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**HYPERION® SMART VIEW FOR OFFICE**

*RELEASE 9.3.1.2.0*

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**USER'S GUIDE**

**ORACLE** | Hyperion

Smart View User's Guide, 9.3.1.2.0

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Authors: Information Development Team

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# 1

## Introduction to Smart View

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This chapter provides an overview of Oracle's Hyperion® Smart View for Office.

## Smart View

Smart View provides a common Microsoft Office interface for Oracle's Hyperion® Essbase® – System 9, Oracle's Hyperion® Financial Management – System 9, Oracle's Hyperion® Planning – System 9, Oracle's Hyperion® Workspace, and Oracle's Hyperion® Enterprise® data. Using Smart View, you can view, import, manipulate, distribute and share data in Microsoft Excel, Word, and PowerPoint interfaces.


## Smart View Benefits

Smart View benefits:

- A common Microsoft Office interface for Essbase, Financial Management, Planning, Oracle's Hyperion® Financial Reporting – System 9, Oracle's Hyperion® Interactive Reporting – System 9, Oracle's Hyperion® SQR® Production Reporting – System 9, Oracle's Hyperion® Web Analysis – System 9, and Hyperion Enterprise
- Ability to import documents from Financial Reporting, Interactive Reporting, SQR Production Reporting, and Web Analysis
- Ability to use smart tags to import Oracle's Hyperion® Reporting and Analysis – System 9 content and functions
- Auto deployment to notify users when a newer version of Smart View is available

# Smart View Toolbar












The Smart View toolbar in Excel displays buttons (described in [Table 1, “Smart View Toolbar Buttons ,” on page 12](#)) for accessing most Smart View commands. You can customize the toolbar by adding and removing buttons.





















- To add or remove buttons from the Smart View toolbar:
  - 1 Click  (Add or Remove Buttons) on the Smart View toolbar to display a menu of toolbar buttons.
  - 2 Click a button to add it to or remove it from the Smart View toolbar. Your selection is displayed on the toolbar immediately.
  - 3 Repeat for each button you want to add or remove.





## Toolbar Buttons

[Table 1](#) lists the buttons on the toolbar.

**Table 1** Smart View Toolbar Buttons

Button	Purpose	Description
	Connection Manager	Opens the Connection Manager where you add, delete, and edit data source connections
	Zoom In	Zooms into data from the connected data source
	Zoom Out	Collapses the cell view
	Pivot	Changes the dimension orientation
	Keep Only	Deletes all members except the ones that are selected
	Remove Only	Removes only the selected members
	Refresh	Refreshes data in the active Excel worksheet
	Submit Data	In Hyperion Enterprise, Financial Management, and Essbase, saves ad hoc data updates to the database
	Refresh All	Refreshes data in all worksheets of the Excel workbook
	Undo	Restores the previous database view
	Redo	Reverses an <b>Undo</b>

<b>Button</b>	<b>Purpose</b>	<b>Description</b>
	Copy Data Points	Copies data points from Excel that you can paste into Word or PowerPoint
	Paste Data Points	Pastes data points that were copied from Excel into Word or PowerPoint
	BI Edit	Enables you to edit Reporting and Analysis documents imported into Excel (not selectable for Hyperion Enterprise)
	POV Manager	Opens the POV Manager where you can perform operations on a Point of View
	Member Selection	Opens the Member Selection dialog box where you can select members and filter member lists
	Function Builder	Opens the Function Builder, where you create and validate functions
	Adjust	Provides options for adjusting the values of selected cells
	Cell Text	For Hyperion Enterprise and Planning data sources, opens the Cell Text dialog box where you edit supporting text for a range of cells
	Supporting Details	For Planning data sources, opens the Supporting Details dialog box where you can provide supplemental calculations for a one-dimensional range of cells
	Select Form	Opens the Select Forms dialog box where you can select Financial Management, Hyperion Enterprise, or Planning data forms
	Instructions	For Planning data sources, displays instructions for data forms
	Take Offline	Opens the Offline Manager (not selectable for Hyperion Enterprise)
	Sync Back	Synchronizes data from an offline Planning data form to an online data form (not selectable for Hyperion Enterprise)
	Lock	Temporarily locks cell values while Planning enters values in other cells (not selectable for Hyperion Enterprise)
	Expand	Displays all levels of detail for the selected cells (not selectable for Hyperion Enterprise)
	Collapse	Collapses all levels of detail for the selected cells (not selectable for Hyperion Enterprise)
	Business Rules	Opens the Business Rules dialog box where you select Business Rules for Planning data forms (not selectable for Hyperion Enterprise)
	Rules on Form	Opens the Rules on Form dialog box, where you execute Calculate Form and Calculate Currencies business rules (not selectable for Hyperion Enterprise)
	Query Designer	Opens the Query Designer, where you design reports
	Run Reports	Runs reports designed in the Query Designer

Button	Purpose	Description
	Visualize in Excel	Enables you to view the detail of a selected Excel data point in a linked report without losing the formatting of the source report
	Visualize in HVE	Opens Oracle's Hyperion® Essbase® Visual Explorer (not selectable for Hyperion Enterprise)
	Options	Opens the Options dialog box where you set ad hoc, display, and cell style preferences
	Add or Remove Buttons	Click – opens a menu of Smart View toolbar buttons to add or remove Right-click – opens a menu of toolbars to add or remove

## Shortcut Menu

In Smart View, you can use right mouse clicks to access shortcut menus. If you select a range of cells, use Ctrl+right click to maintain the selection of cells.

## Login Requirements

Depending on how Smart View was configured by the administrator, you may or may not be required to enter your username and password as you change data providers and Office applications or enter HVE.

## Using Google Search with Smart View

With Essbase, you can use the Google search capabilities of Oracle's Hyperion® Smart Search to search your data source for information and display the results on an Excel spreadsheet in Smart View.

Before starting, you must obtain the URL and trigger keyword, which can be provided by the system administrator.

- To use Google with Smart View:
  - 1 Open a browser.
  - 2 Enter the URL to open. Oracle's Hyperion® Smart Search.
  - 3 Enter the trigger keyword.
  - 4 In the search box, enter one or more member names separated by spaces.
  - 5 Click the link under Search to display the results in Smart View in Excel.

**Note:**

Excel may display a Security Warning message. If you see this message, you must modify Excel macro security settings to see the search results. To do this, select **Tools > Options** from the Excel toolbar. On the Security tab of the Options dialog box, click Macro Security and set Security Level to medium or low. See the system administrator for more information.








## For Microsoft Office 2007 Users














Smart View supports Microsoft Office 2007, whose products feature **ribbons** in place of the previous menu system. In Office 2007 products, the Smart View Hyperion menu is replaced by the Hyperion ribbon, which contains buttons that access Smart View features. Smart View functionality is the same as it is in previous Office versions; only the method of access has changed.

You can still access the Hyperion menu, the online help system, and the Help About screen on the Add-Ins ribbon.









[Table 2](#) describes Smart View buttons on the Hyperion ribbon, grouped according to ribbon sections.

**Table 2** Smart View Buttons on the Hyperion Ribbon for Office 2007

Button	Purpose	Description
Connections		
	Connect	Opens the Connection Manager where you add, delete, and edit data source connections
(no button)	Activate	Enables you to select the data source that you want to activate for the worksheet
(no button)	Reset	Disconnects the worksheet from its current data source
Ad Hoc Analysis		
	Zoom In	Zooms into data from the connected data source
	Zoom Out	Collapses the cell view
	Pivot	Changes the dimension orientation
	Keep Only	Deletes all members except the ones that are selected
	Remove Only	Removes only the selected members
Forms		
	Select Form	Opens the Select Forms dialog box where you can select Financial Management or Planning data forms

<b>Button</b>	<b>Purpose</b>	<b>Description</b>
	Instructions	For Planning data sources, displays instructions for data forms
	Take Offline	Opens the Offline Manager (not selectable for Hyperion Enterprise)
	Refresh Offline	Enables you to update data on offline data forms with current values from online data forms
	Sync Back to Server	Synchronizes data from an offline Planning data form to an online data form
	Lock	Temporarily locks cell values while Planning enters values in other cells (not selectable for Hyperion Enterprise)
	Expand	Displays all levels of detail for the selected cells (not selectable for Hyperion Enterprise)
	Collapse	Collapses all levels of detail for the selected cells (not selectable for Hyperion Enterprise)
<b>Review</b>		
	Refresh	Refreshes data in the active Excel worksheet
	Refresh All	Refreshes data in all worksheets of the Excel workbook
	Submit	In Reporting and Analysis and Essbase, saves ad hoc data updates to the database
<b>Task</b>		
	Undo	Restores the previous database view
	Redo	Reverses an Undo
	Copy Data	Copies data points from Excel that you can paste into Word or PowerPoint
	Paste Data	Pastes data points that were copied from Excel into Word or PowerPoint
	BI: Import	Opens the ImportWorkspace Document dialog box where you can import Reporting and Analysis documents (not selectable for Hyperion Enterprise)
	BI: Edit	Enables you to edit Reporting and Analysis documents imported into Excel (not selectable for Hyperion Enterprise)
	POV Manager	Opens the POV Manager, where you can perform operations on a Point of View
	Member Selection	Opens the Member Selection dialog box, where you can select members and filter member lists
	Function Builder	Opens the Function Builder, where you create and validate functions



<b>Button</b>	<b>Purpose</b>	<b>Description</b>
	Adjust	Provides options for adjusting the values of selected cells
	Cell Text	For Planning data sources, opens the Cell Text dialog box, where you edit supporting text for a range of cells
	Supporting Details	For Planning data sources, opens the Supporting Details dialog box, where you can provide supplemental calculations for a one-dimensional range of cells
<b>Query</b>		
	Query Designer	Opens the Query designer, where you design reports
	Run Report	Runs a report designed in the Query Designer
<b>Visualize</b>		
	Visualize in Excel	Enables you to view the detail of a selected Excel data point in a linked report without losing the formatting of the source report
	Visualize in HVE	Opens Visual Explorer (not selectable for Hyperion Enterprise)
<b>Options</b>		
	Options	Opens the Options dialog box where you set ad hoc, display, and cell style preferences



# 2

# Features and Data Source Providers

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Not all Smart View features pertain to all data source providers. The tables in this chapter list the supported data source providers for each feature.

## Ad Hoc Features and Supported Data Source Providers

Ad Hoc functionality is described in [Chapter 7, “Working with Ad Hoc Analysis.”](#)

**Note:**

To use ad hoc features with Planning data forms, you must be connected to an Essbase data source.

Ad Hoc Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
Double-click to invoke the Ad Hoc analysis grid	X	X	X		
Display POV member selector	X	X	X		
Drag and drop members from POV to grid	X	X	X		
Set default POV by the user	X	X	X		

Ad Hoc Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
Duplicate member name support	X	X	X		
Zoom in and out on dimensions and members	X	X	X		
Zoom in and out on Hybrid Analysis members	X				
Drill-through reports	X				
Pivot dimensions to columns or rows	X	X	X		
Display cell text		X			
Submit data	X	X	X		
Keep only or remove only certain data cells	X	X	X		
Select attribute dimensions	X				
Filter members by UDA	X				
Filter members by attribute dimensions	X				
Adjust data values in cells	X	X	X		
Calculate data	X	X	X		
Translate and consolidate data		X			
Asymmetric grids and free form mode	X	X			
Save formatting	X	X	X		
Preserve formulas	X	X			
Undo and redo last actions	X	X	X		
Select members	X	X	X		
Select Dynamic Time Series members	X				
Suppress rows	X	X	X		
Indent columns	X	X	X		

Ad Hoc Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
Navigate without data	X	X	X		
Specify zoom-in levels	X	X	X		
Specify member retention	X	X	X		
Enable or disable double-clicking	X	X	X		
Enable or disable undo feature	X	X	X		
Specify labels for missing and no access data cells	X	X	X		
Specify member display options	X	X	X		
Display data status		X	X		
Display calculation status and process management level		X			
Specify number of decimal places		X	X	X	
Specify thousands separator		X	X	X	
Specify ancestor position		X	X		
Display messages	X	X	X		
Apply cell styles	X	X	X		
VBA function support	X	X			

## Query Designer Features and Supported Data Source Providers

Query Designer functionality is described in [Chapter 6, “Query Designer.”](#)

Query Designer Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
Select members by using Member Selection	X	X	X		
Drag and drop dimensions from POV toolbar	X	X	X		

Query Designer Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
Enter members into the grid	X	X	X		
Pivot dimensions	X	X	X		
Filter data	X				
Filter members	X		X		
Execute MDX queries	X				
Modify queries from existing reports	X	X	X		
Run queries	X	X	X		

## Dynamic Data Access Features and Supported Data Source Providers

Dynamic data access functionality is described in [Chapter 9, “Accessing Dynamic Data Across Microsoft Office.”](#)

Dynamic Data Access Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
Copy and paste data points between Excel, Word, and PowerPoint	X	X	X		
Retrieve original Excel grid from data points in Word or PowerPoint	X	X	X		
View data points in Visual Explorer	X				
Change POV in Word or PowerPoint by using POV Manager	X	X	X		
Change URL connection by using POV Manager	X	X	X		

# Hyperion Visual Explorer Features and Supported Data Source Providers

Visual Explorer functionality is described in [Chapter 10, “Hyperion Visual Explorer.”](#)

Visual Explorer Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
View data in graphical format	X				
Retrieve Excel grid from graphical data	X				
Change graph style	X				

## Data Form Features and Supported Data Source Providers

Data form functionality is described in [Chapter 5, “Working with Data Forms”](#) and [Chapter 13, “Working with Offline Planning.”](#)

Data Form Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
View instructions		X	X	X	
Adjust data values in cells		X	X	X	
Submit data		X	X	X	
Specify decimal places		X	X	X	
Specify thousands separator		X	X	X	
Manipulate data by performing unary operations		X		X	
Lock and spread values to base periods				X	
Enter supporting detail				X	
Enter cell text		X		X	
Work offline				X	
Synchronize with Planning applications				X	
Execute Business Rules				X	

View Business Rules with runtime prompts				X	
Preserve formulas		X		X	
Apply cell styles		X	X	X	
Support Offline Planning				X	
Search page dimensions				X	
Hide header rows				X	

## Function Features and Supported Data Source Providers

Functions are described in [Chapter 12, “Functions.”](#)

Function Feature	Data Source Providers				
	Essbase	Financial Management	Hyperion Enterprise	Planning	Workspace
Use HsGetValue	X	X	X		
Use HsSetValue	X	X	X		
Use HsDescription		X	X		
Use HsGetText		X			
Use HsSetText		X			
Use HsCurrency		X	X		
Use HsLabel		X	X		
Refresh active worksheets or workbooks	X	X	X		
Migrate Financial Management spreadsheet add-in functions to new syntax		X	X		
Display functions by using smart tags	X	X	X		

## Reporting and Analysis Document Import Features and Supported Data Source Providers

Reporting and Analysis document import functionality is described in [Chapter 11, “Importing Reporting and Analysis Documents into Microsoft Office.”](#)



<b>Reporting and Analysis Feature</b>	<b>Data Source Providers</b>				
	<b>Essbase</b>	<b>Financial Management</b>	<b>Hyperion Enterprise</b>	<b>Planning</b>	<b>Workspace</b>
Import Reporting and Analysis documents into Microsoft Excel, Word, PowerPoint, and Outlook (if Word is the e-mail editor)					X
Edit and refresh Reporting and Analysis documents					X
Import multiple-page documents					X
Use prompts					X
Import Reporting and Analysis documents by using smart tags					X



# 3

## Installing and Enabling Smart View and Visual Explorer

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### Installing Smart View

Because Smart View is an add-in to Microsoft Office products, you can install only on Windows platforms.

To view imported data within Microsoft Office, each user in an organization must install Smart View.

You do not need to uninstall earlier versions of Smart View before installing the latest version.

► To install Smart View:

- 1 Navigate to the location of the Smart View installation file specified by your administrator.
- 2 Double-click `smartview.exe` to start the installation wizard.

If you are licensed to use Visual Explorer, run `SmartViewHVE.exe` instead.

