Hyperion® Analyzer

Release 6.1.1

Getting Started



Hyperion Solutions Corporation
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Hyperion Solutions Corporation 1344 Crossman Avenue Sunnyvale, CA 94089 United States of America

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Preface

Hyperion Analyzer Getting Started explains the documentation, product conventions, concepts, and fundamental procedures necessary to use Hyperion Analyzer. Although this information is intended to help new users learn about Hyperion Analyzer quickly, every user will benefit from the feature descriptions and conceptual information.

Conventions

The following conventions are used in this document:

Table 1: Hyperion Document Conventions

Item	Meaning
>	Arrows indicate the beginning of a procedure with sequential steps.
1, 2, 3	Numbers indicate sequential step procedures.
•	Bulleted items indicate a list of related items.
Boldface text	Boldface text indicates an important application component name or a user interface element.
Italic text	Italic text highlights terms of special emphasis.
Courier text	Courier typeface indicates that the user should enter Courier text exactly as it appears.
Properties Caption	The vertical bar indicates a menu sub-menu item.

Related Documentation

The Hyperion Analyzer documentation set includes:

Product Documentation

Hyperion Analyzer Release Notes contains a comprehensive list of new features, fixes, and late-breaking product developments.

The Hyperion Analyzer *Information Map* lists and describes all Hyperion Analyzer documentation and its location.

Hyperion Analyzer Getting Started (this guide) describes the family of Hyperion Analyzer products, relates terminology central to multidimensional analysis, explains application fundamentals and graphical user interfaces, and leads users through the creation of their first report using the Hyperion Analyzer Java Web Client.

The *Hyperion Analyzer Product Overview* profiles the analysis tools, explains methods for distributing and presenting reports, and tours the Hyperion Analyzer Samples report group.

Client Online Help

Hyperion Analyzer Java Web Client Online Help provides detailed information about navigation, report creation, and advanced Java Web Client topics.

Hyperion Analyzer HTML Web Client Online Help describes navigation, report creation, and the features specific to the Hyperion Analyzer HTML Web client.

Documents for Administrators

The *Hyperion Analyzer Installation Guide* describes Microsoft Windows and UNIX installation options, and system requirements. It summarizes the installation process and information essential to installing and configuring Hyperion Analyzer. This guide includes procedures for establishing a Hyperion Analyzer repository. It also includes troubleshooting and procedures for installing and uninstalling Hyperion Analyzer samples.

The *Hyperion Analyzer Administrator's Guide* describes product features essential to administrators.

Hyperion Analyzer Administration Tools Online Help explains the management of roles, users, user groups, and database connections, as well as provides online help for Hyperion Analyzer Analysis Server administration.

Documents for Developers

The *Hyperion Analyzer API Toolkit Developer's Guide* is an online guide providing detailed information for developers, incorporating Hyperion Analyzer Web technology into custom Web applications.

Ordering Documentation

A complete set of documentation is included on the CD in PDF and HTML format. For information on ordering printed documentation:

- Visit the Hyperion Web site at 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, in the U.S.A. at (203) 703-3600. Clients who are not serviced by support from North America should call their local support centers.

Technical Support

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

- For Web-based support, or to see complete information on available support options, visit the Hyperion 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, in the U.S.A. at (203) 703-3600. Clients who are not serviced by support from North America should call their local support centers.

Web Site

You can find up-to-date information on Hyperion service, support, and training programs on our Web site:

www.hyperion.com

The Hyperion Web site offers an array of service and support information, including product news and updates, frequently asked questions, and product download instructions.

This Guide

Getting Started introduces fundamental Hyperion Analyzer concepts. It is organized into four sections.

Overview of Multidimensional Analysis

- Profiles the objectives of online analytical processing (OLAP)
- Relates Hyperion Analyzer terminology to concepts and procedures

Hyperion Analyzer Java Web Client

- Describes starting the Hyperion Analyzer Java Web Client
- Profiles the graphical user interface (GUI)
- Documents the process of opening, formatting, saving, and distributing Hyperion Analyzer Reports

Creating Your First Report

 Walks a new user through the process of creating a Hyperion Analyzer report

Hyperion Analyzer HTML Web Client

- Describes starting the Hyperion Analyzer HTML Web Client
- Profiles the graphical user interface
- Expedites reviewing Hyperion Analyzer reports

Different Kinds of Users

Hyperion Analyzer users fit into five categories:

Table: Hyperion Analyzer Users

User	Description
System Administrator	Installs, configures, and maintains Hyperion Analyzer and its supporting platforms
Power User, Standard User	Designs reports and establishes content for analysis and review; conducts and distributes analysis to information consumers
Information Consumer	Reviews analysis
Developer	Incorporates Hyperion Analyzer look, feel, and functionality in custom Web applications
Evaluators	Appraises the use and benefit of Hyperion Analyzer for the enterprise

The following tables recommend activities, which demonstrate concepts, provide experience, and expedite the use of Hyperion Analyzer.

Evaluators

Table: Objectives for Hyperion Analyzer Evaluators

Objective	Resource
Familiarize yourself with Hyperion Analyzer concepts and procedures.	Finish reading this book.
2. Evaluate a working Hyperion Analyzer system.	Download free evaluation software from the Hyperion Web site: www.hyperion.com.
3. Appraise the full potential and benefits of Hyperion Analyzer.	Review the Hyperion Analyzer Product Overview, and tour the Hyperion Analyzer Samples report group.
4. Decide whether a more robust evaluation, using existing data sources is required.	If so, contact a system administrator, and follow the objectives for Hyperion Analyzer Administrators.

