# Hyperion® Analyzer

Release 7.0

*Administrator's Guide*

Hyperion®

# Contents

## Chapter A: Customizing HTML Web Content

## Preface

Welcome to the Hyperion Analyzer Release 7.0 Administrator's Guide. This preface discusses the following topics:

## Purpose

This guide provides information that you need to Administer Hyperion Analyzer. It explains Hyperion 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 system administrators who are responsible for administering, optimizing, customizing, securing, and supporting Hyperion Analyzer implementations.

# Document Structure

This document contains the following information:

Chapter 1, "Administrating Hyperion Analyzer", identifies the most common tasks Hyperion Analyzer administrators perform, the resources available to complete these tasks, and considerations to undertake before beginning administration.

Chapter 2, "Managing Security and Access", describes the processes and procedures associated with establishing user authentication methods, customizing authentication securing Hyperion Analyzer information.

Chapter 3, "Administration Tools Overview", gives an overview of the interface, and permissions controlling the use of Hyperion Analyzer.

Chapter 4, "Managing Users", describes the creation, modification, use, and maitenance of Hyperion Analyzer user profiles.

Chapter 5, "Managing User Groups", describes the creation, modification, use, and maitenance of Hyperion Analyzer user group profiles.

Chapter 6, "Managing Report Groups", describes the creation, modification, use, and maitenance of Hyperion Analyzer report groups.

Chapter 7, "Managing Database Connections", describes the creation, modification, use, and maintenance of database connections.  It includes information on database connection properties and profiles Hyperion Essbase, Hyperion Financial Management and multiple relational database connection types.

Chapter 8, "Optimizing Hyperion Analyzer", describes using the Hyperion Analyzer Analysis Server Console to control user sessions and network communication.

Chapter 9, "Configuration and Integration Options", describes both the analyzer.properties file and Hyperion HUB.  These tools manage configuration and integration options for Hyperion applications.

Chapter 10, "Hyperion Analyzer Utilities", profiles the 5.0.3 Migration Utility, the Batch Import Export Utility, and the Web Publishing Batch Utility.

Appendix A, "Customizing HTML Web Content" is a complete reference for Hyperion Analyzer HTML templates, tags, tokens, and actions.

Appendix B, "Applet Parameters", lists applet parameters and other applet-specific information.

Appendix C, "Repository Tables", is a table of Hyperion Analyzer repository tables and their functions.

Appendix D, "User Preferences", outlines all Hyperion Analyzer user preferences and their function.

The Glossary contains a list of key terms and their definitions.

The 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 Information Map, located from the application Help menu.

● Online help is accessible from the product 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 documentation from the Hyperion Solutions Web site:

1. Log on to `http://www.hyperion.com`.

2. Select the **Support** link and type your username and password to log on.

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

3. Follow the on-screen instructions.

➤ To access documentation from the Hyperion Download Center:

1. Log on to `http://hyperion.subscribenet.com`.

2. In the **Login ID** and **Password** text boxes, enter your assigned login ID name and password. Then click **Login**.

3. If you are a member on multiple Hyperion Download Center accounts, select the account that you want to use for the current session.

4. Follow the on-screen instructions.

➤ 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.

# Conventions

The following table shows the conventions that are used in this document:

*Table i: Conventions Used in This Document*

| Item | Meaning |
|---|---|
| ➤ | Arrows indicate the beginning of procedures 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. |
| 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 plus sign. |
| `Example text` | Courier font indicates that the example text is code or syntax. |
| *`Courier italics`* | 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 *`ARBORPATH`* in italics, substitute the value of `ARBORPATH` from your site. |
| *n, x* | 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. |

*Table i: Conventions Used in This Document (Continued)*

| Item | Meaning |
|------|---------|
| 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.<br><br>***Menu name > Menu command > Extended menu command***<br><br>For example: **1.** Select **File > Desktop > Accounts**. |

# Additional Support

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

## Education Services

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

## Consulting Services

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

## Technical Support

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

# Documentation Feedback

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

<table>
<tr><td>Chapter</td><td rowspan="2"># Administrating Hyperion Analyzer</td></tr>
<tr><td>**1**</td></tr>
</table>

# Administrating Hyperion Analyzer

Hyperion Analyzer Administration Tools provide easy-to-use interfaces for administrating and optimizing Hyperion Analyzer.  This chapter provides the following information:

● Administration Tasks

● Administration Resources

● Hyperion Analyzer Components

● Hyperion Analyzer Architecture Overview

● Other Hyperion Analzyer Resources

● Starting Hyperion Analyzer Administration Tools

● Lockout Recovery

● Exiting Hyperion Analyzer Administration Tools

# Administration Tasks

### Installation, Configuration and Migration

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 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 by way of Hyperion Analyzer Administration Tools.

## Managing Users, User Groups and Database Connections

Hyperion Analyzer Administration Tools is the primary interface for managing users, user groups, and database connections. In addition, administrators can assign predefined 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.

## Automating the Distribution of HTML Web Content

Hyperion Analyzer enables users to convert a currently displayed report, or and entire report group to HTML, by specifying JSP templates. This Web publishing process can also be automated using a command line batch utility that converts report groups to HTML as scheduled.

## Configuring Integrated Hyperion Applications

Administrators must register Hyperion applications available to Hyperion Analyzer users through the Related Content feature. Hyperion applications can be registered through both the `Analyzer.properties` file and the Hyperion Hub server, but external authentication is required to use Hyperion Hub.

## Education and Training

Hyperion Analyzer provides administrators with tools to support user training and education, including these:

● The Hyperion Analyzer Sample Report Group

- Hyperion Analyzer API Toolkit samples

- Documentation deliverables in HTML and PDF

### Customizing HTML Web Content

You can customize HTML Web Client templates, or create new templates for displaying Hyperion Analyzer content.

# Administration Resources

You will use the following items and information to administer Hyperion Analyzer:

- Hyperion Analyzer Components

- Hyperion Analyzer Architecture Overview

- Other Hyperion Analzyer Resources

## Hyperion Analyzer Components

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 **Analysis Server** communicates report definitions and system information among 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 stand-alone 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 Overview

Hyperion Analyzer functionality is distributed across a multi-tiered architecture:

- Client layer
- Mid-tier layer
- Database server layer

The **client layer** refers to the four clients and the API Toolkit.  All clients communicate with the rest of the Hyperion Analyzer system using Hypertext Transmission Protocol (HTTP).

The **mid-tier layer** includes:

- The Web server
- The J2EE Application Server
- The Hyperion Analyzer Analysis Server
- Drivers and protocols for communicating with the database server layer

The **database server layer** supports and shares both OLAP and relational databases, and the relational Hyperion Analyzer repository.

A supported Web server is required to present the Web page from which Web clients are launched, to deliver files containing Java components, and to transport images generated at run time.  After clients are established, the Web server manages all client mid-tier HTTP communication.

Hyperion Analyzer has been restructured to run inside leading J2EE-compliant application servers. The supported J2EE Application Server shares Hyperion Analyzer business logic, manages network traffic, maintains system security for large numbers of concurrent users, and provides scalability and stability through load balancing and fault tolerance.

*Figure 1: Hyperion Analyzer Architecture Diagram*
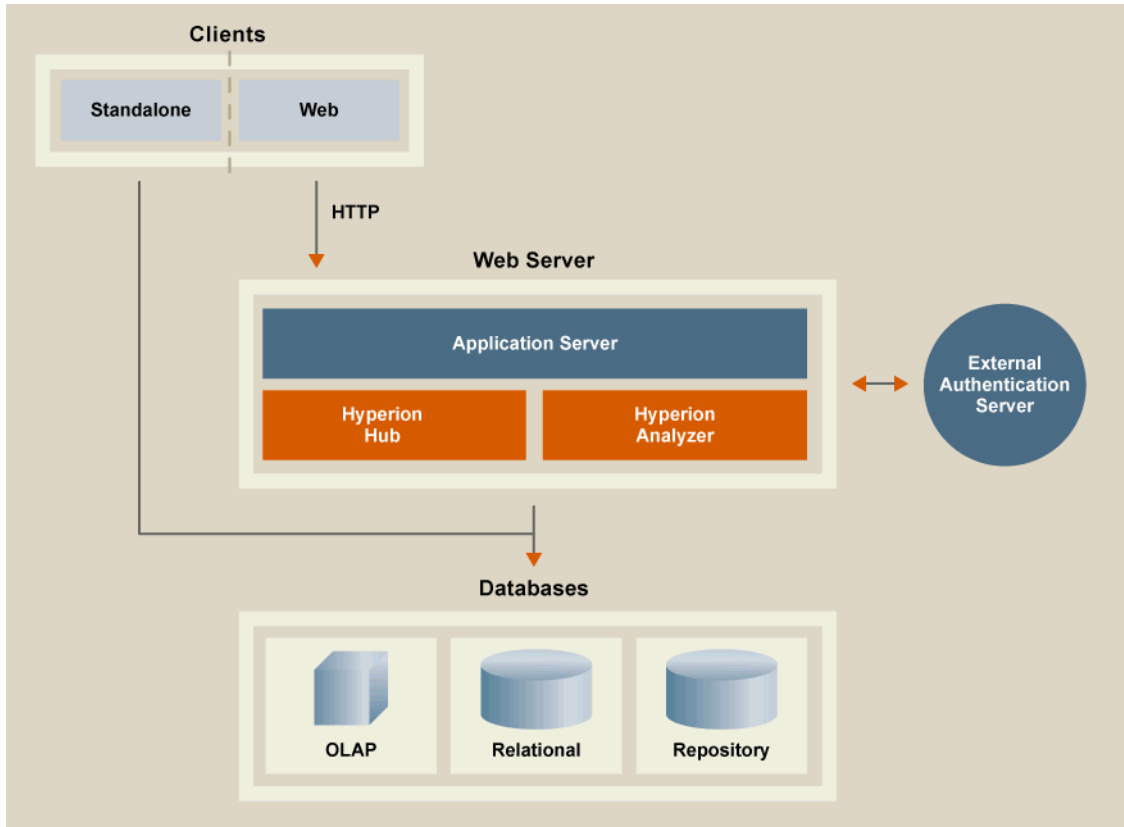


## Other Hyperion Analzyer Resources

These additional components, executables and servlets are provided to help you administrate Hyperion Analyzer:

## Hyperion Analyzer Installer

Hyperion Analyzer uses a new common installer to provide a consistent end-user installation experience across the range of Hyperion products. The installer detects cross-component compatibility issues earlier and subsequently reduces installation-related problems and support calls. For more information, see the *Hyperion Analyzer Windows Installation Guide* or *Hyperion Analyzer UNIX Installation Guide*.

## Hyperion Analyzer Configuration Test Servlet

Use the Hyperion Analyzer Configuration Test Servlet to diagnose and resolve connectivity issues. To start the servlet, start a Web browser and replace "index.html" in the path to the Hyperion Analyzer launch page with "Config." The servlet displays links that centrally report environmental variables and `Analyzer.properties` file parameters, and test connectivity to the class factory, the Hyperion Analyzer repository, the external authentication configuration file, and the Essbase ADM driver.

For more information, see "Hyperion Analyzer Configuration Test Servlet" on page 153.

## 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 and configuring Hyperion Hub connectivity.

For more information, see Chapter 3, "Administration Tools Overview."

## 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.

For more information, see "Hyperion Analyzer Analysis Server Console" on page 117.

## 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. For more information, see "Web Publishing Batch Utility" on page 150.

## Analyzer.properties File

The Analyzer.properties file contains variables controlling Hyperion Analyzer functionality. Administrator modifications to the file support their specific implementations in the following ways:

- Controlling the result set

- Updating the license key without reinstalling

- Identifying integrated Hyperion applications for Hyperion Analyzer

- Configuring Essbase XTD Deployment Services

- Formatting data value tool tips

- Controlling Page Queries

For more information, see "Analyzer.Properties File" on page 122.

## 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.

## Hyperion Hub

Hyperion Hub is a central application and business metadata repository for Hyperion applications and tools. Additionally, Hyperion Analyzer can export XML report definitions to Hyperion Hub to be used by other interoperable Hyperion applications, and import XML report definitions from other Hyperion Analyzer implementations or environments.

For more information, see "Configuring Hyperion Hub" on page 121.

### Hyperion Analyzer Batch Import/Export Utility via API Toolkit

The new batch import/export utility enables administrators to import reports, report groups, user IDs, point of view definitions and personal variable definitions.

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

### Hyperion Analyzer Migration Utility

The `AdminMigrate.exe` and `AnalyzerMigrate.exe` migration utilities enable Hyperion Analyzer 5.0.3 users to convert the majority of their Hyperion Analyzer repository information to the new Hyperion Analyzer 7.0 architecture and repository format.

For more information, see "Hyperion Analyzer 5.0.3 Migration Utility" on page 133.

# Administration Strategies

The specifics of your Hyperion Analyzer implementation determine the administration tasks you undertake, and their order. Key considerations include the following questions:

- Are you implementing Hyperion Analyzer for the first time, or are you upgrading an existing implementation?

- Are you implementing Hyperion Analyzer on Microsoft Windows, a UNIX environment or a mixture of both?

- Are you supporting analysis of Hyperion Essbase, Hyperion Financial Management, relational data sources, or a combination of these data sources?

- What type of user authentication method will you use?

- With which other applications will Hyperion Analyzer be integrated?

- What objectives must interoperability support, and what configuration is necessary for interoperability to succeed?

# Starting Hyperion Analyzer Administration Tools

## Prerequisites for Starting

Before you can start, an administrator must provide you with the uniform resource locator (URL) of the Hyperion Analyzer Java Web Client launch page, and your computer must satisfy any System Requirements.

## Logging On to Hyperion Analyzer Administration Tools

➤ To start the Hyperion Analyzer Administration Tools client:

1. Start a supported Web browser.

2. Select **File > Open** from the menu.

3. Enter the URL of the Hyperion Analyzer launch page, and press Enter.

4. Click the link launching Hyperion Analzyer Administration Tools.

   The Hyperion Analyzer Administration Tools application window is displayed, and then the Login dialog box is displayed.

5. Enter a valid user ID and Password in the Login dialog box.

   **Note:** Hyperion Analyzer is delivered with a defined user ID, **Administrator**, and password, **password**. If you edit the Administrator user profile, do not forget the Administrator password. Loss of the Administrator password prevents administration until another user with an Administrator role privileges resets the password.

6. If prompted with a **Domain** drop down list box, select an authentication method.

   Analyzer authentication is the default authentication method. Essbase and external authentication may also be available.

7. Click **OK**.

## Lockout Recovery

Do not forget the Administrator password. Loss of the Administrator password prevents administration until another user with an Administrator role privileges resets the password.

If 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.

## Exiting Hyperion Analyzer Administration Tools

➤ To exit the Hyperion Analyzer Administration Tools client, select **File > Exit**.

# Chapter 2 Managing Security and Access

## Authentication Options

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

- Analyzer Authentication
- Essbase Authentication
- External Authentication

Authentication methods are not mutually exclusive. Administrators may use a combination of methods and set an order of precedence. Administrators must evaluate the advantages and disadvantages of each method before deciding which to use.

## 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 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:

*Table 1: Essbase Authentication Summary*

| Essbase Authentication Action | Hyperion Analyzer Response |
|---|---|
| Essbase validates the user and the existence of a Hyperion Analyzer user profile. | Hyperion Analyzer logs on the user. |
| Hyperion Essbase validates the user but cannot validate the existence of a Hyperion Analyzer user profile. | Hyperion Analyzer assigns the 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 logon message. |

# External Authentication

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

- The existing corporate structure of user accounts is employed by Hyperion applications, thus reducing administrative overhead

- The benefit of single sign-on to Hyperion applications is added, thus eliminating the need for users to log on multiple times with multiple user names and passwords

Additionally, external authentication is a prerequisite for Hyperion Analyzer to operate with Hyperion Hub and some kinds of related content.

Hyperion Analyzer supports three external authentication providers:

- Lightweight Directory Access Protocol Directory 3.0 (LDAP)

- Microsoft Active Directory, Windows 2000 sp3 (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 2003
- UNIX

**Note:** NTLM implementations on UNIX platforms require that a Hyperion Remote Authentication Module 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 to automatically reauthenticate 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.** From the launch page, start Hyperion Analyzer Administration Tools.

   **2.** Select **Edit > Authentication Services**.

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

   **3.** Select the **General** tab.

   Within the Select Domain Types group the Analyzer check box is selected. The check box is not selectable, so users cannot clear it. 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.

4. Select the **Analyzer** tab.

This tab features a password expiration setting.

5. Optional: To set passwords to expire after a specified interval of days, select the check box and enter a whole number in the entry field.

6. Click **OK**.

## Setting Essbase Authentication

➤ To initiate Essbase authentication:

1. From the launch page, start Hyperion Analyzer Administration Tools.

2. Select **Edit > Authentication Services**.

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

3. Select the **General** tab.

Within the Select Domain Types group the Analyzer check box is selected. This check box is not selectable, so users cannot clear it. This ensures that Analyzer authentication is always available.

4. Select the **Essbase** check box.

This selection enables the Essbase tab.

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

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

6. Select the **Essbase** tab.

7. In the **Essbase Server** field, enter the server domain name or the IP address.

8. Select a defined Hyperion Analyzer user group from the **Default User Group** drop-down list box.

**2**

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 with 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 cannot use Hyperion Analyzer until an administrator assigns the new user ID to a Hyperion Analyzer user group.

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

9. Click **OK**.

# Configuring External Authentication

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

1. External Authentication Prerequisites

2. Install Hyperion Analyzer

3. Define Hyperion Analyzer user groups

4. Editing the Configuration File

5. Restarting the Application Server

6. Specifying the Configuration File Location

7. Copy archives to the application server JRE

8. Mapping Groups to User Groups

## External Authentication Prerequisites

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

1. Is the security platform implemented from an application or an application server?

   Table 2 lists the Web servers / application servers that are supported, on each operating system, by the Hyperion security platform.

   *Table 2: Supported Web Servers/Application Servers by OS*

   | Operating System | Web/App Servers |
   |---|---|
   | Windows NT 4.0, sp 6a or higher | IIS 4.x, Apache 2.0.43 |
   | Windows 2000 Server and Advanced Server, sp 3 or higher | IIS 5.x, Apache 2.0.43 |
   | Windows 2003 | IIS 6.x |
   | Solaris 8 and 9 | Apache 1.3.27 |
   | HP-UX 11i | Apache 1.3.27 |
   | AIX 5.1L | IBM HTTP Server 1.3.26.1 |

2. Which platforms and authentication providers will be used in external authentication?

2

*Table 3: Supported Authentication Providers and Platforms*

| | LDAP 3 compatible directories | NTLM | Microsoft Active Directory |
|---|---|---|---|
| Windows NT 4.0, sp 6a or higher | X | X | X |
| Windows 2000 Server and Advanced Server, sp 3 or higher | X | X | X |
| Windows 2003 | X | X | X |
| UNIX | X | X - requires installation of Hyperion Remote Authentication Module | X |

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

**3.** If you are considering implementing security using an NTLM provider for Hyperion applications installed on a UNIX machine or multiple Windows domains where there is no trust relationship, is the Hyperion Remote Authentication Module installed on a Windows NT or Windows 2000 server?

Install the Hyperion Remote Authentication Module from the Hyperion Download Center. After the Remote Authentication Module is installed, you must provide its URL to the `<remoteServer>` element in the XML configuration file.

**4.** If you want to enable authentication from multiple Windows domains, but you do not want to set up trust relationships between those domains, install the Hyperion Remote Authentication Module on a separate Windows server. This

enables users on one domain to log into Hyperion applications on other domains. All domains involved must be configured to use the same Hyperion Remote Authentication Module instance.

5. Hyperion applications can integrate with Web Access Management Solutions such as Netegrity SiteMinder. Web Access Management Solutions are employed by organizations to manage and enforce authentication, authorization, and single sign-on for web resources such as JSP files, ASP files, or HTML files.

The Hyperion security platform enables single sign-on for web-based Hyperion applications. Integration with a Security Agent requires configuration of the `<securityAgent>` element in the XML configuration file.