- 3 Click **Install**.
- 4 Click **Finish**. The next time you open Microsoft Excel, Word, or PowerPoint, the Hyperion menu or ribbon is displayed.

### Enabling and Disabling Smart View

► To enable or disable Smart View:

- 1 Select **Hyperion > About**.
- 2 Select or clear **Enable Add-in** to enable or disable Smart View.

Your selection takes effect the next time you start a Microsoft Office application.

# Smart View and Essbase Spreadsheet Add-in

Smart View and Essbase Spreadsheet Add-in (release 7.1.2 or later only) can be installed on the same computer, but you must enable compatibility between them.

► To enable compatibility between Essbase Spreadsheet Add-in and Smart View:

- 1 Open Excel.
- 2 Select **Essbase > Options > Global**.
- 3 Select **Limit to Connected Sheets**.
- 4 Click **OK**.

**Note:**

You can connect to data sources from Smart View and Essbase in the same workbook but not on the same worksheet.

## Information for Administrators

The following information in this section is for system administrators.

- [“Smart View Files Installed” on page 28](#)
- [“Running Silent Installations” on page 29](#)
- [“Checking for New Smart View Versions” on page 29](#)
- [“Backward Compatibility” on page 30](#)
- [“Uninstalling Smart View” on page 30](#)

## Smart View Files Installed

**Table 3** Directories Created and Files Installed with Smart View

Directory	Contents
bin	<ul style="list-style-type: none"><li>● Smart View DLLs:<ul style="list-style-type: none"><li>○ HsAddin.dll</li><li>○ HsSpread.dll</li><li>○ HyperionSmartTag.dll</li><li>○ SVPConn.dll</li><li>○ tabui.dll</li><li>○ tabvizql.dll</li></ul></li><li>● HSTbar.xla, the Smart View toolbar</li><li>● smartview.bas, containing VBA function declarations</li><li>● hve.exe, the Visual Explorer executable</li></ul>

Directory	Contents
	<b>Note:</b> <code>hve.exe</code> installs only if you are licensed for Visual Explorer and used <code>SmartViewHVE.exe</code> to install Smart View
<code>docs\help</code>	Smart View documentation in HTML format; the launch file is <code>launch.htm</code>
<code>docs\pdf</code>	Smart View documentation in PDF format, <code>sv_user.pdf</code>
<code>docs\hve</code>	Visual Explorer documentation in Windows help format, <code>HVEHelp.chm</code>  <b>Note:</b> The <code>hve</code> folder and documentation installs only if you are licensed for Visual Explorer and used <code>SmartViewHVE.exe</code> to install Smart View

## Running Silent Installations

Administrators can enable silent installations — installations that do not require settings to be specified each time — for Smart View. The silent installation command can be included in scripts to automate installation.

► To run silent installations:

- 1 Open a command line prompt.
- 2 Navigate to the directory of the Smart View installer.
- 3 Run one of the following commands:
  - To install in the default directory, run `SmartView.exe /s /v"/qn"`
  - To install in another directory, run `SmartView.exe /s /v"/qn INSTALLDIR=<target path>",` for example, `SmartView.exe /s /v"/qn INSTALLDIR=D:\SmartView"`

For Visual Explorer users, replace `SmartView.exe` with `SmartViewHVE.exe` in the command line.

► To run silent installation and log the installation sequence:

- 1 Open a command line prompt.
- 2 Navigate to the directory of the Smart View installer.
- 3 Run `SmartView.exe /s /v"/qn INSTALLDIR=D:\SmartView /L*v c:\install.log"`.

For Visual Explorer users, replace `SmartView.exe` with `SmartViewHVE.exe` in the command line.

## Checking for New Smart View Versions

Smart View supports automatic deployment, which detects when a newer version of Smart View is available to install. Automatic deployment upgrades only Smart View releases 9.0 and later.

## Backward Compatibility

See the compatibility matrix in the *Smart View Readme* for information on compatibility with data source providers.

## Uninstalling Smart View

Close all Microsoft Office applications, then use Add or Remove Programs on the Windows Control Panel to uninstall Smart View, which is listed as Hyperion System 9 Smart View for Office.

When Smart View is installed, the .MSI file is extracted from `SmartView.exe` or `SmartViewHVE.exe` and placed at `C:\WINNT\Downloaded Installations\{<a dynamic GUID>}\`. The .MSI is cached in this location through InstallShield Integrated Development Environment for maintenance mode activities, such as repairing and removing files.

The uninstallation details are stored at:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall
\<Product GUID>
```

Under this key, the sub key "InstallSource" holds the value `C:\WINNT\Downloaded Installations\{<a dynamic GUID>}\`.

The uninstallation process refers to this sub key and locates the extracted .MSI file. Because the .MSI file present in this location only initiates the uninstallation process, you cannot delete the .MSI file during uninstallation. Only after the product is fully uninstalled can you manually delete the .MSI file.

## Registry Information

To preserve login and user preference information, the following registry items remain after uninstalling Smart View:

```
HKEY_CURRENT_USER\Software\Hyperion Solutions\
HyperionSmartViewConnections
```

```
HKEY_CURRENT_USER\Software\Hyperion Solutions\HyperionSmartViewLogin
```

```
HKEY_CURRENT_USER\Software\Hyperion Solutions\
HyperionSmartViewPreferences
```

## Visual Explorer File Association

If Smart View and Essbase Spreadsheet Add-in are installed on the same computer, when you open a Visual Explorer .TWB file directly from Windows Explorer, the file is opened by Smart View, regardless of whether the file was created in Smart View or Spreadsheet Add-in.

If you uninstall Smart View, and keep Spreadsheet Add-in on the computer, the file association for .TWB files is lost, even with Spreadsheet Add-in.

Use Windows Explorer to establish .TWB file association manually with Spreadsheet Add-in.





# 4

## Using Connection Manager

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This chapter explains using Connection Manager to manage data source connections. Topics include how to use Connection Manager for tasks such as adding, editing, deleting, connecting to and disconnecting from data sources, specifying the default connection, checking for active connections, and resetting connections.

## Using Connection Manager

Use the Connection Manager to perform the following tasks:



- “Adding a Data Source Through Direct Connection” on page 35
- “Adding a Data Source Through Shared Services” on page 36
- “Connecting to a Data Source” on page 37
- “Associating a Data Source Connection to a Worksheet” on page 38
- “Editing a Data Source Connection” on page 38
- “Setting a Default Connection” on page 39
- “Deleting a Data Source Connection” on page 40

- [“Disconnecting from a Data Source” on page 40](#)
- [“Changing Passwords for Essbase” on page 41](#)
- [“Checking for Active Connections” on page 41](#)
- [“Resetting Connections” on page 41](#)
- [“Using the Shortcut Menu” on page 41](#)

## About Data Sources

A data source contains the database for the application or Reporting and Analysis content repository for which you want to access data using Smart View. Smart View supports the following data source providers—Essbase, Financial Management, Hyperion Enterprise, Planning, Financial Reporting, Interactive Reporting, SQR Production Reporting, and Web Analysis. For connection information, contact your system administrator.

## About Connection Manager

With the Connection Manager you can add, delete, and modify data source connections. These connections are not specific to worksheets and you can establish multiple connections per Excel instance. A connection is a communication line between the user and data source regardless of whether the data source is connected to or disconnected from the provider server. You can tell whether a data source is connected or disconnected by viewing the icon next to the data source name in Connection Manager. The  icon indicates that the data source is connected. A grayed out  icon indicates the data source is disconnected. When you try to connect to a data source that is disconnected, you are prompted to log in unless you are already authenticated by external authentication.

For more information on using the Connection Manager, see these topics:

- [“Adding a Data Source Connection” on page 34](#)
- [“Connecting to a Data Source” on page 37](#)

## Adding a Data Source Connection

The data sources to which you can connect are displayed in the Connection Manager. You add data sources for Essbase, Financial Management, Hyperion Enterprise, Planning, Financial Reporting, Interactive Reporting, SQR Production Reporting, and Web Analysis. You can either connect to a data source directly, if you know the URL, or using Oracle's Hyperion® Shared Services, display a list of providers that you can access.

### Note:

Hyperion Enterprise does not support Shared Services.

You need to know the following information to add a data source connection:

- If you are working with a database or repository, the location of the URL where the data source is hosted
- If you are working offline, the path of the local storage directory where your metadata resides
- The user name and password that provides you access to the data source, whether it is a URL or directory location

If you do not know this information, contact your system administrator.

For more information on adding a data source, see:

- [“Adding a Data Source Through Direct Connection” on page 35](#)
- [“Adding a Data Source Through Shared Services” on page 36](#)

## Adding a Data Source Through Direct Connection

When you add a data source connection directly in Connection Manager, you need to know the URL for the data source provider to which to connect. A provider can be Essbase, Financial Management, Hyperion Enterprise, Planning, Financial Reporting, Interactive Reporting, SQR Production Reporting, and Web Analysis data sources. You can get this information from your system administrator.

► To add a data source connection through direct connection:

- 1 Select Hyperion > Connection Manager.** For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.
- 2 In the Connection Manager dialog box, click the Add button.**
- 3 Select URL Provider.**

The Add Connection - Provider Type/URL dialog box is displayed.

- 4 In the Provider drop-down list box, select the type of data source to which you want to connect:**
  - Hyperion Provider (for Essbase, Financial Management, Hyperion Enterprise, and Planning)
  - Hyperion Reporting and Analysis — System 9 Provider (for Financial Reporting, Interactive Reporting, SQR Production Reporting, and Web Analysis)
- 5 In the Location drop-down list box, type the URL or the local storage directory for the data source to which you want to connect, and then click Next.**

The URL syntax for the various data sources is as follows. Contact your system administrator for the URL to use:

Essbase: `http(s)://<servername>:13080/aps/SmartView`

Financial Management: `http(s)://<servername>/hfmofficeprovider/hfmofficeprovider.aspx`

Hyperion Enterprise: `http://<servername>/heofficeprovider/heofficeprovider.aspx`

Planning: http(s)://<servername>:8300/HyperionPlanning/SmartView

Reporting and Analysis: http(s)://<servername>:19000/workspace/browse/listxml

If you are accessing a local storage directory, you can click Browse to open the Browse for Folder dialog box. Navigate to the location where your metadata resides, and click OK.

**Note:**

You can click the Back button at any time to return to the previous dialog box and edit the entries you already made.

**6 Optional: Select the Set as default connection check box to make the data source your default connection.**

**7 In the Add Connection - Application/Cube dialog box, expand the Servers node.**

A list of servers that are accessible from the URL you selected in [step 5](#) is displayed.

**8 Expand the nodes until the object to which you want to connect is displayed, then select that object.**

For example, you may want to connect directly to the Essbase, Financial Management, Hyperion Enterprise, or Planning application.

**Note:**

You may be prompted to enter your login information if you try to expand an application for which you do not have access.

**9 In the Connect to Data Source dialog box, type the user name and password, and then click Connect.**

**10 Select the application and click Next. In the Add Connection - Name/Description dialog box, type a name for this data source connection in the Name text box.**

The data source connection name is also referred to as the friendly name.

**Note:**

Do not use semicolons (;) in connection names planned for using functions. An error occurs when using Function Builder to create functions and when pasting data points containing functions.

**11 In the Description text box, type any information that is helpful to you in identifying this data source, and then click Finish.**

The data source connection you just added is now listed in the Connection Manager. To connect to the data source, follow the steps in [“Connecting to a Data Source” on page 37](#). To associate the data source to the current worksheet, follow the steps in [“Associating a Data Source Connection to a Worksheet” on page 38](#).

## Adding a Data Source Through Shared Services

**Note:**

This release of Hyperion Enterprise does not support Shared Services.

You can connect to any provider that has been registered with Shared Services as a provider for Smart View content. Adding data sources through Shared Services conveniently provides users with a single location to choose a list of available Smart View content providers.

► To add a data source through Shared Services:

- 1 **Select Hyperion > Connection Manager.** For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.
- 2 In the **Connection Manager** dialog box, click **Add**.
- 3 **Select Shared Services Provider.**

The Add Connection From Shared Services dialog box is displayed.

- 4 In the **Hyperion Shared Services URL** text box, type the URL to the Shared Services server. The URL syntax for Shared Services is as follows:

