background. The default is light gray.
Debug	When set to TRUE, the Debug Boolean string value (TRUE/FALSE) enables objects to report debugging information to the Java-based Hyperion Analyzer Analysis Server console. The default value is FALSE.
FrameHeight	The FrameHeight string value is the height in pixels of the Hyperion Analyzer frame.

Applet Parameter	Description
FrameWidth	The FrameWidth string value is the width in pixels of the Hyperion Analyzer frame.
HideConfirmDialog	When set to TRUE, the HideConfirmDialog string value hides confirmation dialog boxes. This is TRUE only for events triggered using scripting. Confirmation dialog boxes triggered by conventional GUI object events display normally. The default value is FALSE.
HideErrorDialog	When set to TRUE, the HideErrorDialog string value hides error dialog boxes. This is only TRUE for events triggered using scripting. Error dialog boxes triggered by conventional GUI object events display normally. The default value is FALSE.
Password	The string value of a valid password. Automatic login is triggered when all pre-requisite parameters are provided.
ServerURL	The ServerURL string value is the targeted Hyperion Analyzer Analysis Server name or IP address. When no value is set, Hyperion Analyzer attempts to locate a Hyperion Analyzer Analysis Server console. The default value is FALSE.
UseFrame	When set to TRUE, the UseFrame string value displays the applet in an independent window instead of in the Web browser interface. The default value is FALSE.
UserID	The string value of a valid user ID. Automatic login is triggered when all pre-requisite parameters are provided.
SupportResolveMember	When set to TRUE, the Hyperion Analyzer Java Web Client validates member parameters against the Hyperion Essbase outline, before executing the API method. When set to FALSE the Hyperion Analyzer Java Web Client validates only member IDs, but does not validate aliases verbatim (for the purpose of expediting processing). The default value is TRUE.

Table 3: Applet Parameters (Continued)

Applet Parameter	Description
Support Undo	When set to TRUE, the SupportUndo string value enables undo and redo canability for applicable API
	events. Developers are cautioned; this parameter slow

Table 3: Applet	Parameters	(Continued)
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	events. Developers are cautioned; this parameter slows application processing. The default value is FALSE.
language_COUNTRY	Sets locale parameters, using ISO-639 two-letter codes for language (in lower case) and country (in upper case) (for example, enUS for English, United States). The default is determined by the client machine's configuration.

Managing Memory Allocation

Hyperion Analyzer relies upon the Java Virtual Machine (JVM) to manage memory allocation in conjunction with the operating system.

As the number of instantiated application objects grows and diminishes, the Java Virtual Machine requests that the operating system allocate and free memory proportionally.

The JVM monitors increasing and decreasing memory allocation, in order to determine the memory required to satisfy application needs and simultaneously minimize JVM requests to the operating system.

The JVM may therefore not immediately release allocated memory, in an effort to maintain the amount typically required by the Hyperion Analyzer application.

Application Overview

Chapter

Hyperion Analyzer Utilities

Hyperion Analyzer 5.0.3 Migration Utility

Because Hyperion Analyzer has been completely re-architected, it is necessary for Hyperion Analyzer 5.0.3 users to migrate reports, report groups and system information to the current Hyperion Analyzer release.

Because the re-architecture of Hyperion Analyzer is a paradigm shift in technology, quality, scalability, and usability, the migration process is in fact a conversion of release 5.0.3 database tables to a new release 6.5 database table design.

The migration process is, therefore, not a one-to-one migration of 5.0.3 data into 6.5 data. It is instead an attempt to port as much 5.0.3 data to the new 6.5 format as is possible. Items that cannot be converted automatically are recorded and reported in a conversion log.

Users can review conversion logs in the course of migration, or scroll to the bottom of text editors displaying .ARD and .ARG output files.

Two Kinds of Conversion

Two separate conversion utilities are provided to migrate different database table sets:

• The AdminMigrate.exe conversion utility is a release 5.0.3 Administration Tools client with a migration menu bar. It is used to migrate Hyperion Analyzer 5.0.3 administrative database tables to the release 6.5 table design. • The **AnalyzerMigrate.exe** conversion utility is a release 5.0.3 Windows client with a migration menu bar. It is used to migrate Hyperion Analyzer 5.0.3 database tables to the release 6.5 table design.

Note: Important! Hyperion Analyzer recommends migrating administrative database tables before migrating Analyzer database tables.

Overview of the Migration Process

The migration process consists of the following steps:

- Maintain installations of Hyperion Analyzer 5.0.3 and 6.5 releases.
- Save the conversion utilities, **AdminMigrate.exe** and **AnalyzerMigrate.exe** to the Applications subdirectory of the Hyperion Analyzer 5.0.3 directory.
- Double-click to start the AdminMigrate.exe conversion utility.
- Convert the following items to their corresponding export file.

Table i: Conversion Utility Process

Conversion Utility	Command	Converts To	Suffix
AdminMigrate.exe	Migrate a User	User ID export file	.ARU
	Migrate all Users	User ID export file	.ARU
AnalyzerMigrate.exe	Migrate a View	Report export file	.ARD
	Migrate a View Group	Report Group export file	.ARG

- Import the export file to the release 6.5 repository.
- Repeat the process with the AnalyzerMigrate.exe conversion utility.

Although Report Groups are imported directly into the repository, reports are not saved to the repository until users execute the Save command. Reports and report groups are not shared to other users until report group properties are set to share Analyzer content with selected user groups.

The Import command amends existing 6.5 database repository. It does not overwrite the repository.

Converting Release 5.0.3 Users to Release 6.5 Users

Before you can migrate Hyperion Analyzer administrative data you must save the AdminMigrate.exe file to the Applications subdirectory of the Hyperion Analyzer 5.0.3 directory. Users also must have access to their Hyperion Analyzer 5.0.3 repository.

- To start the AdminMigrate.exe conversion utility:
 - **1.** Open Windows Explorer.
 - **2.** Double-click the **AdminMigrate.exe** file name (in the Applications subdirectory of the Hyperion Analyzer 5.0.3 directory).

The Hyperion Analyzer 5.0.3 Administration Tools toolbar displays.

3. Click the **Manage** toolbar button.

The Management window displays.

- To convert Hyperion Analyzer 5.0.3 user(s) to a Hyperion Analyzer 6.5 user(s) export file (.ARU):
 - 1. Click the **Migrate** menu bar command, and select one of the following options from the sub-menu:
 - Migrate All Users Select Migrate All Users..to convert all user IDs in the repository. After selecting this option, then proceed to step 4.
 - Migrate A User Select Migrate A Users. to convert specific users. After selecting this option, proceed to the next step.

The Users dialog box displays.

- 2. Select a user ID from the drop down list box.
- 3. Click OK.

The Save As dialog box displays. This dialog box will save the converted user(s) to an .ARU export file.

- 4. Navigate to a location in which you would like to save the .ARU export file.
- **5.** Enter a name for the .ARU export file.
- 6. Click the Save As dialog box **OK** button.

Conversion log messages, if any, will display in the Migration Errors dialog box. You can review these messages now, or refer to them later, by reviewing the .ARU file in a text editor. Click OK to dismiss the Migration Errors dialog box.

- To import a Hyperion Analyzer 6.5 user(s) export file (.ARU):
 - 1. Start Hyperion Analyzer 6.5 Administration Tools
 - 2. From the Menu Bar select File | Import.

The Open dialog box displays.

- **3.** Enter the location and filename of the exported .ARU file.
- 4. Click OK.

The users are saved to the repository.

Converting a View to a Report

Note: Before you can migrate Hyperion Analyzer data you must save the AnalyzerMigrate.exe file to the Applications subdirectory of the Hyperion Analyzer 5.0.3 directory. Users also must have access to their Hyperion Analyzer 5.0.3 repository.

- To start the AnalyzerMigrate.exe conversion utility:
 - **1.** Open Windows Explorer.
 - **2.** Double-click the **AnalyzerMigrate.exe** file name (in the Applications subdirectory of the Hyperion Analyzer 5.0.3 directory).
 - **3.** A Hyperion Analyzer 5.0.3 Windows client with a special Migration menu bar displays.
- To convert a Hyperion Analyzer 5.0.3 view to a Hyperion Analyzer 6.5 export file (.ARD):
 - 1. Click the **Migrate** menu bar command, and select **Migrate a View** from the sub-menu.

The Hyperion Analyzer 5.0.3 View Manager displays.

- 2. Click to select the view group tab of the view you wish to convert.
- **3.** Click to select the view name of the view you wish to convert.
- 4. Click the View Manager **OK** button.

The Save As dialog box displays. This dialog box will save the converted view to an .ARD export file.

- 5. Navigate to a location in which you would like to save the .ARD export file.
- 6. Enter a name for the .ARD export file.
- 7. Click the Save As dialog box **OK** button.

Conversion log messages, if any, will display in the Migration Errors dialog box. You can review these messages now, or refer to them later, by reviewing the .ARD file in a text editor. Click OK to dismiss the Migration Errors dialog box.

The Information dialog box displays when conversion is complete. Its message states:

"Finished migrating view <<view name>> into <<pathname>> <<filename.ard>>."

8. Click OK.

To import a Hyperion Analyzer 6.5 export file (.ARD):

- **1.** Start the Hyperion Analyzer 6.5 Java Web Client.
- 2. From the Menu Bar select File | Import | Report.

The Open dialog box displays.

- **3.** Enter the location and filename of the exported .ARD file.
- 4. Click OK.

The Map Connection dialog box displays.

- Select a database connection from the Exported Connection list, and then select its equivalent database connection in the Available Database Connections list.
- **6.** Click the **Map It!** button.

The mapped database connection is displayed in the Mapped Connections list. Repeat steps 5 and 6 until all database connections in the report have been mapped to an equivalent database connection.

7. When all database connections have been mapped, click **OK**.

Converting View Groups to Report Groups

Note: Before you can migrate Hyperion Analyzer data you must save the AnalyzerMigrate.exe file to the Applications subdirectory of the Hyperion Analyzer 5.0.3 directory. Users also must have access to their Hyperion Analyzer 5.0.3 repository.

- To start the AnalyzerMigrate.exe conversion utility:
 - **1.** Open Windows Explorer.
 - **2.** Double-click the **AnalyzerMigrate.exe** file name (in the Applications subdirectory of the Hyperion Analyzer 5.0.3 directory).
 - **3.** A Hyperion Analyzer 5.0.3 Windows client with a special Migration menu bar displays.
- To convert a Hyperion Analyzer 5.0.3 view group to a Hyperion Analyzer 6.5 report group export file (.ARG):
 - 1. Click the **Migrate** menu bar command, and select **Migrate a Group** from the sub-menu.

The Select Hyperion Analyzer Desktop Group dialog box displays.

- 2. Select a view group from the drop down list box.
- 3. Click OK.

The Save As dialog box displays. This dialog box will save the converted view group to an .ARG export file.

- 4. Navigate to a location in which you would like to save the .ARG export file.
- **5.** Enter a name for the .ARG export file.
- 6. Click the Save As dialog box **OK** button.

Conversion log messages, if any, will display in the Migration Errors dialog box. You can review these messages now, or refer to them later, by reviewing the .ARG file in a text editor. Click OK to dismiss the Migration Errors dialog box.

The Information dialog box displays when conversion is complete. Its message states:

"Finished migrating view group <<view group name>> into <<pathname>> <<filename.arg>>."

7. Click OK.

- To import a Hyperion Analyzer 6.5 report group export file (.ARG):
 - 1. Start the Hyperion Analyzer 6.5 Java Web Client.
 - 2. From the Menu Bar select File | Import | Report Group.

The Open dialog box displays.

- **3.** Enter the location and filename of the exported .ARG file.
- 4. Click OK.

The Map Connection dialog box displays.

- **5.** Select a database connection from the Exported Connection list, and then select its equivalent database connection in the Available Database Connections list.
- 6. Click the Map It! button.

The mapped database connection is displayed in the Mapped Connections list. Repeat steps 5 and 6 until all database connections in the report have been mapped to an equivalent database connection.