The Hyperion security platform supports SiteMinder Policy Server 5.5 Service Pack 2 and SiteMinder Web Agent 5.5 Service Pack 2 also known as SiteMinder Web Agent 5.x QMR 5.

**Note:** In this documentation, the terms Security Agent and Web Security Agent are interchangeable, and refer to any Web Access Management Solutions provider such as SiteMinder.

You can configure SiteMinder to require that users authenticate through SiteMinder only, after which they are not required to present credentials again when logging in to Hyperion applications.

## Installing Hyperion Remote Authentication Module to Support UNIX applications

➤ To install a Hyperion Remote Authentication Module in support of UNIX applications:

1. On a Windows NT/2000 server, install the Hyperion Remote Authentication Module. The installation program, `setup.exe`, is available on the Hyperion Download Center.

2. Download and read the installation and setup instructions provided with the Hyperion Remote Authentication Module on the Hyperion Download Center.

## Multiple-Domain Support for NT LAN Manager

The Hyperion Remote Authentication Module also enables Hyperion applications to authenticate users belonging to domains that are not trusted by the Hyperion application domain. This removes the necessity to establish trust relationships between the domains.

➤ To provide support for NTLM authentication using multiple Windows domains,

**1.** On a Windows NT/2000 server, install the Hyperion Remote Authentication Module. The installation program, setup.exe, is available on the Hyperion Download Center.

**2.** Download and read the installation and setup instructions provided with the Hyperion Remote Authentication Module on the Hyperion Download Center.

## Required NTLM User Rights

The NTLM user account on which the application server runs requires the following access:

- 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.

Privileges must be established on the computer running the application server (as opposed to the NT domain).

## Hyperion Analyzer Installation and External Authentication Components

The following external authentication components are installed with Hyperion Analyzer:

- 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 have the privileges of the user groups to which they belong. The number of user groups required is determined by the roles and permissions required for your implementation.

➤ To create new Hyperion Analyzer user group profiles in Hyperion Analyzer Administration Tools:

1. Take one of the following actions:

   ● Right-click the **User Groups** folder and select **New User Group**.

   ● 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.

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. To assign a role, click the role in the **Available** panel, then click the right arrow button, to move the role definition to the **Assigned** panel.

   The role is assigned to all users of the user group. Permissions are cumulative for multiple role selections.

6. Click the **Apply** button.

7. Click **OK**.

The Log panel confirms a successful assignment.

**8.** Repeat steps 1-7 for each user group.

# 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.

## 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.

**Note:** To enable single sign-on where one Hyperion product launches another, you must use a single XML configuration file that is shared by both product installations.

## Editing the Configuration File

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 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

- Optionally, the Web Access Management Solution used by your implementation

➤ To edit the external authentication configuration file, open `CssConfig.xml` in Microsoft WordPad.

**Note:** The application server must be stopped and restarted to reflect changes in the CssConfig.xml file.

## Configuring the Provider Search Order

The search order enables the external authentication mechanism 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. Open `CssConfig.xml` in Microsoft WordPad.

2. 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>**

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

   Providers may be added or removed as needed.

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

   The search order element name must match the name you specify in subsequent provider definitions.

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

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

4. Add, remove or comment out elements as needed.

5. Replace the text between the <el> and </el> tags with the server configuration name. Example:

```
<el>MYntlmServer</el>

<el>MYldapServer</el>

<el>MYmsadServer</el>
```

**Note:** You must use the same server configuration name when you subsequently define external authentication provider configurations.

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

## 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:

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

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

2. Replace the name value to 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.

   ● 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 - For authenticating from UNIX, or for multiple Windows domains without trust relationships.

  **Note:** If you support Hyperion applications only on Microsoft Windows platforms, delete the content of the <remoteServer> tags, because 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

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 </>).

3. Edit the provider definitions between the **<trusted>** and **</trusted>** tags.

If a 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 NTML provider definition between the **<domain>** and **</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 value between the **<maxSize>** and **</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. If you are using the Hyperion Remote Authentication Module (HRAM), edit the value between the **<location>** and **</location>** tags (nested in the **<remoteServer>** and **</remoteServer>** tags) to indicate the URL of the Hyperion Remote Authentication Module.

```
<remoteServer>
```

**2**

```
        <location>//host:1099/NTLMImpl</location>
</remoteServer>
```

If this step does not apply to you, delete the contents of the **<remoteServer>** and **</remoteServer>** tags.

**7.** To save your changes to the configuration file, select **File > Save**.

## 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:

**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.** Replace the name value to 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.

● 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.

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 </>).

3. Edit the values between the **<trusted>** and **</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 values between the **<url>** and **</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 values between the **<usderDN>** and **</userDN>** tags and between the **<password>** and **</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.

6. Edit the user values between the **<maxSize>** and **</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>** and **</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.

8. 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.

9. Edit the user values between the **<identityAttribute>** and **</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.

10. Edit the user values between the **<url>** and **</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>** and **</url>** tags. Do not delete the tag values alone.

11. Edit the user values between the **<loginAttribute>** and **</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 all user names are identified by cn=UserName.

This 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.

12. Edit the user values between the **<fnAttribute>** and **</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.

13. Edit the user values between the **<snAttribute>** and **</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.

14. Edit the user values between the **<emailAttribute>** and **</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.

15. Edit the user values between the **<objectclass>** and **</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 default user object classes for LDAP are person, organizationalPerson, and inetOrgPerson.

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

**16.** Edit the group values between the **<url>** and **</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.

**17.** Edit the group values between the **<nameAttribute>** and **</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>
```

**18.** Edit the group values between the **<objectclass>** and **</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 default group object classes for LDAP are groupofuniquenames?uniquemember and groupOfNames?member.

The 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>
```

**19.** To save your changes to the configuration file, select **File > Save**.

## Configuring Token Timeout

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

➤ To define the length of time a token remains valid:

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>** and **</timeout>** tags, as in this example:

   ```
   <timeout>60</timeout>
   ```

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

## Configuring Preferred Logging Priority

➤ To configure the error level setting for applications supporting external authentication:

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

2. Edit the values between the **<priority>** and **</priority>** tags to specify the level of authentication-related error messages that you want the application to log.

   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 - Include only cautionary information for select operations and requests.

   ● ERROR - Include only errors pertaining to failed operations and requests.

   ● FATAL - Include only errors that result in disconnection.

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

## Configuring for SiteMinder Single Sign-On

➤ To enable single sign-on to web-based Hyperion applications through SiteMinder:

1. Locate the end of the configuration file, after the **<logger></logger>** section but before the line containing **</css>**.

2. Add the following information (indicated by bold) to The Security Agent configuration is applicable only to web-based Hyperion applications.

   ```
   <logger>
     <priority>FATAL</priority>
   </logger>
   <securityAgent name="NETEGRITY"/>
   </css>
   ```

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

4. The SiteMinder administrator must also configure a "response" that adds a custom HTTP header. This HTTP header makes a login name available to Hyperion application web resources. The header must include the parameter HYPLOGIN, and the value of the login name of the authenticated user.

   For example, if you use an LDAP directory and cn is the login name attribute in the configuration file, then the HYPLOGIN header should carry the cn value of the LDAP authenticated user. SiteMinder administrators can also configure the header to SM_USERLOGINNAME, the user ID specified by the user during log on.

   For more information, see the "Responses and Response Groups" section of the Netegrity Policy Design Guide.

5. Because all implementations do not use Web Access Management Solutions such as Netegrity SiteMinder, you must edit the Analyzer.jsp and the Administrator.jsp files. Two jsp parameters have been commented out in each file, and must be uncommented before SiteMinder can be used. Search for the following parameters, remove only the comment marks (<%-- and --%>), and save the jsp files.

   ```
   <%--       <param name = securityAgentToken value ="<%=
   com.hyperion.analyzer.utils.general.HYAURLParamHandler.g
   etSecurityAgentTokenParam(request, application) %>"> --%>
   ```

   ```
   <%--       <param name = siteMinderSession value ="<%=
   com.hyperion.analyzer.utils.general.HYAURLParamHandler.g
   etSiteMinderSession(request, response) %>"> --%>
   ```

## 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.

## Restarting the Application Server

➤ To reflect changes to the CssConfig.xml file, stop and restart the application server.

## 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:

1. Launch Hyperion Analyzer Administration Tools.

2. Select **Edit > Authentication Services**.

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

3. Select the **General** tab.

   Notice that inside the Select Domain Types group that the Analyzer check box is selected. Notice also that the checkbox is not selectable. This ensures that Analyzer authentication is always available.

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

4. Select the **External** check box.

   This selection enables the External tab.

5.  Select a default domain type by clicking an 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.  Select the **External** 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 is displayed in the External tab Configuration File field.

10. From the **Default Domain Server** drop down list box, select an external authentication server 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.

**Note:**  This procedure is completed, but do not close the Authentication Services dialog box yet.  Keep it open for the next procedure.

## 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 repository.

➤   To map defined directory server groups to Hyperion Analyzer groups, perform the following steps:

1.  On the **External** tab of the Authentication Services dialog box, select an external authentication provider from the Group Mappings **Server Name** drop down list box.

This selection 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. Take one of the following actions:

   - 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.

   Your selection is displayed in the Mapped Analyzer Groups cell.

3. Repeat steps 1 and 2 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 steps 1 through 3.

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.

# Administration Tools Overview

This chapter discusses the following topics:

## Hyperion Analyzer Administration Tools Interface

The Administration Tools interface is composed of the following components:

● Application Window Title Bar

● Menu Bar

● Navigation Panel

● Management Panel

● Log Panel

# Application Window Title Bar

The application window contains all interface components. It features a title bar with Minimize, Restore and Close buttons. The title bar displays the current application name and features a right-click menu.

# Menu Bar

The Menu bar is directly below the Application Window Title bar. The menu bar organizes and provides access to principal Administration Tools tasks.

*Table 1: Administration Tools Menu Bar*

| Command | Sub-menu | Description |
|---------|----------|-------------|
| File | | |
| | Login/Logout | Connects to or disconnects from the Hyperion Analyzer repository. |
| | Search... | |
| | Search Next | |
| | Import | Imports an `aru` XML file to automate the creation and deletion of Hyperion Analyzer users, user groups, and database connections. |
| | Export | Exports Hyperion Analyzer users, user groups, and database connections to an an `aru` XML file. |
| | New | |
| | User | Creates an empty user profile. |
| | User Group | Creates an empty user group profile. |
| | Hyperion Essbase Database Connection | Creates a new Essbase database connection. |

*Table 1: Administration Tools Menu Bar*

| Command | Sub-menu | Description |
| --- | --- | --- |
| | Hyperion Financial Management Database Connection | Creates a new Hyperion Financial Management Database Connection. |
| | Relational Database Connection | Creates a new relational database connection. |
| | Exit | Quits the Administration Tools applet. |
| Edit | | |
| | Authentication Services... | Displays the Authentication Services dialog box, enabling you to specify authentication methods and parameters. |
| | Hyperion Hub... | Displays the Hyperion Hub dialog box, enabling you to configure a Hyperion Hub server to work with Hyperion Analzyer. |
| | Directory Protocol... | Displays the Directory Protocol dialog box, enabling you to register integrated Hyperion applications and tools with the Hyperion Hub server.  Registration of this kind supports Related Content functionality. |
| | Mail Server | Displays the Mail Server dialog box, enabling you to specify a mail server for e-mail functionality. |
| Help | | |
| | About Hyperion Analyzer | Displays the Hyperion Analyzer About dialog box that provides licensing and verioning information. |

*Table 1: Administration Tools Menu Bar*

| Command | Sub-menu | Description |
|---------|----------|-------------|
| | Contents and Index | Displays Hyperion Analyzer Administration Tools Online Help (this guide). |
| | Hyperion on the Web | Opens a Web browser and displays the Hyperion Web site. |
| | Information Map | Displays the Hyperion Analyzer Information Map, containing links to the entire Hyperion Analyzer documentation set. |

## Navigation Panel

The navigation panel, on the left side of the Administration Tools interface, features and interactive array of folders.  Folders are node trees that organize and control the following repository information:

● Users

● Roles

● User Groups

● Database Connections

● Report Groups

➤ To expand and collapse folder node trees, double click the folder icon or name.

➤ To create a new node in a folder, right-click the folder and select **New**.

➤ To refresh the navigation panel display, right-click a folder and select **Refresh**.

### Nodes

Each folder contains nodes corresponding to repository information. The Management panel, to the right, always displays an editing interface for the currently selected node.

**3**

➤ To select a node, click the node name.

➤ To delete a node, right-click the node name and select **Delete**.

➤ To refresh the navigation panel display, right-click a folder and select **Refresh**.

   User nodes contain two additional options:

➤ To set user preferences for a specific user, right-click the user node and select **User Preferences**.

➤ To copy a user profile, right-click the user node and select **Clone User**.

   Cloning user profiles expedites the process of creating new users with identical properties.

### Default Nodes

In the **Roles** folder there are four default roles:

- Administrator
- Information Consumer
- Interactive User
- Power User

For more information, see "Managing Roles" on page 59.

In the **User Groups** folder there is a default **Administrators** user group node.

In the **User** folder there is a default **Administrator** node.

**Note:** Hyperion Analyzer is delivered with a defined user ID, **Administrator**, and password, **password**. If you edit the Administrator user profile, do not forget the Administrator password. Loss of the Administrator password prevents administration until another user with an Administrator role privileges resets the password. For more information, see "Lockout Recovery" on page 28.

## Searching for Nodes

In large implementations, you may find it easier to search for specific nodes, than to locate them manually.

➤ To search for a specific node:

1. Start Hyperion Analyzer Administration Tools.

2. From the Menu bar select **File > Search**.

   The Search dialog box is displayed.

3. Enter a search text string in the **Find** text box.

4. Select node type checkboxes in the **Search for** group box.

5. Select a search option from the **Option** option button group.

6. Click **OK**.

   The search engine locates the first node that satisfies the search criteria, makes it the current node and displays the corresponding Management panel. When no node fulfills the search criteria, the Search Results message box is displayed, saying "No Items Found."

7. To continue searching using the same search criteria, select **File > Search Next**.

*Table 2: Administration Tools Search Dialog Box*

| Search Criteria | Option | Description |
| --- | --- | --- |
| Find | | The text string for the search function. |
| Search for... | | |
| | User | Searches user nodes. |
| | Database | Searches database connection nodes. |
| | User Group | Searches user group nodes. |
| | Report Group | Searches report group nodes. |
| Option | | |
| | Whole | Searches for the whole member name or alias. |
| | Substring | Searches for the first, last, or middle part of the member, in the order entered in the member text box. |

*Table 2: Administration Tools Search Dialog Box*

| Search Criteria | Option | Description |
|---|---|---|
| | Beginning | Searches for the start of the member string. |
| | Ending | Searches for the end of the member string. |

**3**

## Management Panel

The Management Panel is on the right side of the Administration Tools interface. It is context-sensitive to the currently selected node, and features tab groups that organize node properties.

## Log Panel

The Log Panel, at the bottom of the Administration Tools interface, displays client-server communication messages between the Administration Tools client and the Hyperion Analyzer Analysis Server.

# Managing Roles

Use of Hyperion Analyzer is controlled by Roles. Roles give or withhold permission to perform Hyperion Analyzer tasks.

Roles can be assigned to both users and user groups, and the resulting permissions are cumulative. The following conventions indicate the source of the role and its permissions:

● **Bolded** roles have been assiged directly to both the user, and to a user group to which it belongs.

● *Italicized* roles have been assigned indirectly through a user group profile.

● Plain Text roles have been assigned directly to the user profile only.

### Permissions

Three kinds of permission can be assigned to a role:

Object Type Permissions - Object type permissions enable users to manipulate all objects of a particualar type:  report, report group, database connection, user, user group, or role.  Object type permissions can be assigned independently of one another.

Instance Permissions - Instance permissions enable user to manipulate specific named objects. Administrators can assign Read, Write, Delete and Create permissions to specific report groups for each user, for example.

Interface-based Permissions - Interface-based permissions enable or disable Hyperion Analyzer functionality.  Administrators can grant or restrict use of the following functionality:

- Analysis Tools
- Calculations
- Cube Navigator
- Custom Report Designer
- Dimension Browser
- Edit Data mode
- Personal Variables
- Point of View
- Restrict Data
- Retrieve Only Top/Bottom
- Save/Save As
- Select Database Connection and Connections User Preferences
- Show Hide Only
- Sorting
- Traffic Lighting
- User Preferences

## Default Roles and Permissions

Hyperion Analyzer is delivered with four predefined roles:

*Table 3: Default Roles and Permissions*

| Role | Permission Type | Value | Permission |
|---|---|---|---|
| Information Consumer | | | |
| | Object | Reports<br>Report Groups | Read Only<br>Read Only |
| | Instance | None | |
| | Interface-based | Custom Report Designer<br>New<br>Save/Save As | Disabled |
| Interactive User | | | |
| | Object | Reports<br>Report Groups<br>Database Connections | ReadOnly<br>Read Only<br>Read Only |
| | Instance | User ID-created | Read<br>Write<br>Delete<br>Create |
| | Interface-based | Custom Report Designer | Disabled |
| Power User | | | |
| | Object | Reports<br>Report Groups<br>Database Connections | Read<br>Write<br>Delete<br>Create |
| | Instance | Power User-created | |
| | Interface-based | | No restrictions |
| Administrator | | | |

*Table 3: Default Roles and Permissions*

| Role | Permission Type | Value | Permission |
|------|-----------------|-------|------------|
| | Object | No restrictions | Read<br>Write<br>Delete<br>Create |
| | Instance | Administrator-created | |
| | Interface-based | | No restrictions |

## Assigning Roles to Users

➤ To assign a role to a specific user or users:

1. Start the Hyperion Analyzer Administration Tools client.

2. Expand the **Roles** folder node tree by clicking the plus sign (+).

3. Select a role node.

   The Management Panel displays the role's tab group.

4. Click the **Users** tab.

   The Users tab features an Available and an Assigned panel.

5. Do one of the following actions:

   - Click a user name in the **Available** panel.

   - To select multiple users in a series in the **Available** panel, press shift and click the first user name in the series, and the last user name in the series. The first user name, the last user name and all user names in between are highlighted and selected.

   - Press Ctrl and click to select multiple users in the **Available** panel. Only the highlighted user names are selected.

6. Click the right green arrow, to move the selection to the **Assigned** panel.

7. Click **Apply**.

   Roles have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Removing Roles from Users

➤ To remove a role from a specific user or users:

**1.** Start the Hyperion Analyzer Administration Tools client.

**2.** Expand the **Roles** folder node tree by clicking the plus sign (+).

**3.** Select a role node.

The Management Panel displays the role's tab group.

**4.** Click the **Users** tab.

The Users tab features an Available and an Assigned panel.

**5.** Do one of the following actions:

● Click a user name in the **Assigned** panel.

● To select multiple users in a series in the **Assigned** panel, press shift and click the first user name in the series, and the last user name in the series. The first user name, the last user name and all user names in between are highlighted and selected.

● Press Ctrl and click to select multiple users in the **Assigned** panel. Only the highlighted user names are selected.

**6.** Click the left green arrow, to move the selection back to the **Available** panel.

**7.** Click **Apply.**

Roles have not been removed until the Apply button is clicked and the Log panel confirms success.

# Assigning Roles to User Groups

➤ To assign a role to a user group:

**1.** Start the Hyperion Analyzer Administration Tools client.

**2.** Expand the **Roles** folder node tree by clicking the plus sign (+).

**3.** Select a role node.

The Management Panel displays the role's tab group.

**4.** Click the **User Groups** tab.

The Users Groups tab features an Available and an Assigned panel.

5. Do one of the following actions:

   - Click a user group name in the **Available** panel.

   - To select multiple user groups in a series in the **Available** panel, Press shift and click the first usergroup name in the series, and the last user group name in the series. The first user group name, the last user group name and all user group names in between are highlighted and selected.

   - Press Ctrl and click to select multiple user groups in the **Available** panel. Only the highlighted user names are selected.