```
http://<shareservices_server>:58080
```

Contact your system administrator for the Shared Services server name.

- 5 **Click Update.**

A list of available data sources that are registered with Oracle's Hyperion® Shared Services is displayed in the Select a Connection from a Provider list box.

- 6 From the **Select a Connection from a Provider** list box, select the data source to which you want to connect.
- 7 **Click Next.**
- 8 In the **Connection credentials** dialog box, type the user name and password that you will use to access this data source, and then click **Connect**.
- 9 In the **Add a Connection Name** dialog box, type a name for this data source connection in the **Name** text box.

The data source connection name is also referred to as the friendly name.

- 10 In the **Description** text box, type any information that is helpful to you in identifying this data source, and then click **Finish**.

The data source connection you just added is now listed in the Connection Manager. To connect to the data source, follow the steps in [“Connecting to a Data Source” on page 37](#). To associate the data source to the current worksheet, follow the steps in [“Associating a Data Source Connection to a Worksheet” on page 38](#).

## Connecting to a Data Source

You can connect to any data source listed in Connection Manager. Connecting to a data source enables you to retrieve data into Excel.

► To connect to a data source:

- 1 **Select Hyperion > Connection Manager.** For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

- 2 In **Connection Manager**, select the data source to which you want to connect and click **Connect**.
- 3 In the **Connect to Data Source** dialog box, enter the user name and password for the data source.
- 4 Click **Connect**.
- 5 Click **Close** to close **Connection Manager**.

To associate the data source to the current worksheet, follow the steps in [“Associating a Data Source Connection to a Worksheet” on page 38](#).

## Associating a Data Source Connection to a Worksheet

After adding data sources to **Connection Manager**, you need to associate a worksheet with a data source before you can access the data. You can connect to one data source per worksheet.

- To associate a data source to a worksheet:

- 1 In **Connection Manager**, select a data source and double-click.
- 2 In the **Connect to data source** dialog box, enter the password and click **Connect**.

The worksheet is now connected to the selected data source.

You can also associate a data source after connecting to it by selecting **Hyperion > Active Connections** and selecting the data source you want to activate for the worksheet. See [“Checking for Active Connections” on page 41](#) for more information.

## Editing a Data Source Connection

You can edit existing data sources in **Connection Manager**. When you edit a data source, you can change the provider, change to a different server with the same data source provider, or change the application or repository associated with the data source. You must disconnect from a data source before you can edit it.

- To edit a data source:

- 1 Select **Hyperion > Connection Manager**. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.
- 2 In the **Connection Manager** dialog box, select the data source that you want to modify and click **Edit**.

The **Edit Connection - Provider Type/URL** dialog box is displayed.

- 3 In the **Provider** drop-down list box, select the type of data source to which you want to connect:
  - **Hyperion Provider** (for Essbase, Financial Management, Hyperion Enterprise, and Planning)
  - **Hyperion Reporting and Analysis – System 9 Provider** (for Financial Reporting, Interactive Reporting, SQR Production Reporting, and Web Analysis)
- 4 In the **Location** field, edit the URL of your data source or select from the list of available data sources.

The URL syntax for the various data sources is as follows. Contact the system administrator for the URL to use:

Essbase: `http(s)://<servername>:13080/aps/SmartView`

Financial Management: `http(s)://<servername>/hfmofficeprovider/hfmofficeprovider.aspx`

Hyperion Enterprise: `http://<servername>/heofficeprovider/heofficeprovider.aspx`

Planning: `http(s)://<servername>:8300/HyperionPlanning/SmartView`

Reporting and Analysis: `http(s)://<servername>:19000/workspace/browse/listxml`

- 5 **Optional:** Select the **Set as default connection** check box to make the data source your default connection.
- 6 **Click Next.**
- 7 In the **Connect to Data Source** dialog box, enter the user name and password for the data source, and click **Connect.**
- 8 In the **Edit Connection - Application/Cube** dialog box, expand the **Servers** node, select an application, and click **Next.**

If you do not see any applications, contact your system administrator. You may be prompted to enter your login information if you try to expand an application for which you do not have access.

- 9 In the **Edit Connection - Name/Description** dialog box, edit the name and description for your connection user name.
  - 10 **Click Finish.**
- In the Connection Manager dialog box, the newly edited data source should be displayed.
- 11 **Click Close** to close **Connection Manager.**

## Setting a Default Connection

The default data source is the data source that is automatically used to retrieve data into the Excel worksheet. The default data source will always be the data source used when navigating from worksheet to worksheet. Using Connection Manager, you can choose the default connection. In Connection Manager, the data source name listed in bold text is the default connection.

► To set the default data source:

- 1 In **Connection Manager**, select an existing data source connection.
- 2 Right-click and select **Set As Default.**

**Note:**

Alternatively, follow the directions in [step 6](#) of “Adding a Data Source Through Direct Connection” on page 35 or [step 5](#) in “Editing a Data Source Connection” on page 38 to make a data source connection the default.

## Deleting a Data Source Connection

Delete a data source from the list in Connection Manager when the connection is obsolete or when you no longer need to connect to a particular data source. You must disconnect from a data source before deleting it.

- To delete a data source:
  - 1 Select **Hyperion > Connection Manager**. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.
  - 2 In the **Connection Manager** dialog box, select the data source that you want to remove and click **Delete**.

**Note:**

You can delete multiple data sources at once.

- 3 When prompted to confirm deletion of the data source, click **Yes**.
- 4 Click **Close** to close **Connection Manager**.

## Disconnecting from a Data Source

Disconnecting from a data source means disconnecting from a live connection to the server. The data source connection is still displayed in Connection Manager until you delete it. Disconnect from a data source when you do not need to retrieve data from it.

- To disconnect from a data source:
  - 1 Select **Hyperion > Connection Manager**. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.
  - 2 In the **Connection Manager** dialog box, select the data source you want to disconnect from and click **Disconnect**.

**Note:**

The Disconnect and Connect buttons toggle, depending on the status of the selected data source.

- 3 Click **Close** to close **Connection Manager**.



## Changing Passwords for Essbase

If you are connected to Essbase, you can update your password whenever it expires or when you want to change it for security purposes.

**Note:**

Changing passwords using Smart View is not supported for clusters, only for standalone Essbase computers. However, an administrator can change passwords for clusters using Administration Services Console.

► To change your password:

- 1 Select **Hyperion > Connection Manager**. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.
- 2 Connect to Oracle's Hyperion® Provider Services.
- 3 Click **Change Password**.
- 4 In the **Change Password** dialog box, enter the existing password in the **Current Password** text box.
- 5 Enter the new password in the **New Password** text box.
- 6 Enter the new password again in the **Confirm Password** text box.
- 7 Click **Change Password**.

## Checking for Active Connections

You can check for all active connections in your Excel session. You can have multiple connections at a time. This feature is useful, especially if you have added many data source connections in Connection Manager and need to quickly find out what connections are being used.

To check for active connections, from the Hyperion menu, select Active Connections. The data sources to which you are connected are listed.

## Resetting Connections

To disconnect a worksheet from its current connection to a data source, select Hyperion > Reset connection.

## Using the Shortcut Menu

Features in Connection Manager are also available using shortcut menus. When you right-click your mouse inside Connection Manager, these commands are available:

- Add
- Edit

- Delete
- Connect
- Set As Default

Shortcut menus provide an alternate way of accessing Smart View commands.

# 5

## Working with Data Forms

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This chapter explains basic Smart View concepts for working with data forms. Smart View enables you to export Planning, Financial Management, and Hyperion Enterprise data forms to Microsoft Excel. Using Smart View, you can work with data forms either online connected to the Planning or Financial Management or Hyperion Enterprise server, or offline disconnected from the server.

### Working with Data Forms in Excel Worksheets

You can use the functionality of Excel with Planning, Financial Management, and Hyperion Enterprise data forms. You can view data form data and instructions, create formulas, and format the color and text in a grid. You cannot create formulas in Hyperion Enterprise data forms. Financial Management supports data forms, but the Financial Management Add Member functionality is not supported in data forms opened in Smart View.

When you import a data form into Excel, Smart View retains the customization for the data form. Although you cannot modify the data form structure, you can modify data values in the data form. You can create numeric analyses and calculations for the data, which are preserved in the worksheet when the data form is brought back to the server. This feature provides faster analytic capability, especially when you work with data forms offline.

#### Note:

Applying a different data source to a sheet containing a data form than the data source originally used to create the data form is not supported.

**Note:**

Excel worksheets are always protected to avoid entering data for read-only cells. Therefore, some Excel functions, such as AutoSum and F9, are disabled.

When you work with data forms rendered in Excel with Smart View:

- Member names are indented based on their level in the hierarchy. They are also indented if you print the data form to a PDF file.

**Note:**

Financial Management and Hyperion Enterprise data forms are custom-formatted and do not have indentation.

- For members with aliases, if the administrator selected the Display Alias option, aliases are displayed on the rows, columns, page, and POV.
- Values submitted back to the database from Excel must be non-formatted data.
- If a data form is currently loaded in Excel and the administrator changes the data form definition on the server side, Hyperion recommends that you close the data form and reload it. This action ensures that the newest data form definitions are displayed.
- Multiple levels in an outline are displayed differently in Smart View than pages on the Planning Web application. Smart View displays up to four levels, while the Web application displays up to two levels.
- If a Planning administrator hides a dimension in the row axis of a Planning data form, this dimension does not display in the row header of the data form in Smart View.

For information about working with data forms in an Excel worksheet, see the following topics:

- [“Opening Data Forms in Excel” on page 45](#)
- [“Navigating in Data Forms” on page 45](#)
- [“Viewing Data Form Instructions” on page 45](#)
- [“Viewing Multiple Data Forms in Excel” on page 46](#)
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## Opening Data Forms in Excel

When you open a data form in Excel, the data form displays existing values for the selected members. You can enter new values or change the existing values.

If you open a group of data forms simultaneously, each is opened in a separate worksheet in the current workbook. Enough worksheets are created to accommodate them all.

► To open a data form:

**1** Open Excel and connect to a data source. See [“About Connection Manager” on page 34](#).

**2** Select **Hyperion > Forms > Select Form**.

The Select Form dialog box displays the Hyperion Enterprise, Essbase, Financial Management, Planning, and Workforce Planning data forms to which you have access.

**3** From **Folders**, select the folder that contains the data form you want to open.

**4** From **Forms**, select the data form or forms you want to open.

**5** **Optional:** To view any instructions associated with the data form, click **View Instructions**.

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

For Hyperion Enterprise, the Member Selection dialog box displays after you open a data form in Excel. To select members for the data form, perform step 3 to step 10 in [“Selecting Members for Financial Management and Hyperion Enterprise Data Forms” on page 46](#). Alternatively, you can click the OK tab in the Member selection dialog box to update the POV drop down lists with the default POV dimension members of the Hyperion Enterprise data source.

## Navigating in Data Forms

You can use the following methods to navigate a data form:

- Press the arrow keys to move forward, backward, up, or down in a data form.
- Press Tab to move to the next cell in the row. Press Shift+Tab to move to the previous cell.
- Press Enter to move to the next cell in the column. Press Shift+Enter to move to the previous cell.
- To navigate among open data forms, click the worksheet tabs at the bottom of the grid.

## Viewing Data Form Instructions

Your administrator may have included information to guide you in preparing data, or to explain the information shown on the data form. For Hyperion Enterprise data forms, the administrator can include the name and descriptions of data forms. You can view the instructions or descriptions associated with a data form.

► To view the instructions for a data form in Excel:

**1** On the **Select Form** page, select a data form and click **View Instructions**.

If the data form is already displayed in Excel, select Forms > Instructions.

- 2 When you finish reading the text, click **OK** to close the **Instructions** window.

## Viewing Multiple Data Forms in Excel

You can view multiple data forms in Excel at the same time.

- To view multiple data forms in an Excel workbook:
  - 1 Select the workbook that contains the data forms that you want to view.
  - 2 From the **Window** menu, select **New Window**.
  - 3 Select the data form that you want to view.
  - 4 From the **Window** menu, select **Arrange** to select how you want the worksheets to be displayed.

### Tip:

To view only sheets in the active workbook, select Windows of Active Workbook.

## Selecting Members for Financial Management and Hyperion Enterprise Data Forms

You can select the POV dimension members for the data form. After you select members, the POV drop-down lists are updated with your selections.

You use the Member Selection dialog box to select POV dimension members. You can view labels or descriptions for dimension members. For example, when you select to view descriptions, the P\_Series member is displayed as “P\_Series - Phones and PDAs”.




You can also search for POV dimension members. For more information, see [step 8 on page 47](#).

- To select dimension members:
  - 1 From any POV drop-down list, click the Ellipsis button (...) to open the **Member Selection** dialog box.
  - 2 Select a member to open the **Member Selection** dialog box.
  - 3 From the **Dimension** drop-down list, select a dimension.
  - 4 To expand or collapse the list of members, use one of the following methods:
    - Click the Expand (+) button to expand all members under the highlighted parent, or click the Collapse (-) button to collapse all members.
    - Click the expand (+) and collapse (-) signs next to dimension members to expand or collapse them.
  - 5 **Optional:** To display active entities only, select **Active Members**.


**Note:**

The Active Member option is available only if the application has been set up for Organization by Period. For information on Organization by Period, see the *Hyperion Financial Management – System 9 Administrator’s Guide*. The Active Member option is not supported for Hyperion Enterprise data source.

**6 Highlight a member, then use one of the following methods to select members:**



- To select individual members, select the check box next to each member that you want to use.
- To select all members for the highlighted member, click the Select button, .
- To select all immediate children for the highlighted member, click  and from the drop-down list, select **Children**.
- To select all base members for the highlighted member, click  and from the drop-down list, select **Base Members**.

**Tip:**






To deselect members, click Select None, .

**7 Click Add, , to move the selected members to the Selection list.**

**Tip:**

To remove members from the Selection list, select the members, then click Remove, . To remove all members from the Selection list, click Remove All, .

**8 Optional: To search for members in the selected dimension, complete the following steps:**

- a. Click  and enter the member name or pattern for which you want to search in the text box.  
You can enter the start of a text pattern for the search, or you can use a trailing asterisk as a wildcard symbol. For example, to find EastSales, you can enter “east” or “ea\*.”
- b. Click  to find the first member within the dimension that matches the search criteria.  
Select the check box next to the member if you want to use it and then click .
- c. Click  again to search for the next occurrence and, if you want to use the member, select the check box next to the member and click .

**Tip:**

If you are at the bottom of the member list, click  to find the next member that matches the search criteria.

- 9 **Optional:** To reorder members in the Selection list, click the **Up** or **Down** arrows or the **Make Lowermost** and **Make Topmost** buttons above the list to move members.
- 10 When you finish selecting members, click **OK**.

## Selecting a Range of Cells

You can select any group of cells in a data form as long as the selection is rectangular and contiguous.

After you select a group of cells, you can copy and paste them, or adjust and spread data values in them. For more information, see [“Copying and Pasting Cells” on page 49](#) and [“Adjusting and Spreading Data Values” on page 57](#).

## Saving Custom Formats

Customization of a data form in Excel is preserved only if the customization was done outside of the main grid. Customization to the grid is not preserved except for the thousands and decimals separators.

**Note:**

In Excel 2002 (XP) and Excel 2003, you change the thousands and decimal separators by selecting Tools > Options > International. To specify a new separator, enter a new separator in the Decimal separator or Thousands separator boxes. Additionally, the thousands separator must be enabled and selected from Hyperion > Options > Display tab > Use Thousands Separator.