7. When all database connections have been mapped, click **OK**.

The Specify Report Group Name dialog box displays.

8. Enter a name for the release 6.5 report group, and click **OK**.

The report group is saved to the repository.

Conversion Exceptions

Because the migration process is not a one-to-one migration of 5.0.3 data into 6.5 database tables, some 5.0.3 data cannot be converted. Items that cannot be converted automatically are recorded and reported in a conversion log.

Users can review conversion logs in the course of migration, or scroll to the bottom of text editors displaying .ARD and .ARG output files.

Due to the diverse use of Hyperion Analyzer, every foreseeable exception cannot be addressed, but a summary of common conversion exceptions follows:

{system} and defaultuser Do Not Migrate

The Release 5.0.3 user ID {system} was used to share content with all users in the Hyperion Analyzer system. Due to security considerations, there is no equivalency in Hyperion Analyzer 6.5. Users and administrators must now explicitly share report groups with user group members.

Owning and Sharing

Owning and Sharing properties do not migrate. Hyperion Analyzer 6.5 reports and report groups are not shared to other users until report group properties are set to share Hyperion Analyzer content with selected user groups.

Linked Views Must Be Converted Together in a View Group

Views that are linked must be placed in the same view group and migrated together. Linked reports that are migrated individually, are converted without links.

Unique Member and Calculation Names

Users that name calculation definitions the same name as dimension members, may encounter conversion errors. Give calculation definitions unique names.

No Defaults for Custom Report Selection Controls

Hyperion Analyzer 5 Custom Report selection controls (radio button group, tab set, list box, and slider bar) do not convert with default settings. This means that when custom reports are displayed, the selection control member selections are not applied to the corresponding data objects, until focus is given to the specific control. When conversion is complete, the report can be saved with new default settings.

Named Report Startup Options

Named Report Startup Options (User Preferences) do not migrate. In order to access to reports of this sort after migration, the report must be assigned to a user group using the Administration Tools client.

Common Conversion Exceptions

Reports:

Unable to find axis.

Unable to find dimension.

Unable to find member.

Unable to migrate view.

Unable to export database information.

Unable to migrate Hyperion Essbase ParentFirst setting.

Unable to migrate image.

Unable to load pinboard.

Unable to migrate calculation.

Unable to migrate Sort first X members.

Unable to migrate data formatting for technical reasons (HYADTOFormatFont has serialization).

Unable to migrate Show/Hides on ranges of values.

Unable to find axis for Show/Hide.

Unable to migrate drill link to executable.

Unable to migrate relational or MS views.

Custom Reports:

Unable to migrate label alignment.

Unable to migrate panel border width.

Unable to migrate panel caption.

Unable to migrate panel font.

Unable to migrate radio group caption.

Unable to migrate radio group hint.

Unable to migrate radio group color.

3

Custom Reports:	
Unable to migrate radio group font.	
Unable to migrate service tab order.	
Unable to migrate service tab stop.	
Unable to migrate service hint.	
Unable to migrate tab set hint.	
Unable to migrate tab set font.	
Unable to migrate combo box hint.	
Unable to migrate combo box font.	
Unable to migrate form due to incomplete loading.	
Unable to find component.	

Hyperion Analyzer Import/Export Utility

Users with privileges can create and delete user IDs and user group profiles by importing a valid .aru XML file. Import functionality is also integral to migrating Hyperion Analyzer 5.0.3 users to Release 6.5.

Import Process Order

The XML file is processed in the following order:

- 1. Delete Users
- 2. Delete User Groups
- 3. Create User Groups
- 4. Create Users
- 5. Delete Personal Variable definitions
- 6. Create Personal Variable definitions
- 7. Delete POV definitions
- 8. Create POV definitions
Importing an .ARU XML file

The .aru xml file can be imported from the Hyperion Analyzer Administration Tools File | Import menu, or from the command line.

- To import and execute an XML file using Administration Tools:
 - 1. Select File | Import from the Administration Tools Menu bar.

The Open dialog box is displayed.

- **2.** Navigate to and select the .aru file.
- 3. Click OK.

The file is imported and processed.

To import and execute an XML file using the command line, enter the following text at the command line of the Hyperion Analyzer drive:

```
Admin.bat [filename.aru] [user_ID] [Password]
```

XML File Format Example

A sample XML import file and a line-by-line explanation follow:

- 1) <?xml version="1.0" encoding="UTF-8"?>
- 2) <AnalyzerAdmin>
- 3) <CreateUserGroups>
- 4) <DefaultRole Name="Interactive User"/>
- 5) <DefaultRole Name="Information Consumer"/>
- 6) <UserGroup Name="GroupA" Description="Some Description"/>
- 7) <UserGroup Name="GroupB" Description="Another Description">
- 8) <Role Name="Power User"/>
- 9) </UserGroup>
- 10) <UserGroup Name="GroupC"/>
- 11) </CreateUserGroups>

```
12) <CreateUsers Password="Pwd" ChangePwd="true"
TemplateProperties="User50">
```

- 13) <DefaultUserGroup Name="GroupA"/>
- 14) <DefaultRole Name="Power User"/>

- 15) <User LoginID="User1" Name="TestName"/>
- 16) <User LoginID="User2" Password="Pwds" ChangePwd="false"/>
- 17) <User LoginID="User3" TemplateProperties="User27">
- 18) <UserGroup Name="Administrators"/>
- 19) <Role Name="Power User"/>
- 20) </User>
- 21) </CreateUsers>
- 22) <DeleteUsers>
- 23) <User LoginID="OldUser1"/>
- 24) <User LoginID="OldUser2"/>
- 25) </DeleteUsers>
- 26) <DeleteUserGroups>
- 27) <UserGroup Name="OldGroup1"/>
- 28) <UserGroup Name="OldGroup2"/>
- 29) </DeleteUserGroups>
- 30) <ModifyUsers>
- 31) <User LoginID="Administrator">
- 32) <AddPersonalVariable Name="MarketPV" Database= "localhost:Sample:Basic" Dimension="Market">
- 33) <Member Name="Market" SelectionMode="CHILDREN"/>
- 34) <Member Name="East" SelectionMode="CHILDREN"/>
- 35) </AddPersonalVariable>
- 36) <AddPersonalVariable Name="YearPV" Database= "localhost:Sample:Basic" Dimension="Year">

```
37) <Member Name="Qtr4" SelectionMode="PREVIOUS" PreviousCount=
"2"/>
```

38) </AddPersonalVariable>

39) <AddPointOfView Name="BatchPOV" Database=
"localhost:Sample:Basic" Active="True">

- 40) <AxisSelections Axis="Columns">
- 41) <Dimension Name="Market">
- 42) <Member Name="East"/>
- 43) <Member Name="West" SelectionMode="CHILDREN"/>

- 44) </Dimension>
- 45) <Dimension Name="Product">
- 46) <Member Name="Product" SelectionMode="CHILDREN"/>
- 47) </Dimension>
- 48) </AxisSelections>
- 49) <AxisSelections Axis="Rows">
- 50) <Dimension Name="Year">
- 51) <Member Name="Year" SelectionMode="CHILDREN"/>
- 52) </Dimension>
- 53) </AxisSelections>
- 54) <AxisSelections Axis="Pages">
- 55) <Dimension Name="Scenario">
- 56) <Member Name="Scenario" SelectionMode="CHILDREN"/>
- 57) </Dimension>
- 58) </AxisSelections>
- 59) </AddPointOfView>

```
60) <RemovePersonalVariable Name="YearPV" Database=
"localhost:Sample:Basic"/>
```

```
61) <RemovePointOfView Name="AnotherPOV" Database=
"localhost:Sample:Basic"/>
```

- 62) </User>
- 63) <User LoginID="TestUser">

```
64) <RemovePointOfView Name="TestPOV" Database=
"localhost:Demo:Basic"/>
```

- 65) </User>
- 66) </ModifyUsers>
- 67) </AnalyzerAdmin>

XML File Format Explanation

The following is a line-by-line description of the above file:

1) Identifies the XML version and character encoding of the XML file. This must be the first line of all .aru import files.

2) Identifies Hyperion Analyzer Administration Tool as the target application. **This must be the second line of all .aru import files**.

3) Begins the request to create one or more user groups.

4,5) Identifies the roles to be assigned to each newly-created user group in the CreateUserGroups request.

6,7) Identifies the user groups to be created. The Name property must be a unique group name. The description property is optional and may be omitted.

8) Identifies a role to be assigned to GroupB in addition to the default roles defined in lines 4 & 5.

9) Ends the definition of GroupB.

10) Identifies a third user group to be created.

11) Ends the CreateUserGroups request.

12) Begins a request to create one or more users. A default password of "Pwd" will be assigned to each new user that does not specifically identify a password. When the default password is omitted, a password must be given in each specific user definition. Each new user will be required to change their password upon login unless the value of ChangePwd is overridden in a specific user definition. Each newly created user will be assigned the same user properties as the existing User50 user. TemplateProperties are optional and may be omitted.

13) Identifies the default user group that will be assigned to each newly created user within the CreateUsers request. Multiple user groups may be specified by adding additional DefaultUserGroup lines.

14) Identifies the default role that will be assigned to each newly created user within the "CreateUsers" request. Multiple roles may be specified by adding additional DefaultRole lines.

15) Identifies the new user to be created. The LoginID must uniquely identify the new user. "Name" is an optional property that may be omitted.

16) Identifies another new user and overrides the default password information provided on line 12.

17) Identifies another new user and overrides the user properties information provided on line 12. This user will have the same properties as the existing User27 user.

18) Identifies the user group to be assigned to User3 in addition to the default group defined in line 13.

19) Identifies the role to be assigned to User3 in addition to the default role defined in line 14.

20) Ends the User3 definition.

21) Ends the create users request.

22) Begins the delete users request.

23,24) Identifies the users to be deleted.

25) Ends the delete users request.

26) Begins the delete user groups request.

27,28) Identifies the user groups to be deleted.

29) Ends the delete user groups request.

30) Begins a request to modify one or more user accounts. The only supported account modifications using the import functionality are adding/deleting points of view and adding/deleting personal variables.

31) Identifies the user whose account is being modified.

32) Begins the request to create a new personal variable. The personal variable name, database name, and the database dimension name to which the variable applies must be provided. If a personal variable of the same name already exists for the database. The operation is aborted. The personal variable is applied to all global and personal databases with the specified name.

33,34) Identifies the members within the dimension that make up the personal variable, as well as the selection mode for each member. Valid selection modes are: MEMBER, CHILDREN, DESCENDANT, PARENT, ANCESTOR, SIBLING, DIMBOTTOM, DIMTOP, LEVEL, GENERATION, and PREVIOUS. The default selection mode is MEMBER.

35) Ends the add personal variable request.

36) Begins the new request to create a personal variable.

37) Identifies the member with a selection mode of PREVIOUS. In this instance a previous count must be provided to identify the number of previous members are to be included with this member.

38) Ends the add personal variable request.

39) Begins the request to create a new point of view. The point of view name, and database name must be provided. The user may optionally indicate whether this point of view should be active. The default active value is "False". If a point of

view of the same name already exists for the database. The operation is aborted. The point of view is applied to all global and personal databases with the specified name.

40) Identifies the axis to which the following dimension selections are to be applied. Valid axes are: Rows, Columns, Pages, and Filters. The default axis is Filters.

41) Identifies dimension to be placed on the axis.

42,43) Identifies the members within the specified dimension to be placed on the axis. The valid selection modes are the same as those identified on line 33,34. Note that on line 42 the default selection mode is MEMBER.

44) Ends the dimension specification.

45-47) Identifies another list of members to be place on the axis identified on line 41.

48) Ends the selection of members for the axis.

49-58) Identifies the members to be included on two more axes.

59) Ends the point of view definition.

60) Request to delete the personal variable named YearPV which is defined against database localhost:Sample:Basic.

61) Request to delete the point of view named AnotherPOV which is defined against database localhost:Sample:Basic.