6. Click the right green arrow, to move the selection to the **Assigned** panel.

7. Click **Apply**.

   Roles have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Managing Users

This chapter discusses the following topics:

- Creating Users
- Editing Users
- Deleting Users
- Assigning Users Roles
- Assigning Users to User Groups
- Assigning Database Connections to Users
- Assigning Report Groups to Users
- Assigning User Preferences to Users

## User Profiles

User profiles are created for every Hyperion Analyzer user. Anyone with permission can create user profiles and use them to do the following tasks:

- Transparently process multiple database log ons
- Define groups of users
- Expedite report group distributions
- Coordinate User Preferences

## Naming Conventions

Hyperion Analyzer user profiles now support the period (.), the underscore (_) and the at sign (@), so that e-mail addresses can be used as user names and user IDs.

User IDs with spaces ( ) cannot be defined in Hyperion Analyzer, but user IDs defined previously in Hyperion Essbase and Hyperion Financial Management that have spaces will be recognized by Hyperion Analyzer.

# Creating Users

Users with privileges have two options for creating new user profiles with Administration Tools:

- Creating New Users from scratch

- Cloning New Users from existing user profiles

## User Profile Creation and Authentication

Hyperion Analyzer user profiles are used by the Analyzer authentication method. Hyperion Analyzer user profiles are also created from Essbase authentication users and externally authentication users, when they first log on to Hyperion Analyzer. Roles and permissions for Essbase authenticated and externally authenticated users are determined first, by the user groups to which users belong.

**Note:** Please note that when Essbase authentication and external authentication are disabled, or when Essbase authenticated users and externally authenticated users are deleted from external repositories, the Hyperion Analyzer user profiles created for these users persist. There is no substitute for user management using Administration Tools.

## Hyperion Analyzer Batch Import/Export Utility via API Toolkit

The new batch import/export utility enables administrators to import reports, report groups, user IDs, point of view definitions and personal variable definitions. For more information, see the *Hyperion Analyzer API Toolkit Developer's Guide*.

## Creating New Users

➤ To create a new user from scratch:

1. Start Hyperion Analyzer Administration Tools

2. Do one of the following tasks:

   - Right-click the Users folder and select **New User**.

   - From the Menu bar, select **File > New > User**.

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

3. Enter the user's full name in the **Name** text area.

4. Enter the user ID in the **User ID** text area.

5. Enter a password in the **Password** text area.

6. Enter the same password in the **Confirm Password** text area.

7. Optional: To prompt the user to change their password when they next log on, click the corresponding check box.

   Administrators have the option of completing additional tasks before clicking the Apply button.

   ● Assigning Users Roles

   ● Assigning Users to User Groups

   ● Assigning Database Connections to Users

   ● Assigning Report Groups to Users

   ● Assigning User Preferences to Users

8. Click the **Apply** button.

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

## Cloning New Users

➤ To clone a new user from an existing user:

1. Start Hyperion Analyzer Administration Tools

2. To expand the **Users** folder node tree, click the Users plus sign (+).

3. Right-click a user node to duplicate and select **Clone User**.

   An empty user profile is displayed in the Management panel. The **General** tab is displayed by default, but the other tabs contain the same properties as the selected user node.

4. Enter the user's full name in the **Name** text area.

5. Enter the user ID in the **User ID** text area.

6. Enter a password in the **Password** text area.

7. Enter the same password in the **Confirm Password** text area.

8. Optional: To prompt the user to change their password when they next log on, click the corresponding check box.

   Administrators have the option of completing additional tasks before clicking the Apply button.

   ● Assigning Users Roles

   ● Assigning Users to User Groups

   ● Assigning Database Connections to Users

   ● Assigning Report Groups to Users

   ● Assigning User Preferences to Users

9. Click the **Apply** button.

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

# Editing Users

Users with privileges can change user profiles as needed.

➤ To edit an existing user profile:

1. Start Hyperion Analyzer Administration Tools

2. To expand the **Users** folder node tree, click the Users plus sign (+).

3. Select a user node.

   The user profile is displayed in the Management panel. There are five tabs: **General, User Groups, Report Groups, Databases,** and **Roles**.

4. Click the **General** tab to make it current.

5. Enter the user's full name in the **Name** text area.

6. Enter the user ID in the **User ID** text area.

7. Enter a password in the **Password** text area.

8. Enter the same password in the **Confirm Password** text area.

9. Optional: To prompt the user to change their password when they next log on, click the corresponding check box.

Administrators have the option of completing additional tasks before clicking the Apply button.

- Assigning Users Roles

- Assigning Users to User Groups

- Assigning Database Connections to Users

- Assigning Report Groups to Users

- Assigning User Preferences to Users

**10.** Click the **Apply** button.

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

# Deleting Users

Users with privileges can delete user profiles as needed. After it has been deleted, a user profile cannot be recovered.

➤ To delete a user profile:

**1.** Start Hyperion Analyzer Administration Tools

**2.** To expand the **Users** folder node tree, click the Users plus sign (+).

**3.** Right-click a user node to delete, and select **Delete User**.

The Delete User dialog box is displayed and requires that you confirm deletion of the user profile.

**4.** Click **OK** to delete the user profile.

The user profile is deleted and the Log panel reports user ID deletion.

# Assigning Users Roles

For more information on roles and role conventions, see "Managing Roles" on page 59.

➤ To assign a role to a user:

1. Expand the **Users** folder node tree by clicking the plus sign (+).

2. Select a user node.

   The Management Panel displays the user's tab group.

3. Click the **Roles** tab.

   The Roles tab features an Available and an Assigned panel.

4. Do one of the following actions:

   ● Click a role in the **Available** panel.

   ● To select multiple roles in a series in the **Available** panel, press shift and click the first role in the series, and the last role in the series. The first role, the last role and all roles in between are highlighted and selected.

   ● Press Ctrl and click to select multiple roles in the **Available** panel. Only the highlighted roles are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

   Roles can be assigned to both users and user groups, and the resulting permissions are cumulative. The following conventions indicate the source of the role and its permissions:

   ● **Bolded** roles have been assiged directly to both the user, and to a user group to which it belongs.

   ● *Italicized* roles have been assigned indirectly through a user group profile.

   ● Plain Text roles have been assigned directly to the user profile only.

   Note therefore, that to control all access to Hyperion Analyzer both user roles and user group roles must be edited. For more information, see "Assigning Roles to User Groups" on page 63.

6. Click **Apply**.

   Roles have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Assigning Users to User Groups

Users with privileges can assign users to user groups, using both the Users node tree and the User Groups node tree.

➤ To assign user group membership to a user:

**1.** Expand the **Users** folder node tree by clicking the plus sign (+).

**2.** Select a user node.

The Management Panel displays the user's tab group.

**3.** Click the **User Groups** tab.

The User Groups tab features an Available and an Assigned panel.

**4.** Do one of the following actions:

- Click a user group name in the **Available** panel.

- To select multiple user group names in a series in the **Available** panel, press shift and click the first user group name in the series, and the last user group name in the series. The first user group name, the last user group name and all user group names in between are highlighted and selected.

- Press Ctrl and click to select multiple user group names in the **Available** panel. Only the highlighted user group names are selected.

**5.** Click the right green arrow, to move the selection to the **Assigned** panel.

**6.** Click **Apply**.

User group membership has not been assigned until the Apply button is clicked and the Log panel confirms success.

# Assigning Database Connections to Users

Users with privileges can assign database connections to users, using both the Users node tree and the Databases node tree.

➤ To assign a database connection to a user:

**1.** Expand the **Users** folder node tree by clicking the plus sign (+).

**2.** Select a user node.

The Management Panel displays the user's tab group.

**3.** Click the **Databases** tab.

The Databases tab features an Available and an Assigned panel.

4. Do one of the following actions:

   - Click a database connection name in the **Available** panel.

   - To select multiple database connection names in a series in the **Available** panel, press shift and click the first database connection name in the series, and the last database connection name in the series. The first database connection name, the last database connection name and all database connection names in between are highlighted and selected.

   - Press Ctrl and click to select multiple database connection names in the **Available** panel. Only the highlighted database connection names are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

   Administrators have the option of completing additional tasks before clicking the Apply button.

6. Optional: To set an alias table for a selected Assigned database connection, click the **Set Alias** button. The Set Alias Table dialog box is displayed, prompting the user to select the alias table from the drop down list box and click **OK**.

7. Optional: To specify the login method used when the current user connects to the database, perform one of the following tasks:

   - Select the **Use Analyzer Login** option button. This option will attempt to connect to the database connection using the user ID and password specified on the General tab.

   - Select the **Prompt for Login** option button. This option will prompt the user to enter a valid user ID and password, before connecting to the database.

   - Select the **Define Login** option button. This option displays the Login Information dialog box, enabling you to enter a valid user ID and password for the database connection, if it varies from the Analyzer Login parameters.

8. Optional: To change the login parameters used by the Define Login option button, click the **Change Login** button and enter new parameter values.

9. Click **Apply**.

   Database Connections have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Assigning Report Groups to Users

Users with privileges can assign report group access to users, using both the Users node tree and the Report Groups node tree.  For more information, see .

➤ To define report group access to a user:

1. Expand the **Users** folder node tree by clicking the plus sign (+).

2. Select a user node.

   The Management Panel displays the user's tab group.

3. Click the **Report Groups** tab.

   The Report Groups tab features an Available and an Assigned panel.

4. Do one of the following actions:

   ● Click a report group name in the **Available** panel.

   ● To select multiple report group names in a series in the **Available** panel, press shift and click the first report group name in the series, and the last report group name in the series.  The first report group name, the last report group name and all report group names in between are highlighted and selected.

   ● Press Ctrl and click to select multiple report group names in the **Available** panel. Only the highlighted report group names are selected.

5. Optional:  You can set instance permissions for the entire selection by clicking one of the option buttons in the **Permissions** group box: Read, Update, Delete, and Owner.

   If no option is elected the user receives Read Only access by default. Note that previous permission elections stay with each report group as they are moved back and forth between the Available and Assigned panels.

6. Click the right green arrow, to move the selection to the **Assigned** panel.

7. Click **Apply**.

   Report group access is not assigned until the Apply button is clicked and the Log panel confirms success.

# Assigning User Preferences to Users

Administrators can customize the Hyperion Analyzer display and behavior using user preferences. These settings are saved as user profile properties, and can be customized for each user. Users can subsequently fine-tune their own user preferences using the Hyperion Analyzer Java Web Client.

For a complete description of user preferences, see Appendix D, "User Preferences".

## User Preferences and Formatting Options

There are identical formatting options and user preferences. User preferences are global settings applied to all new reports. User Preferences, however, can be overridden by database connection formatting and report-based formatting.

Order of Formatting Precedence

1. Formatting options saved with reports
2. Formatting options saved with the database connection
3. Formatting options specified in the User Preferences dialog box

**Note:** Some user preferences may take effect only when reports are reloaded.

## Accessing User Preferences

➤ To display the User Preferences dialog box using Administration Tools, right-click a user node and select **User Preferences**.

## Editing User Preferences

➤ To edit user preferences, navigate using the navigation panel links and tabs, set parameters, click **Apply**, and then **OK**.

# Managing User Groups

This chapter discusses the following topics:

- Creating Users Groups
- Editing Users Groups
- Deleting Users Groups
- Assigning Users Groups Roles
- Assigning Users to User Groups
- Assigning Database Connections to Users Groups
- Assigning Report Groups to User Groups

### User Group Profiles

User groups are used to manage users collectively. User groups also expedite the distribution and control of Hyperion Analyzer content.

### Naming Conventions

Hyperion Analyzer user group profiles now support the period (.), the underscore (_) and the at sign (@), so that e-mail addresses can be used as user group names.

## Creating Users Groups

➤ To create a new user group:

1. Start Hyperion Analyzer Administration Tools

2. Do one of the following tasks:

- Right-click the User Groups folder and select **New User Group**.

- From the Menu bar, select **File > New > User Group**.

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

**3.** Enter a user group name in the **Name** text area.

**4.** Optional: Enter a description in the **Description** text area.

Administrators have the option of completing additional tasks before clicking the Apply button.

- Assigning Users to User Groups

- Assigning Report Groups to User Groups

- Assigning Database Connections to Users Groups

- Assigning Users Groups Roles

**5.** Click the **Apply** button.

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

# Editing Users Groups

Users with privileges can change user profiles as needed.

➤ To edit an existing user profile:

**1.** Start Hyperion Analyzer Administration Tools

**2.** To expand the **User Groups** folder node tree, click the User Groups plus sign (+).

**3.** Select a user group node.

The user group profile is displayed in the Management panel. There are five tabs: **General, Users, Report Groups, Databases,** and **Roles**.

**4.** Click the **General** tab to make it current.

**5.** Enter a new user group name in the **Name** text area.

Administrators have the option of completing additional tasks before clicking the Apply button.

- Assigning Users to User Groups

- Assigning Report Groups to User Groups

- Assigning Database Connections to Users Groups

- Assigning Users Groups Roles

6. Click the **Apply** button.

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

# Deleting Users Groups

Users with privileges can delete user group profiles as needed. After it has been deleted, a user group cannot be recovered.

➤ To delete a user group:

1. Start Hyperion Analyzer Administration Tools

2. To expand the **User Groups** folder node tree, click the User Groups plus sign (+).

3. Right-click a user group node to delete, and select **Delete User Group**.

   The Delete User Group dialog box is displayed and requires that you confirm deletion of the user group.

4. Click **OK** to delete the user group.

   The user group is deleted and the Log panel reports user group deletion.

# Assigning Users Groups Roles

For more information on roles and role conventions, see "Managing Roles" on page 59.

➤ To assign a role to a user group:

1. Expand the **User Groups** folder node tree by clicking the plus sign (+).

2. Select a user group node.

   The Management Panel displays the user group's tab group.

**3.** Click the **Roles** tab.

The Roles tab features an Available and an Assigned panel.

**4.** Do one of the following actions:

- Click a role in the **Available** panel.

- To select multiple roles in a series in the **Available** panel, press shift and click the first role in the series, and the last role in the series. The first role, the last role and all roles in between are highlighted and selected.

- Press Ctrl and click to select multiple roles in the **Available** panel. Only the highlighted roles are selected.

**5.** Click the right green arrow, to move the selection to the **Assigned** panel.

Roles can be assigned to both users and user groups, and the resulting permissions are cumulative. The following conventions indicate the source of the role and its permissions:

- **Bolded** roles have been assiged directly to both the user, and to a user group to which it belongs.

- *Italicized* roles have been assigned indirectly through a user group profile.

- Plain Text roles have been assigned directly to the user profile only.

Note therefore, that to control all access to Hyperion Analyzer both user roles and user group roles must be edited. For more information, see "Assigning Roles to User Groups" on page 63.

**6.** Click **Apply**.

Roles have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Assigning Users to User Groups

Users with privileges can assign users to user groups, using both the Users node tree and the User Groups node tree.

▶ To assign users to a user group:

**1.** Expand the **User Groups** folder node tree by clicking the plus sign (+).

**2.** Select a user group node.

The Management Panel displays the user group's tab group.

3. Click the **Users** tab.

The Users tab features an Available and an Assigned panel.

4. Do one of the following actions:

   ● Click a user name in the **Available** panel.

   ● To select multiple user names in a series in the **Available** panel, press shift and click the first user name in the series, and the last user name in the series. The first user name, the last user name and all user names in between are highlighted and selected.

   ● Press Ctrl and click to select multiple user names in the **Available** panel. Only the highlighted user names are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

6. Click **Apply**.

User group membership has not been assigned until the Apply button is clicked and the Log panel confirms success.

## Assigning Database Connections to Users Groups

Users with privileges can assign database connections to user groups, using both the User Groups node tree and the Databases node tree.

➤ To assign a database connection to a user group:

1. Expand the **User Groups** folder node tree by clicking the plus sign (+).

2. Select a user group node.

   The Management Panel displays the user group's tab group.

3. Click the **Databases** tab.

   The Databases tab features an Available and an Assigned panel.

4. Do one of the following actions:

   ● Click a database connection name in the **Available** panel.

- To select multiple database connection names in a series in the **Available** panel, press shift and click the first database connection name in the series, and the last database connection name in the series. The first database connection name, the last database connection name and all database connection names in between are highlighted and selected.

- Press Ctrl and click to select multiple database connection names in the **Available** panel. Only the highlighted database connection names are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

   Because alias tables and user preferences are related, you cannot set alias tables for user groups. To enable diverse login methods, user group members are prompted to enter a valid user ID and password, before they connecting to the database, but alternate login methods can be specified in the user profile.

6. Click **Apply**.

   Database Connections have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Assigning Report Groups to User Groups

Users with privileges can assign report group access to user groups, using both the User Groups node tree and the Report Groups node tree.

➤ To define report group access for a user group:

1. Expand the **User Groups** folder node tree by clicking the plus sign (+).

2. Select a user group node.

   The Management Panel displays the user group's tab group.

3. Click the **Report Groups** tab.

   The Report Groups tab features an Available and an Assigned panel.

4. Do one of the following actions:

   - Click a report group name in the **Available** panel.

- To select multiple report group names in a series in the **Available** panel, press shift and click the first report group name in the series, and the last report group name in the series.  The first report group name, the last report group name and all report group names in between are highlighted and selected.

- Press Ctrl and click to select multiple report group names in the **Available** panel. Only the highlighted report group names are selected.

5. Optional:  You can set instance permissions for the entire selection by clicking one of the option buttons in the **Permissions** group box: Read, Update, and Delete.

   **Note:** User groups cannot be assigned create privileges, or Owner permisisons.

   If no option is elected the user receives Read Only access by default. Note that previous permission elections stay with each report group as they are moved back and forth between the Available and Assigned panels.

6. Click the right green arrow, to move the selection to the **Assigned** panel.

7. Click **Apply**.

   Report group access is not assigned until the Apply button is clicked and the Log panel confirms success.

**5**

# Managing Report Groups

This chapter discusses the following topics:

- Creating Report Groups

- Deleting Report Groups

- Assigning Users Report Group Access

- Assigning User Groups Report Group Access

- Reviewing a list of Reports in a Report Group

### Report Groups

Report groups commonly contain reports relating to a single subject or common analytical purpose. Report groups coordinate information, enable specific distributions, and enable frequently updated reports to be located easily. Report groups have properties governing their display and use.

## Creating Report Groups

➤ To create a new report group:

**1.** Start Hyperion Analyzer Administration Tools

**2.** Do one of the following tasks:

- Right-click the Report Groups folder and select **New Report Group**.

- From the Menu bar, select **File > New > Report Group**.

An empty report group profile is displayed in the Management panel. The **General** tab is displayed by default. Notice that the General tab is similar to the Report Group Properties dialog box in the Java Web Client.

3. Enter a report group name in the **Name** text area.

4. Optional:  To hide the report group icon from the desktop, clear the **Show on Desktop** check box, or to display the report group icon on the desktop, select the **Show on Desktop** check box.

5. Optional:  To change the report group icon graphic, click the **Select Graphic** button, navigate to a JPG or GIF file and then click **OK**.

   **Note:** If no report group icon graphic is specified a generic Hyperion Analyzer graphic is used.

   Administrators have the option of completing additional tasks before clicking the Apply button.

   ● Assigning Users Report Group Access

   ● Assigning User Groups Report Group Access

   ● Reviewing a list of Reports in a Report Group

6. Click the **Apply** button.

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

# Deleting Report Groups

Users with privileges can delete report group as needed.  After deletion, report groups cannot be recovered.

➤ To delete a report group:

1. Start Hyperion Analyzer Administration Tools

2. To expand the **Report Groups** folder node tree, click the Report Groups plus sign (+).

3. Right-click a report group node to delete, and select **Delete Report Group**.

   The Delete User Group dialog box is displayed and requires that you confirm deletion of the report group.

4. Click **OK** to delete the report group.

   The report group is deleted and the Log panel indicates report group deletion.

# Assigning Users Report Group Access

Users with privileges can grant user four kinds of access to report groups, using both the Report Groups node tree and the Users node tree.