Evaluation installation enables you to install and use all Hyperion Analyzer components for a thirty-day evaluation period. At the end of this period, you can either run a registration application or reinstall Hyperion Analyzer using an unlock code.

System Administrators

Table: Objectives for Hyperion Analyzer Administrators

Objective	Resource
Familiarize yourself with Hyperion Analyzer concepts and procedures.	Finish reading this book.
2. Establish Hyperion Analyzer system requirements and weigh installation options.	Read the Hyperion Analyzer Installation Guide.
3. Install and configure Hyperion Analyzer.	Follow procedures in the Hyperion Analyzer Installation Guide.
4. Identify late-breaking issues specific to this release of Hyperion Analyzer.	Read the <i>Hyperion Analyzer Release Notes</i> or the <i>Readme.txt</i> file.
5. Establish an administration and maintenance strategy.	Read the <i>Hyperion Analyzer Administrator's Guide</i> for information and procedures for establishing user IDs, passwords, user groups, and database connections.
6. Configure and deploy Hyperion Analyzer Samples.	See "Installing Hyperion Analyzer Samples" in the <i>Hyperion Analyzer Installation Guide</i> .
7. Test and verify the environment.	See Hyperion Analyzer Administration Tools Online Help and use the Hyperion Analyzer Administration Tools Console to optimize Hyperion Analyzer.
8. Deploy Hyperion Analyzer to users.	

Power Users

Table: Objectives for Power Users

Objective	Resource
1. Familiarize yourself with fundamental Hyperion Analyzer concepts and procedures.	Finish reading this book.
2. Familiarize yourself with the wide range of analysis tools available to advanced Hyperion Analyzer users.	Read the Hyperion Analyzer Product Overview.
3. Review template examples as inspiration for your own Hyperion Analyzer reports.	Tour the Hyperion Analyzer sample report group.
4. Start the Hyperion Analyzer Java Web Client.	Follow the procedures in this guide.
5. Locate additional information on Hyperion Analyzer Java Web Client.	Consult the Hyperion Analyzer Information Map for a complete documentation list. See Hyperion Analyzer Java Web Client Online Help.

Information Consumers

Table: Objectives for Information Consumers

Objective	Resource
1. Familiarize yourself with fundamental Hyperion Analyzer concepts and procedures.	Finish reading this book.
2. Start the Hyperion Analyzer HTML Web Client.	Follow the procedures in this guide.
3. Locate additional information on Hyperion Analyzer HTML Web Client.	Consult the Hyperion Analyzer Documentation Roadmap for a complete documentation list. See Hyperion Analyzer HTML Web Client Online Help.

Developers

Table: Objectives for Developers

Objective	Resource
Familiarize yourself with fundamental Hyperion Analyzer concepts and procedures.	Finish reading this book.
2. Familiarize yourself with the wide range of analysis tools available to advanced Hyperion Analyzer users.	Read the Hyperion Analyzer Product Overview.
3. Start the Hyperion Analyzer Java Web Client, and explore application functionality.	Follow the procedures in this guide.
4. Familiarize yourself with the Hyperion Analyzer API Toolkit.	Read the Hyperion Analyzer API Toolkit Developer's Guide.
5. Review examples of Hyperion Analyzer Web content as inspiration for your own Web pages.	Tour the Hyperion Analyzer API Toolkit samples.

Hyperion Analyzer

What Hyperion Analyzer Does

Hyperion Analyzer enables organizations around the world to turn raw data into valuable business information.

Hyperion Analyzer enables users to analyze sophisticated multidimensional and relational data in an easy-to-use graphical interface. This empowers business people to explore enterprise data for growth and profit opportunities, to uncover emerging problems, and to test solutions before implementing them.

Hyperion Analyzer provides a set of advanced analysis tools, and enables users to leverage Hyperion Essbase server features simultaneously. Users can also retrieve and analyze relational data using analysis tools.

Analysis reports can be distributed internally and externally, saved as HTML Web content, and referenced by URLs.

Hyperion Analyzer Product Family

Hyperion Analyzer is a product family consisting of these components:

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

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

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

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

The Hyperion Analyzer Java Web Client is an easy-to-use graphical interface that enables online analysis of both Hyperion Essbase and relational data. Users can design and format custom analysis applications without "coding." Hyperion Analyzer is commonly used to conduct sales, and key performance, financial and forecasting analyses.

The **Hyperion Analyzer Windows Client** is the same easy-to-use Java Web Client interface and functionality delivered as a 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.

Developers can incorporate the Hyperion Analyzer Java Web Client look and feel and functionality into their own custom Web applications using the **Hyperion Analyzer API Toolkit**.

Overview of Multidimensional Analysis

What is Online Analytical Processing (OLAP)?

Online Analytical Processing (OLAP) technology organizes key performance indicator data into models enabling speed of thought analysis.

Dimensions and Measures

Business measurements, or values, are organized into arrays for consolidation and retrieval.

These arrays, dimensions, are composed of values called members.

OLAP databases enable users to analyze multiple dimensions in relation to one another. Each data value is the intersection of all dimensions in the database.

Spreadsheets can relate two dimensions as rows and columns, and provide conventions for displaying a third dimension, the z-axis, in a two-dimensional chart.

OLAP technology represents the relationship of multiple dimensions in twodimensional media.

What is a Cube?