62) Ends the modifications to the specified user.

63-65) Modification of another user account.

66) Ends the modify user request.

67) Ends the Administrator requests.

Importing Authenticated Users

With the advent of the new Hyperion Analyzer authentication methods, Administrators have the option of importing users and specifying the authentication method used to validate them during log on.

To enable this functionality, Administrators must enter fully qualified usernames in their XML file, as in the following example:

```
12) <CreateUsers Password="Pwd" ChangePwd="true"
TemplateProperties="User50">
13) <DefaultUserGroup Name="GroupA"/>
14) <DefaultRole Name="Power User"/>
15) <User LoginID="June" Name="TestName"/>
16) <User LoginID="Essbase\Nikko" Password="Pwds" ChangePwd=
"false"/>
17) <User LoginID="External:ntlmSvrname\Franz"
TemplateProperties="User27">
18) <UserGroup Name="Administrators"/>
19) <Role Name="Power User"/>
20) </User>
21) </CreateUsers>
```

On line 15: In the absence of any authentication method, June will be authenticated using by default Analyzer authentication.

On line 16: By declaring Essbase authentication and a backslash(\), the user ID Nikko will be created and authenticated using the defined Essbase authentication server.

On line 17: By declaring the external authentication method and the external authentication provider (separated by a colon (:) and followed by a backslash (\)), the user ID Franz will be created and authenticated using the specified external authentication provider.

Note: Important! To import authenticated users, all authentication methods must be implemented. See Chapter 4, "Managing Security and Access", for more information.

Exporting an .ARU XML File

Administrators have the same options for exporting Hyperion Analyzer repository information

To export an .aru XML file using Administration Tools:

1. Select File | Export from the Administration Tools Menu bar.

The Open dialog box is displayed

- 2. Navigate to an output location for the .aru file.
- 3. Click OK.

The file is exported to the specified location.

Web Publishing Batch Utility

Hyperion Analyzer enables users to convert a currently displayed report, or and entire report group to HTML, by specifying a JSP template.

This Web Publishing process can also be automated using a command line batch utility that converts report groups to HTML as scheduled.

Prerequisites for Web Publishing

Hyperion Analyzer Standalone (Windows) Client

Administrators are required to install a license of the Hyperion Analyzer standalone client on a Windows client machine.

Report Properties

Report properties can be defined that direct Web Publishing. When no report properties are set, default values are used.

Accessing Report Properties

- > To display the Report Properties dialog box, do one of the following tasks:
 - Right-click the Report Tabs bar and select Properties.
 - Click the toolbar Open button, to display Report Manager, and then select Properties from the report name right-click menu.

JSP Templates

Hyperion Analyzer converts reports to Web pages using pre-defined Java Server Pages (JSP) templates.

All templates must be located in your application server's Web Publishing template sub-directory (wp_templates).

When no JSP template file is specified, Analyzer defaults to using the report_publish.jsp template in the \webapps\Analyzer6_Server\templates sub-directory.

Publish To

HTML output location is defined by the Publish To report property.

When using the Batch Utility, the default output file (Publish To) is the application server's Web Publishing Output sub-directory (wp_output) when no other directory is specified.

Creating the Web Publishing XML File

Users are required to define an XML that specifies the parameters and arguments used to automate Web Publishing.

The following code is an example of a Web Publishing XML file:

```
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <AnalyzerExport>
3 <ExportItem URL=
"http://localhost/Analyzer6_Server/Dispatcher" UserName=
"system" Password="password" GroupName="systemGroup"
ReportName="" Overwrite="" />
4 </AnalyzerExport>
```

Web Publishing XML File Explanation

The following is a line-by-line description of the above file:

1) Identifies the XML version and character encoding of the XML file. This must be the first line of all Web Publishing files.

2) Indicates the start of a Web Publishing declaration.

3) Identifies the subject to be exported to HTML using the following attributes:

- URL=the fully qualified path to the Dispatcher in the web app directory.
- UserName=A valid Hyperion Analyzer user ID.
- Password=A valid password for the user name.

3

- GroupName=The name of the Hyperion Analyzer report group containing the reports to be exported as HTML.
- ReportName=The name of the report to be exported as HTML.

Note: In the absence of a specified ReportName attribute, the entire report group is exported as HTML.

4) Indicates the end of a Web Publishing declaration.

Locating the Web Publishing XML File

The Web Publishing XML file must be accessible to the installed Hyperion Analyzer Standalone (Windows) client.

Running the Web Publishing Batch Utility

To export the items specified by the Web Publishing XML file using the command line, enter the following text at the command line of the Hyperion Analyzer drive:

```
BatchExport.bat [filename.xml]
```

Chapter

Managing Security and Access

Authentication Options

Hyperion Analyzer supports three methods for validating user IDs and logons:

- Analyzer Authentication
- Essbase Authentication
- External Authentication

Authentication methods are not mutually exclusive. Administrators may elect a combination of methods and set an order of precedence.

Administrators must evaluate the advantages and disadvantages of each of these methods before setting authentication methods.

Analyzer Authentication

Native Hyperion Analyzer authentication is always available to every valid Hyperion Analyzer user.

Analyzer authentication validates the user against known user IDs and passwords in the Hyperion Analyzer repository.

Administrators using this authentication method have the additional option of setting Hyperion Analyzer passwords to expire at specified interval of days.

The Hyperion Analyzer Batch Import/Export utility enables administrators to compose an .ARU XML file that automates the creation and modification of users and user groups in the Hyperion Analyzer repository. See Chapter 3, "Hyperion Analyzer Utilities", for more information.

Essbase Authentication

When Hyperion Essbase authentication is enabled, Hyperion Analyzer uses the specified Hyperion Essbase server to validate the user ID and password for login. This method requires the administrator to specify the server name or server IP address.

Essbase authentication is summarized by the following table:

Essbase Authentication Action	Hyperion Analyzer Response
Hyperion Essbase validates the user and the existence of a Hyperion Analyzer user profile.	Hyperion Analyzer logs in the user.
Hyperion Essbase validates the user but cannot validate the existence of a Hyperion Analyzer user profile.	Hyperion Analyzer assigns the Hyperion Essbase user ID and password to a new user profile (created using a default user group).
Hyperion Essbase cannot validate the user.	Hyperion Analyzer displays a failed login message.

External Authentication

When external authentication is enabled, Hyperion Analyzer uses a centralized, independent authentication provider to validate the user ID and password.

Hyperion Analyzer supports three external authentication providers:

- Lightweight Directory Access Protocol Directory (LDAP)
- Microsoft Active Directory, Windows 2000 sp1 (MSAD)
- Microsoft Windows NT LAN Manager 4.0 (NTLM)

Hyperion Analyzer supports four external authentication platforms:

- Microsoft Windows NT 4.0
- Microsoft Windows 2000
- Microsoft Windows XP

• UNIX

Note: NTLM implementations on UNIX platforms require NTLM remote server to be installed on a Windows NT or Windows 2000 server.

Single Sign-on

One of the benefits of external authentication is single sign-on. Externally authenticated users are granted access to multiple Hyperion applications after logging on only once. After external authentication, an encrypted token containing the user ID and password is passed among Hyperion applications and is used to automatically re-authenticate the user.

Setting Authentication Methods

Authentication methods are set, in whole or in part, using the Hyperion Analyzer Administration Tools client.

Setting Analyzer Authentication

- To initiate Analyzer Authentication:
 - **1.** Start Hyperion Analyzer Administration Tools.
 - **1.** Select **Edit > Authentication Services**.

The Authentication Services dialog box is displayed. It contains a General tab and three authentication method tabs.

2. Select the General tab.

Within the Select Domain Types group the Analyzer check box is selected. The checkbox is disabled, so that users cannot change this selection. This ensures that Analyzer authentication is always available.

Within the Default Domain Type group the Analyzer option is selected. This sets Analyzer authentication as the default in the Login dialog box.

3. Select the **Analyzer** tab.

This tab features a password expiration setting.

4. If you want to set passwords to expire after a specified interval of days, click the check box and enter a whole number in the entry field.

4

5. Click OK.

Setting Essbase Authentication

- > To initiate Essbase Authentication:
 - **1.** Start Hyperion Analyzer Administration Tools.
 - 1. Select Edit > Authentication Services.

The Authentication Services dialog box is displayed. It contains a General tab and three authentication method tabs.

2. Select the General tab.

Within the Select Domain Types group the Analyzer check box is selected. This checkbox is disabled, so that users cannot change this selection. This ensures that Analyzer authentication is always available.

3. Select the **Essbase** check box.

This selection enables the Essbase tab.

4. Select a default domain type, by clicking an enabled option button in the Default Domain Type group.

If you want Essbase to serve as the default authentication domain, select **Essbase** in the Default Domain Type group. This sets Essbase authentication as the default in the Login dialog box.

If you want Analyzer to serve as the default authentication domain, select **Analyzer**.

- 5. Select the Essbase tab.
- 6. Enter the server domain name or the IP address in the Essbase Server field.
- **7.** Select a defined Hyperion Analyzer user group from the **Default User Group** drop down list box.

When Hyperion Essbase can validate the user, but cannot determine whether a Hyperion Analyzer user ID has yet been created, a new user ID is created using the Essbase user ID and password. The privileges of the specified Default User Group are assigned to the new user ID.

Hyperion Analyzer is delivered with an Administrators user group that assigns all the privileges normally given to the system administrator.

If the none option is selected, a new user ID is created, but the user is not able to use Hyperion Analyzer until an Administrator assigns the new user ID to a defined Hyperion Analyzer user group.

For more information on creating user groups and assigning user roles/privileges, see the Hyperion Analyzer Administration Tools Online Help.

8. Click OK.

Configuring External Authentication

Configuring external authentication has been broken down into the following processes:

Configuring External Authentication Overview

- **1.** Satisfy pre-requisites
- 2. Install Hyperion Analyzer
- **3.** Define Hyperion Analyzer user groups
- 4. Edit the CssConfig.xml file
- **5.** Locating the CssConfig.xml file
- 6. Copy archives to the application server JRE
- 7. Specify the configuration file location
- **8.** Map groups to Hyperion Analyzer user groups

Pre-requisites for External Authentication

Before you can implement external authentication, the following determinations must be made:

- Is the security platform implemented from an application or an application server?
- Which platforms and authentication providers will be used in external authentication?

• If you are considering implementing an NTLM provider on a UNIX platform, is an NTLM remote server installed on a Windows NT or Windows 2000 server?

Installing Hyperion NTLM Remote Server to Support UNIX applications

To install Hyperion NTLM Remote Server in support of UNIX applications, perform the following steps:

1. Install Hyperion NTML Remote Server on the Microsoft Windows NT/2000 server (Run setup.exe).

The installation program, setup.exe, is provided with Hyperion application installation software.

- 2. Accept the terms of the license agreement and click Next.
- **3.** Click **Next** on the Welcome page.
- **4.** Identify a destination location for the NTLM Remote Server, and click **Next**.
- 5. Enter the host name and port number for the machine hosting the NTLM Remote Server, and click Next.
- 6. If you use Secure Sockets Layer (SSL) with your NTLM deployment, select the option to support SSL and click **Next**.
- 7. In the **Start Copying Files** dialog box, click **Next** to begin the installation.
- **8.** Click **Finish** to complete the installation.
- To run the remote server, select Start > Programs > Hyperion Solutions > NTLM Remote Server > Run NTLM Remote Server.

Note: Combining the NTLM remote server with the NTLM Primary Domain Controller is not recommended, but the NTLM remote server machine needs to be in the same domain as the NTLM Primary Domain Controller.

Note: Ensure that the JRE installed on the UNIX application server is also installed on the NTLM Remote Server.

Required NTLM User Rights

The NTLM user account on which the application server runs requires the access described below. Privileges must be established on the machine running the application server (as opposed to the NT domain machine):

- Grant "Access the computer from the network" rights
- Grant "Act as part of the operating system" rights
- End users must be domain users rather than local Windows users.