➤ To grant a user report group access:

1. Expand the **Report Groups** folder node tree by clicking the plus sign (+).

2. Select a report group node.

   The Management Panel displays the report group's tab group.

3. Click the **Users** tab.

   The Users tab features an Available and an Assigned panel.

4. Do one of the following actions:

   - Click a user name in the **Available** panel.

   - To select multiple user names in a series in the **Available** panel, press shift and click the first user name in the series, and the last user name in the series. The first user name, the last user name and all user names in between are highlighted and selected.

   - Press Ctrl and click to select multiple user names in the **Available** panel. Only the highlighted user names are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

6. Click **Apply**.

   User access is not granted until the Apply button is clicked and the Log panel confirms success.

# Assigning User Groups Report Group Access

Users with privileges can grant user groups three kinds of access to report groups, using both the Report Groups node tree and the User Groups node tree.

➤ To grant a user group report group access:

1. Expand the **Report Groups** folder node tree by clicking the plus sign (+).

2. Select a report group node.

   The Management Panel displays the report group's tab group.

3. Click the **User Groups** tab.

   The User Groups tab features an Available and an Assigned panel.

4. Do one of the following actions:

   - Click a user group name in the **Available** panel.

   - To select multiple user group names in a series in the **Available** panel, press shift and click the first user group name in the series, and the last user group name in the series. The first user group name, the last user group name and all user group names in between are highlighted and selected.

   - Press Ctrl and click to select multiple user group names in the **Available** panel. Only the highlighted user group names are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

6. Click **Apply**.

   User group membership has not been assigned until the Apply button is clicked and the Log panel confirms success.

# Reviewing a list of Reports in a Report Group

➤ To review a list of reports in a report group:

   1. Expand the **Report Groups** folder node tree by clicking the plus sign (+).

   2. Select a report group node.

      The Management Panel displays the report group's tab group.

   3. Click the **Reports** tab.

      The **Reports in Report Group** panel list the reports in the selected report group.

# Managing Database Connections

This chapter contains the following information:

## About Database Connections

Servers typically use the server name, application name, and database name in the creation of a unique identifiers. The nature of these components makes database references less portable.

Hyperion Analyzer uses user-friendly database aliases instead of long identifiers. In addition to being easier to remember and more economical to employ, database connection names enable the database to be maintained on multiple servers.

Users can manage their own database connections with the Hyperion Analyzer Java Web Client and the Administration Tools Client. While the Java Web Client enables users to create, edit, and delete their own database connections, the Administration Tools Client enables management of all database connections.

Hyperion Analyzer provides several easy-to-use interfaces for creating and managing database connections.

The database connection name of a report is always displayed in the Java Web Client Information panel.

The Information panel features two database connection segments:

- The Information panel Database segment displays the database name for the current report.

- The Database User Name segment displays the user ID by which access to the database has been gained. Access is set by means of the database connection.

## Three Kinds of Database Connections

Hyperion Analyzer enables you to create database connections to Essbase, Hyperion Financial Management, and relational databases.  Each of these data sources has specific requirements and features.

## Personal and Global Database Connections

Hyperion Analyzer users can connect to databases with connections they personally created or connections to which they have access that were created by the administrator.

Users can always set and edit database connection properties for their own database connections, but they cannot reconfigure the properties for database connections created for groups of users.

## About Database Connection Properties

OLAP database connections feature properties that customize and control use of database connections:

- User-friendly naming

- Integrating OLAP and Relational Data

- About Measures Formatting

- About Alias Tables

Users can configure, edit, remove, and override database connections and database connection properties on a report-by-report basis.

Java Web Client users can always set and edit database connection properties for their own database connections, but they cannot reconfigure the properties for database connections created for groups of users by an Administrator.

In the Java Web Client, a disabled Database Connection Properties dialog box tab indicates that the database connection is global in nature. Users must recreate it as a personal database connection to set different database connection properties.

Users creating reports to be shared with others should use global database connections. Other users cannot display the report without logging on to the personal database connection data source.

**Note:** If you change the Server Name, Application Name, or Database Name parameter values on the Database Connection Properties General tab, you cannot load reports created using different parameter values. A better practice is to create a new database connection with the desired parameter values.

### Controlling the Result Set

For more information on controlling the size of the query result set, see the *Hyperion Analyzer Administrator's Guide*, Configuration Options, Analyzer.properties File.

**7**

# Creating a Hyperion Essbase Database Connection in Administration Tools

Users must have a valid Essbase user ID and password and be authorized to configure database connections.

Configuring a new Essbase database connection requires the user to select Essbase as the database, log on Essbase, and then select an existing application database.

➤ To configure an Essbase database connection:

1. Start Hyperion Analyzer Administration Tools.

2. Take one of the following actions:

   ● On the Menu bar, select **File > New > Hyperion Essbase Database Connection**.

   ● Right-click the **Databases** folder node tree and select **New > Hyperion Essbase Database Connection**.

   ● Click the **Add New** button on the **Connections** User Preferences panel. When the Select Database Type dialog box is displayed, select **Essbase**, and Click **OK**.

   The Hyperion Essbase Login box is displayed.

3. Enter a valid Essbase server name, user ID and password, and Click **OK**.

   The List Databases dialog box is displayed.

4. Select an enabled database from the list and click the green selection arrow.

5. Click **OK**.

   In the Navigation panel, the new Essbase database connection is displayed as a node in the Databases folder node tree. A default name is assigned.

6. Optional: Click the **General** tab, and enter a user-friendly name in the **Database Connection Name** text area.

7. Click the **Apply** button.

   The database connection name has not been changed until the Apply button is clicked and the Log panel confirms success.

   Administrators have the option of completing these additional tasks:

   ● Assigning Database Connections to Users

   ● Assigning Database Connections to Users Groups

   ● Creating Relational Drill-Through

   ● Creating Measures Formatting Definitions

   ● Setting Alias Tables

# About Hyperion Financial Management Database Connections

Before you can use Hyperion Financial Management as a data source, you must install the Hyperion Financial Management client on the Hyperion Analyzer Analysis Server using the following procedures:

- Installing the Hyperion Financial Management Client on the Hyperion Analyzer Analysis Server
- Verifying DCOM Settings on the Client

## Installing the Hyperion Financial Management Client on the Hyperion Analyzer Analysis Server

➤ To install Hyperion Financial Management on the client tier:

1. Take one of the following actions:

   - If you have a Hyperion Financial Management CD, insert the CD into your CD-ROM drive.
   - If you downloaded the Hyperion Financial Management software from the Download Center, navigate to the directory where you downloaded the installation program.

2. Select **File > Run** or **Start > Run**, then type the following command:

   `Drive\folder\ SETUP.EXE.`

3. From the Welcome to Hyperion Financial Management dialog box, click **Next**.

4. From the Select a Setup Procedure dialog box, click **Client**.

5. If you are installing Hyperion Financial Management for the first time, the system prompts you to select a destination folder and a program folder:

   a. Select a destination folder, then click **Next**.

   b. Select a program folder, then click **Next**.

6. Review the current settings for components to be installed, then click **Next** to continue the installation or click **Back** to change any settings.

7. If prompted, select whether to restart your computer at this time, then click **Finish** to complete the setup.

# Verifying DCOM Settings on the Client

After you set up the client workstation, you must verify the DCOM settings.

➤ To verify the DCOM settings:

1. From the Microsoft Windows Desktop, select **Start > Run**.

2. In the **Open** text box, type **dcomcnfg.exe**.

3. Select the **Default Properties** tab.

4. Select the **Enable Distributed COM on This Computer** check box if it not already selected.

**Note:** Hyperion Financial Management ignores the other settings on the Default Properties tab.

5. If it is not already set, set the Default Authentication Level to **None**.

6. If you changed the Default Authentication Level, reboot your computer.

## Verifying Communications between the Application Server and Client

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

● Make sure that the user logged on to the application server has administrative rights to the Microsoft Windows server.

● Check the Distributed Component Object Model (DCOM) configuration on both the application server and the client workstation. The complete DCOM configuration must be set on the application server. The Default Authentication Level must be set to None on the client workstation. After you configure DCOM, you must reboot the computers for the settings to take effect. For instructions, see "Configuring DCOM Security" in the *Hyperion Financial Management Administrator's Guide*.

● To confirm communications between the application server and client, you must register the application server at the client workstation. For instructions, see the steps for registering a server in "Creating a Test Application on the Desktop" in the *Hyperion Financial Management User's Guide*

### Restart the Hyperion Analyzer Analysis Server

After installing the Hyperion Financial Management client, restart the Hyperion Analyzer Analysis Server to expedite the initialization of ADM components.

### Microsoft Windows NT Authentication

---

**CAUTION:** If you are using Microsoft Windows NT Server with Hyperion Financial Management on the Web, you must format Windows using NTFS. For more information on the Windows NTFS configuration, see your system administrator.

---

# Creating a Hyperion Financial Mangement Database Connection in Administration Tools

Users must have a valid Hyperion Financial Management user ID and password, and be authorized to configure database connections.

➤ To configure a Hyperion Financial Management database connection:

1. Start Hyperion Analyzer Administration Tools.

2. Take one of the following actions:

    ● On the Menu bar, select **File > New > Hyperion Financial Management Database Connection**.

    ● Right-click the **Databases** folder node tree and select **New > Hyperion Financial Management Database Connection**.

    ● Click the **Add New** button on the **Connections** User Preferences panel. When the Select Database Type dialog box is displayed, select **Hyperion Financial Management**, and Click **OK**.

    The Hyperion Financial Management Login dialog box is displayed.

3. Enter a valid Hyperion Financial Management server name, user ID and password and Click **OK**.

    The List Applications dialog box is displayed.

4. Select an enabled database from the list and click the green selection arrow.

**7**

**5.** Click **OK**.

In the Navigation panel, the new Hyperion Financial Management database connection is displayed as a node in the Databases folder node tree. A default name is assigned.

**6.** Optional: Click the **General** tab, and enter a user-friendly name in the **Database Connection Name** text area.

**7.** Click the **Apply** button.

The database connection name has not been changed until the Apply button is clicked and the Log panel confirms success.

Administrators have the option of completing these additional tasks:

● Assigning Database Connections to Users

● Assigning Database Connections to Users Groups

● Creating Relational Drill-Through

● Creating Measures Formatting Definitions

# About Relational Access

Hyperion Analyzer can access both OLAP and supported relational databases. There are five methods for accessing relational data from the Hyperion Analyzer client:

## Custom Report SQL Spreadsheet

SQL Spreadsheet objects represent relational data sources as a spreadsheet, using standard SQL syntax queries.

## Relational Drill-through

Hyperion Analyzer users can construct seamless liaisons between OLAP data and relational data sources. This navigation from OLAP to relational data is typically called "relational drill-through." After being configured, users can navigate from the dimension bottom (level 0) of the OLAP database and drill down to specified relational data.

Hyperion Analyzer stores relational drill-through definitions as database connection properties of an Essbase database connection. Users can define their own Select statements and clauses as part of the drill-through definition. The query result set is presented in the format of the SQL Spreadsheet described above.

## Defining a Relational Database Connection

Hyperion Analyzer provides users with an easy-to-use graphical interface for defining Relational Database Connections. Users are prompted to specify a relational database type and login credentials, select a relational table, and define the properties of the database connection and cube.

Hyperion Analyzer clients query the specified relational data source, aggregate the result set, and express data in the format of an OLAP cube.

## EIS Drill-through

EIS Drill-through is a server-based form of relational drill-through. Like conventional relational drill-through, users can construct seamless liaisons between OLAP data and relational data sources. Unlike conventional relational drill-through, users can drill to the relational report from any intersection in the Hyperion Analyzer report.

Your Essbase Administrator must establish EIS drill-through reports. The relational query is stored as Intersection specific meta data, and flagged with a Linked Reporting Object indicator. When users double-click flagged cells, the OLAP report navigates to the specified relational report.

## Hyperion Analyzer Repository

Access to the Hyperion Analyzer repository is the only mandatory form of relational database access. The repository centrally stores Hyperion Analyzer system data, user IDs, user preferences, and report definitions in relational database tables. Without access to the repository, you cannot save any form of Hyperion Analyzer information. Hyperion Analyzer System Administrators establishes access to the Hyperion Analyzer repository during installation.

**7**

### System Requirements

System Requirements vary for relational access methods, and the user and system administrator must establish and configure supported RDBMS. See the *Hyperion Analyzer Installation Guide* for a complete description of relational system requirements.

### Controlling the Size of the Query Result Set

Query governors vary for relational access methods.

Custom report SQL spreadsheets and relational drill-through methods enable users to declare query governors in the course of creating the SQL query or relational drill-through definition.

When you drill from OLAP to relational data, passing only the drilled OLAP dimension member to the relational data source may result in a large query result set. To focus and diminish the query result set, users have the option of passing the page dimensions and filter dimensions specified in the OLAP report.

Other relational access methods rely on the Analyzer.properties File to limit the query result set.

For more information on controlling the size of the query result set, see the *Hyperion Analyzer Administrator's Guide*, Configuration Options, Analyzer.properties File.

# About Relational Database Connections

This section contains the following information:

- Installing and Configuring JDBC Drivers
- Retrieving Relational Tables
- Defining the Relational Cube
- Creating Relational Database Connections

# Installing and Configuring JDBC Drivers

The first Relational Database Connection Wizard panel, Configure JDBC Drivers, requires that the user specify a supported relational database, edit the database connection string, and provide database login credentials.

*Table 1: Configure JDBC Driver Dialog Box*

| Text box or Control | Description |
| --- | --- |
| Driver Type | Selects one of the supported relational databases:<br>• IBM DB2 7.2 Personal Edition<br>• IBM DB2 7.2 fp7 and 8.1 fp2 Workgroup and Enterprise Edition<br>• Microsoft SQL Server 2000 sp3<br>• Oracle 8.1.7 and 9.2.1<br>• Teradata 4.1 |
| JDBC Driver | The Java Database Connectivity Driver for the selected relational database is automatically displayed in this text box. |
| Database Connection String | A sample database connection string syntax is provided in this text box. Users must edit the string so that it specifies their RDBMS computer name and database name. |
| JDBC Username | Indicate a valid user name for the relational database. **Important!** Hyperion Analyzer requires this text box to be populated. Users cannot create a relational database connection without specifying a user name and password. |
| JDBC Password | Indicate a valid password for the user name. **Important!** Hyperion Analyzer requires this text box to be populated. Users cannot create a relational database connection without specifying a user name and password. |
| Test Connection | Click this button to test the relational connection before proceeding. If the connection is successful a message box reading "Connection Succeeded" is displayed. |

**7**

## Important Notes on JDBC Drivers

The JDBC driver connects the application server hosting Hyperion Analyzer and the relational database, not the client computer. Users must ensure that the application server is able to connect.

Hyperion Analyzer currently supplies all the drivers that Hyperion supports.

IBM DB2 is release specific. Hyperion provides the JDBC driver for IBM DB2 7. The DB2java.zip client drivers must match the DB2java.zip archive on the IBM DB2 database server. **Caution:** Be extremely careful when copying files from the RDBMS server to the Hyperion Analyzer install directory! There are extreme consequences if you overwrite the application server local DB2 files used to access configuration information.

The Teradata 4.1 Connection string features four bracketed JDBC connection string parameters. Brackets and parameter names must be replaced with valid values.

*Table 2: Connection String Parameters*

| Parameters | Description |
|---|---|
| {host-name} | Server domain name |
| {port} | TCPIP port number |
| {DSN} | Data source name |
| {database name} | A specific database name |

JDBC driver archives must be explicitly referenced by file name within the classpath of the  webapp application server.

Users cannot create a relational database connection without specifying the user name and password used to validate access.

## Retrieving Relational Tables

The second relational database connection wizard panel, Select Fact Table, provides filters for locating a fact table by schema and finally table name.

*Table 3: Select Fact Table Dialog Box*

| Text box or Control | Description |
|---|---|
| Select Table group box | |
| Schema Filter | The Schema filter prompts the user to select a schema type from the corresponding drop-down list box, to narrow the list of relational tables. |
| Table Type Filter | The Table Type filter prompts the user to select a table filter from the corresponding drop-down list box, to narrow the list of relational tables. |
| Retrieve Table List Button | This button retrieves the list of relational tables. |

## Defining the Relational Cube

The third Relational Database Connection Wizard panel, Relational Cube Editor, diagrams the relational cube as a node tree.

*Table 4: Relational Cube Editor Dialog Box*

| Default Node | Right-Click Menu | Description |
|---|---|---|
| Relational Cube | | |
| | Rename Cube | Right-click the Relational Cube node and select Rename Cube to specify the relational database connection name. |
| Dimensions | | |
| | Add Dimension | Right-click the Dimensions node and select Add Dimension to create a new dimension. |
| Defined Dimension | | |

**7**

*Table 4: Relational Cube Editor Dialog Box*

| Default Node | Right-Click Menu | Description |
|---|---|---|
| | Add Generation | Right-click a defined dimension node and select Add Generation to specify a relational columns as a dimension generation. |
| | Rename Dimension | Right-click a defined dimension node and select Rename Dimension to specify a new name for the dimension. |
| | Delete Dimension | Right-click a defined dimension node and select Delete Dimension to remove the dimension from the node hierarchy. |
| | Preview | Right-click a defined dimension node and select Preview to display a node tree of the selected dimension hierarchy. |
| Defined Generation | | |
| | Edit Generation | Right-click a defined generation node and select Edit Generation to change properties for that generation. |
| | Rename Generation | Right-click a defined generation node and select Rename Generation to specify a new name for that generation. |
| | Delete Generation | Right-click a defined generation node and select Delete Generation to remove that generation from the node hierarchy. |
| | Move Up | Right-click a defined generation node and select Move Up to move that generation up in the node hierarchy. |
| | Move Down | Right-click a defined generation node and select Move Down to move that generation down in the node hierarchy. |
| | Preview | Right-click a defined generation node and select Preview to display a node tree of the selected dimension hierarchy. |

*Table 4: Relational Cube Editor Dialog Box*

| Default Node | Right-Click Menu | Description |
| --- | --- | --- |
| Measures | | |
| | Edit Measures | Right-click the Measures node and select Edit Measures to specify columns as measures. |
| | Rename | Right-click the Measures node and select Rename to specify a different name for the measures dimension. |
| | Preview | Right-click a defined measures node and select Preview to display a node tree of the selected dimension hierarchy. |
| Defined Measure | | |
| | Rename Member | Right-click a defined measure and select Rename Member to specify a new name for the measure. |
| | Delete Measure | Right-click a defined measure and select Delete Measure to remove the measure from the node hierarchy. |
| | Preview | Right-click a defined measures node and select Preview to display a node tree of the selected dimension hierarchy. |
| Properties | | Displays the properties of the currently selected node. |

## Important Notes on Relational Table Properties

To protect existing open reports and to expedite network traffic and server resources, there is only one cached JDBC connection per user per relational database connection. Therefore your edits to relational database connections do not take effect until you log off Hyperion Analyzer and log back on.

# Creating Relational Database Connections

➤ To create a relational database connection:

1. Start Hyperion Analyzer Administration Tools.

2. Take one of the following actions:

   - On the Menu bar, select **File > New > Relational Database Connection**.

   - Right-click the **Databases** folder node tree and select **New > Relational Database Connection**.

   - Click the **Add New** button on the **Connections** User Preferences panel. When the Select Database Type dialog box is displayed, select **Relational**, and Click **OK**.

   The **Configure JDBC Driver** dialog box is displayed. Hyperion Analyzer supports relational database connectivity for four JDBC Drivers. If you require alternate relational connectivity methods, see "About Relational Access" on page 94.

3. Select one of the following supported JDBC drivers from the **Driver Type** drop-down list.

   - **IBM DB2**
   - **Microsoft SQL Server**
   - **Oracle**
   - **Teradata**

   Your JDBC driver selection populates the **Database Connection String** text area with a relational database connection string.

4. Replace bracketed variables in the string with valid values.

   Depending on the driver type, there are variables for host name, database name, port, and DSN. You must replace both the brackets and the variable.