## Searching for a Page in Planning

If the Planning administrator sets up multiple page dimensions for a form, you select the page with the data you require from the page drop-down.

- To search for a page in Planning:
  - 1 Click in the page dimension you want to search to highlight it.
  - 2 **Optional:** The page drop-down can contain hundreds of pages. To find a page in a long list, type one or more characters of the page name you want. For example, to search for *USD* in the currency page, type *U*.

If the characters you type match the name of a page, the full name of the page is displayed in the page drop-down.
  - 3 Select the page name containing the data with which you want to work.



## Copying and Pasting Cells

In Excel, you can copy data values within a data form, and from one data form to another. In a single copy and paste operation, you can copy values from one cell to another cell, from one cell to many cells, or from many cells to many cells.

### Note:

If you copy and paste a value with supporting detail in the main grid, only the value is copied and pasted, and not the supporting detail.

► To copy and paste data:

- 1 **Select the worksheet in which you are copying and pasting cells.**

### Tip:

If the worksheet is protected, select **Tools > Protection > Unprotect Sheet**.

- 2 **Select the cell or group of cells that contain the data that you want to copy.**

For information on selecting multiple cells, see [“Selecting a Range of Cells” on page 48](#).

- 3 **Right-click and select **Copy** to copy the values in the selected cells to the clipboard.**

To copy data in other applications, use that application’s Copy command.

- 4 **Select the cell or group of cells to which you want to paste the data.**
- 5 **Click **Paste**.**

### Note:

If you try to copy and paste using Ctrl+C and Ctrl+V twice, the value is not copied the second time.

## Entering Percentage Values in Planning

If a Planning administrator has set the data type for a member to Percentage, the member is displayed with a percent sign (%) in its cell. When you change a percentage value, Smart View accepts the new value and displays a percent sign.

## Entering Date Values in Planning

If a Planning administrator sets Date as a member's data type, the member is displayed as a date. The default date format is DD/MM/YY. When you change a date, Smart View accepts the new value and displays it. If a member's data type is not Date, you cannot successfully enter a date in the cell.

## Writing #Missing Values

A cell that displays #Missing has no data value in the data form. You can enter a data value by selecting the cell and entering the value. You can also eliminate irrelevant data in a cell by selecting the cell with the irrelevant data and replacing the data with #Missing.

You can submit a data form to write #Missing values to the database. If you replace #missing with a character (for example, a dash (-)), you can place a dash in the cell and submit that to the database, too. After you select the cells that you want to contain #Missing, press the Delete key or enter #Missing. The cells are set to #Missing when you save the data form.

### Note:

#Missing is different from zero. Zero is a data value, and #Missing indicates lack of a data value for the cell. #Missing decreases the size of the database and positively impacts system performance. On data forms that are designed to suppress missing data, rows that contain cells with #Missing values are not displayed after the data form is reloaded.

### Note:

You can choose to have Smart View display numeric zeroes instead of #Missing or other text. See [“Replacement Labels for Data” on page 206](#).

## Adding Cell Text

You can add annotations called cell text to the cell at any level. You can add cell text at the summary time period level and across multiple dimensions at any level. You can also add cell text for non-level zero members (bottom-up versions), calculated cells (Dynamic Calc), and read-only cells, such as explanations for data analysis of variances and rolling forecasts.

When you work with cell text, keep in mind that you can also use supporting or line item detail to add comments to data. You can use supporting detail to build and communicate bottom-up values, such as travel, for which you need to calculate aggregate values. Cells that contain text are indicated by a dark blue border around the cell.

► To add cell text:

- 1 Open a data form, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 In the data form, select a cell or a range of contiguous cells.
- 3 Select **Hyperion > Cell Text**. For Office 2007, click **Cell Text** in the **Task** section of the **Hyperion** ribbon.
- 4 In the **Cell Text** window, enter the text that you want to add.

You can add up to 2000 characters of cell text for each cell. If you selected a range of cells, you can enter cell text in a separate text box for each cell.

- 5 Click **OK**.

## Viewing and Editing Cell Text

You can use the Cell Text window to view cell text for a single cell or for a range of contiguous cells. You cannot view cell text directly in a data form.

➤ To view or edit cell text:

- 1 Open a data form, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 In the data form, select a cell or a range of cells that contain cell text.

When a cell contains cell text, an indicator is displayed in the cell.

- 3 Select **Hyperion > Cell Text**. For Office 2007, click **Cell Text** in the **Task** section of the **Hyperion** ribbon.
- 4 In the **Cell Text** window, view or edit the text.

If you selected a range of cells that contain cell text, a separate text box is displayed for each cell.

- 5 When you finish viewing or editing cell text, click **OK**.

## Submitting Cell Text in Planning

After you enter or edit cell text in a Planning form, you can submit it to the Planning database.

➤ To submit cell text to the Planning database:

- 1 Open the data form, if necessary, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 Edit the cell text.
- 3 Select **Hyperion > Submit Data** to save the text to the database. For Office 2007, click **Submit** in the **Review** section of the **Hyperion** ribbon.

A blue triangle in a cell's upper right corner indicates that it contains cell text.

## Subtotaling Values in Planning

The following points explain how values are subtotaled and totaled in data forms:

- Dimension member subtotals are calculated based on factors such as the hierarchies and logic of the Essbase outline and the member properties an administrator sets.
- If the Calculate Data Form calc script is selected to launch during a save operation, all subtotals in the data form are recalculated based on their members' aggregation properties and the design and layout of the data form.
- When data is saved, Essbase automatically calculates members that are set to dynamically calculate, so the data form does not require a calc script to calculate these members. This Essbase calculation excludes level 0 members.
- Calculations are based on stored values, which are not necessarily the same as displayed values. For example, the values that you see in the data form may be based on scaling or on precision settings.

- Only members displayed on the data form are calculated.
- If you have read but not write access to a member, subtotals correctly include its value even though it is read-only.
- If a Calculate Data Form business rule is associated with the data form, subtotals are calculated automatically when the script is launched. See [“Executing the Calculate Data Form and Calculate Currencies Business Rules”](#) on page 56 for more information.

## Changing a Data Cell's Currency in Planning

If a Planning administrator enabled the functionality, you can enter data in a currency other than a cell's base currency. Currencies in the drop-down list can be designated as the local currency.

### Note:

To override the base currency for an entity, the cell must be displayed in the local currency, and its version must be bottom-up. The application must be a multi-currency application and the data form should support multi-currency.

➤ To enter cell data in a local currency other than the base currency for the cell:

**1** In a data form, select a local currency member for the cell.

**2** **Optional:** To look up the currency's code, select **View > Currency**.

Available Currencies shows the application's currencies. Note the Currency Code for the currency you want to work with, and close the window. If you cannot select View > Currency, multiple currencies are not enabled for this application or data form.

**3** In the right column, **HSP\_InputCurrency**, type the new **Currency Code** in the data cell.

Typing the currency code in the data cell overrides the base currency for the entity.

**4** Click **Submit** to submit the new currency code to the Planning server.

**5** Enter the currency value in the left column, **HSP\_InputValue**, of the data cell.

**6** Click **Rules on Form** and select the **Calculate Currencies** rule to calculate and save the new currency value.

If the Calculate Currencies calc script is set to run when the data form is saved, and the data form is enabled for multiple currencies, the data value is displayed in the currency you selected.

## Submitting Data

You can submit data to the data source in either connected or disconnected mode. Submitting data in offline mode is not supported for Hyperion Enterprise.

In valid ad hoc and data form grids in Excel, you can modify and save **data** (any type) when Smart View is disconnected from the data source and then submit your modified data to the data source when you reconnect.

If you modify **member names**, however, you trigger free-form mode and must refresh the data before submitting it. Because refreshing replaces data in the worksheet with data from the data source, your modifications are lost before you submit them.

**Note:**

Smart View must be installed on the client computer; otherwise, you lose your changes when you submit the data. In addition, there must not have been changes to the form, user privileges, or other settings on the server.

The following rules apply when data is submitted:

- All dimensions must appear in the same axis as they did before the data was synchronized. For example, if accounts were on the row when you loaded the data form into Smart View, then they must be on the row on the server when you submit the data form. If not, you receive an error message. This is true for all axes (rows, columns, pages and POVs).
- All pages must appear in the same order as when the data form was loaded. If not, you receive an error message.
- You can change the order of the dimensions in the row or column. For example, if the data form had Entities and Accounts on the row, and you reverse this order and submit the data form, when you save the data form, all the data is written to the correct members.
- When using Financial Management or Hyperion Enterprise forms, you can lock any cell or range of cells to apply cell protection until the data is refreshed or submitted. Note that locking the cell does not lock the actual data cube in Financial Management, but only the cell in the form. When the data is refreshed or submitted, the cell is no longer locked.

If all of these rules are followed, the grid is saved. In some cases, some of the cells submitted may no longer exist on the data form. This can occur when the data form definition changes, when rows/columns are suppressed, or when access privileges change. In these cases, only the cells that are writable and exist on the new data form definition are saved. However, you will see a message that some of the cells were not saved.

This applies to both cells and supporting detail changes, and also applies to both online and offline modes.

- To submit data to the data source, select **Hyperion > Submit Data**. For Office 2007, click **Submit** in the **Review** section of the **Hyperion** ribbon.

## Working with Business Rules for Planning

You can launch business rules and calculation scripts that recalculate data in Essbase. The relevant data form in Excel is updated with the new data. The calculation scripts you can access are shown by plan type.

When you launch a business rule, the rule can display a runtime prompt, asking you to enter information.

If a calculation is successful, the values in the Essbase database reflect the results.

For more information about business rules, see:

- [“Launching Business Rules in Excel” on page 54](#)
- [“Launching Business Rules From a Data Form” on page 54](#)
- [“Entering Runtime Prompts for Business Rules” on page 55](#)
- [“Executing the Calculate Data Form and Calculate Currencies Business Rules” on page 56](#)

## Launching Business Rules in Excel

You can launch business rules that recalculate data in Essbase.

► To launch a business rule in Excel:

- 1 **Open a data form**, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 **Save any unsaved data in the spreadsheet.**

Any data not saved on the spreadsheet is lost when you launch a business rule.

- 3 **Select Hyperion > Calculation Options > Business Rules.**

The Business Rules dialog box is displayed.

- 4 **In the Plan Type frame, select the plan type associated with the rule you want to use.**
- 5 **Select a rule from the rules listed for that plan type, then click Launch.**

If the business rule contains runtime prompts, complete [step 2 of “Entering Runtime Prompts for Business Rules” on page 55](#).

If the calculation is successful, the values in the Essbase database reflect the results of the calculation.

- 6 **Click Close.**
- 7 **To view the new values in the data form, select Hyperion > Refresh.** For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Launching Business Rules From a Data Form

Sometimes one or more business rules are associated with a data form.

► To launch a business rule associated with a data form:

- 1 **Open a data form**, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 **Save any unsaved data in the spreadsheet.**

Any unsaved data on the spreadsheet is lost when you launch a business rule.

- 3 **Select Hyperion > Calculation Options > Rules on Form.**

4 Select a rule from the rules listed, then click **Launch**.

If the business rule contains runtime prompts, complete [step 2](#) of “[Entering Runtime Prompts for Business Rules](#)” on page 55.

If the calculation is successful, the values in the Essbase database reflect the results of the calculation.

5 To view the new values in the data form, select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Entering Runtime Prompts for Business Rules

When you launch a business rule or save a data form that launches a business rule as a property of the data form, the rule can issue a runtime prompt, which prompts you to enter information. When you work with runtime prompts, keep the following points in mind:

- If a business rule has a runtime prompt and Use Members on Data Form is selected by an administrator in Planning, the default member on the runtime prompt window matches the current member in the page and/or the POV selection of the open data form.
- Members on the Member Selection page are filtered by the current user’s security definitions and by any limitations set for the runtime prompt (for example, only Descendants of Q1). You cannot select a shared member in a runtime prompt.
- You can launch Essbase calculation scripts from Smart View, but you cannot launch graphical business rules and enhanced calculation scripts.




► To enter a runtime prompt for a business rule:



1 Launch a business rule that has a runtime prompt, using the procedure in “[Launching Business Rules in Excel](#)” on page 54.

If you select Submit Data on a data form that has been designed to launch a business rule when saved, the Runtime Prompts dialog box is displayed automatically, if necessary.

2 In the Runtime Prompts dialog box, enter the necessary information.

The icon in front of the prompt indicates the type of expected input, as shown in the following table:

Icon	Expected Type of Input
	Single member selection
	Multiple member selections
	Numeric value

Icon	Expected Type of Input
	<p>Text value</p> <p><b>Note:</b> Text value is for use only with enhanced calc scripts. String type cannot be used with Graphical Scripts.</p>
	<p>Dimension from the database</p> <p><b>Note:</b> Dimension is for use only with enhanced calc scripts. Dimension type cannot be used with Graphical Scripts.</p>

**3 Click Launch.**

If the calculation is successful, the values in the Essbase database reflect the results of the calculation.

**4 To view the new values in the data form, select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.**

## Executing the Calculate Data Form and Calculate Currencies Business Rules

Use the Rules on Form command to select and execute the Calculate Data Form and Calculate Currencies business rules.

The Calculate Data Form business rule is created for each data form to calculate subtotals. The Calculate Currencies business rule is created for data forms that include multiple currencies in a row, column, or page to enable the conversion of values among available currencies.

The order in which business rules are launched is very important and may affect the data. If you plan to launch both Calculate Data Form and the Calculate Currencies business rules, it is important that you run the conversions first, before subtotaling the data form.

➤ To launch the Calculate Data Form and Calculate Currencies business rules in Excel:

**1 Open a data form, using the procedure described in “Opening Data Forms in Excel” on page 45.**

Any data that is not saved on the spreadsheet is lost when you launch the business rule.

**2 Select **Hyperion > Calculation Options > Rules on Form**.**

The business rules associated with the data form are displayed in the Business Rules dialog box.

**3 Complete one or both of the following actions:**

- To convert currencies, select **Calculate Currencies**.
- To calculate subtotals, select **Calculate Forms**.

**4 Click Launch.**

If the calculation is successful, the values in the Essbase database reflect the results of the calculation.



# Adjusting and Spreading Data Values

You can make adjustments to data values in a data form using the following methods:

- Adjust values by increasing or decreasing by a numeric value or percentage
- Spread values over a range of cells

**Note:**

Financial Management and Hyperion Enterprise does not support spreading data, but Planning, Hyperion Enterprise, and Financial Management support adjusting data.

You cannot adjust a data value if the member dimension is read-only or if the value is null (that is, if the value is #Missing).

For instructions on adjusting data values and spreading, see the following topics:

- [“Adjusting Values” on page 57](#)
- [“Spreading Data for Time Periods” on page 58](#)
- [“How Spreading Data Works” on page 58](#)
- [“Spreading Data with Cell Locking in Planning” on page 62](#)
- [“Examples of Spreading Data with Cell Locking” on page 62](#)

**Note:**

In the Options dialog box, Display tab, if you specified a non-numeric symbol for missing values (for example, a hyphen) in the #NoData/Missing Label text box, you cannot use the Adjust Data feature.

## Adjusting Values

You can adjust the value of cells in a data form by a specified number or percentage if the cells contain numerical data and are not read-only. You can adjust data for multiple cells if the cells are all at the same level (for example, you can adjust data for February and March in the same operation, but not for March and Q1).

► To adjust data values:

- 1 **Open a data form**, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 **In the data form**, click the data cell that contains the value that you want to adjust.