Hyperion Analyzer Installation and External Authentication Components

Hyperion Analyzer installs the following external authentication components in the course of installation:

- A generic CssConfig.xml file is installed in the ..\hyperion\analyzer\conf directory.
- Java Cryptography Extension (JCE) archives are installed in the ..\hyperion\analyzer\css directory.

Defining Hyperion Analyzer User Groups

Hyperion Analyzer privileges are assigned by user group. All users command the privileges given to the user groups to which they belong.

If your Hyperion Analyzer implementation already features defined user groups, you can proceed to the next procedure.

- To create new Hyperion Analyzer user group profiles in Hyperion Analyzer Administration Tools, perform the following steps:
 - **1.** Do one of the following tasks:
 - Right-click the User Groups folder and select New User Group from the right-click menu.
 - From the Menu bar, select **File > New > New User Group**.

An empty user group profile is displayed in the Management panel. The General tab is displayed by default.

2. Enter a user group name in the Name field.

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- **3.** Optionally, you can enter a user group description in the **Description** field.
- 4. Click the **Roles** tab.

Hyperion Analyzer has four defined roles:

- Administrator Unrestricted
- Power User
- Interactive User
- Information Consumer Read-only access

Detailed descriptions of the permissions provided through each of these roles is provided by Hyperion Analyzer Administration Tools Online Help.

Note: Assign these roles conservatively. There are fewer consequences for expanding permissions than restricting permissions.

- 5. Select a role in the **Available** panel.
- 6. Click the right arrow button, to move the role definition to the Assigned panel.

The selected role has been assigned to all users of the user group. Permissions are cumulative for multiple role elections.

- 7. Click the Apply button.
- 8. Click OK.

A user group profile has not been created until the Apply button is clicked and the Log panel confirms success.

This process must be repeated for each user group. The number of user groups required is determined by the roles and permissions required for your implementation.

Editing the CssConfig.xml File

External authentication is managed using a configuration XML file that specifies the platforms and authentication providers of your specific implementation. Users must establish the components used in support of external authentication, and then coordinate them by editing the XML file.

Pre-existing Configuration Files

Before you edit the CssConfig.xml file delivered with Hyperion Analyzer, you must determine whether your enterprise has defined an external authentication configuration file for previously installed Hyperion products.

Note: If this file already exists, do not overwrite it.

The Hyperion Analyzer external authentication configuration file is called CssConfig.xml. Because files can be renamed, you cannot depend on a simple file search to determine the existence of an external authentication configuration file.

Editing Configuration File Overview

If no other external authentication configuration file exists, you can edit the generic CssConfig.xml file installed in the ..\hyperion\analyzer\conf directory.

In editing the XML file, you will specify the following information:

- The sequential search order for accessing multiple external authentication provider types
- The type, name, parameters, and number of external authentication providers
- The duration in minutes that authentication tokens persist when passed to Hyperion applications (before timing out)
- Logging parameters

Opening the Configuration File

To edit the external authentication configuration file, open the external authentication configuration file (CssConfig.xml) in Microsoft WordPad Text Editor.

Configuring the Provider Search Order

The search order provides the external authentication mechanism the ability to access multiple providers in a sequential manner. Search order must be defined even if there is only a single authentication provider. In this case, the search order property has a single entry.

> To define the provider search order:

1. Locate the **<searchOrder>** tag in the configuration file.

Each supported external authentication provider is listed as an element of the search order tag:

```
<searchOrder>
```

```
<el>ntlmServer</el>
<el>ldapServer</el>
<el>msadServer</el>
```

```
</searchOrder>
```

The order of the elements determines the order in which each external authentication provider is searched in an attempt to validate users during log on.

Hyperion recommends placing the provider for most users of Hyperion applications first in the search order.

2. Cut and paste the elements, to reorder them.

Providers may be added or removed as needed.

The search order element must be named exactly the same as the name you specify in subsequent provider definitions.

To expedite editing, you can comment out elements using the following syntax:

<!-- el>ldapServer</el -->

- **3.** Add, remove or comment out elements as needed.
- To save your changes to the configuration file, select File > Save from the WordPad Menu bar.

Configuring an NTLM Provider

You must modify the configuration file to support NTLM external authentication providers, if you are implementing them.

> To define NTLM external authentication providers, perform the following steps:

1. Locate the NTLM provider tags in the configuration file.

The NTLM tag is <ntlm name="ntlmAuth1">.

2. Edit the name value to correctly reflect the name of the external authentication provider.

Remember that the string value must be inside quotation marks, and must be identical to the name specified in the search order tag.

The following parameters can be set for each defined provider. Do not delete parameter values only. In the absence of values, defaults may be used. To delete the impact of a parameter, comment it out, or delete the entire tag set (from <> to </>).

- trusted: The trust relationship of this provider
- domain: The NTLM domain against which to authenticate
- maxSize: Maximum allowable number of users or groups returned.
- remoteServer: This section should be included when authenticating from UNIX

Note: If you support Hyperion applications only on Microsoft Windows platforms, delete the content of the <remoteServer> tags, as their configuration applies only to support for UNIX clients accessing information stored in an NTLM provider.

• location: Location providing the remote RMI authentication for NT

The configuration file contains generic provider definitions to expedite your changes. Edit the parameters as follows:

3. Edit the **<trusted></trusted>** tags.

If the specified provider is a trusted provider, leave the value **true**. A password is not present or required in the user authentication token, when the value is true. Users still must log in with a user name and password, but the password is not stored in the token.

If the specified provider is not a trusted provider, replace the value with **false**. A password is required in the user authentication token, when the value is false.

If the entire tag is deleted, the default value of true is used.

4. Edit the **<domain></domain>** tags.

The NTLM provider is responsible for operations on the specified domain. When no value is supplied for the domain element, the NTLM provider performs operations on all trusted domains. 5. Edit the user <maxSize></maxSize> tags.

Replace the generic value with the maximum number of entries that can be returned in a query.

If the entire tag is deleted, the default value of 100 is used. Do not delete the tag values solely. Setting the value to 0 prevents rows from being returned to the application.

6. To save your changes to the configuration file, select **File > Save** from the WordPad Menu bar.

Configuring the NTLM Remote Server in Support of UNIX Applications

If you are implementing an NTLM provider on a UNIX platform, you must identify the NTLM remote server installed on a Windows NT or Windows 2000 server.

- To configure the Hyperion NTLM Remote Server in support of UNIX applications, perform the following steps:
 - 1. Locate the **<remoteServer>** tag in the configuration file NTLM provider definition.
 - 2. Change the value between the <location></location> tags to indicate the URL of the Hyperion NTLM Remote Server.

You may be required to un-comment the lines surrounding the tag and values.

3. To save your changes to the configuration file, select **File > Save** from the WordPad Menu bar.

Configuring an LDAP or MSAD Provider

You must modify the configuration file to support LDAP and MSAD external authentication providers, if you are implementing them.

- To define LDAP and MSAD external authentication providers, perform the following steps:
 - 1. Locate the LDAP and MSAD provider tags in the configuration file.

The LDAP tag is <ldap name="ldapAuth1">.

The MSAD tag is **<msad name="msadAuth1">**.

2. Edit the name value to correctly reflect the name of the external authentication provider.

Remember that the string value must be inside quotation marks, and must be identical to the name specified in the search order tag.

The following parameters can be set for each defined provider. Do not delete parameter values only. In the absence of values, defaults may be used. To delete the impact of a parameter, comment it out, or delete the entire tag set (from <> to </>).

- trusted: The trust relationship of this provider
- url: Provider server identification
- userDN: (Optional) ID of user with directory access
- password: (Optional) Password of user with directory access
- authType: Authentication type
- authProtocol: (Optional) Authentication Protocol
- maxSize: Maximum allowable number of users or groups returned.
- identityAttribute: Attribute which specifies the users identity
- user: Attributes defining user aspects.

Note: loginAttribute is used to identify the users login name.

• group: Attributes defining group aspects.

The configuration file contains generic provider definitions to expedite your changes. Edit the parameters as follows:

3. Edit the **<trusted></trusted>** tags.

If the specified provider is a trusted provider, leave the value **true**. A password is not present or required in the user authentication token, when the value is true.

If the specified provider is not a trusted provider, replace the value with **false**. A password is required in the user authentication token, when the value is false.

If the entire tag is deleted, the default value of true is used.

4. Edit the **<url></url>** tags.

Replace the tag value with the URL of the external authentication provider location. You must include the domain component attributes (DCs) in the URL. For example:

ldap://ldap_server:389/DC=company,DC=com

Note: Ensure that there are no empty spaces in the URL.

5. Edit the **<usderDN></userDN>** tags and **<password></password>** tags.

Replace the generic values with information from valid user account with read-only access to the directory stores.

If you want to provide anonymous access, delete both tag definitions. Do not delete the tag values solely.

Next you will structure the user definition information for external authentication.

6. Edit the user <maxSize></maxSize> tags.

Replace the generic value with the maximum number of entries that can be returned in a query.

If the entire tag is deleted, the default value of 100 is used. Do not delete the tag values solely. Setting the value to 0, enables a result set size of unlimited. This is not advisable, as extremely large result sets quickly consume memory allocations.

7. Edit the user <authProtocol></authProtocol> tags.

Replace the generic value with additional security protocols you are using to secure data transmission to and from the external authentication provider.

The only valid value for this tag is ssl.

If you are not using Secure Sockets Layer, delete the tags completely.

If you are using Secure Sockets Layer, also complete the following tasks:

- On the directory server, ensure that a certificate is installed and available.
- On the Java Virtual Machine that runs your application, create a certificate database if one does not exist.
- On the Java Virtual Machine that runs your application, trust the Certificate Authority (CA) that issues the server certificate.

The security platform uses the LDAP service provider from SUN to authenticate users stored externally in an LDAP-compatible directory. The LDAP service provider runs on the Java Virtual Machine for your application. When SSL is used as the secure medium to connect to the directory server, the security platform LDAP service provider uses Java Secure Socket Extension software for SSL support.

8. Edit the user **<identityAttribute></identityAttribute>** tags.

Replace the generic value with the unique identifier attribute of the directory. The attribute may be the DN, or a custom attribute such as employee_ID. When the identityAttribute tags are deleted the default value is **dn**.

9. Edit the user **<url></url>** tags.

Replace **ou=People** with the directory server branch that contains user entries. For example (if users are stored in a directory named People):

```
<user>
<url>ou=People</url>
</user>
```

The user url property is relative to the URL specified for the provider. If you want the provider to search the whole directory, delete the **<url></url>** tags. Do not delete the tag values solely.

10. Edit the user <loginAttribute></loginAttribute> tags.

Replace the generic value with the unique entry attribute of the directory. The attribute may be part of the DN, such as cn or uid, or a custom attribute such as employee_id. When the loginAttribute tags are deleted, the default is **cn**.

For example, if users use the common name attribute and are identified by cn= UserName, the following syntax is used:

```
<user>
<loginAttribute>cn</loginAttribute>
</user>
```

The sample above is correct if it is true that all user names are identified by cn=UserName.

The above example highlights a subset of the DN. However, the loginAttribute property can instead refer to an attribute under the directory node for the user. For example, loginAttribute can point to uid.

11. Edit the user **<fnAttribute></fnAttribute>** tags.

Replace the generic value with the attribute associated with first-name entries in the directory. If the <fnAttribute> </fnAttribute> tags and their contents are deleted, the default value for the first-name attribute is givenname.

12. Edit the user **<snAttribute></snAttribute>** tags.

Replace the generic value with the attribute associated with last-name entries in the LDAP directory. If the <snAttribute></snAttribute> tags and their contents are deleted, the default value for the last-name attribute is sn.

13. Edit the user **<emailAttribute></emailAttribute>** tags.

Replace the generic value with the attribute mapped to e-mail addresses that is stored in your corporate directory.

If the <emailAttribute> </emailAttribute> tags and their contents are deleted, the default value is mail.