A **cube** is an array organized with respect to the relationships of multiple dimensions and measures.

OLAP database **queries** request dimension member data from a cube and organizes it into a manageable block of data.

Dimensional Hierarchies

There is a specific order, or hierarchy, to dimension members.

Dimensions of numeric values follow a hierarchy of numerical order, but consider other hierarchies:

- Centuries, Decades, Years, Quarters, Months, Weeks, Days, Hours, Minutes, and Seconds are elements of the time hierarchy.
- Continents, Countries, Regions, States, Cities, Neighborhoods, Locations, and Departments are elements of the Market hierarchy.

It is important to understand that multiple members can belong to a single dimensional hierarchy.

For Example: Years, Quarters, and Months are members of the Time

dimension.

A dimension can relate to different places in the hierarchy of another dimension.

For Example: A Cost dimension can be evaluated against years, quarters,

weeks, or days.

Dimensions are organized into cubes using these hierarchical relationships.

Familial Relationships

Elements of greater detail are referred to as **descendants** of more general elements.

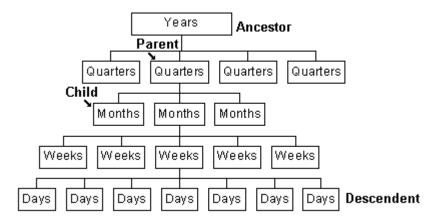
Elements of more generality are conversely referred to as **ancestors** of more detailed elements.

For Example: Months, Weeks, and Days are all descendants of Time.

Weeks are ancestors to Days.

To simplify hierarchical relationships, the terms **parent** and **child** are used. A parent is the direct ancestor of an element in a hierarchy. A child is the direct descendant of an element in a hierarchy.

The following illustration shows a typical time hierarchy.



A Time Dimension Hierarchy

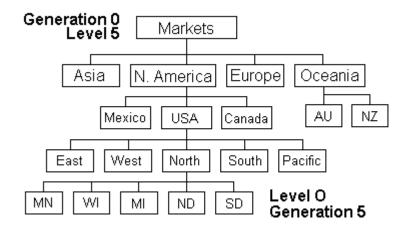
Generations and Levels

Dimension members on the same layer of the dimensional hierarchy are referred to collectively as **generations** or **levels**.

Generations are hierarchical layers counted down from the highest ancestor (generation 0).

Levels are hierarchical layers counted up from the lowest descendant (level 0).

Hyperion Essbase enables users to label and reference generations and levels.



Generations and Levels Diagram

Nonaggregate Dimensions

Previously mentioned dimension examples were aggregates of their members.

For Example: Twenty-four hours make a day. Seven days compose a week.

Fifty-two weeks form a year, and so on. In these cases, the time dimension literally represents the sum of its components.

However, some dimensional hierarchies are not the sum of their components.

For Example: The Measures dimension is commonly composed of business

measures such as Sales, Profit and Cost of Goods Sold. Relating these dimensions to other dimensions in the cube

provides meaningful data.

For Example: The Scenario dimension is typically composed of measures

such as Actual, Budget, Prior Year, and so on. These

members cannot be combined to form a meaningful aggregate. The Scenario dimension is, therefore, only a descriptive label

for the measures it contains.

When the dimension label cannot represent the sum of its contents, a protocol exists to use one member set in place of the dimension label. Hyperion Essbase uses the first child of the dimension as the **implied share** in place of nonaggregate dimension labels.

Attributes

In addition to dimension member names, locations, and relationships, Hyperion Essbase can store characteristics about specific members.

For Example: The product dimension may indicate that in Women's Apparel,

Shirts and Blouses, there is a cotton T-shirt product.

Attributes indicate that the cotton T-shirt is red, cyan, lime, or

pink.

For Example: The Market dimension may indicate there is a franchise store

in Biloxi, Mississippi. Attributes indicate that the store is

2500 square feet in size.

It is important to know that **attributes** are stored in dimension hierarchies, in the same manner as dimension members. Attributes are labeled and are displayed accordingly in Hyperion Analyzer.

Sparse and Dense Dimensions

Most multidimensional databases lack member values in every single dimension member of every single intersection.

For Example: All products may not be sold in all areas of a country.

To maximize database performance, dimensions are labeled either **sparse** or **dense**.

Sparse dimensions have a low percentage of member values for all possible cube intersections. Dense dimensions have a high percentage of member values for all possible cube intersections.

Labeling dimensions as sparse and dense enables Hyperion Essbase to expedite retrieval while minimizing memory and disk requirements.

Organizing Reports

Reports

Hyperion Analyzer abstracts multidimensional and relational information into a two-dimensional display called a **report**.

A report is both the content and the format of the display.

After they have been saved to the repository, reports become multi-purpose files that users can display in numerous formats.

Report Groups

Reports are organized into groups called **report groups**.

Report groups commonly contain reports relating to a single subject or common analytical purpose.

Report groups:

- Coordinate information
- Enable specific distributions
- Enable frequently updated reports to be located easily

Properties

Reports and report groups have **properties** governing their display and use.

Sharing and Distributing Report Groups

The "Shared to User Group" report group property controls the distribution of reports and report groups in the Hyperion Analyzer system.

Using this report group property, reports and report groups are assigned to user groups. Only users in the specified user group can open the report group. In addition, only user group members can alter report and report group properties.

Locking Reports

While report group properties determine access to and distribution of reports, users can lock reports to further restrict, or direct, exploration in reports, right-click menu options, and navigation methods.