- 3 **Select **Hyperion > Adjust****. For Office 2007, click **Adjust** in the **Task** section of the **Hyperion** ribbon.

The Adjust Data dialog box is displayed.

- 4 **Select an option:**
  - Increase Selected Cells by fixed Percentage
  - Decrease Selected Cells by fixed Percentage

- Add Fixed Value to Selected Cells
  - Subtract Fixed Value from Selected Cells
  - Multiply Selected Cells by a Fixed Value
  - Divide Selected Cells by a Fixed Value
- 5 In the text box, enter the percentage or number by which you want to adjust the value of the cell.
  - 6 Click **Adjust Data**.

**Tip:**

For information on how adjusting data can affect other cells, see [“How Spreading Data Works” on page 58](#).

## Spreading Data for Time Periods

While working with a Planning data form page in Excel, you can spread, or distribute, values in several ways (Financial Management does not support spreading data):

- Spread the value of a summary time period to its base time periods or to the first parent or first child of the parent time period
- Spread values among children and parents proportionally, based on existing distribution
- Spread values based on the weekly distribution of a quarter, which could be 4-4-5, 5-4-4, 4-5-4, or None (as set up by the budget administrator)
- Temporarily lock the values of certain cells while spreading data over time periods

**Note:**

You cannot spread data in a summary time period that includes members with mixed currency types.

► To spread data for time periods:

- 1 Open a data form, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 Enter the new value in the selected cell.

The value is distributed according to the rules in the table on [“How Spreading Data Works” on page 58](#).

- 3 Click **Save**.

## How Spreading Data Works

Factors like account type, existing distribution, member hierarchies, and data type affect how values are distributed. Whether or not a cell is locked also affects data distribution. For information on spreading data with locked cells, see [“Spreading Data with Cell Locking in Planning” on page 62](#).

The following examples show the results if you enter or change a currency or non-currency value.

Time Balance Property of the Account	New Value Distribution	Examples
<p>FLOW Revenue, Expense, Saved Assumption (where the Time Balance property is set to Flow)</p>	<p>To all children and parents proportionally, based on the existing distribution. The new value affects the entire summary period roll ups hierarchy so that the parent time period is always the sum of its children.</p> <p>If there is no existing distribution (that is, if the values for all children are zeros or #Missing) and the changed value is a quarter, the new value spreads down proportionally, based on the weekly distribution, which can be 4-4-5, 4-5-4, 5-4-4, or evenly if the account's spreading is set to None).</p> <p>If the changed parent is a year Total or some other kind of summary time period, the value is spread evenly.</p>	<p><b>Example 1</b></p> <p>You change Qtr 1 from 250 to 500. Before the change, the months of Qtr 1 have the following values:</p> <p style="padding-left: 40px;">Jan = 100</p> <p style="padding-left: 40px;">Feb = 50</p> <p style="padding-left: 40px;">Mar = 100</p> <p><b>Result:</b> The 500 is distributed to the children of Qtr 1 proportionally, replacing previous values as follows:</p> <p style="padding-left: 40px;">Jan = 200</p> <p style="padding-left: 40px;">Feb = 100</p> <p style="padding-left: 40px;">Mar = 200</p> <p>The 500 is aggregated to the parents of Qtr 1. If Year Total was formerly 1000, its new value is 1250.</p> <p><b>Example 2</b></p> <p>You change March from 100 to 200.</p> <p><b>Result:</b> March, Qtr 1, and Year Total all increment by 100. Jan and Feb remain unchanged.</p>
<p>FIRST All types of Accounts</p>	<p>Upward to its first parent and downward to its child only if the changed cell is the first child of its parent time period.</p> <p>The summary time period is always equal to the first of its child time periods.</p> <p>If there is no existing distribution (that is, values for all the children are zeros or are missing), the new value is copied to each of the children.</p>	<p><b>Example 1</b></p> <p>You change Qtr 1 from 20 to 40. Before the change, the months of Qtr 1 have the following values:</p> <p style="padding-left: 40px;">Jan = 20</p> <p style="padding-left: 40px;">Feb = 15</p> <p style="padding-left: 40px;">Mar = 05</p> <p style="padding-left: 40px;">Q1 = 20</p> <p><b>Result:</b> The 40 is distributed to the children of Qtr 1 proportionally, replacing their previous values as follows:</p> <p style="padding-left: 40px;">Jan = 40</p> <p style="padding-left: 40px;">Feb = 15</p> <p style="padding-left: 40px;">Mar = 05</p> <p style="padding-left: 40px;">Q1 = 40</p>
<p>BALANCE Asset, Liability, Equity, Saved Assumption (where the Time Balance property is set to Balance)</p>	<p>Downward to the last child and upward to the parent only if the changed cell is the last child of its parent time period.</p>	<p><b>Example 1</b></p> <p>You change Qtr 1 from 30 to 50.</p>

Time Balance Property of the Account	New Value Distribution	Examples
	<p>The summary time period is always equal to the last of its child time periods.</p> <p>If there is no existing distribution (that is, if the values for all children are zero or missing), the new value is spread across the children.</p>	<p><b>Result:</b> March also changes to 50. Jan and Feb do not change. Year Total does not change because Qtr 1 is not the last child of Year Total.</p> <p><b>Example 2</b></p> <p>You change Qtr 4 from 100 to 50.</p> <p><b>Result:</b> Dec changes to 50 because it is the last child of Qtr 4. Oct and Nov remain unchanged, as do quarters 1, 2, and 3. Year Total changes to 50 because Qtr 4 is the last child of Year Total.</p> <p><b>Example 3</b></p> <p>You change Qtr 2 to 100. Before the change, the months of Qtr 2 have the following values:</p> <p style="padding-left: 40px;">Apr = 0</p> <p style="padding-left: 40px;">May = 0</p> <p style="padding-left: 40px;">June = 0</p> <p><b>Result:</b></p> <p style="padding-left: 40px;">Apr = 100</p> <p style="padding-left: 40px;">May = 100</p> <p style="padding-left: 40px;">June = 100</p> <p>Year Total is unchanged.</p>
<p>AVERAGE Revenue, Expense, Saved Assumption, (where the Time Balance property is set to Average)</p>	<p>To all the children and the parents proportionally, based on the existing distribution. The new value affects the entire summary time period roll ups hierarchy so that the parent is always the average of its children.</p> <p>Assumes an equal number of days in each period, such as 30 days for each month.</p>	<p><b>Example 1</b></p> <p>You change Qtr 1 from 5 to 10. Before the change, the months of Qtr 1 have the following values:</p> <p style="padding-left: 40px;">Jan = 05</p> <p style="padding-left: 40px;">Feb = 10</p> <p style="padding-left: 40px;">Mar = 00</p> <p style="padding-left: 40px;">Q1 = 05</p> <p><b>Result:</b></p> <p style="padding-left: 40px;">Jan = 10</p> <p style="padding-left: 40px;">Feb = 20</p> <p style="padding-left: 40px;">Mar = 00</p> <p style="padding-left: 40px;">Q1 = 10</p>
<p>AVG_365 Revenue, Expense, Saved Assumption, (where the Time Balance property is set to Average)</p>	<p>Weighted daily average based on 365 days in a year, assuming that February always has 28 days. This does not account for leap years.</p> <p>As you work with AVG_365, keep these points in mind:</p>	<p><b>Example 1</b></p> <p>You enter values for Jan, Feb, and Mar. For any year, including leap years, February is assumed to have 28 days, and Qtr 1 is assumed to have 90 days.</p> <p style="text-align: center;"><b>Value Entered Number of Days</b></p>

Time Balance Property of the Account	New Value Distribution	Examples
	<ul style="list-style-type: none"> <li>● You cannot customize month labels, although you can use aliases.</li> <li>● Years must have twelve months, and quarters must be the sum of three base months.</li> <li>● You cannot change the fiscal start month after the application is set up.</li> <li>● All months are included in the calculation. #Missing is treated as 0 in the numerator, and all of the days are included in missing months in the denominator. Thus, for example, QTR means three months, not QTD, and Total Year means all twelve months, not YTD.</li> </ul>	<p>Jan = 9,000 31</p> <p>Feb = 8,000 28</p> <p>Mar = 8,000 31</p> <p>Q1 90 (the total days for Jan, Feb, and Mar)</p> <p><b>Result:</b></p> <p>Q1 = 8,344</p> <p>The average for Qtr 1 is calculated as follows: (1) Multiply the value for each month in Qtr1 by the number of days in that month, (2) sum the values, and (3) divide the total by the number of days in Q1. Using 28 for the number of days in Feb and 90 for the number of days in Q1, the result is as follows: <math>(9,000 * 31 + 8,000 * 28 + 8,000 * 31) / 90 = 8,344</math></p>
<p>AVG_ACTUAL Revenue, Expense, Saved Assumption, (where the Time Balance property is set to Average)</p>	<p>Weighted daily average based on the actual number of days in a year. This accounts for leap years, in which February has 29 days.</p> <p>As you work with AVG_ACTUAL, keep these points in mind:</p> <ul style="list-style-type: none"> <li>● You cannot customize month labels, although you can use aliases.</li> <li>● Years must have twelve months, and quarters must be the sum of three base months.</li> <li>● You cannot change the fiscal start month after the application is set up.</li> <li>● All months are included in the calculation. #Missing is treated as 0 in the numerator, and all days are included in missing months in the denominator. Thus, for example, QTR means three months, not QTD, and Total Year means all twelve months, not YTD.</li> </ul>	<p><b>Example 1</b></p> <p>For a leap year, you enter values for Jan, Feb, and Mar. February is assumed to have 29 days, and Qtr 1 is assumed to have 91 days.</p> <p><b>Value Entered Number of Days</b></p> <p>Jan = 9,000 31</p> <p>Feb = 8,000 29</p> <p>Mar = 8,000 31</p> <p>Q1 91 (the total days for Jan, Feb, and Mar)</p> <p><b>Result:</b></p> <p>Q1 = 8,341</p> <p>The average for Qtr is calculated as follows: (1) Multiply the value for each month in Qtr 1 by the number of days in that month, (2) sum these values, and (3) divide the total by the number of days in Q1. Using 29 for the number of days in Feb and 91 for the number of days in Q1, the result is as follows: <math>(9,000 * 31 + 8,000 * 29 + 8,000 * 31) / 91 = 8,341</math></p> <p><b>Example 2</b></p> <p>For a non-leap year, you enter values for Jan, Feb, and Mar. February is assumed to have 28 days, and Qtr1 is assumed to have 90 days.</p> <p><b>Value Entered Number of Days</b></p> <p>Jan = 9,000 31</p> <p>Feb = 8,000 28</p>

Time Balance Property of the Account	New Value Distribution	Examples
		<p>Mar = 8,300 31</p> <p>Q1 90 (the total days for Jan, Feb, and Mar)</p> <p><b>Result:</b></p> <p>Q1 = 8,344</p> <p>Using 28 for the number of days in Feb, and 90 for the number of days in Q1, the result is as follows: <math>(9,000 * 31 + 8,000 * 28 + 8,000 * 31) / 90 = 8,344</math></p>

## Spreading Data with Cell Locking in Planning

When spreading data over time periods, you can temporarily lock the values of one or more cells to preserve their values when other values are recalculated. You can spread data across time periods based on various calculations and visually review the changes before committing them to the database. This breakback capability is useful when you have seeded your data, and you want to manipulate and analyze values in specific accounts to produce desired results. To see examples of how cell locking works with spreading, see [“Examples of Spreading Data with Cell Locking” on page 62](#).

► To temporarily lock values:

- 1 Open a data form, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 In the data form, select the cell or group of cells that you want to lock.
- 3 Select **Hyperion > Forms > Lock**. For Office 2007, click **Lock** in the **Forms** section of the **Hyperion** ribbon.

A color change indicates that a cell is locked. You can now spread or manipulate data in the other cells however you want, without affecting the locked cells. (For information on how Planning spreads data, see [“Spreading Data for Time Periods” on page 58](#) and [“How Spreading Data Works” on page 58](#)).

- 4 To unlock a cell, select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Examples of Spreading Data with Cell Locking

### *Example 1*

Account A has the following values before locking and spreading:

	Jan	Feb	Mar	Q1
Account A	100	100	100	300

In this example, you lock the Feb and Mar values at 100. You then change the value in Q1 from 300 to 600. Because Jan, Feb, and Mar must now total 600 and Feb and Mar are locked at 100 each, Planning calculates Jan to be 400 and fills in that value.

This is how the data is displayed after locking and spreading:

	Jan	Feb	Mar	Q1
Account A	400	100	100	600

### Example 2

Account B has the following values before locking and spreading:

	Q1	Q2	Q3	Q4	Year Total
Account B	100	100	100	100	400

In this example, you lock Q1 and Q2 values at 100 each. You then change Year Total from 400 to 800. Because the yearly total must equal 800 and Q1 and Q2 are locked at 100 each, Planning calculates Q3 and Q4 to be 300 each and fills in those values.

This is how the data is displayed after locking and spreading:

	Q1	Q2	Q3	Q4	YearTotal
Account B	100	100	300	300	800

## Working With Supporting Detail

Planning's Supporting detail feature helps you build and communicate bottom-up values when planning corporate expenses, such as travel, salary, and projects, for which you need to calculate aggregate values. Supporting detail serves as a built-in calculator for developing data that is not in the member outline. (Financial Management supports line item detail, but not supporting detail.) Supporting detail can include text, values, and operators that define how data aggregates.

Supporting detail also provides a way to drill down into data to better understand its basis. For example, if the bottom-level member in your outline is pens, you can add line items in supporting detail for ballpoint, fountain, marker, and so on. Then you can aggregate the detail values to the pen member in the outline.

When working with supporting detail, keep the following points in mind:

- Supporting detail does not change members in the Essbase outline structure.
- To enter, create, change, or delete supporting detail, you must have write access to cells. To view supporting detail, you must have read access.
- You cannot enter, adjust, spread, or save data into aggregate values that have supporting detail. Aggregate values with supporting detail are read-only.
- You can add supporting detail to both target and bottom-up versions.

- You cannot add supporting detail to summary time periods, such as quarters. You can add supporting detail only to base time periods (level zero members).
- Number and precision formatting is not reflected in the Supporting Detail window.
- The sequence of operators in supporting detail follows the logic that Essbase uses to process multiple operators in a complex calculation.
- If numeric values are not defined for one or more cells, you can delete the undefined values from Essbase. If you select to delete the undefined values, #Missing shows in the cells. If you select not to delete undefined values, the values are left as is.
- If you copy and paste a value with supporting detail in the main grid, only the value is copied and pasted, not the supporting detail.
- You can select multiple cells when adding supporting detail in online mode only. In offline mode, you must add supporting detail cell by cell.

For more information about supporting detail, see:

- [“Adding Supporting Detail” on page 64](#)
- [“Totaling When Supporting Detail Cells Are Blank” on page 65](#)
- [“Working with Supporting Detail Hierarchy” on page 66](#)
- [“Viewing or Changing Supporting Detail” on page 67](#)
- [“Synchronizing Supporting Detail with Essbase” on page 67](#)

## Adding Supporting Detail

Use the Supporting Detail window to set and change how detail items aggregate to cell values in a data form. For information about using supporting detail, see [“Working With Supporting Detail” on page 63](#).

➤ To add supporting detail that calculates values in a data form:

- 1 **Open a data form in Excel, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).**
- 2 **In the data form, select the data cells for which you want to add detail.**

You can select a range of contiguous cells in a row or column in online mode only. You cannot select a section of cells that include a combination of rows and columns. To add detail in offline mode, you can select cells only on a cell by cell basis.

- 3 **Select **Hyperion > Supporting Detail**. For Office 2007, click **Supporting Detail** in the **Task** section of the **Hyperion** ribbon.**

The Supporting Detail window is displayed. This window reflects your cell selection in the data form.

- 4 **Replace the untitled text with an explanation or description.**

You can include up to 1,500 characters of supporting detail. The text and its associated operator must be unique among children of the same parent.



- 5 Use the buttons to create or change the indented hierarchy to reflect the structure and calculations that you want.

For example, you can click Add Child to add a line item directly below the selected item.

For more information about the structure that you can create, see [“Working with Supporting Detail Hierarchy”](#) on page 66.

- 6 Set the mathematical relationships among the line items by selecting an operator for each line item.

You can select from these operators: + (add), - (subtract), \* (multiply), / (divide), and ~ (ignore). Selecting Ignore saves the item text without requiring a numeric value.

- 7 Enter data for the items for which you want to set or calculate values.

When you enter numbers into the Supporting Detail window, use the scaling that was set up for the data values in the data form.

- 8 Click **OK**.

Values are dynamically calculated and aggregated before the data is saved.

## Totaling When Supporting Detail Cells Are Blank

If a data cell in supporting detail is blank, the cell is not aggregated. Do not assume that a blank cell means zero.

For example, you might define the following supporting detail to calculate the daily rate of hiring an instructor (\$250) times the number of days per month for which you plan to retain an instructor (4 in January, but none in February). As shown in the following example, the Instructor total for Feb is 250, even though you do not intend to hire an instructor in February:

	<i>Jan</i>	<i>Feb</i>
Instructor	1000	250
Rate *	250	250
Days	4	

To correctly total values in this situation, do not leave the cell blank. Instead, leave the Rate cell blank, or enter a zero in the relevant Days data cell, as shown below:

	<i>Jan</i>	<i>Feb</i>
Instructor	1000	0
Rate *	250	250
Days	4	0

In the solution above, the rate (250) is multiplied by 0 (zero), resulting in a value of zero.

## Working with Supporting Detail Hierarchy

The supporting detail hierarchy should reflect the information that supports the cell values and the mathematical operators that create the appropriate relationships.

➤ To create or change the supporting detail hierarchy:

- 1 Open a data form in Excel, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 In the data form, select the cells with supporting detail with which you want to work.
- 3 Select **Hyperion > Supporting Detail**. For Office 2007, click **Supporting Detail** in the **Task** section of the **Hyperion** ribbon.

The Supporting Detail window is displayed. This window shows your cell selection in the data form.

- 4 Create or change the rows in the hierarchy that provide the detail for the data values by clicking an item and selecting an option:

Option	Result
Expand All	Shows all levels of supporting detail
Collapse All	Collapses all levels of supporting detail
Add Child	Adds a new line item one level below the selected line item. You can add an unlimited number of children, but keep in mind its potential impact on performance
Add Sibling	Adds a line item at the same level as the selected cell. You can add an unlimited number of siblings, but keep in mind the potential impact on performance
Delete	Removes the selected line item
Delete All	Removes all supporting detail at once
Promote	Moves the selected line item to the next-higher level in the hierarchy
Demote	Moves the selected line item to the next-lower level in the hierarchy
Move Up	Places the selected line item before its preceding sibling
Move Down	Places the selected line item after its sibling successor
Duplicate Row	Adds a row below the selected item, duplicating the structure of the selected row (text, operator, and values)
Fill	For rows, copies the data from the current cell to the cells to the right of the current cell
Copy	Copies data from the current cell
Paste	Pastes data to a cell

- 5 Click **Close**.

The save operation stores the detail text and values and stores the aggregate values in the Essbase database.

## Viewing or Changing Supporting Detail

Cells that have supporting detail are indicated in the Excel grid by a light green background.

You can select one cell or a range of contiguous cells in a row or column. You cannot select a section of cells that includes a combination of rows and columns. Select cells that are in the local currency if you need to write to them.

► To view or change supporting detail:

- 1 Open a data form in Excel, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 In the data form, select the data cells for which you want to view or change detail.

You can select one cell or a range of contiguous cells in a row or column. You cannot select a section of cells that includes a combination of rows and columns. Select cells that are in the local currency if you need to write to them.

- 3 Select **Hyperion > Supporting Detail**. For Office 2007, click **Supporting Detail** in the **Task** section of the **Hyperion** ribbon.
- 4 View or change the line items or the calculations that aggregate the data in the selected cells.

For instructions about adding and maintaining supporting detail, see [“Adding Supporting Detail” on page 64](#) and [“Working with Supporting Detail Hierarchy” on page 66](#).

## Synchronizing Supporting Detail with Essbase

In Planning applications, when you delete supporting detail for a cell, you affect the associated value in the relational database. You specify how to handle the stored Essbase value. You can set it to #Missing or leave it as it was before the supporting detail was deleted. This feature is useful if you want to use supporting detail as a scratch pad or calculator.

► To synchronize supporting detail with Essbase:

- 1 Open a data form in Excel, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 In the data form, click the cell that has the supporting detail you want to remove.
- 3 Select **Hyperion > Supporting Detail**. For Office 2007, click **Supporting Detail** in the **Task** section of the **Hyperion** ribbon.
- 4 In the **Supporting Detail** window, delete the information, then click **OK**.
- 5 Select an option from the displayed message to specify how to handle the aggregate value of the deleted supporting detail stored in Essbase:
  - To delete the value from Essbase, click **Yes**, set the value(s) to #Missing.
  - To leave the data value in Essbase as is, click **No**, leave the value(s) as is.

# Working with Formulas in Data Forms

When working with data forms, you can create Excel formulas to manipulate or analyze the data. You can create formulas inside or outside the data form's grid. If you want to, you can save the formulas with the Excel workbook so that when you use the workbook again, the formulas are preserved.

## Note:

Formulas that reference data within the same grid are not supported.

You can create formulas:

- Inside or outside the data form's grid
- On cells that have cell text

You cannot create formulas:

- On read-only cells or cells that are locked
- On cells that have supporting detail (in Planning) or line item detail (in Financial Management)

Formulas are preserved even when you:

- Refresh the data form without saving the data
- Later open the saved .XLS worksheet
- Expand or collapse rows or columns

Formulas interact with other functionality in the following ways:

- For Planning only: You can spread data values using a formula in a summary parent cell. Spreading logic ignores formulas in child cells. For example, you could enter a formula in Qtr1 whose calculated value is spread over Jan, Feb, and March. However, if you enter a formula in Feb, that cell is ignored when the value for Qtr1 is spread. For more information about how data is spread, see [“Adjusting and Spreading Data Values” on page 57](#)
- If you move a referential formula, its cell references are updated to reflect its new location
- If you use the Suppress #Missing Rows feature on a cell that has a referential formula, the cell references are not updated; the cell relationship is absolute, not relative
- If you use the Adjust feature to change the value of a data cell on which you have created a formula, the adjusted values overwrite the formula

If you create formulas in the data form, you are prompted to save the workbook as an .XLS file with the new formulas under the following conditions:

- You change the current page.
- You take a data form offline (this applies only to Planning).
- You select a different data form.
- You connect to a different data source.

Even if you save the formulas with the workbook, you lose temporary access to the formulas if:

- You change the current page, data form, or data source.
- You take the data form offline.

## Working with Smart Lists in Planning Data Forms

A Smart List is displayed in a Planning data form cell as an alphanumeric text description, but stored in the database as a number. For example, an integer Smart List for a reporting cycle may have values 1-5, for Yearly (1), Quarterly (2), Monthly (3), Daily (4), and Hourly (5). The values that are displayed on the data form are Yearly, Quarterly, Monthly, Daily, and Hourly. When you select one of these values on the form, and save the form, the number associated with it is stored in the database. This saves you from memorizing the numeric values associated with each time period in the reporting cycle.

You access Smart Lists from custom drop-down lists in Planning data form cells. When you click into cells whose members are associated with a Smart List (as a member property), you select a drop-down list option instead of entering data. In fact, you cannot type in a cell that contains a Smart List. Smart Lists display in cells as down arrows that expand into lists when clicked.

For example, suppose a data form contains a Smart List named Justification that provides selections for Research, Customer Feedback, and Expansion. When you click into Account cells named Reason (whose members are associated with the Justification Smart List), a down arrow is displayed. When you click the down arrow, it expands into a drop-down list containing:

- Research
- Customer Feedback
- Expansion

Select one of the Smart List options as the value for the cell.

### Note:

Smart Lists must be set up and enabled by a Planning administrator before you can use them in Smart View. For more information about enabling Smart Lists for data forms, see “Menus, Enumerations, UDAs, and Formulas” in the *Hyperion System 9 Planning Administrator’s Guide*.

► To select a Smart List option in a data form cell:

- 1 Open a data form in Excel, using the procedure described in [“Opening Data Forms in Excel” on page 45](#).
- 2 In the data form, click into a data cell containing a Smart List.

### Note:

Only cells whose members are associated with Smart Lists (as a member property) contain Smart List drop-down lists.

A down arrow is displayed in the cell.

**3 Click the down arrow in the cell.**

The down arrow expands into a drop-down list.

**4 Select an option.**

The option you select is entered into the data cell.

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## Query Designer Features

Query Designer is used to design report layouts and select members for queries in Essbase, Financial Management, and Hyperion Enterprise data sources.

With Query Designer, you can:

- Design queries from default reports
- Extract queries from existing reports
- Enter and run MDX queries for advanced users
- Share queries with other users

## Query Designer Worksheets

In Query Designer worksheets, some ad hoc operations are disabled when you design queries but are enabled in the reports.

Operations enabled only after running queries:

- Formulas
- Asymmetric reports
- Comments

- Blank rows or columns
- Changes to alias tables
- Ad Hoc actions such as zoom in and out, keep and remove only, and double-click

Operations allowed neither during query design nor after running the query:

- Filtering of column members
- Changing data sources in query mode

**Note:**

When using grids that contain duplicate (non-unique) members, the Member Name option must be selected in the Options dialog box to display the qualified name in the worksheet (for Essbase only). Ensure that duplicate members use fully-qualified member names.

You can create queries from a blank sheet. After retrieving a default report from an Essbase or Financial Management or Hyperion Enterprise data source, run Query Designer and modify the layout. See [“Creating Queries from Default Reports” on page 72](#). Another use of Query Designer is taking an existing report, such as one containing the budget for West Coast markets, and extracting a basic query from the report. The query can then be modified. See [“Extracting Queries from Reports” on page 73](#).

Options such as suppress missing rows, repeat member names, and indentation are defined as in ad hoc queries and can be set while working in the query sheet, but are not applied until after you run the query.

You cannot change data sources in the same query worksheet. However, you can have multiple Query Designer worksheets in the same workbook. For example, you can have one query sheet connected to an Essbase data source and another connected to a Financial Management data source.

Query Designer worksheets are designated by *Sheetname* - Query; for example, Sheet1 - Query. If you have more than one query sheet, the sheet is given a different name, such as Sheet2 - Query. After running a query, a report sheet is created with the name *Sheetname* - Report; for example, Sheet1 - Report, and the query sheet, *Sheetname* - Query, becomes hidden. Selecting Hyperion > Query > Query Designer enables you to view and modify the query sheet.

Queries can be saved as .xls files. You can use queries as templates and share them with other users, who may want to run the same query or customize the query to their own needs.

## Creating Queries from Default Reports

Starting with default reports, you can create queries.

- To create queries from default reports:

- 1 In Excel, connect to an Essbase or Financial Management or Hyperion Enterprise data source.



- 2 Select **Hyperion > Query > Query Designer For Office 2007**, click **Query Designer** in the **Query** section of the **Hyperion** ribbon.

A worksheet called “*Sheetname - Query*” is created. It contains a default query (for example, Sheet1 - Query) and a POV toolbar that contains dimensions and a dropdown menu of dimension attributes.

- 3 From the POV toolbar, drag and drop dimensions and attributes either to columns or rows in the worksheet or within the POV itself. You can also enter members directly into the grid.

If you want to select members or filters for the dimensions, click the dimension name on the POV toolbar to invoke the Member Selection dialog box. See “[Filtering Members in Queries](#)” on page 74.

- 4 Select **Hyperion > Query > Run Report** or click  on the POV toolbar. For Office 2007, click **Run Report** in the **Query** section of the **Hyperion** ribbon.

The resulting report is displayed in a new sheet called “*Sheetname -Report;*” for example, Sheet1 - Report. The report and query can be saved. The query is saved as part of the .xls file.

**Note:**

The .xls file that results from running the query can be saved for possible use as an Hyperion Enterprise or Essbase data load data source.

## Extracting Queries from Reports

Use Query Designer to extract queries from existing reports, which you can modify and share with others.

- To extract queries from existing reports:

- 1 Open a report in Excel.
- 2 Connect to an Essbase or Financial Management or Hyperion Enterprise data source.
- 3 Select **Hyperion > Query > Query Designer**. For Office 2007, click **Query Designer** in the **Query** section of the **Hyperion** ribbon.

A new sheet called “*Sheetname - Query*” is created. The sheet contains a query extracted from the existing report; for example, Sheet1 - Query.

- 4 Modify the query.

For example, you can delete members, add members, or pivot to create different queries and layouts.

**Note:**

Modifying the query does not preserve the format of the original report after running the query.

- 5 Select **Hyperion > Query > Run Report** or click  on the POV toolbar. For Office 2007, click **Run Report** in the **Query** section of the **Hyperion** ribbon.

The resulting report is displayed in a new sheet called “*Sheetname* -Report”; for example, Sheet1 - Report.

## Editing Queries

You can modify queries. After you run a query, the Query Designer sheet, *Sheetname* - Query, becomes hidden. You must run Query Designer again to view the Query Designer sheet.

► To edit queries:

- 1 Select the Query Designer sheet *Sheetname* - Query; for example, Sheet 1- Query.

If the Query Designer sheet is hidden, select Hyperion > Query > Query Designer. The Query Designer sheet is displayed.

- 2 Edit the query, such as adding new members, pivoting, removing members, and specifying data filters.
- 3 Select **Hyperion > Query > Run Report**. For Office 2007, click **Run Report** in the **Query** section of the **Hyperion** ribbon.

The report in *Sheetname*-Report is updated.

### Note:

Rerunning queries regenerates the report, therefore any changes to the report, such as zooming in on members and entering comments or formulas are lost.

## Filtering Members in Queries

You can filter members during member selection for queries for Essbase and Hyperion Enterprise. You can filter members for Essbase by:

- Children
- Descendants
- Levels
- Generation
- UDA (user-defined attributes; defined by the administrator)
- Attribute
- Subset of attribute dimensions to create conditional expressions
- Period
- Date range

You can filter members for Hyperion Enterprise. You can filter,

- Account dimension members by:
  - Input

- Calculated
- Dynamic
- Entity dimension members by:
  - None
  - Parent
  - Base
  - Parent + Base + Subentity
  - Parent + Subentity
  - Base + Subentity
  - Parent + Base
- Period dimension members by:
  - None
  - <Scenario\_Frequency>
  - Daily
  - Weekly
  - Monthly
  - Quarterly
  - Trimester
  - Half-Yearly
  - Yearly



Using the Member Selection dialog box, specifying member filters inserts MDX syntax into the grid. For example, to filter by descendants for the East market, the MDX syntax is `DESCENDANTS ([East])`. You can modify the MDX statement by editing the cell. For example, you can change the statement to `DESCENDANTS ([West])` to filter members by descendants of West. Other examples of MDX syntax include `([100].CHILDREN)`, `([Product].LEVELS(1).MEMBERS)`, and `ATTRIBUTE([True])`. You can change the values to `([200].CHILDREN)`, `([Product].LEVELS(2).MEMBERS)`, and `ATTRIBUTE([False])`. If you type an invalid MDX statement, an error message is displayed when you run the query. See [“Filtering Members” on page 83](#).

**Note:**

MDX queries are not supported for Hyperion Enterprise data sources.

## Filtering Data

You can filter data in queries for Essbase data sources only. Filtering data limits the amount of data returned to a specified top or bottom criterion. Top or bottom ranking enables you to view, for example, the top 10 products in sales for a given region.

- To filter data:
  - 1 In the report, select a dimension.
  - 2 Select **Hyperion > Query > Data Filter**.
  - 3 From **Data Filter**, under **Count**, select **Top** or **Bottom** and specify a number.
  - 4 Under **Set**, click , and in **Member Selection**, select a row member for ranking, and click **OK** to return to **Data Filter**.
  - 5 Under **Value**, click , and in **Member Selection**, select a column member to run the ranking against, and click **OK** to return to the **Data Filter** dialog box.
  - 6 Click **OK**.

An MDX query, for example `TopCount( { [Qtr3] }, 10, [Measures].[Profit])`, that represents your data filtering settings is inserted into the grid. The example returns the top 10 most profitable products in quarter 3.

- 7 Select **Hyperion > Query > Run Report**. For Office 2007, click **Run Report** in the **Query** section of the **Hyperion** ribbon.

The query results are displayed in the sheet.

## Analyzing Time-Related Data in Query Designer

(Essbase only) Using Smart View, you can analyze flash metrics such as sales of cost of goods sold against time-based metrics. This enables you to look for trends, find averages for different time periods, and so forth. To do this, you use linked attributes which enable periodicity of members. Periodicity is a shared pattern among time dimension members that make them meaningful for time-based analysis (January and April share periodicity as first months of quarters, for example). Day by month, day by week, and week by year are examples of linked attributes. You can also set ranges for linked attributes and apply filters.

- To analyze time-related data in Query Designer:
  - 1 Create a query as described in [“Creating Queries from Default Reports” on page 72](#).
  - 2 From the Query Designer toolbar, select **Date-Time** dimension and drag it to the grid or within the toolbar.
  - 3 Click **Date-Time** in the Query Designer toolbar to open **Member Selection**, where you can select members and apply Period, Range, and other filters as described in [“Filtering Members in Queries” on page 74](#).
  - 4 Under **Attributes** on the Query Designer toolbar, select an attribute or linked attribute in the dropdown menu, then drag it to the grid or within the toolbar. Repeat as necessary for other attributes.
  - 5 To select members and apply filters to an attribute, click the attribute name on the Query Designer toolbar to open **Member Selection**.
  - 6 Select **Hyperion > Query > Run Report**. For Office 2007, click **Run Report** in the **Query** section of the **Hyperion** ribbon.

## Rerunning Queries

You can use Hyperion > Refresh or Refresh All to update data on query reports, but refreshing does not rerun queries. For example, if data filtering is set to return the top 10 cars sold in California, the sales data for the 10 cars is refreshed, but the set of 10 cars does not change. To update the top 10 list of cars, you must rerun the query. Rerunning queries regenerates reports, therefore changes to reports, such as zooming in and entering comments, are lost.

## MDX Queries

Advanced users can bypass the Query Designer interface and enter MDX commands in the query sheet or in the Execute MDX dialog box.

► To execute MDX queries:

- 1 In Excel, connect to an Essbase data source.
- 2 Select **Hyperion > Query > Execute MDX**.
- 3 In **Execute Free Form MDX Query**, enter the MDX query.

For example:

```
SELECT {[Sales], [Cogs]} on columns, Filter ([Product].Levels( 2 ).Members,  
AVG([Year].CHILDREN, 9001.0) > 9000.00) on rows
```

- 4 Click **Execute**.



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# 7

## Working with Ad Hoc Analysis

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Ad hoc grids are used to analyze data from a data source. An ad hoc query is a request to the database server to search its data for specific information or results. Ad hoc queries enable you to view data for specific dimensions from the data source without writing spreadsheet functions.

Ad hoc analysis is supported for Essbase, Hyperion Enterprise, and Financial Management data source providers.

## The Ad Hoc Grid

After you connect to a data source and open a worksheet, you can open the default Ad Hoc grid by double-clicking a cell in the worksheet or by selecting Refresh to create a default grid. To open a grid by double-clicking, you must have enabled this feature from the Options dialog box. For more information on ad hoc options, see [“Ad Hoc Options” on page 201](#).

The default grid layout is specific to the data source. You can begin working with data using the default grid, or you can update the columns and rows with additional or different dimension members. For more information, see [“Selecting Members for Ad Hoc Analysis” on page 81](#).

If you connect to a different data source while you are working in a grid, the system displays a message that you have applied a new connection to a grid that was connected with a different connection. You can continue to work with the new connection or either disconnect and then reconnect to the proper data source or select the data source from the Active Connections menu option. If you are working in a new grid, to reapply the original data source, you must reconnect and then refresh the grid. If you are working in a grid from a saved workbook, to reapply the original data source, you can reconnect to the saved data source without refreshing the grid.

**Note:**

If you are working in a new grid and you change the data source connection, you must refresh the grid in order to view the POV. If you open a spreadsheet with a previously saved POV, change the data source, and refresh the sheet, the POV is not updated with the new data source members. You must change the POV when you change the data source.

You can change the POV settings at any time for a grid. If you want to save the POV settings in a worksheet, after you make any changes to the POV, you must refresh the settings before you save the worksheet. For more information, see [“Refreshing the Grid” on page 88](#).

**Note:**

If you make changes to the POV of a saved workbook after changing the data source connection, the changed POV will not be saved when the workbook is saved.

You can also change the starting dimensions in the default grid by selecting a different dimension or member in the POV Manager before performing a Refresh, as described in [“Editing the Point of View” on page 213](#).

You can dynamically change the members defined on the rows or columns of the grid. You can select a member on a row or column and use the Member Selection option to replace the selected member. For more information see [“Selecting Members for Ad Hoc Analysis” on page 81](#).

**Note:**

When using ad hoc grids with Financial Management, invalid cells that contain a value display the value as zero. This is different from other Financial Management modules where invalid cells that contain a value display that value.



## Setting Ad Hoc Options

You can set options to control how data is retrieved into the ad hoc spreadsheet and which data is retrieved as described in “[Ad Hoc Options](#)” on page 201.

## Selecting Members for Ad Hoc Analysis

You can select the dimensions and members for the rows and columns of the ad hoc grid. After you select members, the grid is updated with the new dimension members.

You use the Member Selection dialog box to select dimension members. You can filter the list of members and you can view labels or descriptions for dimension members. For example, when you select to view descriptions, the P\_Series member is displayed as “P\_Series - Phones and PDAs”.

You can select a maximum of 1,000 members for the ad hoc POV.

You can also search for dimension members. For more information, see [step 11 on page 82](#).

► To select dimension members:

**1 Select Hyperion > Member Selection.**

The Dimension Name Resolution dialog box is displayed.

**2 From the **Dimensions** drop-down list, select a dimension and click **OK**.**

The Member Selection dialog box is displayed.

**3 Optional:** To filter the list of members, select a member list from the **Filter** drop-down list. See “[Filtering Members](#)” on page 83.

**4 Optional:** For advanced filtering, highlight a member without selecting its check box, then select a member list.

This uses the highlighted member as the filter parameter. For example, if you highlight United States and change the filter list to Children, the system displays the children of United States.

**5 Optional:** To display dimension descriptions instead of labels, select **Use Descriptions**.

**6 Optional:** To display Dynamic Time Series members for a time dimension, select **Dynamic Time Series Members**.

**Note:**




The Dynamic Time Series option is available only when working with Essbase data sources. For more information on selecting and working with Dynamic Time Series members, see “[Working with Dynamic Time Series Members](#)” on page 86.

**7 Optional:** To display active entities only, select **Active Members**.

**Note:**

The Active Members option is available only if the application has been set up for Organization by Period. For information on Org by Period, see the Hyperion Financial Management – System 9 Administrator’s Guide.

**8 In the Members list, highlight a member, then use one of the following methods to select members:**



- To select individual members, select the check box next to each member that you want to use.
- To select all members for the highlighted member, click Select, .
- To select all immediate children for the highlighted member, click  and from the drop-down list, select **Children**.
- To select all base members for the highlighted member, click  and from the drop-down list, select **Base Members**.

**Tip:**

To deselect members, click Select None.






**9 Click Add, , to move the selected members to the Selection list.**

**Tip:**

To remove members from the Selection list, select the members, then click Remove, . To remove all members from the Selection list, click Remove All, .

**10 Optional:** To reorder members in the **Selection** list, click the **Up** or **Down** arrows or the **Make Lowermost** and **Make Topmost** buttons above the list to move members.

**11 Optional:** To search for members in the selected dimension, complete the following steps:

- a. Click  and enter the member name or pattern for which you want to search in the text box.  
You can enter the start of a text pattern for the search, or you can use a trailing asterisk as a wildcard symbol. For example, to find EastSales, you can enter “east” or “ea\*.”
- b. Click  to find the first member within the dimension that matches the search criteria.  
Select the check box next to the member if you want to use it and then click .
- c. Click  again to search for the next occurrence and, if you want to use the member, select the check box next to the member and click .

**Tip:**

If you are at the bottom of the member list, click  to find the next member that matches the search criteria.

**Tip:**

F3 enables the Find text box. Selecting F3 again searches down and Shift F3 searches up.

**12 When you finish selecting members, click OK.**

## Filtering Members

When selecting members from a large outline, use filters to limit the members returned in a report. For Essbase, you can select attributes and set conditions for them using the Subset dialog box.

► To filter members:

- 1 After selecting a member in the spreadsheet, access the **Member Selection** dialog box using several methods:**
  - Select **Hyperion > Member Selection**. For Office 2007, click **Member Selection** in the **Task** section of the **Hyperion** ribbon.
  - From **POV** toolbar, select the down arrow button next to a dimension and select the ellipses (...).
  - From the **POV** toolbar in **Query Designer**, double-click the dimension name or select the down arrow button next to a dimension and select the ellipses (...).
- 2 From **Dimension**, select a dimension.**
- 3 From **Filter**, select an option:**

**Note:**

Filter options vary depending on whether you are connected to Essbase, Financial Management, or Hyperion Enterprise data sources. Filter options for Essbase are static and are described in this procedure. Filter options for Financial Management are dynamic.

- **None**—Applies no filters
- **Children**—Selects only children of a specific member
- **Descendants**—Selects only descendants of a specific member
- **Level**—Selects members by level number
- **Generation**—Selects members by generation number
- **UDA**—Selects members by user defined attributes (Essbase only)
- **Attribute**—Selects members associated with a specified attribute dimension (Essbase only)

- **Subset**—Opens the **Subset** dialog box for specifying attribute dimension criteria (Essbase only)
- **Input**—Selects input accounts (Hyperion Enterprise only)
- **Calculated**—Selects calculated accounts (Hyperion Enterprise only)
- **Dynamic View**—Selects dynamic view accounts (Hyperion Enterprise only)
- **Parent**—Selects parent entities (Hyperion Enterprise only)
- **Base**—Selects base entities (Hyperion Enterprise only)
- **Subentity**—Selects subentities (Hyperion Enterprise only)
- **Daily**—Selects daily entries (Hyperion Enterprise only)
- **Weekly**—Selects weekly entries (Hyperion Enterprise only)
- **Monthly**—Selects monthly entries (Hyperion Enterprise only)
- **Quarterly**—Selects quarterly entries (Hyperion Enterprise only)
- **Trimester**—Selects trimester entries (Hyperion Enterprise only)
- **Half-Yearly**—Selects half-yearly entries (Hyperion Enterprise only)
- **Yearly**—Selects yearly entries (Hyperion Enterprise only)

**4 If you selected:**

- **None, Children, Descendants, Input, Calculated, Dynamic View, Parent, Base, Subentity, Daily, Weekly, Monthly, Quarterly, Trimester, Half-Yearly, or Yearly**, go to [step 9](#).
- **Level or Generation**, the **Filter Arguments** dialog box is displayed. Go to [step 5](#).
- **UDA**, the **Filter Arguments** dialog box is displayed. Go to [step 6](#).
- **Attribute**, the **Filter Arguments** dialog box is displayed. Go to [step 7](#).
- **Subset**, the **Subset** dialog box is displayed. Go to [step 8](#).

**5 In Filter Arguments:**

- a. Specify the level or generation number in **Level or Generation**.
- b. Click **OK**.
- c. Go to [step 9](#).

**6 In Filter Arguments:**

- a. Type the user defined attribute in **UDA**.
- b. Click **OK**.
- c. Go to [step 9](#).

**7 In Filter Arguments, in Attribute Members select .**

The **Subset** dialog box is displayed, enabling you to specify an attribute so that members are returned containing the specified attribute.

- a. In **Dimension**, select an attribute dimension.
- b. In **Member**, select an attribute member.

- c. Click **Add**.
- d. **Optional:** You can change the selected attribute dimension and member. Click **Set** after making the changes. Click **Delete** to remove the attribute.
- e. Go to [step 9](#).

**8 In Subset, define attribute conditions to return members meeting the condition.**

- a. In **Dimension**, select an attribute dimension; for example, Caffeinated.
- b. In **Member**, select an attribute member; for example, True.
- c. Click **Add**.
- d. In **Dimension**, select another attribute dimension; for example, Pkg Type.
- e. In **Member**, select another attribute member; for example, Bottle.
- f. Click **Add**.

An AND condition statement is created; for example, [True] AND [Bottle].

- g. **Optional:** Select the condition statement to change it.
- h. Select **Operator** and a condition:
  - **AND**—The selection must meet both conditions; for example, the members must be caffeinated and packaged in bottles.
  - **OR**—The selection must meet either conditions; for example, the members can be caffeinated or packaged in bottles.
  - **NOT**—The selection includes only the members that do not have the selected condition; for example, the members that are not caffeinated.
- i. **Optional:** You can nest conditions by selecting more attributes and selecting **Add**, then to **Root**.
- j. Click **OK** after setting the conditions to return to **Member Selection**.

**9 In Member Selection, click  to add the members to the selection.**

**10 Click OK.**

## Member Selection Differences

The Member Selection dialog box can be accessed in several ways. However, depending on where you accessed the Member Selection dialog box, the functionality can be different.

**Table 4** Member Selection Functionality Differences

Member Selection Type	Purpose
Ad Hoc	Accessed from Hyperion > Member Selection. You can select a dimension on the grid and change which members are selected for the report. You cannot apply member filters.
POV toolbar	Accessed from POV toolbar. You can change the dimension or member to make it available on the POV toolbar, so that you can add it to the grid.

## Dragging and Dropping Dimension Members

You can drag and drop dimensions between rows and columns and move them in and out of the grid. You can drag and drop the dimensions to any row or column on the grid.

### Note:

If you drag a dimension over an existing dimension in the grid, the new dimension is placed on the outer side of the existing dimension.

- To drag and drop a dimension member, use one of the following methods:
  - To drag a dimension member from the Point of View toolbar to the grid, select the member, and drag it to the desired location on the grid.
  - To drag a dimension member from the grid to the Point of View toolbar, select the member in the grid, right-click and drag it to the toolbar.

### Note:

Smart View drag and drop is disabled after you perform Excel editing actions such as typing over member values, inserting or deleting columns or rows, dragging and dropping an Excel region. etc. To re-enable Smart View drag and drop, refresh the grid.

## Working with Dynamic Time Series Members

### Note:

This option is available only when working with Essbase data sources.

Dynamic Time Series members are predefined members used in to-date calculations. Dynamic Time Series members do not appear as members in your database outline; instead, they represent a generation in a Time dimension. For example, in the Essbase Sample Basic database, the Application Designer can create a generation name called Quarter for generation 2 of the Year dimension that contains the data for Qtr1, Qtr2, Qtr3, and Qtr4. When you create the generation name Quarter, Essbase creates and enables a Dynamic Time Series member called Q-T-D.

To use Dynamic Time Series in calculations, you first define the latest time period for which you want data. The latest time period is the level 0 member in a Time dimension. For example, in the Sample Basic database, the level 0 members are the months of the year: Jan, Feb, Mar, and so on. If the current month is August, and you want to know the sales data for the quarter up to the current month, Dynamic Time Series calculation gives you the sales data for the months of July and August.

**Note:**

If you are manually entering dynamic time series members into a free-form grid, formats such as Q-T-D (Jan), QTD (Jan), YTD (Mar), Y-T-D (Mar), MTD (Jun), and M-T-D (Jun) are supported. Formats such as QTDate (Jan) are not supported.

► To specify the latest time period to use:

**1 Access the Member Selection dialog box using one of the following methods:**

- Select **Hyperion > Member Selection**. For Office 2007, click **Member Selection** in the **Task** section of the **Hyperion** ribbon.
- From the **Options** drop-down menu on the **POV** toolbar, choose **Select Members**, select the time dimension (if available), and then choose a member.

The Member Selection dialog box is displayed, and the Time dimension and member names are displayed in the Members list box.

**2 Select the Dynamic Time Series Member check box.**

The dimension and member names are displayed as Dynamic Time Series members.

The following are valid Dynamic Time Series members:

Dynamic Time Series	Generation Name
H-T-D	History
Y-T-D	Year
S-T-D	Season
P-T-D	Period
Q-T-D	Quarter
M-T-D	Month
W-T-D	Week
D-T-D	Day

**3 Select the Dynamic Time Series members that you require from the Members list box and click Add,**



- 4 In the Selection list box, select a Dynamic Time Series member to highlight it, and then click the dts button.**
- 5 From the drop-down list in the Select DTS Member dialog box, select the latest period on which the to-date calculation will be based.**
- 6 Click OK.**
- 7 Repeat step 4 through step 6 for all Dynamic Time Series you have added to the Selection list box.**
- 8 Click OK to close the Member Selection dialog box.**

## Formatting Data Cells in the Grid



In both free form grids and structured grids, you can use the Capture Formatting command to capture and apply formatting styles, such as font color or number styles, to selected data cells.

If you are working in a free form grid, you must refresh the grid after you type member names in the grid in order to use Capture Formatting.

### Note:

The procedure in this topic assumes you are displaying the Formatting toolbar in Excel. To display the formatting toolbar, right-click in the toolbar area of Excel and select Formatting.

► To apply formatting to one or more data cells in a grid:

- 1 Select the cell or cells to which you want to apply formatting.
- 2 Choose one or more of following formatting options:
  - To apply a background color to the selected cells, click the arrow next to the Fill Color button, , and click on a color from the palette to select it.
  - To apply a font color to the selected cells, click the arrow next to the Font Color button, , and click on a color from the palette to select it.
  - To apply formats to numbers, such as add decimal places or a currency symbol, select **Format > Cells** and make the appropriate selections in the **Number** tab.
- 3 Select **Hyperion > Capture Formatting** to retain the formatting options for the selected cells.

### Tip:

You can also right-click and select **Hyperion > Capture Formatting** to apply the formatting options you have chosen to the selected cells.

## Refreshing the Grid

You can refresh the grid at any time to retrieve data from the connected data source into the active worksheet. For example, after you change the Point of View, you can refresh the grid to see the changes. If you want to save the Point of View settings in a worksheet, you must refresh the settings before you save the worksheet.

### Note:

To refresh a grid, 250 bytes per cell of memory is needed. For example, to refresh a 100x30 cell grid requires 750,000 bytes of JVM memory.



- To refresh the grid, take one of the following actions:
  - Select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.
  - Click the **Refresh** toolbar button.
  - From the Point of View dialog box, click the **Refresh** arrow.
  - Right-click, then select **Hyperion > Refresh**.

To refresh all grids, functions, and forms in the workbook, select **Hyperion > Refresh All**. For Office 2007, click **Refresh All** in the **Review** section of the **Hyperion** ribbon.

## Zooming In on Dimension Members

You can drill down to various levels of data in the grid by expanding the members. For example, if you want to view data for a specific quarter or month rather than for the whole year, you can zoom in on the [Year] member to see more detailed data.

When you zoom in on a member, it is expanded according to the options specified in the Options dialog box. If you select the option to zoom in on all levels, the grid displays all descendants of the selected member.

The default zoom option is to zoom in to the next level to retrieve data for the children of the selected member or members. For example, if you double-click the [Year] member, the system displays Quarter1, Quarter2, Quarter3, and Quarter4.

You can zoom in on the bottom level to retrieve data for the lowest level of members in a dimension. You can select to retrieve data at the sibling level, the same level, or the same generation as the selected member.

Hybrid Analysis gives the spreadsheet user the ability to drill down from multidimensional members to relationally-stored members. In Smart View, when you connect an Essbase data source, you can drill down to relationally-stored members if they are present in the Essbase database. Drilling down on Hybrid Analysis members is enabled by default. For more information on Hybrid Analysis, see [“Accessing Data from a Hybrid Analysis Relational Source” on page 92](#).