14. Edit the user **<objectclass></objectclass>** tags.

You may add <entry></entry> tags and values if your corporate directory schema requires specialized object classes to describe users, and those object classes are not present in the existing entries.

The provided (default) user object classes for LDAP are person, organizationalPerson, and inetOrgPerson.

The provided (default) user object classes for Active Directory are person, organizationalPerson, and user.

Next you will structure the group definition information for external authentication.

15. Edit the group **<url></url>** tags.

Replace **ou=Groups** with the directory server branch that contains group entries. For example (if users are stored in a directory named Groups):

```
<group>
<url>ou=Groups</url>
</group>
```

The user url property is relative to the URL specified for the provider. If you want the provider to search the whole directory, delete the **<url></url>** tags. Do not delete the tag values solely.

16. Edit the group **<nameAttribute></nameAttribute>** tags.

Replace the generic value with the attribute in the corporate directory through which a group entry can be discovered. The default value is cn if the <nameAttribute> section is deleted.

For example (if group names containing the relevant user entries are using the Common Name attribute):

```
<group>
<nameAttribute>cn</nameAttribute>
</group>
```

17. Edit the group **<objectclass></objectclass>** tags.

You may add <entry></entry> tags and values if your corporate directory schema requires specialized object classes to describe groups, and those object classes are not present in the existing entries.

The provided (default) group object classes for LDAP are groupofuniquenames?uniquemember and groupOfNames?member.

The provided (default) group object class for Active Directory is group?member.

For additional entries you make, the <entry> tag values must be of the format ObjectClassName?AttributeName

For example (where group is the name of the objectClass and member is the attribute that holds the distinguished Name of the member of this group):

```
<group>
<entry>group?member</entry>
</group>
```

 To save your changes to the configuration file, select File > Save from the WordPad Menu bar.

Configuring Token Timeout

When an externally authenticated user logs in to a Hyperion application, a token is generated to contain the login credentials. You can configure the token to expire after a specified number of minutes, instead of the default of 480 minutes (eight hours).

> To define the length of time a token remains valid, perform the following steps:

1. Locate the **<token>** tag in the configuration file.

2. Enter the number of minutes required to pass before a user is prompted to authenticate again between the **<timeout></timeout>** tags.

<timeout>60</timeout>

3. To save your changes to the configuration file, select **File > Save** from the WordPad Menu bar.

Configuring Preferred Logging Priority

- To configure the error level setting for applications supporting external authentication, perform the following steps:
 - **1.** Locate the **<logger>** tag in the configuration file.
 - Change the error reporting value from DEBUG to the level of authentication-related error messages that you want the application to log between the <priority>DEBUG</priority> tags.

The following values are cumulative and include the error messages of the subordinate error levels.

DEBUG - Include all information for the purposes of debugging.

INFO - Include status information for select operations and requests.

WARN - Only include cautionary information for select operations and requests.

ERROR - Only include errors pertaining to failed operations and requests.

FATAL - Only include errors that result in disconnection.

3. To save your changes to the configuration file, select **File > Save** from the WordPad Menu bar.

Copying Archives to the Application Server JRE

- Copy the following Java Cryptography Extension (JCE) archives from the ..\hyperion\analyzer\css directory to the application server Java Runtime Environment \lib\ext directory:
 - jce1_2_2.jar
 - local_policy.jar
 - sunjce_provider.jar

• US_export_policy.jar

Note: If these files already exist at this location, do not overwrite them.

Specifying the Configuration File Location

Because paths for supported application servers vary, you must specify the path to the edited CssConfig.xml file.

- To specify the CssConfig.xml file path, perform the following steps:
 - 1. Launch Hyperion Analyzer Administration Tools.
 - Select Edit > Authentication Services from the Administration Tools menu bar.

The Authentication Services dialog box is displayed. It features a General tab and three authentication method tabs.

3. Click the General tab to make it the current tab.

Notice that inside the Select Domain Types group that the Analyzer check box is selected. Notice also that the checkbox is disabled, so that users cannot change this selection. This ensures that Analyzer authentication is always available.

The Essbase check box may or may not be selected, depending on your implementation.

4. Click the **External** check box.

Notice that this selection enables the External tab.

5. Select a default domain type, by clicking an enabled option button in the Default Domain Type group.

If you want external authentication to serve as the default authentication domain, click the External option button in the Default Domain Type group. This sets external authentication as the default in the Login dialog box. You must also specify the a default authentication server on the External tab.

If you want Analyzer to serve as the default authentication domain, click the Analyzer option button.

- 6. Click the External tab to make it the current tab.
- 7. Click the **Set Configuration File** button.

The External Authentication dialog box is displayed.

- **8.** Enter the fully qualified path to the edited CssConfig.xml file (that you copied to the **..\hyperion\analyzer\conf** application server directory).
- 9. Click OK.

The specified path displays in the External tab Configuration File field.

10. Click the **Default Domain Server** drop down list box, and select one external authentication server to serve as the default.

This setting, in conjunction with the Default Domain Type selection on the General tab, sets a specific external authentication provider as the default in the Login dialog box.

This specific procedure is completed, but do not close the Authentication Services dialog box yet.

Mapping Groups to User Groups

Externally authenticated users must be mapped to Hyperion Analyzer user groups, so that Hyperion Analyzer can appropriately control use and access to the Hyperion Analyzer system.

- To map defined directory server groups to Hyperion Analyzer groups, perform the following steps:
 - 1. In the Authentication Services dialog box **External** tab, click the Group Mappings **Server Name** drop down list box, and select a defined external authentication provider.

This points the Group Mappings table to the external authentication providers specified by the CssConfig.xml file.

The directory server groups for the specified provider display on the left side of the table.

- **2.** Do one of the following:
 - Click the **Mapped Analyzer Groups** cell to the right of a Directory Server Groups cell, and select a defined Hyperion Analyzer user group from the drop down list box.
 - Right-click the **Mapped Analyzer Groups** cell to the right of a Directory Server Groups cell, and select **Map to Group** and a defined Hyperion Analyzer group from the sub-menu.

Your selection displays in the Mapped Analyzer Groups cell.

- **3.** Repeat this process until every directory server group is mapped to a Hyperion Analyzer user group.
- **4.** If applicable, click the Group Mappings **Server Name** drop down list box, select a different external authentication provider, and repeat the process of mapping directory server groups to a Hyperion Analyzer user groups.
- 5. When all groups for all external authentication providers have been mapped to Hyperion Analyzer user groups, click **OK**.

Secure Socket Layer

Hyperion Analyzer supports the SSL 3.0 security protocol. The SSL record protocol encapsulates other protocols that enable client-server authentication and establish encrypted data transfer.

Lockout Recovery

Do not forget the Administrator password, as this prevents administration until another user with an Administrator role (privileges) resets the password.

In the event that you are unable to log in as an administrator because of lost or forgotten passwords, Hyperion Analyzer technical support may be able to recover the system password. However, since there is no "back door" into Hyperion Analyzer, recovering system passwords is difficult.

Managing Security and Access

Configuration Options

5

Chapter

Analyzer.Properties File

The Analyzer.properties file contains variables controlling Hyperion Analyzer functionality. Administrators need to modify the file in support of their specific implementations.

Those using the Apache Tomcat 4.0.1 application server can find the Analyzer.properties file at:

```
C:\Hyperion\analyzer\catalina\webapps\Analyzer6_Server\WEB-INF\ conf
```

Those using the IBM WebSphere application servers can find the Analyzer.properties file at:

```
C:\Hyperion\appserver\hosts\default_host\Analyzer6_Server\Analyzer6\classes
```

Editing the Analyzer.properties File

Controlling the Result Set

Users and system administrators can set row limits to control the size of both the relational and OLAP query result set. This protects server and network resources from being consumed unintentionally by very large query result sets.

The Relational Drill-through graphical user interface features a Max rows to return field that controls the number of rows returned during relational drill-through.

Other OLAP and relational row limits must be set in the Analyzer.properties text file. The path to this text file varies by application server configuration.

The Analyzer.properties file contains variables controlling the query result set in terms of rows:

- MaxDataCellLimit controls OLAP database connection query result set size.
- MaxJdbcCellCount controls relational database connection query result set size.

They are set by default as follows:

MaxDataCellLimit=50000

MaxJdbcCellCount=50000

> To change the upper bound for query result set size:

- **1.** Stop the application server.
- **2.** Edit the variables in a text editor and save your changes.
- **3.** Restart the application server.

Updating the License Key Without Reinstalling

Users can update the number of licensed users or transition from evaluation to licensed use of Hyperion Analyzer without reinstalling the entire application suite.

Users receive new license keys from Hyperion by contacting customer support. For Web-based support, or to see complete information on available support options, visit the Hyperion Web site at: www.Hyperion.com

The Analyzer.properties file contains variables controlling licensed use of Hyperion Analyzer:

- **SingleUser-LicenseKey**= indicates an individual license key.
- LicenseKey= indicates group license keys.
- LicenseKeyVersion=Analyzer6 indicates the version of Hyperion Analyzer
- > To change the license key information:
 - **1.** Stop the application server.
 - **2.** Edit the variables in a text editor and save your changes.
 - **3.** Restart the application server.

Identifying Hyperion Integrated Applications for Hyperion Analyzer

Users must define the Hyperion integrated applications that are available to Hyperion Analyzer users through the Related Content feature.

The Analyzer.properties file contains two variables enabling integrated Hyperion applications in Hyperion Analyzer:

- RelatedContent.Server.Name.0=<ServerDisplayName>
- RelatedContent.Server.URL.0=<TargetURL>

ServerDisplayName is the string value that displays in the Add Related Content dialog box.

TargetURL is the uniform resource locator used to launch the integrated Hyperion application. The TargetURL must be in the following format:

http://<hostname:port>/<webAppURL>?<Application-specific parameters>

The application-specific parameters are defined by individual integrated applications. The following are a few examples of application-specific parameters:

Hyperion Analyzer

sso_username=
\$SSO_USERNAME\$&sso_password\$SSO_PASSWORD\$&sso_token=
\$SSO_TOKEN\$

Hyperion Reports

sso_username=\$SSO_USERNAME\$&sso_password=\$SSO_PASSWORD\$

Hyperion Q&R

sso_token=\$SSO_TOKEN\$&AUTH_TYPE=secLDAP&APS_NAME= hipserver3&path=%2f

Hyperion Central

sso_token=\$SSO_TOKEN\$&path=%2f

Note: Replacement tags are used within the application-specific parameters so that user authentication information can be passed in a consistent way. Available replacement tags are:

- \$SSO_USERNAME\$
- \$SSO_PASSWORD\$
- \$SSO_TOKEN\$

Hyperion Integrated Application Definition Examples

Note: Note the sequential numbering of definitions using a zero-based index!

RelatedContent.Server.Name.0=Hyperion Analyzer

RelatedContent.Server.URL.**0**= http://server1/Analyzer6_Server/DirectoryServlet?sso_username= \$SSO_USERNAME\$&sso_password\$SSO_PASSWORD\$&sso_token= \$SSO_TOKEN\$

RelatedContent.Server.Name.1=Hyperion Reports

RelatedContent.Server.URL.1= http://server2:8200/Reports/HRRepositoryXML.jsp?sso_username= \$SSO_USERNAME\$&sso_password\$SSO_PASSWORD\$&sso_token= \$SSO_TOKEN\$

External Authentication Requirements for Hyperion Integrated Applications

Hyperion integrated applications accessed through the Related Content feature require external authentication implementation.

In addition, the external authentication configuration file(s) must have identical entries for the external authentication provider.

In short, all applications must authenticate users using the same configuration file, or, in the case of multiple configuration files, the authentication provider entries must be identical.
Configuring Essbase XTD Deployment Services (EDS)

The Analyzer.properties file supports variables enabling Essbase XTD Deployment Services (EDS). This service enables access to clustered Essbase server configurations.

A cluster of Essbase servers is a set of servers running on different computers (or different CPUs, on multi-processor systems) that run copies, or replicas, of the same Essbase application, a single Essbase server that runs replicas of the same application, or a combination of both.