Hyperion Analyzer Java Web Client

The Hyperion Analyzer Java Web Client is an easy-to-use graphical interface enabling the online analysis of both Hyperion Essbase and relational data. With Hyperion Analyzer, users can design and format custom analysis applications without "coding." Hyperion Analyzer is commonly used to conduct sales, key performance, financial, and forecasting analyses.

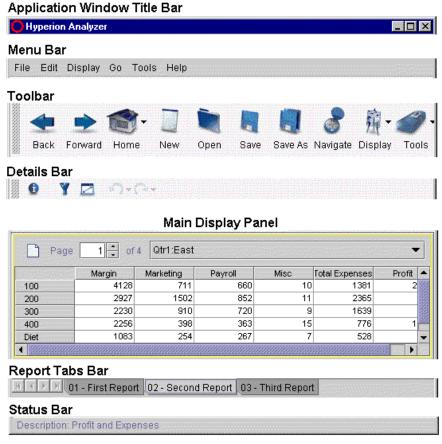
Prerequisites for Starting the Java Web Client

Before starting, a system administrator must provide a uniform resource locator (URL) for the Hyperion Analyzer Java Web Client launch page. Your computer must also satisfy any system requirements.

Starting Hyperion Analyzer Java Web Client

- To start Hyperion Analyzer Java Web Client:
 - 1. Start a supported Web browser (such as Microsoft Internet Explorer 4 or 5, or Netscape Communicator, Netscape Navigator 4.7, 6.1, or 6.2).
 - 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 the Hyperion Analyzer Java Web Client.
 - The Hyperion Analyzer application window is displayed. The Login dialog box is displayed.
 - 5. Enter a valid user ID and password in the Login dialog box.
 - 6. Click **OK**.

The report or desktop specified by the Startup Options user preferences is displayed.



Exploded Hyperion Analyzer Java Web Client Interface

Hyperion Analyzer Java Web Client User Interface

The most important feature of Hyperion Analyzer is its easy-to-use interface for sophisticated, multidimensional, and relational analysis. Our methods and metaphors make online analysis as easy as surfing the Internet.

User Interface Components

The Hyperion Analyzer Java Web Client user interface is composed of six bars, and a display panel:

- Application window title bar
- Menu bar
- Toolbar
- Details bar
- Main Display panel
- Report Tabs bar
- Status bar

Hiding Interface Components

Users can hide interface components, in order to maximize display panel space, or to customize the display.

- ➤ To hide the Toolbar, click the Show/Hide Toolbar button.
- > To hide the Information panel, click the Show/Hide Information Panel button.
- ➤ To hide the Filter panel, click the Show/Hide Filter Panel button.
- ➤ To hide the Menu bar, right-click the **Details bar** and select the **Show Main Menu** item.



Show/Hide Toolbar Button



Show/Hide Information Panel Button



Show/Hide Filter Panel Button



Details Bar Right-click Menu

The Desktop

The Hyperion Analyzer desktop centrally collects and presents report group icons. Report group icons are similar to application shortcuts on the Windows desktop.



Hyperion Analyzer Desktop

Users included in report group distributions are shown report group icons on their desktops automatically. Users can also hide report group icons.

Only icons for shared report groups are displayed on a user's desktop.

➤ To locate the Desktop, select **Analyzer Desktop** from the toolbar **Home** button drop-down menu.



Opening Report Groups

You can open report groups either by the Report Manager or directly from the Desktop.

> To open a report group using the Desktop, double-click the **Report Group** icon.



Report Group Icon

When a report group is opened, the reports in that group are opened and displayed as tabs (across the Report Tab bar). Select a report tab to make the corresponding report current.

Main Display Panel

The body of the report displays in the Main Display panel. The Main Display panel actually consists of four coordinated panels:

- The Filter panel
- The Page Control panel
- The Information panel
- The Main Display panel



Exploded Main Display Panel

Display Types and Layouts

Users can present the same OLAP information in different formats. There are three fundamental display types:

- Spreadsheet
- Chart
- Pinboard

Users can create a standard spreadsheet grid, several chart types, and an infinite number of pinboard variations. Display types have prerequisites that must be satisfied.

Users can also change the display type to better present information, to facilitate comparisons, or to illustrate information graphically. Users can also lock display types to prevent others from changing the report.

Changing Display Types

To change the display type of an existing report, click the **Display** toolbar button, and select a display type or chart type from the drop-down menu.

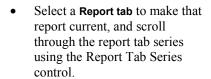


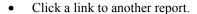
Toolbar Display Button and Drop-down Menu

Navigating Between Reports

There are several methods for navigating between open reports.

- > To navigate between open reports:
 - Click the toolbar Back and Forward buttons.
 - Select the Go | Back or Go | Forward menu items from the Menu bar.







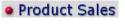
Back and Forward Toolbar Buttons



Back and Forward Menu items



Report tabs and the Report Tab Series control



Report Link

Navigating Reports

Users can rearrange, expand, and concentrate OLAP intersections for focused analysis. Because these methods represent travel through an OLAP cube, they are called navigation methods. The following table describes navigation methods:

Navigation	Description	Method
Swap	Switches the placement of two dimensions.	Drag and drop a dimension onto another dimension in the Main Display panel.
Move	Moves a dimension in the layout.	Drag and drop a dimension between dimensions in the Main Display panel.
Page	Displays the intersection of different dimensions using the existing layout.	Click or scroll the Page Control panel.
Drill	Increases or decreases the level of report detail by including or excluding members of the dimensional hierarchy in the display.	Click dimension member labels on the Main Display panel.
Drag and Drop	Uses the Information panel to rearrange the Main Display panel layout.	Drag and drop dimensions in the Information panel.
Undo	Reverses the last executed command, and returns the display to its previous state.	Click the Details bar Undo button.
Redo	Reverses Undo. Reverses the negation of the last command.	Click the Details bar Redo button.
Linking	Navigates to other reports or executables.	Click linked cells on the Main Display panel and pass the selected cell and the dimension context to another report.