5. Enter a valid JDBC user name in the **JDBC Username** text box.

6. Enter a valid password for the user name in the **JDBC Password** text box.

7. Click the **Test Connection** button to verify relational database connectivity.

   If the connection fails, repeat steps 2 through 6 until you can establish a succesful relational database connectivity. Be sure you have removed the brackets from the string variables.

8. When you have a successful relational connection, close the Test Connection message and click **OK** to proceed to the next wizard dialog box.

   The **Select Fact Table** dialog box requires you to select a relational fact table from a list. Schema filters and table type filters are available to narrow long lists of tables.

   **Note:** Before you can use a schema filter, it must be mapped to the RDBMS database username used to log on to the database. This username is specified on the previous wizard dialog box, Configure JDBC Drivers.

9. Select a schema from the **Schema Filter** drop down list.

10. Select a table type from the **Table Type Filter** drop down list.

11. Click the **Retrieve Table List** button to query the relational database for tables meeting filter requirements, and display the result set in the panel.

    Clicking the **Retrieve Table List** button,

    An understanding of the relational database is required to select the fact table. You may need to ask the relational database administrator to identify the fact table. The fact table must contain at least one column of numeric data that can be used as a measures dimension.

12. Select a table to be used as the fact table from the table result set, and click **OK**.

    The **Relational Cube Editor** dialog box diagrams the relational cube as a node tree in the same manner that the Dimension Browser presents OLAP cubes. Properties of the selected node display in the Properties panel at the bottom of the dialog box. Click to select a node. Double-click to expand and collapse nodes. Right-click to edit dimensions and measures.

13. Right-click the **Measures** node and select **Edit Measures**.

    The **Measure Editor** dialog box is displayed. It enables you to define relational columns as measures by moving them from the **Available Columns** list panel to the **Measures Members** list panel. In this dialog box you can also rename the measures dimension, specify the default dimension, add measures to the cube, and specify aggregation methods for measures dimensions.

14. Select a column from the **Available Columns** list panel that has a numeric data type, and then click the **right arrow** (>) button to move the column to the **Measure Members** list panel.

Note that the selected measure has been designated as the default measure dimensions.

15. **Optional**:  When there is more than one measure in the **Measure Members** list panel, you can specify the measure to be used as the default measure, by clicking an option button in the **Default** column.

16. **Optional**:  To change the name of the measure, click the **Member Name** text area, and type a new name. Member names must be unique to each other and the name of the measures dimension for SQL parsing to be successful.

17. **Optional**: To indicate a different aggregation method for a member, click the **Aggregation Type** text area and select from the following fixed aggregation methods.  When no aggregation type is specified Sum is used by default:

    - **Sum**

    - **Count**

    - **Min**

    - **Max**

    - **Avg**

18. When you have specified all the fact table columns to use as measures, click **OK**.

    The **Relational Cube Editor** is displayed. Note that the Measures node can be expanded to display the new measures dimension you defined.

19. Right-click the **Dimensions** node and select **Add Dimension**.

    The **New Dimension Name** dialog box is displayed.

20. Enter a name for the dimension you would like to define, and click **OK**.

    The **Generation Editor** dialog box is displayed. It enables you to define an OLAP generation for the dimension, to name the generation, to indicate the ID and alias tables used for return values, and to relate the dimension back to the fact table.

21. Enter a name for this generation of the dimension hierarchy in the **Generation Name** text box.

    Note that the **Select Member ID and Description Columns** group box displays the fact table by default.

22. To narrow the list of tables available for selection, select a filter from the **Table Type** drop-down list.

**23.** Select a table from the **Table** drop-down list.

**24.** Indicate the column to be used for ID aliases in the top **Column** drop-down list.

**25.** Indicate the column to be used for Descriptions aliases in the bottom **Column** drop-down list.

By identifying columns that tables have in common, you relate the defined dimension generation back to the fact table. Typically, several sets of common columns are used to identify a circuitous path back to the fact table.

You may need to ask the relational database administrator for a description of relational tables and their columns to discern tables that have common columns.

Start by identifying tables that have columns in common with the table you specified for your dimension generation. Then find tables that have columns in common with the fact table. Determine if any tables that have common columns with the dimension generation also share common columns with the fact table. If they do, then your relationship is mapped. If not, you must continue comparing columns until you can map a bridge between the dimension generation and the fact table.

Note that the **Define Fact Table Mappings** group box displays the dimension you just defined and the fact table by default. Unless they share a common column, you must select a **Table Type** filter, a table, and the same column as the dimension generation. If they do share a common column, you need only indicate that column in the **Column** drop down list at right.

When a table and column are selected on the right, a new line is added to the **Define Fact Table Mappings** group box below until the dimension generation and fact table relationship is mapped.

Keep the following considerations in mind as you make your selections.

● Question marks (?) indicate unspecified columns.

● Left and right **Column** drop-down lists must display common columns.

● Each **Define Fact Table Mappings** line should display different column sets than the line above.

● To improve performance, specify as few column sets as is possible.

**7**

**26.** In the **Define Fact Table Mappings** group box, select a table from the **Table** drop down list at right that has the same column as the **Column** drop down list on the left.

The specified table and column display on a line below.

**27.** Select the same **Column** drop-down list on the right as is specified in the **Column** drop-down list on the left.

**28.** Repeat steps 26 and 27 until you have mapped a relationship between the dimension generation and the fact table, then click **OK**.

The **Relational Cube Editor** is the current dialog box again. Note that the Dimension generation and Measures nodes can be expanded, by clicking the plus sign (+), to display the relational cube structure.

**29.** **Optional**: To add generations to the same dimension, right-click the dimension name and select **Add Generation**. The **Generation Editor** is displayed again. Repeat steps 21-28.

**30.** **Optional**: To reorder the generations in the dimension hierarchy, right-click a generation name and select **Move Up** or **Move Down**. The generation node moves in the specified direction in the dimension hierarchy.

**31.** **Optional**: To add dimensions to the same relational cube, right-click the **Dimensions** node and select **Add Dimension**. Repeat steps 19-28.

**32.** When all measures, dimensions, and generations have been defined and ordered, click the Relational Cube Editor **OK** button.

The Administration Tools Navigation panel is displayed with the relational database connection node. Note that the Mangement panel General tab features three buttons.

The Modify JDBC Connection button enables you to completely redefine the relational database connection, beginning with the Configure JDBC Driver dialog box.

The Modify Fact Table button enables you to select a new fact table and define a new relational cube using the current JDBC connection string.

The Modify Cube button enables you to redefine the relational measures and dimensions for the current JDBC connection string and selected fact table. The Relational Cube Editor also enables you to rename the relational cube.

# Assigning Database Connections to Users

Users with privileges can assign database connections to users, using both the Users node tree and the Databases node tree.

➤ To assign a database connection to a user:

1. Expand the **Databases** folder node tree by clicking the plus sign (+).

2. Select a database connection node.

   The Management Panel displays the tab group of the database connection.

3. Click the **Users** tab.

   The Users tab features an Available and an Assigned panel.

4. Do one of the following actions:

   ● Click a user name in the **Available** panel.

   ● To select multiple user names in a series in the **Available** panel, press shift and click the first user name in the series, and the last user name in the series. The first user name, the last user name and all user names in between are highlighted and selected.

   ● Press Ctrl and click to select multiple user names in the **Available** panel. Only the highlighted user names are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

   Administrators have the option of completing additional tasks before clicking the Apply button.

6. Optional: To set an alias table for a selected Assigned database connection, click the **Set Alias** button. The Set Alias Table dialog box is displayed, prompting the user to select the alias table from the drop down list box and click **OK**.

7. Optional: To specify the login method used when the current user connects to the database, perform one of the following tasks:

   ● Select the **Use Analyzer Login** option button. This option will attempt to connect to the database connection using the user ID and password specified on the General tab.

**7**

- Select the **Prompt for Login** option button. This option will prompt the user to enter a valid user ID and password, before connecting to the database.

- Select the **Define Login** option button. This option displays the Login Information dialog box, enabling you to enter a valid user ID and password for the database connection, if it varies from the Analyzer Login parameters.

8. Optional: To change the login parameters used by the Define Login option button, click the **Change Login** button and enter new parameter values.

9. Click **Apply**.

   Database Connections have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Assigning Database Connections to Users Groups

Users with privileges can assign database connections to user groups, using both the User Groups node tree and the Databases node tree.

➤ To assign a database connection to a user group:

1. Expand the **Databases** folder node tree by clicking the plus sign (+).

2. Select a database connection node.

   The Management Panel displays the tab group of the database connection.

3. Click the **User Groups** tab.

   The User Groups tab features an Available and an Assigned panel.

4. Do one of the following actions:

   - Click a user group name in the **Available** panel.

   - To select multiple user group names in a series in the **Available** panel, press shift and click the first user group name in the series, and the last user group name in the series. The first user group name, the last user group name and all user group names in between are highlighted and selected.

- Press Ctrl and click to select multiple user group names in the **Available** panel. Only the highlighted user group names are selected.

5. Click the right green arrow, to move the selection to the **Assigned** panel.

Because alias tables and user preferences are related, you cannot set alias tables for user groups. To enable diverse login methods, user group members are prompted to enter a valid user ID and password, before they connecting to the database, but alternate login methods can be specified in the user profile.

6. Click **Apply**.

Database Connections have not been assigned until the Apply button is clicked and the Log panel confirms success.

# Integrating OLAP and Relational Data

Because Hyperion Analyzer can access both OLAP and supported relational databases, users can construct seamless liaisons between OLAP data and relational data sources. This navigation from OLAP to relational data is typically called relational drill-through.

Relational drill-through is configured as a database connection property of an OLAP database connection.

After relational drill-through is configured, users can navigate from the dimension bottom (level 0) of the OLAP database and drill down to specified relational data.

Relational drill-through is a client-based integration solution comparable to the server-based Essbase Integration Services (EIS) drill-through.

The Relational Drill-Through dialog box is a graphical user interface for creating SQL relational database queries. Users can use complex SQL syntax to specify table joins, and select and order by clauses.

**Note:** In order to support a broad array of JDBC relational data sources, relational drill-through does not support queries by levels, generations, or previously selected members.

### Relational Drill-through Process Overview

Upon accessing the Database Connection Properties dialog box, users complete the following tasks in the creation of relational drill-through navigation:

**7**

1. Define a relational database connection.

2. Indicate the relational database table name.

3. Update the Columns list.

4. Map relational columns to dimensions in the OLAP database.

5. Indicate whether to pass filter dimensions or page dimensions and a row limit (if any).

6. Click Apply.

For instructions for creating relational drill-through navigation, see "Creating Relational Drill-Through" on page 110.

### Controlling the Size of the Query Result Set

Query governors vary for relational access methods.

Custom report SQL spreadsheets and relational drill-through methods enable users to declare query governors in the course of creating the SQL query or relational drill-through definition.

When you drill from OLAP to relational data, passing only the drilled OLAP dimension member to the relational data source may result in a large query result set. To focus and diminish the query result set, users have the option of passing the page dimensions and filter dimensions specified in the OLAP report.

Other relational access methods rely on the Analyzer.properties File to limit the query result set.

For more information on controlling the size of the query result set, see the *Hyperion Analyzer Administrator's Guide*, Configuration Options, Analyzer.properties File.

# Creating Relational Drill-Through

Users with privileges can create new relational drill-through connections as a database connection property of an Essbase or Hyperion Financial Management database connection, using the Administration Tools Management panel, or Connections User Preferences, Database Connection Properties.

Users must know the name of the relational database table that they intend to access before they begin.

➤ To create a new relational drill-through connection:

1. Start Hyperion Analyzer Administration Tools.

2. Expand the **Databases** folder node tree by clicking the plus sign (+).

3. Select a database connection node.

   The Management Panel displays the tab group of the database connection.

4. Click the **General** tab.

   The General tab features a Relational Drill-through group box. If no drill-through definition is defined an Add button is displayed. Database connections with drill-through definitions feature dynamic Delete and Modify buttons.

5. Click the **Add** button.

   The **Configure JDBC Driver** dialog box is displayed. Hyperion Analyzer supports relational database connectivity for JDBC Drivers.

6. Select one of the following supported JDBC drivers from the **Driver Type** drop-down list.

   - **IBM DB2**

   - **Microsoft SQL Server**

   - **Oracle**

   - **Teradata**

   Your JDBC driver selection populates the **Database Connection String** text area with a relational database connection string.

7. Replace bracketed variables in the string with valid values.

   Depending on the driver type, there are variables for host name, database name, port, and DSN. You must replace both the brackets and the variable.

8. Enter a valid JDBC user name in the **JDBC Username** text box.

9. Enter a valid password for the user name in the **JDBC Password** text box.

10. Click the **Test Connection** button to verify relational database connectivity.

    If the connection fails, repeat steps 6 through 10 until you can establish a succesful relational database connectivity. Be sure you have removed the brackets from the string variables.

**11.** When you have a successful relational connection, close the Test Connection message and click **OK** to proceed to the Modify Relational Drill-through Connection dialog box.

**12.** Enter a relational database table name in the **From** text box.

**13.** Click the **Update Columns** button.

Column names for the specified table are displayed in the Column Name and Related Dimension panel at the bottom of the dialog box.

**14.** Designate the OLAP dimensions from which you connect to these table columns. To do this, you must understand the relationships between OLAP and relational data.

**15.** Click a cell in the Related Dimension column opposite a relational column name that you would like to connect to OLAP data.

The clicked cell presents a drop-down list box with the dimension list of the OLAP database connection.

**16.** Click to select an OLAP dimension.

Repeat the process of mapping relational database columns and OLAP dimensions until your mappings are complete.

**17.** Optional:

Take one or more of these additional actions:

● Click the **Pass Pages** check box to maintain the current OLAP page dimensions as you drill into relational data.

● Click the **Pass Filters** check box to maintain the current OLAP filter dimensions as you drill into relational data.

● Set row limits for the query result set in the "Max rows to return" text box. This protects server and network resources from being consumed unintentionally by very large query result sets.

● Specify SQL Select, Where, and Order By clauses in the corresponding text boxes to narrow the relational query result set.

**18.** Click **OK**.

# About Measures Formatting

The General tab of a database connection profile contains a Formatting group box with a Format button that enables you to globally format one dimension used by an OLAP database connection. This global formatting, called measures formatting, includes leading and trailing characters, numeric formatting of numeric dimension values, and header and data formatting.

Measures formatting options differ from those of data formatting and Default Formatting user preferences. The scope of the formatting depends on the source of the formatting definition.

# Creating Measures Formatting Definitions

Database connection properties can be accessed in both the Hyperion Analyzer Java Web Client and the Hyperion Analyzer Administration Tools client. Database connection properties can be set using the Management panel of a database connection node, or through Connections User Preferences.

➤ To set dimension member metadata formatting on a database connection:

1. Start Hyperion Analyzer Administration Tools.

2. Expand the **Databases** folder node tree by clicking the plus sign (+).

3. Select a database connection node.

   The Management Panel displays the tab group of the database connection.

4. Click the **General** tab.

   The General tab features a Formatting group box.

5. Select the **Format** button.

   The Formatting dialog box is displayed.

6. Select a dimension from the list panel.

7. Click the **Format** button.

   The Measures Formatting dialog box is displayed.

8. Select the dimension members to which measures formatting is applied.

   ● To expand the tree view panel to the left, click the plus sign.

   ● To make explicit member selections, select member names.

- To select multiple members, press the **Ctrl** Key and select member names.

- To select a series of members Press the **Shirt** Key and select the first and last members of the series.

- To select all displayed members Press **Ctrl+A** and select a member.

- To make dynamic member selections Use the **Advanced Member Selection** drop-down list box.

9. Set measures formatting options.

10. Click the **Apply Formatting to Member(s)** button.

## Measures Formatting Dialog Box

*Table 5: Measures Formatting Options Overview*

| Display Data Options | Description |
|---|---|
| Leading and Trailing | Sets the representation of negative data values. |
| Currency Symbol | Inserts the following currency formatting symbols into the Positive Prefix and Negative Prefix text boxes: Dollar ($), Cents (¢), Pound (£), Euro(E), Deutschmark (DM), Franc (F), and Yen (¥). |
| Positive Prefix | Enter data to be added before positive values. |
| Positive Suffix | Enter data to be added after positive values. |
| Negative Prefix | Enter character to precede negative numeric values. **Caution:** The minus sign (-) is the default prefix. Deleting the default prefix without replacing it causes negative values to be displayed positively. |
| Negative Suffix | Enter data to be added after negative values. |
| Numeric Formatting | |
| Grouped Thousands check box | Groups numeric digits in thousands. |
| Minimum Decimals: | Sets the minimum number of digits used to display data. |
| Maximum Decimals: | Sets the maximum number of digits used to display data. |

*Table 5: Measures Formatting Options Overview*

| Advanced Member Selection | |
|---|---|
| Drop-down List Box | Displays the Advanced Member Selection menu, enabling users to define dynamic measures formatting. |
| Header Font | Displays the Font Properties dialog box. |
| Data Font | Displays the Font Properties dialog box. |
| Apply Formatting to Member(s) | Applies measures formatting settings to the database connection definition. |
| Remove Formatting from Member(s) | Removes measures formatting settings from the database connection definition. |

### Creating Dynamic Measures Formatting

Users have the option of defining measures formatting using either an explicit member selection or advanced member selection. Using advanced member selection makes the measures formatting dynamic. As members are added deleted and changed in the database, the formatting maintains itself and does not become obsolete.

➤ To create a dynamic measures formatting definition, use the Advanced Member Selection drop-down list box.

## About Alias Tables

Alias tables are database tables that store aliases, or alternate description labels, for dimensions or members.

Only Hyperion Essbase enables administrators to define multiple alias tables. Hyperion Analyzer enables you to specify which alias table to use. The alias table selection is saved as a database connection property.

Hyperion Analyzer Administrators can specify a default alias table for global database connections using Hyperion Analyzer Administration Tools. You can specify default alias tables for your personal database connections, using the Set Alias Table dialog box.

### Label Mode

Label mode enables you to select whether a dimension member is listed by ID number, description, or both. Label mode options are data-source-specific, and can be set for database connections, specific reports, and specific dimensions.

Although the label mode indicates whether the description or ID number is used, it is the database alias table that provides the displayed value.

You can set a default label mode before opening a report by clicking the Set Alias Table button on a database connection node Users tab.

You can also set a default label mode before querying the data source using Cube Navigator options, and after querying using Data Display options on the Main Display panel right-click menu.

You can specify which description label to use in specific dimensions, using Dimension Browser and using Data Display options on the Main Display panel right-click menu.

# Setting Alias Tables

➤ To specify a default alias table for a database connection:

1. Start Hyperion Analyzer Administration Tools.

2. Expand the **Databases** folder node tree by clicking the plus sign (+).

3. Select a database connection node.

   The Management Panel displays the tab group of the database connection.

4. Click the **Users** tab.

5. Select at least one Assigned user name.

6. Click the **Set Alias Table** button.

   The Set Alias Table dialog box is displayed.

7. Select an alias table from the drop-down list box and Click **OK**.

   Whenever the specified database connection is used, the selected label mode is also used. Subsequent label mode selections made in the Cube Navigator or the Dimension Browser overwrite these default settings.

# Chapter 8

# Optimizing Hyperion Analyzer

# Hyperion Analyzer Analysis Server Console

### Prerequisites for Starting

Before you can start, an administrator must provide you with the uniform resource locator (URL) of the Hyperion Analyzer Java Web Client launch page, and your computer must satisfy any System Requirements.

### Logging On to the Hyperion Analyzer Analysis Server Console

➤ To start the Hyperion Analyzer Analysis Server Console:

   **1.** Start a supported Web browser.

   **2.** Select **File > Open** from the menu.

   **3.** Enter the URL of the Hyperion Analyzer launch page, and press Enter.

   **4.** Click the link launching Hyperion Analzyer Analysis Server Console.

   The Hyperion Analyzer Analysis Server Console application window is displayed, and then the Login dialog box is displayed.