Users are encouraged to download and read the Essbase XTD Deployment Services Installation Guide for complete information on installing, configuring and using this service.

Variable	Description
UseEES=false	UseEES=true prompts ADM to use EDS to access Essbase.
	UseEES=false enables ADM to use the default JNI driver.
EESDriverName= adm:thin:com.hyperion.ap. ees.EESHssDriver	Specifies the EDS driver to ADM. Do not modify this variable.
EESServerName=localhost	Specifies the server running EDS.
EESLocale=en	Specifies the locale for EDS.
EESDomain=essbase	Specifies the domain for EDS. Do not modify this variable.
EESORBType=TCPIP	Specifies the valid ORB type for EDS. Only TCPIP is supported.
EESPort=5001	Specifies the EDS communication port. Specify a currently unused port.
EESUseConnPool=false EESConnPerOp=false	Specifies the method ADM uses for EDS connection pooling.
	A connection pool is a set of login sessions from EDS to an Essbase server. EDS uses a connection pool to process requests for Essbase services. There are 3 valid combinations of these properties:
	EESUseConnPool=false EESConnPerOp is
	ignored.
	In this configuration, EES will not use any connection pooling.
	EESUseConnPool=true EESConnPerOp=false
	Connection pooling is used, and the connection is held from the time the cube view is opened until it is closed.
	EESUseConnPool=true EESConnPerOp=true
	Connection pooling is used, and the connection is released immediately after each operation.

Table 5: EDS Variables

Variable	Description
EESUseCluster=false	Enables EDS to use available Essbase cluster.
EESUseReportOption= false	This property should only be set to true if using Microsoft's JVM.

Note: The username and password used by the ADM-EDS driver must be valid on both the EDS server and the Essbase server.

Note: ChangePassword and SetPassword server actions attempt to modify both EDS and Essbase OLAP server passwords. To be successful, the following properties must be set correctly: olap.server.autoChangePassword=true. Also the administrator user ID specified by the EDS_ES_HOME/bin directory (olap.server.admin.name=admin) must be different than the user ID being passed by the action.

Note: Two archives installed with EDS must be defined in the Hyperion Analyzer classpath: ess_es_server.jar and ess_japi.jar.

Note: We do not recomment implementing EDS in conjunction with AIX platforms.

Configuration Options

Chapter

HTML Web Client Templates, Tags, and Actions

HTML Web Client Templates

Templates are composed of conventional HTML and Hyperion Analyzer tags and actions. The following is a list of the templates used by the HTML Web Client:

- about.jsp
- analyze.jsp
- changepwd.jsp
- dblogin.jsp
- desktop.jsp
- dimbrowser.jsp
- edit.jsp
- error.jsp
- frame.jsp
- loggedout.jsp
- login.jsp
- relatedcontent.jsp
- report_publish.jsp
- report.jsp
- reportlist.jsp
- saveas.jsp

Custom Templates

Once custom templates are created, you can optionally pre-compile the templates to enhance performance. Save the templates with other .jsp pages in the appropriate application server directory. In addition, some application servers require the .jsp pages be registered in the web.xml file. See your application server documentation to determine the requirement. This task is reserved for advanced users familiar with their application servers, as there are considerable differences between the supported application servers.

Template Tags

Template tags are parsed sequentially. In order to differentiate Hyperion Analyzer tags from HTML tags, the start and end tags are identified by the following syntax:

<hya: is the start of the tag and /> is the close of the tag.

For example:

```
<hya:TagName attribute1="value1", attribute2="value2", atrribute3="value3"/>
```

<hya:About/>

Returns version number, copyright and server information, usually displayed in the Hyperion Analyzer About dialog box.

<hya:AllowActions/>

Enables drilling or Advanced member selection. The absence of this tag disables drilling in the Hyperion Analyzer HTML Web Client.

<hya:Analyze/>

Returns a URL to launch the Java Client

<hya:AuthServerList/>

Returns an HTML combo box that lists the available authentication servers.

<hya:CalcList/>

Returns to the Hyperion Analyzer HTML Web Client a list of available server calcs. These server based calculations are often used to reconsolidate the database after edits have been posted.

Sample

```
<SELECT>
<OPTION>Default</OPTION>
</SELECT>
```

<hya:CancelDBLogin/>

Returns a URL to cancel the database login template.

<hya:CancelEdit/>

Returns a URL containing the actions to terminate the Edit Data mode without posting edits to the database.

<hya:CancelSave/>

Returns a URL to cancel the Save As template without saving the report.

<hya:CellBGColor/>

Defines the color of the cell background at the specified row and column.

Attributes

Value	Description
datasource	The name of the data source found in the tree view of Designer.
row	The integer representing a specified table row.
column	The integer representing a specified table column.

<hya:CellFGColor/>

Defines the color of the foreground text at the specified row and column.

Attributes

Value	Description
datasource	The database connection name.
row	The integer representing a specified table row.
column	The integer representing a specified table column.

<hya:CellValue/>

Returns the value of the cell at the specified row and column

Attributes

Value	Description
datasource	The database connection name.
row	The integer representing a specified table row.
column	The integer representing a specified table column.

<hya:DataPost/>

Appends the end of a Grid tag output data cell with the supplied data string.

Example

<hya:DataPost value=""/>

Attributes

string: data

<hya:DataPre/>

Precedes a Grid tag output data cell with the supplied data string.

Attributes

string: data

Example

```
<hya:DataPre value="<strong>"/>
```

<hya:DataTD/>

Appends the <TD> HTML tag of a Grid tag output data cell with the supplied attribute string. Used to modify <TD> tag attributes for color, alignment, and other attributes. String data must specify valid HTML attributes for the <TD> tag, or the Web browser cannot render the cells.

Attributes

string: data

Example

```
<hya:DataTD value="align='right'"/>
```

<hya:DBList/>

Returns a combo box list of available database connections in the New Report template.

<hya:DBMessage/>

Returns status messages generated by the database.

<hya:DBName/>

Returns the database ID.

<hya:Desktop/>

Returns an HTML version of the Hyperion Analyzer HTML Web Client Desktop.

<hya:DimBrowserCurrentMember/>

Returns the member name of the current selected member in the Dimension Browser.

<hya:DimBrowserDefaultLabelMode/>

Returns a string for the default label mode of the selected dimension.

String Values

Descriptions

IDs

Both - Descriptions and IDs

<hya:DimBrowserDimName/>

Returns the dimension name in the Dimension Browser.

<hya:DimBrowserEvent/>

Returns a URL to the server that sends the event to the Dimension Browser.

Attributes

event: The possible values of the name attribute for DimBrowserEvent:

Attribute	Description
event	The possible values of the name attribute for DimBrowserEvent:
	UseDefault
	UseAlias
	UseID
	UseBoth
	Remove
	RemoveAll
	Apply
	Cancel

Values

- UseDefault
- UseAlias
- UseID
- UseBoth
- Remove

- RemoveAll
- Apply
- Cancel

Example

```
<hya:DimBrowserEvent event="UseDefault"/>
```

<hya:DimBrowserLabelMode/>

Returns the current Label Mode string.

Value

- 0 use id
- 1 use alias
- 2 use default
- 3 use both

<hya:DimBrowserModeMenu/>

Returns an HTML table of the Selection Mode List that contains the following HTML anchors:

- Search
- Move Up
- Move Down
- Remove

<hya:DimBrowserSelectionList/>

Returns the HTML table that contains the member selections defined for the dimension being browsed.

<hya:DimBrowserShowModeMenu/>

Returns:

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true - The Dimension Browser Mode Menu is displayed

false - The Dimension Browser Mode Menu is hidden.

<hya:DimBrowserShowSearchDialog/>

Returns:

true - The Search Dialog table is displayed

false - The Search Dialog table is hidden.

<hya:DimBrowserTree/>

Returns the HTML table of the hierarchical tree of members for the selected dimension. Members that are selected in the tree are displayed in the Selection List.

<hya:DisplayTypes/>

Returns a list of available display types for the Hyperion Analyzer HTML Web Client.

Sample

```
<SELECT>
```

```
<OPTION>Spreadsheet</OPTION>
<OPTION>Bar Chart</OPTION>
```

</SELECT>

<hya:DrillOptions/>

Returns a list of available Hyperion Analyzer HTML Web Client drill options.

Sample

```
<SELECT>
```

```
<OPTION>Drill Down</OPTION>
<OPTION>Drill Up</OPTION>
<OPTION>Drill To Top</OPTION>
```

</SELECT>

<hya:EditData/>

Returns the URL to initiate the Edit Data Mode of the current data object of the current report.

<hya:Filters/>

Returns a list of filter dimensions for the current data object of the current report.

<hya:GetProperty/>

Gets the true or false state of the defined attribute value.

Attributes

name: indicates the value that the GetProperty tag is obtaining the state for.

Value	Description
showInfo	Returns the true or false display state of Information Panel.
showFilters	Returns the true or false display state of Filters.
showFonts	Returns true if the Analyzer style or false if the Template style is employed for the fonts.
showMultiPage	Returns the true or false display state of MultiPage.
isSaveAllowed	Returns the true or false state of the current report if Save is allowed.
isReportLoaded	Returns the true or false state of the current report if a report is loaded.
isEditAllowed	Returns the true or false state of the current report if Edit mode is allowed.
isEssbase	Returns the true or false state of the current data object in a report uses an Hyperion Essbase data connection
isRelational	Returns the true or false state of the current data object in a report uses a relational data connection
isHFM	Returns the true or false state of the current data object in a report uses an Hyperion Financial Management data connection

<hya:Grid/>

Returns an HTML grid for the current page of the current data object of the current report.

<hya:HeadPost/>

Appends the end of a Grid tag output header cell with the supplied data string.

Example

```
<hya:HeadPost value="</strong>"/>
```

Attributes

string: data

<hya:HeadPre/>

Precedes a Grid tag output header cell with the supplied data string.

Attributes

string: data

Example

```
<hya:HeadPre value="<strong>"/>
```

<hya:HeadTD/>

Appends the <TD> HTML tag of a Grid tag output header cell with the supplied attribute string. Used to modify <TD> tag attributes for color, alignment, and other attributes. String data must specify valid HTML attributes for the <TD> tag, or the Web browser cannot render the cells.

Attributes

string:data

Example

<hya:HeadTD value="align='right'"/>

<hya:Home/>

Returns the URL of the Hyperion Analyzer Home page.

<hya:InfoAcross/>

Returns the Information panel Across axis segment.

<hya:InfoDatabase/>

Returns the Information panel Databases segment.

<hya:InfoDown/>

Returns the Information panel Down axis segment.

<hya:InfoFilters/>

Returns the Information panel Filters axis segment.

<hya:InfoPages/>

Returns the Information panel Pages axis segment.

<hya:InfoPanel/>

Returns the Hyperion Analyzer HTML Web Client Information panel.

<hya:InfoRestrict/>

Returns the Information panel Restrict Data segment.

<hya:InfoSort/>

Returns the Information panel Sort segment.

<hya:InfoTopBottom/>

Returns the Information panel Retrieve Only Top/Bottom segment.

<hya:InfoTrafficLight/>

Returns the Information panel Traffic Lighting segment.

<hya:InfoUser/>

Returns the Information panel User segment.

<hya:LinkTo/>

Launches the current report in the specified value of the Type attribute.

Attributes

type

Values

JavaClient

HTMLClient

<hya:Logout/>

Returns the URL to log out the user.

<hya:Message/>

Returns any status messages generated by the program. The tag only returns errors generated by tags placed sequentially before it in the template.

<hya:NewReport/>

Returns a URL to initiate creating a new report.

<hya:NextPage/>

Returns a URL to go to the next page in the page series of the current data object.

<hya:NextReport/>

Returns a URL to go to the next report in the current report group.

<hya:PageCount/>

Returns the number of pages in the current data object of the current report.

<hya:PageNumber/>

Returns the page number of the current page in the current data object of the current report.