Remember, navigation does not change the OLAP cube, only the twodimensional display of cube information.

Formatting Reports

Advanced formatting features directly contribute to successful analysis by expediting comparisons, visually organizing data, and emphasizing structures.

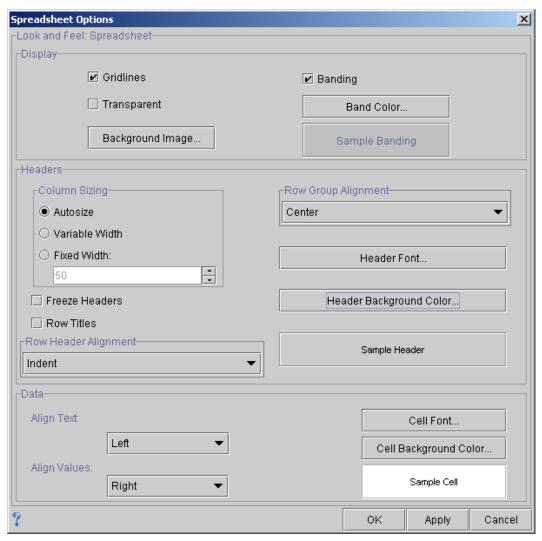
Hyperion Analyzer offers numerous report-formatting options:

Report-formatting Options	Description
Spreadsheet Options	Displays the Spreadsheet Options dialog box, to format cells, headers and fonts.
Chart Properties	Displays the Chart Properties dialog box featuring chart- specific formatting tools.
Pinboard Options	Displays the dialog box sequence used to create and edit pinboards.
Data Display Options	Displays the Data Display dialog box used to format data values, and to display behavior.
User Preferences	Sets the default look and feel, and behavior for your reports.
Show/Hide Only Analysis Tool	Displays the Show/Hide dialog box, used to filter data by:
	• Color
	• Value
	Member
Sorting Analysis Tool	Displays the Sorting dialog box, used to order the query result set in ascending or descending order.

Report-formatting Options	Description
Traffic Light Analysis Tool	Displays the Traffic Lighting dialog box, used to color-code dimension member values based on:
	Fixed limits
	Comparison of values
	Traffic Lighting visually associates member values whether or not they are sorted or ranked.
Restrict Data	Displays the Restrict Data dialog box, used to restrict the query result set based on criteria.
Retrieve Only Top/Bottom	Displays the Retrieve Only Top/Bottom dialog box, used to limit and rank the query result set.
Linked Reporting Objects	Displays the Linked Reporting Objects dialog box, used to link data on reports to files, executables, and URLs.
Data Formatting	Displays the Data Formatting dialog box, used to format data values based on member or value criteria.
Calculations	Displays the Calculations dialog box, used to create calculated rows and columns.

Spreadsheet Options

The Spreadsheet Options dialog box centralizes the numerous formatting options for spreadsheet components. Users can format cells, headers, and the spreadsheet display.



Spreadsheet Options Dialog Box

> To open the Spreadsheet Options dialog box, right-click the report and select Spreadsheet Options from the right-click menu.

Saving Reports

A report is not a report until it is saved to the Hyperion Analyzer repository.

- > To save a report, perform one these procedures:
 - Right-click the Report tab and select Save.
 - Select File | Save from the Menu bar.
 - Click the toolbar Save button.



Toolbar Save Button

Users cannot save a new report, because the save command requires that report names and report group locations already be defined. The Save As command displays the Report Properties dialog box, enabling users to define (or edit) the report name and report group location

Distributing Reports

When you save a report to a report group, it is automatically distributed to other Hyperion Analyzer users.

- To distribute a report or report group to specific groups of users:
 - 1. Click the toolbar **Open** button.

The Report Manager is displayed.

2. Right-click a report group name and select **Properties**.

The Report Group Properties dialog box is displayed.

- 3. In the **Share to User Groups** area, select the check boxes of user groups with whom the report group will be shared.
- 4. Click OK.

The report group is distributed to the specified user groups.

Creating Reports

This section describes the options available to users in creating reports and the process of creating your first report, using the Report Creation wizard.

Report Creation Options

Users can create reports in two ways:

- Modifying existing reports
- Querying the database cube and laying out a new report

There are special procedures for:

- Creating a pinboard
- Creating a custom report

Report Creation Wizard

Hyperion Analyzer automates the process of creating reports using a report creation wizard. A series of dialog boxes prompts the user to define report parameters.

- > To create a new report:
 - 1. Click the **New**... toolbar button.