   **5.** Enter a valid user ID and Password in the Login dialog box.

   **Note:** Hyperion Analyzer is delivered with a defined user ID, **Administrator**, and password, **password**. If you edit the Administrator user profile, do not forget the Administrator password. Loss of the Administrator password prevents administration until another user with an Administrator role privileges resets the password.

**6.** If prompted with a **Domain** drop down list box, select an authentication
method.

Analyzer authentication is the default authentication method. Essbase and
external authentication may also be available.

**7.** Click **OK**.

# Analysis Server Console Interface

The Hyperion Analyzer Analysis Server Console interface is composed of two
panels. The System Status Panel contains statistical fields and controls. The User
Sessions Panel contains session status information and controls.

## System Status Panel

*Table 1: Analysis Server Console System Status Panel*

| Control | Description |
| --- | --- |
| Show/Hide (at the far right) | Expand or collapse the System Status panel in the console interface. |
| Current User Sessions | The number of current sessions. |
| Disconnect users idle for more than *n* minutes. | Disconnect sessions idel for more than the number of minutes (10-1000) specified by the corresponding field. |
| Maximum User Sessions | The maximum number of concurrent users since the last refresh. |
| Refresh Statistics Interval | Set the time interval for automatic refresh of the display. |
| Submit | Applies changes to settings. |

## User Sessions Panel

*Table 2: Analysis Server Console User Sessions Panel*

| Control | Description |
| --- | --- |
| Show/Hide (at the far right) | Expand or collapse the User Sessions panel in the console interface. |
| Session ID | A unique session identifier generated by the application server. |
| User | The Hyperion Analyzer user ID. |
| Client ID | The IP address or HTML client sessinos for the client application. |
| Total Requests | The number of client requests generated by the session. |
| Average Response | The cumulative response time divided by the number of requests, in seconds. |
| Login Time | The date and time that the sessino was instantiated. |
| Kill Check box | Manually ends the selected session. |

*Table 2: Analysis Server Console User Sessions Panel*

| Control | Description |
|---------|-------------|
| Kill Message | The text message displayed to the client when kill is executed. |
| Submit | Applies changes to setttings. |

# Managing Memory Allocation

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

The JVM monitors increasing and decreasing memory allocation, to determine the memory required to satisfy application needs and simultaneously minimize JVM requests to the operating system. As the number of instantiated application objects grows and diminishes, the JVM requests that the operating system allocate and free memory proportionally. The JVM may therefore not immediately release allocated memory, to maintain the amount typically required by the Hyperion Analyzer application.

# Configuration and Integration Options

This chapter contains the following information:

- Configuring Hyperion Hub
- Registering Hyperion Analyzer with Hyperion Hub
- Analyzer.Properties File
- Editing the Analyzer.properties File
- Configuring Different Java Plug-in Versions

## Configuring Hyperion Hub

Hyperion Hub allows for the syncronization of business hierarchies, the storage and versioning of these hierarchies and the integration of data across Hyperion's Business Performance Management applications.

To share Hyperion Analyzer content with other Hyperion Analyzer environments, you can import and export Hyperion Analyzer Reports and Report Group definitions to and from a configured Hyperion Hub server.

➤ To configure Hyperion Analyzer with Hyperion Hub:

**1.** Start Hyperion Analyzer Administration Tools.

**2.** From the Menu bar, select **Edit > Hyperion Hub**.

The Hyperion Hub dialog box is displayed.

**3.** Enter a server name in the **Server Name** text box.

**4.** Specify a port number in the **Port** text box.

**5.** Enter a valid Hyperion Hub user name and password in the **Login Information** group box.

**6.** Click **OK**.

# Registering Hyperion Analyzer with Hyperion Hub

Administrators must register Hyperion applications available to Hyperion Analyzer users through the Related Content feature. Hyperion Analyzer can be registered through both the Analyzer.Properties File and the Hyperion Hub server, but external authentication is required to use Hyperion Hub.

➤ To register Hyperion Analyzer with Hyperion Hub:

**1.** Start Hyperion Analyzer Administration Tools.

**2.** From the Menu bar, select **Edit > Directory Protocol**.

The Directory Protocol dialog box is displayed.

**3.** Select the **Register with Hyperion Hub** check box at the bottom left.

**4.** Optional: Enter a user-friendly name in the **Alias** text box.

**5.** Click **OK**.

# Configuring a Mail Server for Hyperion Analyzer

➤ To configure a mail server for Hyperion Analyzer:

**1.** Start Hyperion Analyzer Administration Tools

**2.** From the Menu bar, select **Edit > Mail Server**.

The Mail Server dialog box is displayed.

**3.** Enter a mail server name in the text box, and click **OK**.

# Analyzer.Properties File

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

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

```
C:\Hyperion\analyzer\catalina\webapps\Analyzer7_Server\WEB-INF\
conf
```

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

```
C:\Hyperion\appserver\hosts\default_host\Analyzer7_Server\Analy
zer6\classes
```

**9**

# Editing the Analyzer.properties File

You can edit the `Analyzer.properties` file for the following purposes:

● Controlling the Result Set

● Updating the License Key Without Reinstalling

● Identifying Integrated Hyperion Applications for Hyperion Analyzer

● Configuring Essbase XTD Deployment Services

● Formatting Data Value Tool Tips

● Resolving Hyperion Essbase Subscriptions in Hyperion Analyzer

● Configuring External Authentication with Hyperion Essbase

● Setting Hyperion Analyzer to Log Queries

● Configuring Microsoft Excel to Support Hyperion Analyzer

## 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 dialog box 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`
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 limit of 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

You 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 Hyperion Analyzer release number.

➤ 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 Integrated Hyperion Applications for Hyperion Analyzer

Administrators must register Hyperion applications available to Hyperion Analyzer users through the Related Content feature. Hyperion applications can be registered through both the Analyzer.properties file and the Hyperion Hub server, but external authentication is required to use Hyperion Hub.

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 is displayed 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 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 as follows:

- $SSO_USERNAME$

- $SSO_PASSWORD$

- $SSO_TOKEN$

# Hyperion Integrated Application Definition Examples

Notice the sequential numbering of definitions using a zero-based index.

```
RelatedContent.Server.Name.0=Hyperion Analyzer
RelatedContent.Server.URL.0=
http://server1/Analyzer7_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 files 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

The `Analyzer.properties` file supports variables enabling Essbase XTD Deployment Services. 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 multiprocessor systems) that run copies of the same Essbase application, a single Essbase server that runs replicas of the same application, or a combination of both.

Download and read the *Essbase XTD Deployment Services Installation Guide* for complete information on installing, configuring and using this service.

**9**

*Table 1: EDS Variables*

| Variable | Description |
|----------|-------------|
| UseEES | A value of true prompts ADM to use Essbase XTD Deployment Services to access Essbase; A value of false enables ADM to use the default JNI driver. |
| EESDriverName | Specifies the Essbase XTD Deployment Services driver to ADM.  Do not modify this variable from the value adm:thin:com.hyperion.ap.ees.EESHssDriver. |
| EESServerName | Specifies the server running Essbase XTD Deployment Services. |
| EESLocale | Specifies the locale for Essbase XTD Deployment Services. |
| EESDomain | Specifies the domain for Essbase XTD Deployment Services.  Do not modify this variable. |
| EESORBType | Specifies the valid ORB type for Essbase XTD Deployment Services.  Only TCPIP is supported. |
| EESPort | Specifies the Essbase XTD Deployment Services communication port.  Specify a currently unused port. |

| Variable | Description |
|---|---|
| EESUseConnPool<br>EESConnPerOp | Specifies the method ADM uses for Essbase XTD Deployment Services connection pooling.<br><br>A connection pool is a set of login sessions from Essbase XTD Deployment Services to an Essbase server. Essbase XTD Deployment Services uses a connection pool to process requests for Essbase services. There are three valid combinations of these properties:<br><br>**EESUseConnPool=false  EESConnPerOp is ignored.**<br><br>In this configuration, EES will not use any connection pooling.<br><br>**EESUseConnPool=true  EESConnPerOp=false**<br><br>Connection pooling is used, and the connection is held from the time the cube view is opened until it is closed.<br><br>**EESUseConnPool=true  EESConnPerOp=true**<br><br>Connection pooling is used, and the connection is released immediately after each operation. |
| EESUseCluster | A value of true enables Essbase XTD Deployment Services to use available Essbase cluster. |
| EESUseReportOption | This property should be set to true only if you are using Microsoft's Java Virtual Machine. |

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

**Note:** ChangePassword and SetPassword server actions attempt to modify both Essbase XTD Deployment Services 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 Essbase XTD Deployment Services must be defined in the Hyperion Analyzer classpath: ess_es_server.jar and ess_japi.jar.

**Note:** Hyperion does not recommend implementing Essbase XTD Deployment Services in conjunction with AIX platforms.

# Formatting Data Value Tool Tips

The `Analyzer.properties` file contains a variable controlling the format of data value tool tips. Tool tips display as small boxes over data cells when the cursor triggers a float over event.

When the variable **`FormatToolTips='true'`**, the tool tip displays the data value in scientific notation unformatted to up 1E7. When the variable **`FormatToolTips='false'`** or is not specified in the `Analyzer.properties` file, the tool tip displays the data value in the same format as the spreadsheet grid.

# Resolving Hyperion Essbase Subscriptions in Hyperion Analyzer

Administrators can set the `Analyzer.properties` file variable **`FastResolveEssbaseSubscriptions=true`** to realize a Hyperion Analyzer performance improvement, as long as they are not conducting Hybrid analysis. Setting to true indicates use of Essbase pass-thru methods to generate dimension member lists fo subscription controls. Since there is no way for Hyperion Analyzer to detect Hybrid Analysis the variable is set to false by default.

**`FastResolveEssbaseSubscriptions=false`** indicates to use standard Essbase resolve member methods to generate a dimension member lists for subscription controls.

## Configuring External Authentication with Hyperion Essbase

Setting the `Analyzer.properties` file variable **`EnableEssbaseCSS=true`** indicates that Hyperion Analyzer should pass the authentication token generated during external authentication to Hyperion Essbase. This enables Hyperion Analyzer users to connect to Essbase without an additional log on.

Because not all implementations employ external authentication, the variable is set to false by default, indicating that Hyperion Analzyer should use the name and password encapsulated in the token to log on to Hyperion Essbase.

An exception to this behavior surrounds use of a trusted external authentication token by Hyperion Analyzer. In this case, no password is provided and the user will be prompted to log on again.

For more information on external authentication, see Chapter 2, "Managing Security and Access."

## Setting Hyperion Analyzer to Log Queries

Setting the `Analyzer.properties` file variable **`LogQueries=true`** redirects the ALE query report and Essbase report specification created by ADM to the Hyperion Analyzer output log. This variable is set to false by default, to minimize the amount of logged information.

## Configuring Microsoft Excel to Support Hyperion Analyzer

The `Analyzer.properties` file variable **`ExcelPath`** indicates where Hyperion Analyzer should search for the Microsoft Excel executable file, used in conjunction with the Java Web Client's Export to Excel feature.

```
ExcelPath=C:\\My_Excel_Path\\Excel.exe;
C:\\Your_Excel_Path\\Excel.exe
```

# Configuring Different Java Plug-in Versions

The Hyperion Analyzer Java Web Client and Administration Tools Client are configured to use the Sun Java Plug-in 1.3.1_09. Administrators can update the Sun Java Plug-in versions by editing the Analyzer.jsp and Administrator.jsp files static versioning statement. This mandates the loading of the specified version of the Sun Java plug-in.

**9**

➤ To edit the Analyzer.jsp and Administrator.jsp static versioning statement, perform the following tasks:

1. Open the Analyzer.jsp file using a text editor.

2. Search for the static versioning statement class ID, **clsid:**.

    The current class ID value is as follows:

    ```
    clsid:CAFEEFAC-0013-0001-0004-ABCDEFFEDCBA
    ```

3. Edit the clsid value, to the desired Sun Java Plug-in version.

    Alphabetic characters at the beginning and end of the string are set by Sun. Do not change these characters. The first two sets of numeric digits indicate the Sun Java Plug-in version. The third set of numeric digits indicates the patch number. For example, the clsid value for the 1.3.1_10 Sun Java Plug-in is as follows:

    ```
    clsid:CAFEEFAC-0013-0001-0010-ABCDEFFEDCBA
    ```

4. Save your changes to the jsp file.

5. Repeat all of these steps for the Administrator.jsp file.

# 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 7.0 database table design.

The migration process is, therefore, not a one-to-one migration of 5.0.3 data into 7.0 data. It is instead an attempt to port as much 5.0.3 data to the new 7.0 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 7.0 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 7.0 table design.

**Note:** Hyperion recommends migrating administrative database tables before migrating Hyperion Analyzer database tables.

## Overview of the Migration Process

The migration process consists of the following steps:

1. Maintain installations of Hyperion Analyzer 5.0.3 and 7.0 releases.

2. Save the conversion utilities, `AdminMigrate.exe` and `AnalyzerMigrate.exe` to the `Applications` subdirectory of the Hyperion Analyzer 5.0.3 directory.

3. Double-click to start the `AdminMigrate.exe` conversion utility.

4. Convert the following items to their corresponding export file.

*Table i: Conversion Utility Process*

| Conversion Utility | Purpose | Export File | Suffix |
|---|---|---|---|
| AdminMigrate.exe | Migrate a user | User ID | ARU |
| | Migrate all users | User ID | ARU |
| AnalyzerMigrate.exe | Migrate a view | Report | ARD |
| | Migrate a view group | Report Group | ARG |

5. Import the export file to the Release 7.0 repository.

6. 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 Release 7.0 database repository. It does not overwrite the repository.

## Converting Release 5.0.3 Users to Release 7.0 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.

**10**

➤ To start the `AdminMigrate.exe` conversion utility:

1. Open Windows Explorer.

2. Double-click `AdminMigrate.exe` (in the `Applications` subdirectory of the Hyperion Analyzer 5.0.3 directory).

   The Hyperion Analyzer 5.0.3 Administration Tools toolbar is displayed.

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

   The Management window is displayed.

➤ To convert Hyperion Analyzer 5.0.3 users to a Hyperion Analyzer 7.0 users export file ARU file:

1. Click **Migrate** on the menu bar, and select one of the following commands:

   ● Migrate All Users - Converts all user IDs in the repository. After selecting this option proceed to step 4.

   ● Migrate A User - Converts specific users.

   The Users dialog box is displayed.

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

3. Click **OK**.

   The Save As dialog box is displayed. The converted users are saved 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 **OK**.

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

7. To close the Migration Errors dialog box, click **OK** .

➤ To import a Hyperion Analyzer 7.0 users export ARU file:

1. From the Hyperion Analyzer launch page, start Hyperion Analyzer 7.0 Administration Tools.

2. From the Menu Bar select **File > Import**.

   The Open dialog box is displayed.

3. Enter the location and file name 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 **`AnalyzerMigrate.exe`** in the `Applications` subdirectory of the Hyperion Analyzer 5.0.3 directory.

   A Hyperion Analyzer 5.0.3 Windows client with a special Migration menu bar is displayed.

➤ To convert a Hyperion Analyzer 5.0.3 view to a Hyperion Analyzer 7.0 export ARD file:

1. Click **Migrate** on the menu bar, and select **Migrate a View**.

   The Hyperion Analyzer 5.0.3 View Manager is displayed.

2. Select the view group tab of the view that you wish to convert.

3. Select the view name of the view that you wish to convert.

4. Click **OK**.

   The Save As dialog box is displayed. 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 the following message when conversion is complete:

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

**8.** Click **OK**.

➤ To import a Hyperion Analyzer 7.0 export ARD file:

**1.** From the Hyperion Analyzer launch page, start the Hyperion Analyzer 7.0 Java Web Client.

**2.** From the Menu Bar select **File | Import | Report**.

The Open dialog box is displayed.

**3.** Enter the location and filename of the exported ARD file.

**4.** Click **OK**.

The Map Connection dialog box is displayed.

**5.** Select a database connection from the **Exported Connection** list, and then select the database connection to use in the **Available Database Connections** list.

**6.** Click the **Map It!** button.

The mapped database connection is displayed in the Mapped Connections list.

**7.** Repeat steps 5 and 6 until all database connections in the report have been mapped to available database connections.

**8.** 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 the Hyperion Analyzer 5.0.3 repository.

➤ To start the `AnalyzerMigrate.exe` conversion utility:

1. Open Windows Explorer.

2. Double-click **`AnalyzerMigrate.exe`** in the `Applications` subdirectory of the Hyperion Analyzer 5.0.3 directory.

   A Hyperion Analyzer 5.0.3 Windows client with a Migration menu bar is displayed.

➤ To convert a Hyperion Analyzer 5.0.3 view group to a Hyperion Analyzer 7.0 report group export ARG file:

1. Click **Migrate** on the menu bar, and select **Migrate a Group**.

   The Select Hyperion Analyzer Desktop Group dialog box is displayed.

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

3. Click **OK**.

   The Save As dialog box is displayed.

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 **OK**.

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

7. To close the Migration Errors dialog box, click **OK**.

   The Information dialog box displays the following message when conversion is complete:

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

8. Click **OK**.

➤ To import a Hyperion Analyzer 7.0 report group export ARG file:

1. From the Hyperion Analyzer launch page, start the Hyperion Analyzer 7.0 Java Web Client.

2. From the menu bar select **File > Import > Report Group**.

   The Open dialog box is displayed.

3. Enter the location and name of the exported ARG file.

4. Click **OK**.

   The Map Connection dialog box is displayed.

5. Select a database connection from the **Exported Connection** list, and then select the database connection to use in the **Available Database Connections** list.

6. Click the **Map It!** button.

   The mapped database connection is displayed in the Mapped Connections list.

7. Repeat steps 5 and 6 until all database connections in the report have been mapped to available database connections.

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

   The Specify Report Group Name dialog box is displayed.

9. Enter a name for the Release 7.0 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 Release 5.0.3 data into Release 7.0 database tables, some Release 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 they can scroll to the bottom of text editors displaying ARD and ARG output files.

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

**10**

## {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. Because of security considerations, there is no equivalency in Hyperion Analyzer 7.0. 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 7.0 reports and report groups are not shared with 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 who give calculation definitions the same name as dimension members may encounter conversion errors. To avoid this, 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 controls. When conversion is complete, the report can be saved with new default settings.

## Named Report Startup Options

Named Report Startup Options specified in the User Preferences dialog box do not migrate. Before you can access a report of this sort after migration, the report must be assigned to a user group using the Administration Tools client.

# Common Conversion Exceptions

**10**

| 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. |

| 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

Authorized users 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 7.0.

## 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 Hyperion Analyzer Administration Tools, or the command line.

**10**

➤ 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 the ARU file and select it.

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 for the Hyperion Analyzer drive:

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

## XML File Format Example

The following is a sample XML import file:

```
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 example XML file in the preceding topic:

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.

8) Identifies a role to be assigned to GroupB in addition to the default roles defined in lines 4 and 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" is assigned to each new user who does not specifically identify a password. When the default password is omitted, a password must be given in each specific user. New users are required to change their passwords upon login unless the value of ChangePwd is overridden in a specific user definition. Each new user is assigned the same user properties as the existing User50 user. TemplateProperties are optional.

13) Identifies the default user group that will be assigned to each new user within the CreateUsers request. You can specify multiple user groups by adding 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.

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 has 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.

**10**

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

44) Ends the dimension specification.

45-47) Identify 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) Identify 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) Modifications 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 methods used to validate them during logon.

**10**

To enable this functionality, administrators must enter fully qualified usernames in their XML files, 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 is authenticated using by default Hyperion Analyzer authentication.

On line 16, by declaring Essbase authentication and a backslash (\), the user ID Nikko is 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 is created and authenticated using the specified external authentication provider.

**Note:** Before you can 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 JSP templates.

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 stand-alone client on a Windows client computer.

### 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 access the report properties dialog box, take one of the following actions:

- 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.

  The Report Properties dialog box is displayed.

### JSP Templates

Hyperion Analyzer converts reports to Web pages using predefined Java Server Page (JSP) templates.

All templates must be located in your application server's Web publishing template subdirectory, `wp_templates`.