<hya:Pages/>

Returns a list of all the pages in the current data object of the current report.

Sample

<SELECT>

<OPTION>East</OPTION>

<OPTION>West</OPTION>

```
</SELECT>
```

<hya:Password/>

Returns the user password.

<hya:PostLogin/>

Returns post login actions. For more information, examine the login.jsp file for the contents of the string stored there.

<hya:PreviousPage/>

Returns an HTML version of the previous page in the page series of the current data object.

<hya:PreviousReport/>

Returns an HTML version of the previous report in the current report group.

<hya:RefreshEdits/>

Returns the URL to reload the data for the current grid. Often used with Edit Data mode HTML controls that reload the current grid with the last saved values.

<hya:RelatedContent/>

Returns the related contents of the selected data cell.

Related Content Column Description

Related Content Icon	Each content type can have an icon
Related Content String	An HTML anchor link to the content on the server.

<hya:Reload/>

Returns the URL to reload the current report. Often used for HTML controls that reload the current report per the last save.

<hya:Report/>

Returns an HTML version of the current report.

<hya:ReportDescription/>

Returns the report description.

Sample

Profit Report for the Eastern Region

<hya:ReportGroupList/>

Returns a combo box list of the names of the report groups that a user has access.

<hya:ReportGroup/>

Returns the name of the current report group.

<hya:ReportHeight/>

Returns the height of the current report in pixels.

<hya:ReportManager/>

Returns the Hyperion Analyzer HTML Web Client Report Manager as an expandable and collapsible node tree.

<hya:ReportName/>

Returns the name of the current report.

<hya:ReportSize/>

Changes the current report height and width.

Attributes

Attribute	Description
height	The height of the report in pixels, with
	the value equal to an integer in a string.
width	The width of the report in pixels.

Example

```
<hya:ReportSize height="480" width="640"/>
```

<hya:ReportState/>

Returns the state of the current report in a string so that the Java Client displays the report in the same state as the HTML Client.

<hya:ReportWidth/>

Returns the width of the current report in pixels.

<hya:Res/>

Gets a string value from a (language based) resource property file.

Attribute

id: maps the propertyname to a propertyvalue in a property file

<hya:Save/>

Returns a URL to execute to save the current report.

<hya:Script/>

Returns the Java Script necessary to handle interactive requests such as user actions and page navigation.

<hya:ServletURL/>

Returns the URL of the Hyperion Analyzer HTML Web Client servlet engine.

<hya:SetParam/>

Returns a URL to indicate an action for setting parameters.

<hya:ShowAbout/>

Returns the URL to show the About dialog box.

<hya:ShowReportManager/>

Returns the URL to show the Report Manager.

<hya:ShowSaveAs/>

Returns a URL to show the Save As dialog.

<hya:Startup/>

Returns the URL to do what the Startup User Preferences is set to do. For example load a report, load a specific report group, etc.

<hya:ToggleFilters/>

Returns a URL to toggle Filters on or off.

<hya:ToggleInfo/>

Returns the URL to toggle the Web Client Information panel.

<hya:ToggleMultiPage/>

Returns the URL that toggles the Hyperion Analyzer HTML Web Client Page Control panel between multiple and aggregated page combo boxes.

<hya:ToggleStyle/>

Returns the URL that toggles between different Hyperion Analyzer HTML Web Client grid style.

<hya:UserCredential/>

Returns a string containing user information that is used to authenticate a user.

<hya:UserID/>

Returns the name of the user.

<hya:Version/>

Returns the <major>.<minor>version number of Hyperion Analyzer.

<hya:WebAppURL/>

Returns the URL of the Hyperion Analyzer Web application.

Example

http://<servername>/Analyzer6_Server/

Template Tag Styles

Custom HTML styles have been defined to speed development. Styles have been separated into three groups:

Template Styles

- List Template Styles
- About Styles

Use these styles in Cascading Style Sheets or declare them in line as needed.

Example

```
.gridOddRow{background-color:#A6C9C9;}
```

Template Tag Styles List

The following tables list and describe the each of the following template tag styles:

- Template Styles
- List Template Styles
- About Styles

Use these styles in Cascading Style Sheets or declare them in line as needed.

Example

```
.gridOddRow{background-color:#A6C9C9;}
```

Table 6: HTML Client Template Style Tags

Style	Description
gridEvenRow	Formats even numbered rows.
gridOddRow	Formats odd numbered rows.
gridData	Formats grid data cells.
gridNegData	Formats data cells with negative values.
gridColHeader	Formats column headers.
gridRowHeader	Formats row headers.
gridRowTitle	Formats the upper left hand corner of grid row titles.
infoHeader	Formats the Information panel headers.
infoData	Formats Information panel data.

Table 7: HTML Client List Template Style Tags

Style	Description
groupStyle	Formats report group lists.
viewStyle	Formats report lists.
highlightStyle	Formats selected report groups with highlighting.

Table 8: HTML Client About Style Tags

Style	Description
version	Formats Hyperion Analyzer version information.
copyright	Formats Hyperion Analyzer copyright information.
server	Formats server information.
warning	Formats warning information.

HTML Web Client Actions

Web developers can further customize Hyperion Analyzer HTML behavior by including "actions" and their parameters in uniform resource locators (URL) pointing to the Hyperion Analyzer HTML Web Client facility. Such an URL would consist of the following elements:

URL Element	Description
http://	Protocol
ServerName	The name of the server hosting the Hyperion Analyzer HTML Web Client.
PathName	The Path to Hyperion Analyzer HTML Web Client servlet engine.
?	The required question mark (?) delimiter.
SID	Secondary ID. The established session handle.

Table 9: Hyperion Analyzer HTML Web Client URL Components

Note: HTML actions and their parameters are delimited by the ampersand (&) character. The ampersand character is typically omitted directly following the question mark (?) delimiter to avoid confusion and redundancy.

Using Actions

HTML actions are commands to the HTML Web Client included in the URL.

Example

To Log on to Hyperion Analyzer:

```
http://[ServerName]/[PathName]? Action=login&userid=
[UserID]&password=[Password]
```

Because URLs do not accommodate empty spaces, users are reminded to use "%20" to represent the spaces in strings.

Actions List

Action

Indicates the action to perform. See the Actions List above for a complete list of actions.

About

Returns Hyperion Analyzer HTML Web Client About dialog box information.

Analyze

Loads the Analyze template (the Java Client launch page.)

CancelDBLogin

Cancels the database login.

CancelEdit

Cancels the Edit Data mode.

Note: This action requires that the user understand the process of initiating and ending Edit Data mode. Edits can only be applied to the current page of the current data object.

CancelSave

Cancels the SaveAs action and returns to the current report template.

ChangePassword

Changes the Hyperion Analyzer password for the current user ID.

Parameters

password - the current password newpassword - A new password

DBLogin

Logs on to the specified database.

Daramotore

i arameters	
Parameter	Description
dbname	The database id.
dbuserid	A valid user ID for the specified database.
dbpassword	The password for the user ID.
saveuid	Indicates to save the login information for future use. Values of "1" or "True" indicate to save.

Desktop

Displays the Desktop template.

DimBrowser

Displays the Dimension Browser template, if there are available values for the events parameters they are displayed in the Dimension Browser.

Parameters

Parameter	Description
view	Indicates the specific data object on the report that is displayed in the DimBrowser.
dimension	Indicates the dimension that is displayed in the DimBrowser.
event	Indicates any event sent to the DimBrowser template in a URL that updates the template. For a list of events see the <hya:dimbrowserevent></hya:dimbrowserevent> tag.

DrillCell

Displays the Related Content template of the specified view for the specified row and column.

Parameters

Parameter	Description
view	Indicates the specific data object on the report where the Related Content identifier is located.
row	The integer representing a specified table row.
col	The integer representing a specified table column.

DrillDown

Drills down on the specified dimension member of the specified data object.

Parameters

Parameter	Description
view	Indicates the specific data object in the report where
	drilling takes place. Data object names are listed in the
	Tree View panel when the Hyperion Analyzer Java Web
	Client is in Design Report mode.
dimension	Indicates the dimension on which to drill.
member	Indicates the dimension member on which to drill.

DrillUp

Drills up on the specified dimension member of the specified data object.

Parameters	
Parameter	Description
view	Indicates the specific data object on the report where drilling takes place. Data object names are listed in the Tree View panel when the Hyperion Analyzer Java Web Client is in Design Report mode.
dimension member	Indicates the dimension on which to drill. Indicates the dimension member on which to drill.

DrillToTop

Drills to the top member of the specified dimension member of the specified data object.

Parameters	
Parameter	Description
view	Indicates the specific data object in the report where drilling takes place. Data object names are listed in the Tree View panel when the Hyperion Analyzer Java Web Client is in Design Report mode.
dimension	Indicates the dimension on which to drill.
member	Indicates the dimension member on which to drill.

EditData

Initiates the Edit Data mode, enable users to change data and send new values back to the database.

Note: This action requires that the user understand the process of initiating and ending Edit Data mode. Edits can only be applied to the current page of the current data object.

ExportToHtml

Exports the current report to HTML using the specified parameters. This action is used to support batch export.

Parameters

Parameter	Description
groupname	The name of the report group that the report is stored.
reportname	The name of the report to export.

FocusDisplayObject

Sets the current data object of the current report.

Parameters

view - Indicates the specific data object on the report to receive focus. Data object names are listed in the Tree View panel when the Hyperion Analyzer Java Web Client is in Design Report mode.

Home

Displays the Hyperion Analyzer Desktop.

LoadGroup

Loads the specified report group.

Parameters

group - The ID of the report group.

LoadReport

Loads the specified report.

Parameters

report - The name of the report.

group - The name of the report group containing the report.

Login

Logs in to the Hyperion Analyzer Analysis Server, starts the Hyperion Analyzer HTML Web Client and displays the defined Startup page.

Parameters

Parameter	Description
userid	A valid Hyperion Analyzer user ID
password	The password for the user ID.

Logout

Terminates the session specified by the SID number.

MoveDim

Relocates the dimension on the specified axis and position to another axis and position.

Parameters

Parameter	Description
axisto	Indicates the destination axis to which the dimension is moved.
	1 - column axis
	2 - row axis
	3 - page axis
	4 - filter axis
posto	Indicates the position on the specified axis the dimension takes. Uses a zero-based index. Zero (0) is the first position.
dimension	Indicates the dimension to move, and thereby its current axis and position.

NewDispType

Changes the current data object to the specified display type. Data objects with a chart display type also require a dispsubtype, or chart type, to be defined.

Parameters

disptype - The display type of the current data object.

dispsubtype - The chart type of a chart.

disptype	Display Type Value
0	Default
1	Spreadsheet
2	Chart
3	Pinboard

dispsubtype	Chart Type Value
1	Chart Type Values
2	Vertical Bar Chart
3	Line Chart
4	Pie Chart
5	Quadrant Chart
6	Area Chart
7	Multi-type Chart (Unsupported)
8	Marks Chart
12	Spline Chart (Unsupported)
13	Curved Area Chart (Unsupported)
14	Pareto Chart
17	Bubble Chart
20	Horizontal Bar Chart
21	User's Default Chart Type (User Preferences)
22	Last Selected Chart Type (Unsupported)
23	Box Plot Chart (Box and Whiskers) (Unsupported)

NewPage

Displays a specified page using its page number in the page series.

Parameters

pageno - The page number of the specified page. Uses a zero-based index.

NewReport

When the action is used without parameters, it displays the New Report template. When the following parameters are provided the new report is created.

Parameters

Parameter	Description
dbid	the index of an existing database connection.
layout	consists of the following layout types:
	1 - spreadsheet
	2 - chart
	3 - vertical combo
	4 - horizontal combo

NextReport

Returns the next report in the report group.

PrevReport

Returns the previous report in the report group.

RefreshEdits

Reset the Edit Data mode cells to their last saved values.

Reload

Reloads the current report in the report template.