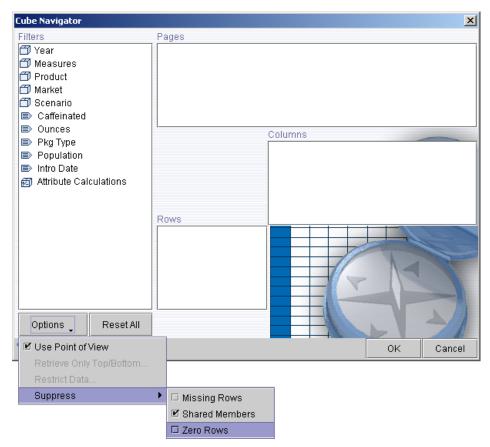
The Select Layout dialog box is displayed.

2. Select Spreadsheet, and click OK.

The Select Database Connection dialog box is displayed.

- Select the Sample database connection from the Existing Connections list.
- 4. Click OK.

The Cube Navigator is displayed, with returned database dimensions. Cube Navigator is a graphic interface used to define database queries.



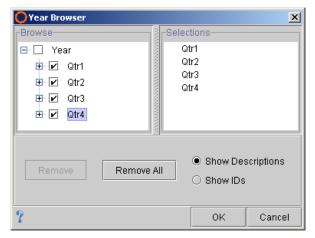
Sample Database Cube Navigator

Available dimensions and attributes are displayed in the Filter panel. Filter dimensions are aggregated so that only their highest ancestors are represented.

Drag and drop dimensions and attributes to the Pages, Columns, and Rows panels in order to define query intersections and their layout:

5. Drag the **Year** dimension onto the Columns panel.

Notice that dropping a dimension on an axis prompts Cube Navigator to open the Year Dimension Browser.



Year Dimension Browser

Many member selection options are available:

To select specific dimension members it is helpful to know the following methods:

- Clicking any plus sign (+) expands the dimension hierarchy to display its children.
- Clicking any minus sign (-) collapses the dimension hierarchy.
- Clicking any member name selects that member.
- Selected member names are displayed in the Selection box. A check is displayed next to Dimension Browser group member names.
- Note that you can revise member selections at any time by opening the Cube Navigator and double-clicking a placed dimension.

Advanced member selection methods are described later in this tutorial.

6. Click the Year plus sign (+).

The children of Year are displayed.

- 7. Click each of the four quarters (Q1, Q2, Q3, and Q4) to select them.
- 8. Click OK.

The Cube Navigator is redisplayed.

9. Drag the **Scenario** dimension into the Columns panel.

The Scenario Dimension Browser is displayed.

10. Select Actual and Budget from the Scenario dimension.

Clicking is a simple way to select members.

11. Click OK.

Cube Navigator is redisplayed. Now look at another, more powerful way to select members:

12. Drag the **Product** dimension onto the Rows panel.

The Product Dimension Browser is displayed.

13. Right-click the **Product** dimension name.

The Advanced Member Selection right-click menu is displayed.

14. Select Also Select Children from the right-click menu.

This selection includes the Product member and members immediately beneath it in the dimension hierarchy.

Advanced member selections enable fast, dynamic selections by leveraging Hyperion Essbase.

Selection rules (in this case, Also Select Children) are applied dynamically each time the report is opened. Therefore the report always displays members immediately below Product, even as members are added and removed from the database.

15. Select the **Show Descriptions** option button.

Users can choose between displaying dimension member IDs (numeric IDs) or descriptions (text identifiers).

16. Click **OK**.

Cube Navigator is redisplayed.

17. Drag the Market dimension onto the Rows panel.

- 18. Expand the Market dimension hierarchy by clicking the plus sign (+).
- 19. Right-click the **Central** dimension member.
- Select Also Select Level from the advanced member selections rightclick menu.

All Market dimension members at the same level as Central (all Regions) are selected.

- 21. Click OK.
- 22. Drag the Measures dimension onto the Pages panel.

The Measures Dimension Browser is displayed.

23. Select the **Sales** dimension member (+Measures | +Profit | +Margins | Sales).

By placing Sales measures on the page axis, all report intersections will be relevant to Sales figures.

24. Click OK.

Cube Navigator is redisplayed.

25. Drag the **Pkg Type** attribute dimension to the Pages panel.

The Pkg Type Dimension Browser is displayed.

 Right-click Pkg Type and select Also Select Children from the right-click menu.

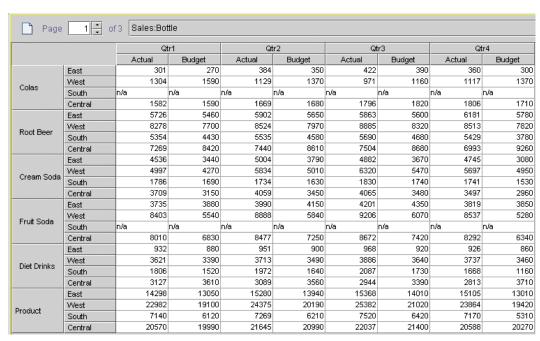
This selection organizes the query result set into pages by the children of the Package Type attribute dimension (a page for total Pkg Type and a page for each individual Pkg Type). Because Sales measures are also on the Pages axis, all report intersections will be relevant to Sales figures and the current package type.

27. Click OK.

Cube Navigator is redisplayed.

28. Click **OK** to exit Cube Navigator, and submit the query.

The requested data values are returned and presented per query parameters.



The Created Report

You have now created your first report.

Saving Reports

Users cannot save a new report, because the save command requires that report names and report group locations already be defined. The Save As command displays the Report Properties dialog box, enabling users to define (or edit) the report name and report group location.