When no JSP template file is specified, Hyperion Analyzer defaults to the `report_publish.jsp` template in the `\webapps\Analyzer7_Server \templates` subdirectory.

**Note:** BEA WebLogic 6.1 users defining custom templates must save their templates to the wp_templates directory inside the ear file. After the custom templates have been saved to the Analyzer7_Server\wp_templates directory, the ear must be rebuilt and posted to the application server. The wp_output directory is not affected, nor is this a problem in WebLogic 7.2.

## 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 subdirectory, `wp_output`.

## Creating the Web Publishing XML File

Users are required to define a XML files that specify 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/Analyzer7_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 example file in the preceding topic:

1) Identifies the XML version and the 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 ID

- 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 stand-alone (Windows) client.

## Running the Web Publishing Batch Utility

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

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

# AnalyzerCredential.jsp

You can generate time-limited login credentials that enable users to go directly to a Hyperion Analyzer Web Client, without sending unencrypted login information between the client and server.

To do this, pass a user ID and password to the AnalyzerCredential.jsp page. The AnalyzerCredential.jsp page generates time-limited credentials that can be used to authenticate the user to one of the following:

- The Java Web Client (Analyzer.jsp) UserCredential applet parameter

- The HTML Web Client (login.jsp) UserCredential query parameter (action= login).

**10**

The credential token is returned in encrypted form and expires by default in five minutes.  Expiration and length of time can be controlled by parameters in the AnalyzerCredential.jsp file.

The AnalyzerCredential.jsp is typically installed below the Web app directory:

```
Analyzer7_Server/AnalyzerCredential.jsp
```

# Hyperion Analyzer Configuration Test Servlet

Use the Hyperion Analyzer Configuration Test Servlet to diagnose and resolve connectivity issues. To start the servlet, start a Web browser and replace "index.html" in the path to the Hyperion Analyzer launch page with "Config."  The servlet displays links that centrally report environmental variables and `Analyzer.properties` file parameters, and test connectivity to the class factory, the Hyperion Analyzer repository, the external authentication configuration file, and the Essbase ADM driver.

➤ To launch the Configuration Test Servlet:

1. Open a browser window and type the following URL.

   ```
   http://<hostname>/Analyzer7_Server/Config
   ```

The Configuration Test Servlet allows you to access the following information and tests:

● **List Environment Variables** – Displays the environment variables from the server.

● **View Analyzer Property Files** – Displays repository information from the `classes.xml`, `Xml.properties`, and `Analyzer.properties` files.

● **Class Factory Test** – Tests the `classes.xml` file.

● **Repository Test** – Retrieves information from the repository based upon the user ID defined.

● **External Authentication Test** – Tests external authentication and single sign-on.

● **ADM Essbase Test** – Provides login information and allows you to test your connectivity to Essbase.

To access each of the above pages, click the corresponding link.

## Environment Variables

The List Environment Variables page displays Java System Properties and System Environment Variables. You can use this page to view specific system properties which include, user.name, java.class.path, java.home, HYPERION_HOME, LOGONSERVER, and CLASSPATH.

*Figure 1:  Environment Variables*

**10**
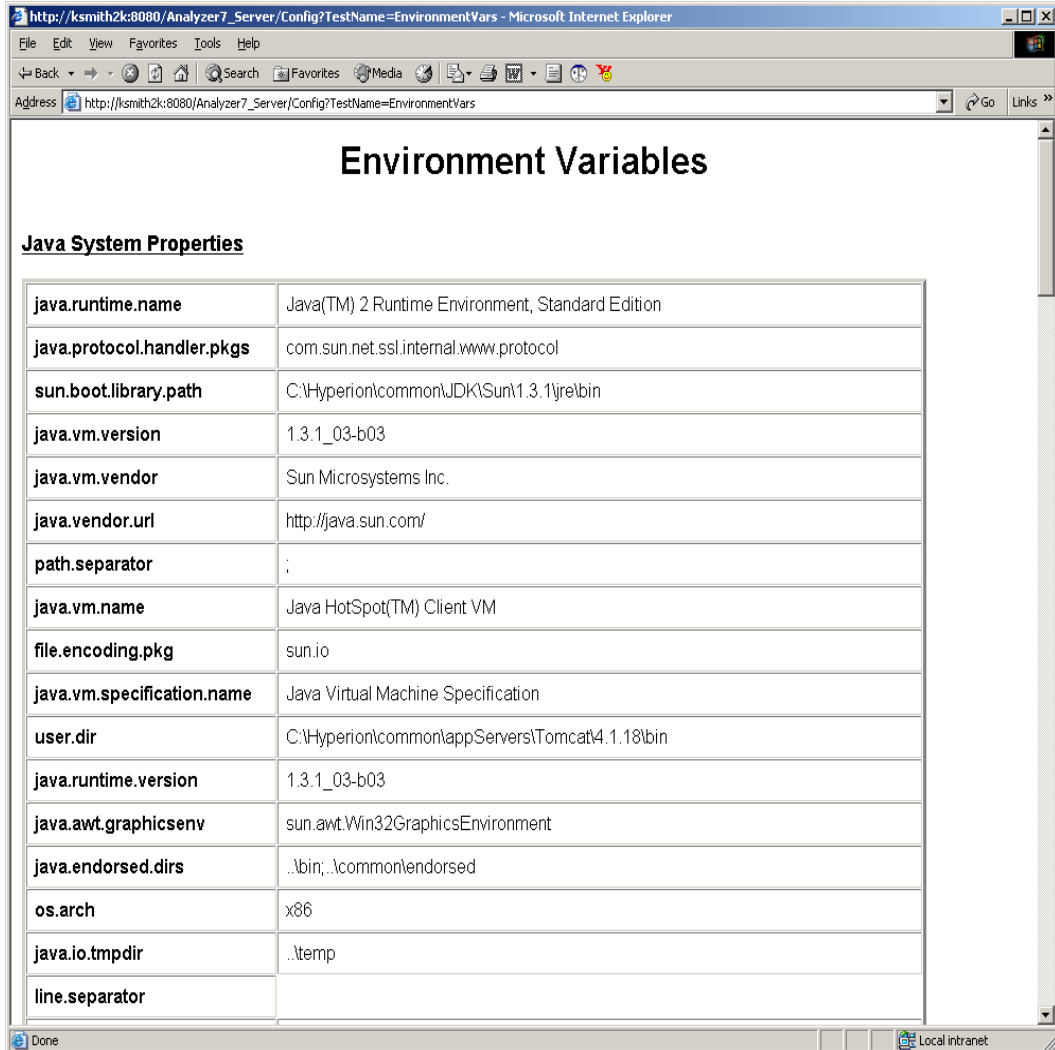
> **Tip:** You can use the browser's **Back** button or the **Available Tests** link at the bottom of the page to return to the Configuration Test Servlet home page.

## Viewing Analyzer.properties Parameters

The Analyzer Property Files page displays the physical location and links to access the `Classes.xml`, `Xml.properties`, and `Analyzer.properties` pages.

➤ To view a file, click the corresponding link.

For example, if you want to view the installation license key, you can view the `Analyzer.properties` file.

## Testing the Class Factory

The Class Factory Test page tests the `Classes.xml` file. The last line of the page indicates whether the test executed successfully or failed. If the class factory test failed, a stack trace displays to help you troubleshoot the problem.

## Testing the Repository

The Repository Test page retrieves information from the repository using the defined user ID and tests the repository connection. This test is extremely helpful to troubleshoot issues with connectivity. The last line of the page indicates whether the test executed successfully or failed. If the test failed, a stack trace displays to help you troubleshoot the problem.

## Testing External Authentication

The Test External Authentication page allows you to test the external authentication and single sign-on. Similar to the other testing pages, if the test fails, a stack trace is provided to help you troubleshoot the problem.

## Testing ADM Essbase

The ADM Essbase Configuration page provides the following information:

- ADM Environment Variables
- ADM Property File Locations
- ADM Jar Locations

- Version Information

- Essbase Login Information

You can use this page to login to Essbase and test your connectivity.

**Tip:** To view the ADM Property files, click a property link.

➤ To login and test your Essbase connectivity:

1. Scroll to the bottom of the page and type:

   - The name of the Essbase server

   - Your Essbase user name

   - Your Essbase password

2. Click **Show Details**.

3. Click **Submit Query**.

# Customizing HTML Web Content

## HTML Web Client Templates

Templates are composed of conventional HTML and Hyperion Analyzer tags and actions. The following templates are 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`
- `newreport.jsp`
- `print.jsp`
- `relatedcontent.jsp`
- `report_publish.jsp`
- `report.jsp`
- `reportlist.jsp`
- `saveas.jsp`

### Custom Templates

After custom templates are created, you can pre-compile them to enhance performance. Save the templates with other JSPs in the appropriate application server directory. In addition, some application servers require the JSPs 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, because there are considerable differences between the supported application servers.

# Template Tags

Template tags are parsed sequentially. 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"/>
```

Following are the Hyperion Analyzer template tags and their descriptions.

### <hya:About/>

Returns the release number with 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.

### &lt;hya:CalcList/&gt;

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

**Sample**

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

### &lt;hya:CancelDBLogin/&gt;

Returns a URL to cancel the database logon template.

### &lt;hya:CancelEdit/&gt;

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

### &lt;hya:CancelSave/&gt;

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

### &lt;hya:CellBGColor/&gt;

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

**Attributes**

| Value | Description |
| --- | --- |
| datasource | The data source name, or query definition name.  It can be identified in the tree view of Design Report mode |
| row | The integer representing a specified table row |
| column | The integer representing a specified table column |

### &lt;hya:CellFGColor/&gt;

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="</strong>"/>
```

**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

### &lt;hya:DimBrowserDimName/&gt;

Returns the dimension name in the Dimension Browser.

### &lt;hya:DimBrowserEvent/&gt;

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

| Attribute | Description |
| --- | --- |
| event | The name of a defined Dimension Browser event. |

**Values**

- UseDefault
- UseAlias
- UseID
- UseBoth
- Remove
- RemoveAll
- Apply
- Cancel

**Example**

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

### &lt;hya:DimBrowserLabelMode/&gt;

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:

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.

**Example**

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

### <hya:DisplayObject/>

Returns the HTML of the current data object. Data objects are report components that represent the data source as a spreadsheet, chart, or pinboard. Custom reports and horizontal and vertical combination reports can contain more than one data object.

### <hya:DrillOptions/>

Returns a list of available Hyperion Analyzer HTML Web Client drill options, including the option to display the Dimension Browser for the currently selected dimension.

**Example**

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

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

**Attributes**

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

| 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 when Hyperion Analyzer style fonts are in use or false when the template style fonts are in use. |
| showMultiPage | Returns true when multiple page dimensions are separated into individual drop down list boxes and false when page dimensions are aggregated. |
| isSaveAllowed | Returns true when the current report can be saved. |
| isReportLoaded | Returns true when the current report is loaded. |
| isEditAllowed | Returns  true when the current report can enter Edit mode. |
| isEssbase | Returns true when the current data object in a report uses a Hyperion Essbase database connection. |
| isRelational | Returns true when the current data object in a report uses a relational database connection. |
| isHFM | Returns true when the current data object in a report uses a Hyperion Financial Management database connection. |
| isDrillThru | Returns true when the current data object is a drill-through report. |
| isViewLoaded | Returns true when there is a current data object, or in other words has been loaded. |
| isSQLView | Returns true when the current data object is a custom report SQL spreadsheet component. |

## **<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:LayoutList/>

Returns a drop down list box listing layout options: spreadsheet, chart, vertical combination, and horizontal combination.

### <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 off the user.

### <hya:Message/>

Returns any status messages generated by the program. The tag returns only 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.

**Example**

```
<SELECT>
     <OPTION>East</OPTION>
     <OPTION>West</OPTION>
</SELECT>
```

### <hya:Password/>

Returns the user password.

### <hya:PostLogin/>

When a URL is interrupted by authentication methods, an action and its parameters from the URL are encapsulated as the value of a PostLogin variable in the login page. When the user is authenticated, the action is passed on for execution.

### <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:Print/>

Returns the URL of the Web browser print template displaying the current data object. This can be used as print preview functionality that supports printing through the Web browser.

### <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 HTML node tree of related contents for the selected data cell.

### <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.

**Example**

```
Profit Report for the Eastern Region
```

### <hya:ReportGroupList/>

Returns a combo box list of report group names to which 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**

| | |
|---|---|
| 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 Web client displays the report in the same state as the HTML Web 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 property name to a property value 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 box.

### <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, and so on.

### <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 information used to authenticate the user.

### <hya:UserID/>

Returns the name of the user.

### <hya:Version/>

Returns the *<major>*.*<minor>*release number of Hyperion Analyzer.

### &lt;hya:WebAppURL/&gt;

Returns the URL of the Hyperion Analyzer Web application.

**Example**

http://*&lt;servername&gt;*/Analyzer7_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.

*Table 1: 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 of grid row titles. |

*Table 1: HTML Client Template Style Tags*

| Style | Description |
|---|---|
| infoHeader | Formats the Information panel headers. |
| infoData | Formats Information panel data. |

*Table 2: 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 3: HTML Client About Style Tags*

| Style | Description |
|---|---|
| version | Formats Hyperion Analyzer release information. |
| copyright | Formats Hyperion Analyzer copyright information. |
| server | Formats server information. |
| warning | Formats warning information. |

# HTML Web Client Actions

Web developers can customize Hyperion Analyzer HTML behavior by including actions and their parameters in URLs pointing to the Hyperion Analyzer HTML Web Client. Such an URL would consist of the elements described in the following table:

*Table 4: Hyperion Analyzer HTML Web Client URL Components*

| 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. |

**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. Following are the HTML actions available for your use.

## 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 logon.

## 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 be applied only 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 the user on to the specified database.

**Parameters**

dbname-                  The database ID
dbuserid-                A valid user ID for the specified database

**Parameters**

| | |
|---|---|
| dbpassword- | The password for the user ID |
| saveuid- | Indicates whether to save the login information for future use. Values of "1" or "True" indicate to save. |

## Desktop

Displays the Hyperion Analyzer 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**

| | |
|---|---|
| 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/> tag. |

## DrillCell

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

**Parameter**

| | |
|---|---|
| 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.

**Parameter**

| | |
|---|---|
| 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**

| | |
|---|---|
| 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- | Indicates the dimension on which to drill. |
| member- | 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**

| | |
|---|---|
| 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, enabling 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**

| | |
|---|---|
| groupname- | The name of the report group in which the report is stored. |
| reportname- | The name of the report to export. |

## FocusDisplayObject

Sets the current data object of the current report.

**Parameter**

view -   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.

**Parameter**

group - The ID of the report group

## LoadReport

Loads the specified report.

### Parameter

name - 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

| | |
|---|---|
| userid | A valid Hyperion Analyzer user ID |
| password | The password for the user ID |
| postlogin | An optional parameter indicating an action to be executed following login, specified in the login URL. You must also provide the required parameters for the executed action. |

```
Example:
http://[ServerName]/[PathName]?Action=login&userid=
[UserID]&password=[Password]&postlogin=loadreport&group=
[groupname]&name=[reportname]
```

## 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**

| | |
|---|---|
| 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.

**Parameter**

disptype - The display type of the current data object:

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

dispsubtype - The chart type of a chart:

| dispsubtype | Chart Type Value |
|---|---|
| 1 | Chart Type Values |
| 2 | Vertical Bar Chart |
| 3 | Line Chart |

| dispsubtype | Chart Type Value |
|---|---|
| 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.

### Parameter

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

| | |
|---|---|
| dbid- | the index of an existing database connection |
| layout- | One 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.

## Print

Returns the URL of the Web browser print template displaying the current data object. This can be used as print preview functionality that supports printing through the Web browser.

## RefreshEdits

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

## Reload

Reloads the current report in the report template.

## ReloadData

Reloads data values in the current data object of the current report.

## 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.

**Parameter**

calcname -    The name of the Hyperion Essbase server calc used to reconsolidate 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**

| | |
|---|---|
| newgroup- | A new report group name |
| newname- | A new report name |
| newdesc- | A new report description |

## 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 is entered:

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

## SetAliasController

Specifies the alias controller custom report component and the alias table of the current database connection from which to derive a description label.

**Parameters**

| | |
|---|---|
| acname- | The name of the alias controller custom report component |
| acitem- | The name of the alias table, from which the description label is derived. |

## SetDim

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

**Parameters**

| | |
|---|---|
| view- | 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- | The dimension |
| member- | 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 values of the parameters are stored in memory for the duration of the user session.

**Parameters**

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:** This action does not support the following features: Logging off, User Preferences, Report Manager, Launch Executable, Print Screen, or Print Current Report.

**Parameter**

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**

sctype-          A string indicating the type of subscription control:

- radio
- combobox
- button
- checkbox
- multilevel
- sqlcombobox

scname-          An internal subscription controller id number

**Parameters**

| | |
|---|---|
| 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- | (Check box only) True if the check-box is selected; false if it is not. |

## Startup

Executes actions defined by the Startup User Preferences. For example: load a report, load a specific report group, and so forth.

## 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.

➤ To log on to Hyperion Analyzer, type this URL:

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

➤ To log on to a specific report of a specific Hyperion Analyzer session, type this URL:

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

### 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 logon 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 logon fails.

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

➤ To retrieve the Login Status and SID, type this URL:

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

If you logged on using the portal mode, you can use the LoadReport action to return 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 (in the response header).