ReportManager

Returns the HTML Web Client Report Manager node tree. The tree contains nodes representing reports and report groups.



RunCalc

Reconsolidates the Hyperion Essbase database after changes have been posted.

calcname - The name of the Hyperion Essbase server calc used to re-consolidate the database.

Save

Saves the current report

SaveAs

Saves the current report with another report name. The current report parameters that are not changed, are retained for the new report.

Parameters

Parameter	Description
newgroup	A name of a report group.
newname	A new name of the report.
newdesc	A description of the report.

SaveAsPage

Displays the Save As template.

SendData

Posts Edit Data mode changes to the Hyperion Essbase database.

Note: This action requires that the user understand the process of initiating and ending Edit Data mode. Edits can only be applied to the current page of the current data object.

Posting is achieved on a cell by cell basis, with all cell values being sent. Each posting must be in the following format:

rrrrcccc=n

Where n is the value located at row rrrr and column cccc.

Example

To send a spreadsheet with two rows, one column, and the values 5 and 10, the action would be entered:

&action=senddata&00010001=5&00020001=10

SetDim

Selects the specified dimension member and related dimension members defined by an Advanced Member Selection mode.

Parameters

Parameter	Description
view	Indicates the specific data object on the report. Data object names are listed in the Tree View panel when the Hyperion Analyzer Java Web Client is in Design Report mode.
dimension	Indicates the dimension.
member	Indicates the dimension member.
mode	The Advanced Member Selection mode:
	0 - Select Member
	1 - Also Select Children
	2 - Also Select Descendants
	3 - Also Select Parent
	4 - Also Select Ancestors
	5 - Also Select Siblings
	6 - Also Select Dim Bottom
	7 - Also Select Dim Top
	8 - Also Select Level
	9 - Also Select Generation

SetParam

Updates the server with parameter values to set current and subsequent report widths and height. The value of the parameters are stored in memory for the duration of the user session.

Parameters

Parameter	Description
reportwidth	The new width of the report.
reportheight	the new height of the report.

SetServiceDispatcher

Executes the action of the services control specified by the following parameters. Currently requires an internal services dispatcher ID number.

Note: Does not support the following services: Log off, User Preferences, Report Manager, Launch Executable, Print Screen, or Print Current Report.

Parameters

sdname - The services dispatcher ID number

SetSubscriptionController

Executes the selection action of the subscription control specified by the following parameters. Currently requires an internal subscription controller ID number.

Parameters	
Parameter	Description
sctype	An integer indicating the type of subscription control:
	• radio
	• combo box
	• button
	• checkbox.
scname	An internal subscription controller id number.
scitem	The control text. The scitem parameter is different for each of the four supported subscription controller types:
	• check boxes and radio buttons - the control text.
	• combo box - the zero-based index of the menu series.
	• button - the text label.
scselected	(Checkbox Only) True indicates the checkbox is selected.

Startup

Executes the action defined by the Startup User Preferences is set to do. For example load a report, load a specific report group, etc.

ToggleFilters

Shows or hides Filters in the interface.

ToggleInfo

Shows and hides the Information panel.

ToggleMultiPage

Toggles the Page Control panel between multiple and aggregated page combo boxes.

ToggleStyle

Toggles between the grid styles.
Samples

The following topics provide sample templates, tags and actions that you can model in the creation of your own HTML content.

Using Actions to Retrieve Information

Hyperion Analyzer provides a technique for gathering information from returned html headers.

Portal

By adding the portal=1 parameter to the end of the Login or LoadReport actions, users can retrieve additional information in the HTTP response header.

Using portal at the end of a Login action returns the Login Status and user SID ("X-Login-Status", "X-Login-SID", X-SSO-Login-status) in the response header. The Login Status indicates the success of the login effort:

- 1 Success
- -1 Error
- -2 Change Password
- -3 Logon failed with token

The X-SSO-Login-Error returns an error code if external authentication is configured and then a login fails.

The user SID, or session ID, is the session handle number.

Using Portal at the end of the LoadReport action returns the names of all the data sources ("X-Datasource-Names") and data source types ("X-Datasource-Types") for all the data objects on the report.

To log on to Hyperion Analyzer:

```
http://[ServerName]/[PathName]?Action=login&userid=
[UserID]&password=[Password]
```

To retrieve the Login Status and SID:

```
http://[ServerName]/[PathName]?Action=login&userid=
[UserID]&password=[Password]&portal=1
```

> To log on to a specific Hyperion Analyzer session:

http://[ServerName]/[PathName]?SID=[Session Handle]&Action= login&userid=[UserID]&password=[Password]

> To log on to a specific report of a specific Hyperion Analyzer session:

```
http://[ServerName]/[PathName]?SID=[Session Handle]&Action=
loadreport&group=[Group Name]&name=[Report Title]
```

To retrieve the data source names of specific report of a specific Hyperion Analyzer session:

http://[ServerName]/[PathName]?SID=[Session Handle]&Action= loadreport&group=[Group Name]&name=[Report Title]



Chapter

IBM WebSphere Application Server

IBM WebSphere

Hyperion Analyzer has been architected to run inside leading J2EE-compliant application servers. The supported J2EE Application Server shares Hyperion Analyzer business logic, manages network traffic, and maintains system security for large numbers of concurrent users.

Differences Between Operating Systems

In Microsoft Windows operating systems, WebSphere is run as a service. The current Windows installation uses IBM WebSphere Standard and Advanced Editions version 3.5.5. The current IBM AIX UNIX installation uses IBM WebSphere Standard and Advanced Editions version 3.5.3.

Administrating WebSphere

Users can monitor and optimize the WebSphere system using the WebSphere Administrator's Console.

WebSphere Administrator's Console

The Administrator's Console is a Java applet used to control the WebSphere application server. Users can create data sources, numerous applets, servlets and Web entities, as well as configure security settings and protocols. WebSphere configuration information is stored in the WebSphere Admin Server.

To start the WebSphere Administrator's Console select Start > Programs > IBM WebSphere > Application Server V3.5 > Administrator's Console.

The Administrator's Console features its own online documentation.

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WebSphere Admin Server

The WebSphere Admin Server is a repository storing configuration information. It does not store any Hyperion Analyzer data.

To start the WebSphere Admin Server, Select Start > Programs > IBM WebSphere > Application Server V3.5 > Start Admin Server.



Glossary

administrator. An individual who installs and maintains the Hyperion Analyzer system, including establishing user IDs, passwords, database connections and security. See also System Manager.

Analysis Server. Hyperion Analyzer Analysis Server. An application server that distributes report information and enables Web clients to communicate with the OLAP server.

asymmetric analysis. A report characterized by groups of members that differ by at least one member across groups. There can be a difference either in the number of members or in the names of the members.

attribute. A dimension member classification. An attribute can be specified to select and group members that have the specified attribute associated with them, and to perform calculations and application-specific functions.

attribute dimension. A type of dimension that enables analysis based on the attributes or qualities of the members of its base dimension.

axis. A discrete aspect of the two-dimensional report on which multidimensional data is displayed, such as filters, pages, rows, and columns.

calculation. The process of aggregating data, or of running a calculation script on a database.

calculation script. A set of instructions telling Hyperion Essbase how to calculate the values of a database.

cell. A unit of data representing the intersection of dimensions in a multidimensional database. Also, the intersection of a row and column in a spreadsheet.

chart. One of the three report display types. Chart reports also have a chart type property set for them. Charts are created using Hyperion Analyzer.

child. A member that has a parent above it in the database hierarchy. A child may have siblings (peers) that exist at the same level of the database hierarchy.

client. A client interface, such as Hyperion Analyzer, or a workstation on a local area network.

column. A vertical display of information in a grid or table. A column can contain data from a single field, derived data from a calculation, or textual information. Contrast with row.

database. A repository of data within Hyperion Essbase that contains a multidimensional data storage array. Each database consists of a storage structure definition (outline), data, security definitions, and optional scripts.

database connection. A user-friendly database alias used instead of a long database identifier (server name, application name, and database name) that enables database references to be more portable.

data source. A named client-side object connecting report components to databases, using database connections, queries, and other components.

descendant. Any member below a parent in the database outline.

Desktop. An automatically generated report that dynamically presents buttons that enable groups of reports to be accessed with a single click.

dimension. A data category that is used to organize business data for retrieval and consolidation of values. Each dimension contains a hierarchy of related members grouped within it.

display type. One of three Hyperion Analyzer formats saved to the repository: spreadsheet, chart, and Pinboard.

external authentication. The ability to log in to Hyperion applications using user information stored outside the application itself; user names and passwords are instead managed in a corporate authentication provider such as LDAP or Microsoft Windows NTLM.

hierarchy. A set of multidimensional relationships in an outline, often created in a tree format.

implied share. A member with only one child, or a member with multiple children of which only one child is consolidated. For this reason the parent and child share the same value.

intersection. A unit of data representing the intersection of dimensions in a multidimensional database. Also, a worksheet cell.



JDBC. Java Database Connectivity driver. Client-server communication agent between Java-based clients and databases.

linked reporting object (LRO). An external file that is linked to a data cell in a Hyperion Analyzer report.

member. A discrete item that forms part of a dimension.

missing data. A marker indicating that data in the labeled location either does not exist, contains no meaningful value, or was never entered.

multidimensional database (MDDB). A method for referencing data through three or more dimensions. An individual record is the intersection of a point for a set of dimensions.

multithreading. A client-server process that enables multiple users to work on the same applications without interfering with each other.

online analytical processing (OLAP). A multidimensional, multi-user, client-server computing environment for users who need to analyze consolidated enterprise data in real time. OLAP systems feature drill-down, data pivoting, complex calculations, trend analysis, and modeling.

parent. A member that has subordinate members below it in the hierarchy.

personal variable. A means by which users define and name complex member selections.

pinboard. One of the three report display types. Pinboards are graphic reports, composed of backgrounds and interactive icons called Pins. Pinboards are created using Hyperion Analyzer Design Tools.

point of view (POV). A means by which users automatically insert dimensions and members that are of interest to them into the reports of others.

pins. Interactive icons placed on graphic reports called pinboards. Pins are dynamic. They can change images, and traffic lighting color based on the underlying data values and analysis tools criteria.

report. A Hyperion Analyzer display of selected multidimensional cube dimensions and members. A report is both the content and the format of the display. After it is saved to the repository, a report becomes a multipurpose file that users can display in numerous formats.

report group. A group of Hyperion Analyzer reports.

repository. A set of relational database tables for storing report definitions and Hyperion Analyzer system information.

role. A user type label. Roles give or withhold the permissions needed for various Hyperion Analyzer tasks.

row. A horizontal display of information in a grid or table. A row can contain data from a single field, derived data from a calculation, or textual information. Contrast with column.

query. A component of the data source. Queries are SQL statements submitted to the database, which return multidimensional intersection result sets.

server. A multi-user database server that accesses data values based on the intersection of dimension members.

single sign-on. The ability for a user to access multiple Hyperion Applications after logging on just once using external credentials.

spreadsheet. One of the three report display types. Spreadsheets are tabular reports of rows, columns and pages, created using Hyperion Analyzer.

subset. A group of members selected by specific criteria.

substitution variable. A variable that acts as a global placeholder for information that changes regularly. You set the variable and a corresponding string value; the value can be changed at any time.

System Manager. An individual who installs and maintains the Hyperion Analyzer system including establishing user IDs, passwords, database connections, and security. See also administrator.

toolbar. A series of shortcut buttons providing quick access to the most frequently used commands.

traffic lighting. Color-coding of report cells, or Pins based on a comparison of two dimension members, or on fixed limits. Traffic lighting definitions are created using the Hyperion Analyzer Traffic Light Analysis Tool.

Uniform Resource Locator (URL). An address for a resource in the World Wide Web, such as a document, an image, downloadable files, a service, or an electronic mailbox. URLs use a variety of naming conventions and access methods, such as HTTP, FTP and Internet mail. URLs can point to files on a local network drive, or to reports in the Hyperion Analyzer repository.

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