- > To save the report:
 - 1. Do one of the following tasks:
 - Click the **Save As** Toolbar button.
 - Select **Save As** from the Report tab right-click menu.
 - Select File | Save As from the Menu bar.
 - 2. Enter the following information in the Report Properties dialog box and click **OK**:
 - Report Name: First Report
 - Description: Regional Sales by Package Type
 - Group: First Report Group

The report is saved in the "First Report Group" report group. The report name is displayed on the report tab, and the Report Description is displayed on the Status bar.

Report Descriptions are an effective way to provide other users with report information.

Formatting Reports

Each Hyperion Analyzer display type features unique formatting options:

- Spreadsheet options
- Chart Properties
- Pinboard options

In addition reports share a common interface for formatting data values:

• Data Display options

Users can set all reports to display a default look and feel using:

User preferences

To format data values based on criteria:

Data Formatting Analysis Tool

> To format the report:

1. Right-click the **Qtr1** dimension label, and select **Spreadsheet Options** from the right-click menu.

The Spreadsheet Options dialog box is displayed.

2. Click the Headers group Header Font button.

The Select Font dialog box is displayed.

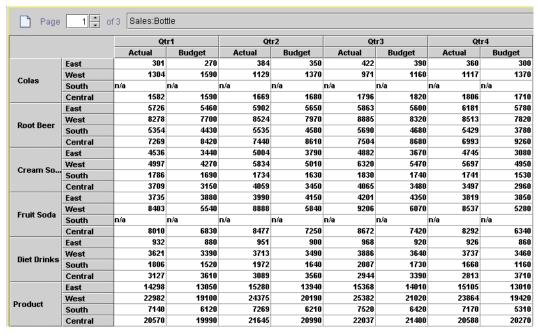
- 3. Select a **12-point**, **bold** font.
- 4. Click OK.
- 5. Click the Data group **Cell Font** button.

The Select Font dialog box is displayed.

- 6. Select a **12-point**, **bold** font again.
- 7. Click **OK**.

- 8. Click the **Apply** button.
- 9. Click OK.

The header and cell fonts are now 12-point bold.



The Formatted Report

Using Traffic Lighting

The Traffic Lighting Analysis Tool color-codes dimension member cells. Users can base color-coding on a comparison of two dimension members, or by fixed limits on a single dimension member.

Traffic lighting graphically associates member values, whether or not they are sorted or ranked.

Compare Actual to Budget for each of the four quarters, and then color-code values as high (Red), medium (Yellow), or low (Green):

1. Right-click the **Actual** dimension member label, and select **Analysis Tools | Traffic Lighting...** from the right-click menu.

The Traffic Lighting Manager dialog box is displayed.

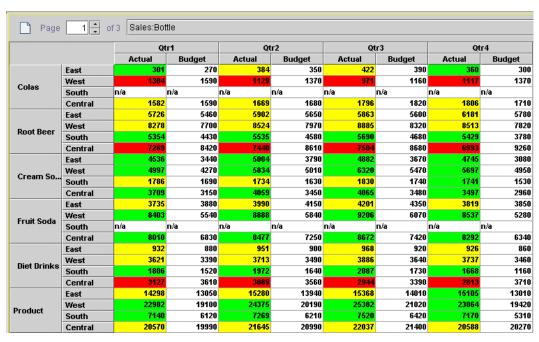
2. Click the Add button.

The Traffic Lighting dialog box is displayed.

- 3. Select Actual in the Apply Traffic Lighting To panel.
- 4. Select **Budget** in the **Comparing It To** panel.

Variance Limits determine traffic lighting color. Variance Limits can be set by either fixed differences or percentage differences.

- 5. Select the % Differences option button.
- 6. Click each set-point entry field and enter the following parameters:
 - 10 for the higher than limit
 - -10 for the lower than limit
- 7. Click **OK** to add the traffic lighting definition to the Applied list.
- 8. Click **Close** to close the Traffic Lighting Manager dialog box.



"First Report" with Traffic Lighting

You have now created traffic lights to compare Actual to Budget measures.

Use the Page control to check each Pkg Type page. Notice that the traffic lighting definition has been applied to the entire report.

Using Calculations

The Product Groups of the report are organized by Market. To compare Budget and Actual figures more effectively, create two calculated metrics following these steps:

 Right-click Actual, and select the Analysis Tools | Calculations... menu item.

The Calculations Manager is displayed.

2. Click **Add** to create a new calculation.

The Calculation Definition dialog box is displayed.

- 3. Type Variance in the Name field.
- 4. Click the "Insert After" option button in the Select Position panel, and select Budget from the drop-down list.

You have indicated that the calculated column Variance is to be displayed after the Budget column.

5. Select **Subtract** from the **Function** drop-down list.

To display the difference between Budget and Actual figures, subtract Budget from Actual:

- 6. Click the Actual label from the Select Members panel.
- 7. Click the first undefined argument (?) in the Arguments panel.
- 8. Click the right-arrow (>) between the two panels.

Actual becomes the first argument in the calculation.

- 9. Click the Budget label from the Select Members panel.
- 10. Click the next undefined argument (?) in the Arguments panel.
- 11. Click the right-arrow (>) between the two panels.

Budget becomes the second argument in the calculation. The calculation is displayed bottom of the dialog box in the Equation box.

12. Click **OK** to return to the Calculations Manager dialog box.

While we're here, let's create a percent variance calculation.

- 13. Click Add again to open the Calculation Def dialog box.
- 14. Name this calculation **%Variance**.
- 15. Click the **Insert After** option button in the **Select Position** panel, and select **Variance** from the drop-down list.