➤ To retrieve the data source names of specific report of a specific Hyperion Analyzer session, when you have logged on using the portal parameter, type this URL:

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

# Appendix B

# 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.

*Table 1: Applet Modifiers*

| 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. This URL should not be changed when specified in the `applet.html` file. Locally installed classes should omit this modifier. |

*Table 2: 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. |
| FrameWidth | The FrameWidth string value is the width in pixels of the Hyperion Analyzer frame. |
| HideConfirmDialog | API Toolkit-specific<br><br>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 | API Toolkit-specific<br><br>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. |
| HideSearchMenu | When set to TRUE, the HideSearchMenu string value hides the Search command from the right-click menu. The default value is FALSE. |
| HideToolBars | When set to TRUE, the HideToolBars string value hides all Toolbars. The default value is FALSE. |
| HideMainToolBar | When set to TRUE, the HideMainToolBar string value hides the Toolbar. The default value is FALSE. |
| HideMainMenu | When set to TRUE, the HideMainMenu string value hides the Menu bar. The default value is FALSE. |
| HideTabBar | When set to TRUE, the HideTabBar string value hides the Report Tabs bar. The default value is FALSE. |

*Table 2: Applet Parameters (Continued)*

| Applet Parameter | Description |
| --- | --- |
| HideStatusBar | When set to TRUE, the HideStatusBar string value hides the Status bar. The default value is FALSE. |
| HideReportPopupMenu | When set to TRUE, the HideReportPopupMenu string value hides the Report Tabs bar right-click menu. The default value is FALSE. |
| HidePrevNext | When set to TRUE, the HidePrevNext string value hides the Back and Forward Toolbar buttons. The default value is FALSE. |
| HidePrevNextSm | When set to TRUE, the HidePrevNextSm string value hides the dynamic Back and Forward Details bar buttons. The default value is FALSE. |
| HideHome | When set to TRUE, the HideHome string value hides the Home Toolbar button. The default value is FALSE. |
| HideHomeSm | When set to TRUE, the HideHomeSm string value hides the dynamic Home Details bar button. The default value is FALSE. |
| HideNew | When set to TRUE, the HideNew string value hides the New Toolbar button. The default value is FALSE. |
| HideOpen | When set to TRUE, the HideOpen string value hides the Open Toolbar button. The default value is FALSE. |
| HideSave | When set to TRUE, the HideSave string value hides the Save Toolbar button.  The default value is FALSE. |
| HideSaveAs | When set to TRUE, the HideSaveAs string value hides the SaveAs Toolbar button.  The default value is FALSE. |
| HideClose | When set to TRUE, the HideClose string value hides the Close command on the Report Tabs bar right-click menu. The default value is FALSE. |
| HideCloseAll | When set to TRUE, the HideCloseAll string value hides the CloseAll command on the Report Tabs bar right-click menu. The default value is FALSE. |

*Table 2: Applet Parameters (Continued)*

| Applet Parameter | Description |
| --- | --- |
| HideReloadReport | When set to TRUE, the HideReloadReport string value hides the Reload Report command on the Report Tabs bar right-click menu. The default value is FALSE. |
| HideNav | When set to TRUE, the HideNav string value hides the Cube Navigator commands on the Menu bar and Toolbar. The default value is FALSE. |
| HideReportProps | When set to TRUE, the HideReportProps string value hides the Properties command on the Report Tabs bar right-click menu. The default value is FALSE. |
| HideImport | When set to TRUE, the HideImport string value hides the Import command on the Menu bar. The default value is FALSE. |
| HideExport | When set to TRUE, the HideExport string value hides the Export command on the Menu bar. The default value is FALSE. |
| HideDesigner | When set to TRUE, the HideDesigner string value hides the Design Report command on the Menu bar and Tools Toolbar drop down menu. The default value is FALSE. |
| HideTools | When set to TRUE, the HideTools string value hides the Tools command on the Menu bar and Toolbar. The default value is FALSE. |
| HidePrint | When set to TRUE, the HidePrint string value hides the Print command on the Menu bar and Toolbar. The default value is FALSE. |
| HideUserSettings | When set to TRUE, the HideUserSettings string value hides the User Preferences command on the Menu bar and Toolbar. The default value is FALSE. |
| HideReportGroupProps | When set to TRUE, the Hide string value hides the . The default value is FALSE. |
| HideUndoRedo | When set to TRUE, the HideUndoRedo string value hides the Undo and Redo commands on the Details bar. The default value is FALSE. |

*Table 2: Applet Parameters (Continued)*

| Applet Parameter | Description |
|---|---|
| HideDisplayTypes | When set to TRUE, the HideDisplayTypes string value hides the Display command on the Menu bar and Toolbar. The default value is FALSE. |
| HideToggleInfoPanel | When set to TRUE, the HideToggleInfoPanel string value hides the Show/Hide Information Panel command on the Details bar. The default value is FALSE. |
| HideToggleFilters | When set to TRUE, the HideToggleFilters string value hides the Show/Hide Filters command on the Details bar. The default value is FALSE. |
| HideToggleToolbar | When set to TRUE, the HideToggleToolbar string value hides the Show/Hide Toolbar command on the Details bar. The default value is FALSE. |
| Password | The string value of a valid password. Automatic login is triggered when all prerequisite 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 | API Toolkit-specific<br><br>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 (to expedite processing). The default value is TRUE. |

*Table 2: Applet Parameters (Continued)*

| Applet Parameter | Description |
| --- | --- |
| Support Undo | API Toolkit-specific |
| | When set to TRUE, the SupportUndo string value enables undo and redo capability for applicable API events. Note:  Setting this parameter to TRUE 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 computer's configuration. |

# Repository Tables

The repository centrally stores Hyperion Analyzer system data in relational database tables. The repository is multi-user and is typically installed in shared local area network locations. 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 1: Repository Tables*

| 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, User Group, and so on. |

*Table 1: Repository Tables*

| Table | Function |
|-------|----------|
| TBLOBJINSTANCEPERMISSIONS | Records the object instance permissions definition. |
| TBLOBJLINKSOPS | Records additional properties of TBLOBJLINKS records. |
| 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. |

# User Preferences

Users can customize the Hyperion Analyzer display and set behavior for new reports by setting user preferences.

## User Preferences and Formatting Options

There are some identical formatting options and user preferences. User preferences are global settings applied to all new reports. User Preferences, however, can be overridden by database connection formatting and report-based formatting.

Order of Formatting Precedence

**1.** Formatting options saved with reports

**2.** Formatting options saved with the database connection

**3.** Formatting options specified in the User Preferences dialog box

**Note:** Some user preferences may take effect only when reports are reloaded.

## Accessing User Preferences

➤ To display the User Preferences dialog box:

● Click the **Tools** toolbar button drop-down menu and select **User Preferences**.

● Select **Tools > User Preferences** from the Menu bar.

# User Preferences Dialog Box

The User Preferences dialog box contains a navigation panel and a user preferences panel.

➤ To navigate among user preferences, click either the panel name or navigation node.

*Table 2: User Preferences Panels*

| Panel | User Preferences |
|---|---|
| General | Home Page, Startup Settings, Change Password |
| Point of View | Point of View |
| Look and Feel | Use of Cube Navigator in new reports, Desktop Wallpaper, and Interface Elements |
| Drilling | Drilling Methods, Linking, Append or Replace Member Selections |
| Spreadsheet | Spreadsheet Formatting |
| Chart | Chart Formatting |
| Default Formatting | Leading and Trailing Formatting, Replace Missing With, and Numeric Formatting |
| Personal Variables | Personal Variables |
| Connections | Create database connections, Set database connection properties. |
| OLAP Server | Suppression, Show Linked Report Object Icons |

### Modifying User Preferences

➤ To change preferences, navigate through the user preference panels, make your selections, and then click the **Apply** button.

# General User Preferences

General User Preferences are divided into three groups:

● Home Page

● Startup

● Change Password

# Home Page User Preferences

You have the option of specifying a report as the Hyperion Analyzer Home Page. The specified report is displayed when users click the Home toolbar button. You can also elect the Hyperion Analyzer Desktop as your home page.

➤ To set the Hyperion Analyzer Home Page using user preferences:

1. Click the toolbar **Tools** button drop-down menu and select User Preferences.

2. Take one of the following actions:

   - Click the **Use Desktop** button to set the Hyperion Analyzer Desktop as the Home Page.

   - Click the **Use Current Report** button to set the current report as the Home Page.

   - Click the ellipses (**...**) button to set a report from the Report Manager dialog box as the Home Page.

3. Click the **Apply** button.

4. Click **Close**.

➤ To set the Hyperion Analyzer Home Page using the **Home** toolbar button:

1. Click the Toolbar **Home** button drop-down menu.

2. Select one of the following options:

   - Analyzer Desktop

   - Set Current Report As Home Page

   - Reset Home Page to Analyzer Desktop

# Startup User Preferences

Startup user preferences enable users to specify the report or report group to be displayed at startup. Options include these starting points:

- The Normal mode interface (None)

- The Report Manager

- The Hyperion Analyzer Home Page

- A specific report group

- A specific report

➤ To set startup user preferences:

1. Take one of the following actions:

    - Click the **Tools** toolbar button drop-down menu and select **User Preferences**.

    - Select **Tools > User Preferences** from the Menu bar.

2. Select the **General** tab of the User Preferences dialog box.

3. Select one of the startup user preferences option buttons:

    - None

    - The Report Manager

    - Home Page

    - Report group

    - Report

4. Optional:  If you selected the Report Group, or Report option, click the ellipses (**...**) button and browse to a specific report group or report.

5. Click the **Apply** button, and then click **Close**.

## Change Password Dialog Box

The Change Password button displays the Change Password dialog box, enabling users to change their Hyperion Analyzer password.

The Change Password dialog box requires that users to enter an alternate password.

Two events automatically prompt users to change their password:

- Hyperion Analyzer Administration Tools users can select the Change Password at Next Login checkbox, to prompt the manual update of their password.

- Administrators can require users to update their password at a regular intervals, using Administration Tools security settings.

You can also opt to change your passwords voluntarily using General User Preferences.

# Point of View User Preferences

Point of View user preferences enable users to insert automatically the dimensions and members that are of interest to them into the reports of others.

Points of View expedites the process of member selection in complex dimensions and ensures accurate, standardized selections. You can also generate reports and make member selections manually with Cube Navigator and Dimension Browser.

Consider the following four (4) benefits:

### Generic and Specific Reports

Report designers in large enterprises can create a set of generic reports, knowing that individual users can superimpose diverse and user-specific member selections into these reports.

### Replacing Member Selection Statements

Users can apply the complex calculations and analysis tool definitions of others' reports to the dimensions and members they track, using Point of View. This eliminates the need for the user to investigate and recreate these analyses.

### Default Dimension Layout and Member Selections for New Reports

When Point of View is activated, the report-creation process is simplified. Cube Navigator is loaded with the dimension member selections designated by the current Point of View.

### Session-based Point of View

Point of View is session-based. Point of View definitions are saved and recalled as part of individual database connections. This enables them to be used on all the reports using the corresponding database connection.

### Reloading Reports

Users must reload the report for the applied Point of View definition to be displayed.

### Point of View and Personal Variables

Point of View definitions replace all existing member selections for corresponding dimensions and database connections. Personal variables can instead augment existing member selections for a single dimension.

Users can also leverage personal variables in the creation of Point of View definitions.

## Point of View User Preferences

*Table 3: Point of View User Preferences*

| Point of View User Preferences | Description |
|---|---|
| Point of View | Lists Point of View definitions for the current database connection. |
| Name | Names the Point of View definition. |
| Database Connection | Relates the Point of View definition to a database connection. |
| Activate This Point of View | Enables the selected Point of View definition. |
| Member Selections | Enables users to edit the Point of View definition. |
| Add | Creates the Point of View definition. |
| Remove | Deletes the selected Point of View definition. |
| Apply | Saves User Preferences changes. |
| Close | Closes the User Preferences dialog box. |

### Using Point of View

The Use Point of View check box in Cube Navigator Options enables and disables point of view for the database query.

# Look and Feel User Preferences

Look and Feel user preferences are organized into three groups: drilling, spreadsheet, and chart. Each group of Look and Feel user preferences is displayed on a separate panel.

*Table 4: User Preferences Related to Look and Feel*

| Look and Feel User Preferences | Description |
|---|---|
| Look and Feel | • Sets interface elements to be displayed by default.<br>• Sets the Desktop wallpaper graphic.<br>• Sets whether or not Cube Navigator automatically lays out dimensions. |
| Drilling | • Sets the default drilling method.<br>• Sets default Drill Linking options.<br>• Sets default drilled member display behavior. |
| Spreadsheet | Sets default spreadsheet display type formatting. |
| Chart | Sets default chart display type formatting. |

Spreadsheet user preferences and chart user preferences are identical to spreadsheet options and chart properties. They are only applied to subsequently created reports, however.

## Look and Feel Options

*Table 5: Look and Feel User Preferences*

| Look and Feel User Preferences | Description |
|---|---|
| New Reports | |
| Use Cube Navigator | Enables or disables automatic layout of dimensions. |
| Desktop | |

*Table 5: Look and Feel User Preferences*

| | |
|---|---|
| Select Wallpaper | Displays the Select Graphic dialog box, enabling users to select a GIF or JPEG file for use as the Desktop background. |
| Display | |
| Report Tabs | Sets report tabs to be displayed by default. |
| Menu Bar | Sets the menu Bar to be displayed by default. |
| Toolbar | Sets the toolbar to be displayed by default. |
| Toolbar Text Labels | Sets toolbar text titles to be displayed by default. |
| Filter Panel | Sets the ilter panel to be displayed by default. |
| Information Panel | Sets the Information panel to be displayed by default. |
| Status Bar | Sets status bar to be displayed by default. |
| Multiple Page drop-down List Boxes | Sets multiple page drop-down list boxes to be displayed by default. |
| Apply | Saves User Preferences changes. |
| Close | Closes the User Preferences dialog box. |

### Use Cube Navigator Check Box

Hyperion Analyzer provides the option of automatically laying out the dimensions associated with any given database connection. This behavior locates the first dimension in the database connection on the row axis and all subsequent dimensions to the columns axis.

When the Use Cube Navigator Check box is selected no automatic layout is applied. Users must then use Cube Navigator to select and position dimensions in the report.

# Drilling User Preferences

Drilling user preferences are organized into three groups:

● Methods

● Linking

● Behavior

### Drilling User Preferences Options

*Table 6: Drilling User Preferences*

| Drilling User Preferences | Description |
|---|---|
| Method | Sets drilling navigation through the dimension hierarchy to one of the following menu options: |
| Next Level | Returns the next lowest level. |
| Descendants | Returns all descendants. |
| Dimension Bottom | Returns the lowest level (level O). |
| Siblings | Returns members on the same level with the same parent. |
| Same Level | Returns members on the same level. |
| Same Generation | Returns members the same distance from the highest ancestor. |
| Linking | |
| Pass Pages | Sets drill linking to pass the page dimension member context. |
| Pass Filters | Sets drill linking to pass the filter dimension member context. |
| Behavior | |
| Append Member Selections | Augments the drilled member with the drilling result set. |
| Replace Member Selections | Replaces the drilled member with the drilling result set. |
| Apply | Saves User Preferences changes. |
| Close | Closes the User Preferences dialog box. |

# Default Formatting User Preferences

Formatting options enable users to format headers and data based on dimension member selections.

While the formatting options are fixed, the scope of the formatting varies depending on the source of the formatting.

## Default Formatting Options

*Table 7: Default Formatting Options Overview*

| Formatting Options | Description |
|---|---|
| Leading and Trailing Formatting | |
| Currency Symbol | Inserts the following currency formatting symbols into the Positive Prefix and Negative Prefix text boxes: Dollar ($), Cents (¢), Pound (£), Euro(E), Deutschmark (DM), Franc (F), and Yen (¥). |
| Positive Prefix | Enters character to precede positive numeric values. |
| Positive Suffix | Enters character to follow positive numeric values. |
| Negative Prefix | Enters character to precede negative numeric values. **Warning:** The minus sign (-) is the default prefix. Deleting the default prefix without replacing it causes negative values to display positively. |
| Negative Suffix | Enters character to follow negative numeric values. |
| Numeric Formatting | |
| Grouped Thousands Check Box | Displays numeric digits as grouped by thousands. |
| Minimum Decimals | Indicates the minimum number of decimal places to display. |
| Maximum Decimals | Indicates the maximum number of decimal places to display. |
| Scale | Enables abbreviated values by tens, hundreds, thousands, ten-thousands, hundred-thousands, millions, and billions. |
| Use Negative Color Check Box | Indicates that negative numbers are signified by a selected color. |
| Select Negative Color | Enables users to select the color representing negative values. |

*Table 7: Default Formatting Options Overview*

| Samples | |
|---------|---|
| Update Samples | Updates the samples panel based on the most recent formatting selections. |
| Replace Missing With | Replaces missing values with either a text string or zero. |
| Zeros | |
| Text | |
| | |

# Personal Variables User Preferences

Personal variables enable users to define and name complex member selections. After they have been defined, users can leverage personal variables any time they are presented with the corresponding dimension and database connection.

## Generic and Specific Reports

Other users can create personal variables using the same name, dimension, and database connection that contain the dimensions members that are of interest to them.

This technique enables everyone to create hybrid reports that feature both generic and user-specific content.

## Point of View and Personal Variables

Point of View definitions replace all existing member selections for corresponding dimensions and database connections. Personal variables can instead augment existing member selections for a single dimension.

Users can also leverage personal variables in the creation of Point of View definitions.

## Personal Variable User Preferences

*Table 8: Personal Variables User Preferences*

| Personal Variable User Preferences | Description |
| --- | --- |
| Personal Variables | Lists Personal Variable definitions for the current database connection. |
| Name | Names the Personal Variable definition. |
| Database Connection | Relates the Personal Variable definition to a database connection. |
| Dimension | Indicates the dimension of the related database connection for which a Personal Variable is being created. |
| Member Selections | Enables users to edit the Personal Variable definition. |
| Add | Creates the Personal Variable definition. |
| Remove | Deletes the selected Personal Variable definition. |
| Apply | Saves User Preferences changes. |
| Close | Closes the User Preferences dialog box. |

# Connections User Preferences

The Connections User Preferences panel provides an inventory of database servers and database connections available to the current user.

The database type, the database connection name, and any associated alias tables for available database connections are displayed.

### Modifying Database Connection Properties

Users can display and edit the database connection properties by selecting a database connection and clicking the Modify button.

# Adding Database Connections

Hyperion Analyzer provides users with an easy-to-use graphic interface for creating online analytical processing (OLAP) and relational database connections. Users are prompted to select a database type, log on to the database server, and select a specific database in turn, until the database connection is defined.

➤ To create an Essbase database connection using the Connections User Preferences panel:

1. Display the User Preferences dialog box using one of the following actions:

   ● Click the **Tools** toolbar button drop-down menu and select User Preferences.

   ● Select **Tools > User Preferences** from the Menu bar.

2. Select **Connections** User Preferences.

3. Click the **Add New** button.

   The Select Database Type dialog box is displayed.

4. Select Essbase from the drop-down list and Click **OK**.

   The Hyperion Essbase Login dialog box is displayed.

5. Specify the Essbase server and a valid Essbase user ID and password.

6. Click **OK**.

   The List Databases dialog box is displayed.

7. Select a database from the Available Databases list and click the right-arrow button.

   The selected database is added to the Selected Databases list.

8. Click **OK**.

   The selected database is added to the Connections User Preferences list.

# OLAP Server User Preferences

OLAP server user preferences enable users and administrators to set features of the OLAP server from the Hyperion Analyzer client.

*Table 9: OLAP Server User Preferences*

| OLAP Server User Preferences | Description |
|---|---|
| Suppress | Omits the following components, as selected, from the query result set: |
|  | Missing Rows |
|  | Shared Members |
|  | Zero Rows |
| Show Linked Reporting Object Indicators Check Box | Prevents the display of LRO icons (Blue Triangles). |

Essbase imposes a maximum limit of 256 columns. Hyperion Analyzer sets a column limit of 50,000 data cells for a query. There is also a query governor that enables users to set limits on the number of cells returned by a query; the default is also 50,000 data cells.  For more information about the Analyzer.properties file, see the *Hyperion Analyzer Administrator's Guide*.

# 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.

# Index

**A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**

## I

Point of View and Personal Variables, 204, 209
Point of View User Preferences, 203 to 204
Portal, 189
preferred logging priority, configuring, 48
Prerequisites for Starting, 27, 117
prerequisites for using this guide, xi
Prerequisites for Web Publishing, 150
PrevReport, 184
Print, 184
Privileges must be established on the computer
    running the application server (as opposed to the
    NT domain)., 37
provider search order, configuring, 40
Publish To, 151
Purpose, xi

# R

RefreshEdits, 184
Registering Hyperion Analyzer with Hyperion Hub,
    122
Relational Drill-through, 94
Relational Drill-through Overview, 109
Relational Drill-through Process Overview, 109
Relational Overview, 94
Reload, 184
ReloadData, 184
Reloading Reports, 203
Removing Roles from Users, 63
Replacing Member Selection Statements, 203
Report Groups, 83
Report Properties, 150
ReportManager, 184
repository, 21
Repository Tables, 197
Required NTLM User Rights, 37
Resolving Hyperion Essbase Subscriptions in
    Hyperion Analyzer, 130
Restart the Hyperion Analyzer Analysis Server, 93
Restarting the Application Server, 50
Retrieving Relational Tables, 99
Reviewing a list of Reports in a Report Group, 86
RunCalc, 184
Running the Web Publishing Batch Utility, 152

# S

Samples, 188
    HTML Web Client, 188
Save, 185
SaveAs, 185
SaveAsPage, 185
Searching for Nodes, 57
Secure Socket Layer, 52
secure socket layer, 52
security options, 29
SendData, 185
Session-based Point of View, 203
Set Alias Table Dialog Box, 115
SetAliasController, 186
SetDim, 186
SetParam, 187
SetServiceDispatcher, 187
SetSubscriptionController, 187
Setting Alias Tables, 116
Setting Analyzer Authentication, 31
Setting Authentication Methods, 31
Setting Essbase Authentication, 32
Setting Hyperion Analyzer to Log Queries, 131
Single Sign-on, 31
Specifying the Alias Table to Use, 115
Specifying the Configuration File Location, 50
Starting Hyperion Analyzer Administration Tools, 27
Startup, 188
Startup User Preferences, 201
Style Tags
    About, 175
    List Template, 175
    Template, 174
System Requirements, 96
System Status Panel, 119

# T

Technical Support, xvi
technical support, xvi
Template Tag
    styles, 174
Template Tag Styles, 174
Template Tag Styles List, 174
Template Tags, 158, 173

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z