Now determine what percentage Actual figures are of Budget figures:

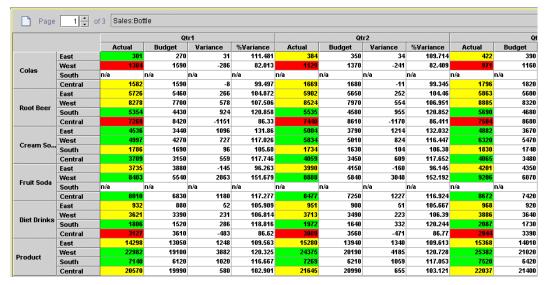
- 16. Select **Percent** from the **Function** drop-down list box.
- 17. Click the Actual label from the Select Members panel.
- 18. Click the first undefined argument (?) in the Arguments panel.
- 19. Click the right-arrow (>) between the two panels.

Actual becomes the first argument in the calculation.

- 20. Click the **Budget** label from the **Select Members** panel.
- 21. Click the next undefined argument (?) in the Arguments panel.
- 22. Click the right-arrow (>) between the two panels.

Budget becomes the second argument in the calculation. The calculation is displayed bottom of the dialog box in the Equation box.

- 23. Click **OK** to return to the Calculations Manager dialog box.
- 24. Click **Close** to apply calculations to the report.



Your First Report With Calculated Metrics

Without using formulas, you have created two calculated metrics. It's easy to create reports with Hyperion Analyzer and even easier to create calculations.

25. Right-click the report tab and select **Save** to save your report.

Hyperion Analyzer HTML Web Client

Before you can start, the system administrator must install the Hyperion Analyzer system, and provide you with the uniform resource locator (URL) of the Hyperion Analyzer HTML Web Client launch page.

You must also start Hyperion Essbase to access multidimensional data.

Starting the Hyperion Analyzer HTML Web Client

Prerequisites for Starting the HTML Web Client

Before starting, the system administrator must provide a uniform resource locator (URL) for the Hyperion Analyzer HTML Web Client launch page. Your computer must also satisfy any system requirements.

Starting the Hyperion Analyzer HTML Web Client

- > To start Hyperion Analyzer HTML Web Client:
 - 1. Start a supported Web browser (such as Microsoft Internet Explorer 4 or 5, or Netscape Communicator, Netscape Navigator 6.1 or 6.2).
 - 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 the Hyperion Analyzer HTML Web Client.

The Login page is displayed.

- 5. Enter a valid user ID and password in the Login fields.
- 6. Click OK.

The report or desktop specified by the Startup Options user preferences is displayed.

Hyperion Analyzer HTML Web Client User Interface

The HTML Web Client provides sophisticated, multidimensional, and relational analysis in an easy-to-use, 100 percent HTML interface. Its methods and metaphors make online analysis as easy as surfing the Internet.

User Interface Components

The Hyperion Analyzer HTML Web Client user interface is composed of three display panels:

- Toolbar
- Main Display
- Report Manager Panel

Locate these bars and panels in the following user interface illustration:



Hyperion Analyzer HTML Web Client Interface

The Main Display panel actually consists of three coordinated panels:

- The Toolbar
- The Information panel
- The Main Display panel



Labeled Main Display Panel

Viewing Reports with the HTML Web Client

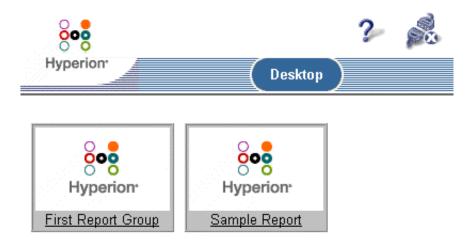
The Desktop is a graphic metaphor for centrally collecting and presenting report groups. Users included in a report group distribution by other users, find report group icons on their desktops.

Locating the HTML Web Client Desktop

> To locate the Desktop, click the toolbar **Home** button.



> To open a report group by way of the Desktop, click the report group icon.



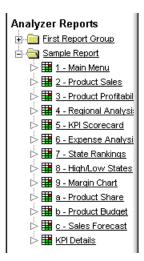
HTML Web Client Desktop

Opening a Report

Users must use the Report Manager to open specific reports. The Report Manager is a graphical interface for selecting reports from the repository. Report Managers vary between Web clients.

Report Manager templates commonly contain the following components:

- Report group folders
- Report hyperlinks



Report Manager Interface

- ➤ To open a specific Hyperion Analyzer report using the HTML Web Client:
 - 1. Locate the Report Manager.
 - 2. Click the report group containing the desired report, to expand the report list.
 - 3. Click the report name.

Navigating Reports in the HTML Web Client

Users can rearrange, expand, and collapse the display of OLAP intersections. Because these methods represent travel through an OLAP cube, they are called navigation methods.

The Hyperion Analyzer HTML Web Client supports three kinds of navigation:

Name	Description	Method
Moving	Moves a dimension in the layout	Use the Information panel.
Paging	Displays the intersection of different dimensions using the current layout.	Use the Page controls.
Drilling	Increases (or decreases) the level of report detail by including (or excluding members of the dimension hierarchy	Use the Drill controls to drill on the currently selected dimension member.

Locked Reports

Report owners can lock Hyperion Analyzer report navigation, in order to focus the attention of subsequent users. Other users cannot navigate a report that has been locked by the report owner.

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 five 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.

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

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 five 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.

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

subset. A group of members selected by specific criteria.

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

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

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

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

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

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