- To zoom in on dimension members, take one of the following actions:
  - Double-click on a cell.
  - Select a worksheet cell for which you want to zoom in, then select **Hyperion > Ad Hoc Analysis > Zoom In**. For Office 2007, click **Zoom In** in the **Ad Hoc Analysis** section of the **Hyperion** ribbon.

## Zooming Out on Dimension Members

You can drill up to higher levels of data in the grid by collapsing, or zooming out to, dimensions. For example, if you previously drilled down on a dimension such as Period to view data for

October, November, and December in Quarter 2, you might need to drill up to view aggregate data for the period. When you zoom out from December, the Period dimension is collapsed for October, November, and December and replaced with Quarter2.

- To zoom out on dimension members:
  - 1 Select a worksheet cell for which you want to zoom out.
  - 2 Select **Hyperion > Ad Hoc Analysis > Zoom Out**. For Office 2007, click **Zoom Out** in the **Ad Hoc Analysis** section of the **Hyperion** ribbon.

## Retrieving Attribute Dimensions and Members

You retrieve attribute dimensions or members by first performing an ad hoc query, then typing their names directly on the worksheet. The base dimension must already exist on the worksheet before you type the attribute name in the sheet.

For information on retrieving attributes in free-form grids, see:

- [“Working with Attribute Dimensions” on page 104](#)
- [“Valid Grid with POV Region and Attribute” on page 117](#)
- [“Retrieving Attribute Dimensions in Free-Form Mode” on page 120](#)

- To retrieve an attribute member by typing its name:
  - 1 Perform an ad hoc query to place the base member on the worksheet.
  - 2 Type the attribute name over the base dimension name in the worksheet.  
The attribute member name replaces the base dimension name.
  - 3 Refresh the worksheet.
  - 4 Zoom in on the attribute member name.
  - 5 **Optional:** Perform other ad hoc query operations, such as pivoting or adding other dimensions to the sheet.

For example, to retrieve the Pkg Type attribute from the Essbase Sample Basic application and database, perform the following steps:

- a. Connect to Sample Basic in a blank worksheet and refresh the sheet.
- b. Drag the Product dimension from the POV and drop it on the Year dimension. Or, in the POV, select **Options > Pivot to Row > Product**.
- c. In the worksheet, in the cell that contains the Product dimension type `Pkg Type` over the word `Product`.
- d. Double-click `Pkg Type` to view measures by can or bottle package type.

## Viewing the Qualified Name of a Member

As you perform ad hoc queries in the grid, you can view the *qualified* name for a member.

When you view the qualified name of the member, you are able to view the member name and the names of its parents up to the level in the dimension that uniquely defines the member. This can be helpful when querying on a grid that contains aliases or duplicate member names.

The qualified member name is displayed in a pop-up dialog box in the following format:

[Dimension] . [Member]

The number of members displayed in the qualified name depends on the number of member levels necessary to provide the qualified name of the member.

► To view the qualified name of a member in the grid:

- 1 Select a member in the grid.
- 2 Select **Hyperion > Ad Hoc Analysis > View Qualified Member Name**.

A dialog box containing the qualified member name is displayed.

- 3 Click **OK**.
- 4 **Optional:** To view the qualified name of another member, repeat the procedure.

**Note:**

If you want to view qualified member names in the worksheet, select the “Description Only” option in the Display tab of the Options dialog box. See [“Specifying Data Display Options” on page 207](#) for instructions on setting this option.

## Displaying Aliases for Member Names

**Note:**

This option is not available when working with Hyperion Enterprise data sources.

Aliases are alternate names for database members. You can perform ad hoc retrievals using the database member name, which is often a stock number or a product code, or an alias, which can be more descriptive. Each database to which you connect can contain up to 10 alias tables.

For example, members of the Product dimension in the Essbase Sample Basic database are defined as codes, such as 100 and 200. A descriptive value for each member of Product, such as Colas and Root Beer, is defined in an alias table. In some cases, alias names may vary depending on the combination of other database members. For example, a Product member may have an alias in multiple languages for worldwide users.

**Note:**

Using the Change Alias Table command may result in the loss of cell comments and formulas that you added to the worksheet, and formatting that you preserved using the Capture Formatting command.

➤ To display aliases for member names:

- 1 In the **Options** dialog box, **Display** tab, verify that in the **Member Name Display Options** group, either **Member Name and Description** or **Description Only** has been selected.

The “Member Name and Description” option or the “Description Only” option must be selected in order for alias names to display in the ad hoc grid. See [“Display Options” on page 206](#) for information on setting the Member Name Display Options.

- 2 Perform one of the following options:

- Select **Hyperion > Connection Manager**. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

If you are using Essbase, you can select or change an alias table for a data provider connection in the Connection Manager. New data sources and new worksheets associated with this connection use the specified alias table. New worksheets that contain a previously existing grid, however, continue to use the previous alias table. Copy/ pasted data points are not affected by changes to the alias table. When an alias table is modified in the Connection Manager, the background POV is updated with the new aliases.

Changing the alias table in the Connection Manager causes functions that are dependent on the connection to fail.

- Select **Hyperion > Ad Hoc Analysis > Change Alias Tables**. Use this option to change alias tables for existing grids.

- 3 In the **Connection Manager**, right-click the active provider and select **Change Alias Table**.

- 4 In the **Select Alias Table** dialog box, select the alias table that contains the member names that you want to use, and click **OK**.

- 5 Refresh the grid to display the alias names from the table you have chosen.

Use any of the methods described in [“Refreshing the Grid” on page 88](#).

## Accessing Data from a Hybrid Analysis Relational Source

Because relational databases can store several terabytes of data, they offer nearly unlimited scalability. Essbase multidimensional databases are generally smaller than relational databases but offer sophisticated analytical capabilities. With Hybrid Analysis, you can integrate a relational database with an Essbase database and thereby leverage the scalability of the relational database with the conceptual power of the multidimensional database.

Hybrid Analysis eliminates the need to load and store lower-level members and their data within the Essbase database. This feature gives Essbase the ability to operate with almost no limitation on outline sizes and provides for rapid transfer of data between Essbase databases and relational databases.

In Smart View, you do not need to set a specific option order to retrieve data that is stored in the Hybrid Analysis relational source. This functionality is enabled automatically. Perform zoom in operations as described in [“Zooming In on Dimension Members” on page 89](#).

## Pivoting Dimensions

Pivoting changes the orientation of the data on the worksheet. You can move dimensions between rows and columns and move dimensions in and out of the grid. When you move between rows and columns, the system moves the selected dimension to the outermost row or column on the opposite axis. For example, when you select Pivot to Row, the system moves the dimension to the far left side of the grid, and when you select Pivot to Column, the system moves the dimension to the top of the grid. You can also select to pivot a dimension out of the ad hoc grid to the Point of View.

Before you remove a dimension from a grid, you must first pivot the replacement dimension into the grid.

### Note:

When the “Use Excel Formatting” option is selected (as described in [“Using Excel Formatting” on page 209](#)), member and numeric formats may unexpectedly change after pivot operations. For example, member names may be centered and numeric values may be left justified. You can reset the grid to the proper format using the formatting options of Excel.

- To pivot data, do one of the following tasks:
  - To move a dimension to the outermost row or column, click on a dimension, then select **Hyperion > Ad Hoc Analysis > Pivot**. For Office 2007, click **Pivot** in the **Ad Hoc Analysis** section of the **Hyperion** ribbon.
  - To pivot a dimension to the Point of View, select the dimension, then from the Point of View toolbar, select **Options > Pivot to POV**.
  - To pivot a dimension to a row, from the Point of View toolbar, select **Options > Pivot to Row**, then select a dimension.
  - To pivot a dimension to a column, from the Point of View toolbar, select **Options > Pivot to Column**, then select a dimension.

### Note:

In Financial Management, you can pivot only from rows or columns with multiple dimensions. If you need to pivot a grid with one row dimension and one column dimension, first move a POV dimension to a row or column, pivot, then move POV dimension back.

### Note:

In Hyperion Enterprise, the Pivot to POV, Pivot to Row, and Pivot to Column options are not available.

## Keeping Data

You can modify the ad hoc grid by selecting only the dimension members that you want to keep in the grid. When you select the Keep Only option, the system keeps only the selected member (the active cell) or member range within the grid. All unselected members are removed from the worksheet for that dimension.

The options that you select for member retention also affect the behavior of the Keep Only option. For more information, see [“Member Retention Options” on page 205](#).

- To keep data in the grid:
  - 1 Select the member or members that you want to keep.
  - 2 Select **Hyperion > Ad Hoc Analysis > Keep Only**. For Office 2007, click **Keep Only** in the **Ad Hoc Analysis** section of the **Hyperion** ribbon.

## Removing Data

You can modify the ad hoc grid by removing dimension members from the grid. When you select Remove Only, the system removes the selected member (the active cell) and data or member range and data from the worksheet for that dimension. All unselected members are retained in the worksheet.

The options that you select for member retention also affect the behavior of the Keep Only option. For more information, see [“Member Retention Options” on page 205](#).

### Note:

If you delete members from a grid using the Delete key (not using the Remove Only command), you must also delete the corresponding data points; otherwise, when you refresh the grid, the remaining cells are treated as comments.

- To remove data from the grid:
  - 1 Select the member or members that you want to remove.
  - 2 Select **Hyperion > Ad Hoc Analysis > Remove Only**. For Office 2007, click **Remove Only** in the **Ad Hoc Analysis** section of the **Hyperion** ribbon.

## Adding Cell Text

### Note:

This option is not available when working with Hyperion Enterprise data sources.

You can add a text description for any cell. For example, you might want to add an explanation of the cell's data. After you have added cell text, you can also make any necessary changes to the text.

► To add cell text:

- 1 **Select the cell or cells for which you want to add text.**
- 2 **Select *Hyperion > Cell Text*.** For Office 2007, click **Cell Text** in the **Task** section of the **Hyperion** ribbon.

The Point of View is displayed for the cell that you selected.

- 3 **In the *Cell Text* window, enter the text that you want to add.**

You can add up to 2,000 characters of cell text for each cell. If you selected a range of cells, you can enter cell text in a separate text box for each cell.

- 4 **Click *OK*.**

Cells that contain text are indicated by dark blue borders.

## Viewing Cell Text

### Note:

This option is not available when working with Hyperion Enterprise data sources.

If a worksheet cell contains cell text, you can view it from an ad hoc grid. Cells that contain text are indicated by dark blue borders.

► To view cell text:

- 1 **Select the cell for which you want to view cell text.**
- 2 **Select *Hyperion > Ad Hoc Analysis > Cell Text*.** For Office 2007, click **Cell Text** in the **Task** section of the **Hyperion** ribbon.

The Point of View is displayed for the cell that you selected.

- 3 **View the cell text, then click *OK* to close the dialog box.**

## Calculating Data

When you are using an ad hoc grid, you can select several options to calculate data. You can calculate data, force a calculation to run for selected cells, calculate contribution values, or force calculation to run for selected contribution values.

To calculate data, you must have security access rights to the data. If the calculation option is not available for the cell, the system ignores that cell.

All options described in this topic are available to *Financial Management* users. For more information on calculating data from a Financial Management data source, see the *Hyperion Financial Management – System 9 User’s Guide*.

**Note:**

If you are connected to an Essbase data source, only the Calculate option is available. Choosing this option invokes the Calculation Scripts dialog box, where you may select the calculation script that you want to run. See “[Selecting a Calculation Script](#)” on page 96 for more information.

**Note:**

If you are connected to Hyperion Enterprise data source, only the Calculate option is available. For Hyperion Enterprise data sources, refresh the data forms after calculating data to update the calculated accounts.

- To calculate data:
  - 1 Select a cell or range of cells for which you want to calculate data.
  - 2 Select **Hyperion > Calculation Options**, then select one of the following options:
    - To calculate the selected cells, select **Calculate**.

**Note:**

If you are connected to an Essbase data source, you are prompted to select a calculation script to run, as described in “[Selecting a Calculation Script](#)” on page 96.

- To force calculation to run for all selected cells, select **Force Calculate**.
- To calculate contribution values, select **Calculate Contribution**.
- To force calculation to run for all selected contribution values, select **Force Calculate Contribution**.

## Selecting a Calculation Script

If you are connected to an Essbase data source, you can choose a calculation script with which to calculate an Essbase database.

- To calculate the database with a calculation script:
  - 1 Select **Hyperion > Calculation Options > Calculate** to display the **Calculation Scripts** dialog box.

The Cube area displays the databases that belong to this application. The calculation scripts associated with each cube are listed in the lower portion of the dialog box.



**Tip:**

To view a subset of scripts, clear all check boxes in the Cube area of the dialog box and then select the cube with which you are working to list only the scripts available for that cube in the lower portion of the dialog box.

**2 Click on a calculation script name and click Launch.**

A status message is displayed telling you whether the calculation was successful or not. If the calculation was not successful, contact your Essbase administrator.

## Inserting Calculating and Non-Calculating Rows and Columns

When you work with an ad hoc grid, columns and rows you add are retained when you perform a Refresh or a zoom-in operation.

Keep the following guidelines in mind when inserting calculating and non-calculating columns and rows:

- Rows or columns may be inserted within the grid or outside of the grid.
- An inserted row or column may contain a formula.
- An inserted row or column may contain text or an Excel comment.

## Translating Data

**Note:**

This option is not available when working with Hyperion Enterprise data sources.

When you are using an ad hoc grid, you can translate data for cells. You can translate selected data, or force translation to run for selected cells.

To translate data, you must have security access rights to the data. If the translation option is not available for the cell, the system ignores that cell.

For more information on translating data, see the *Hyperion Financial Management – System 9 User’s Guide*.

► To translate data:

- 1 Select a cell or range of cells for which you want to translate data.**
- 2 Select **Hyperion > Calculation Options**, then select one of the following options:**
  - To translate the selected cells, select **Translate**.
  - To force translation to run for all selected cells, select **Force Translate**.

## Consolidating Data

When you are using an ad hoc grid, you can consolidate data for cells. You can consolidate selected data, consolidate all data, or consolidate all cells that contain data.

To consolidate data, you must have security access rights to the data and you must be assigned the Consolidate security role. To Consolidate All data, you must be assigned the Consolidate All security role.

If the consolidation option is not available for the cell, the system ignores that cell.

For more information on consolidating Financial Management data, see the *Hyperion Financial Management – System 9 User’s Guide*.

► To consolidate data:

- 1 Select a cell or range of cells for which you want to run consolidation.
- 2 Select **Hyperion > Calculation Options**, then select one of the following options:
  - To consolidate data for the selected cells, select **Consolidate**.
  - To consolidate data for all cells, regardless of whether they contain data, select **Consolidate All**.
  - To consolidate data for all cells that contain data, select **Consolidate All With Data**.

## Submitting Data

After you calculate, translate, or consolidate data on an ad hoc grid, you can submit data from the grid to the data source to ensure that the data source uses the latest information from the worksheet. See “[Submitting Data](#)” on page 52.

To submit data to the data source, select **Hyperion > Submit Data**. For Office 2007, click **Submit** in the **Review** section of the **Hyperion** ribbon.

### Note:

When the grid layout is changed (such as by inserting a column or row) or when the area outside of the data region is changed, the Submit Data option will be disabled. Select **Hyperion > Refresh** to refresh the grid so that the data region can be established by Smart View, then the Submit Data option will be enabled and data can be changed and submitted.

## Working with Formulas in Ad Hoc Grids

When working with ad hoc grids, you can create Excel formulas to manipulate or analyze the data.

You can create formulas:

- Inside or outside the ad hoc grid

- On cells that have cell text or are locked

You cannot create formulas:

- On read-only cells
- On cells that have supporting detail (applies only when working with Planning data forms)

Formulas are preserved even when you:

- Refresh the ad hoc grid
- Zoom in or zoom out (referential formulas are updated with their new relative positions)

**Note:**

After performing a Zoom In or Zoom Out operation, the location of the formula is calculated based on the first occurrence of a member on any row or column. If member names are repeated, then zooming in or zooming out on the grid may cause the formula location to be wrongly calculated. Hyperion recommends that you avoid use of Zoom In and Zoom Out operations when working with grids containing repeated members and formulas referring to them.

- Use the Keep Only or Remove Only functions
- Add comments

Formulas are not preserved if you change the grid by:

- Pivoting data (for example, by selecting Pivot to POV or Pivot to Column)
- Clearing the grid
- Retrieving data without saving the formulas
- Using the Change Alias Table command

## Working with Drill-Through Reports

**Note:**

This option is not available when working with Hyperion Enterprise data sources.

Drill-through is a tool that enables you to drill from the summarized and calculated data stored in Essbase into detail data stored in a relational database. For example, if you are analyzing retail sales for the first quarter in the Eastern region, you can request a drill-through report to see a list of customers who purchase a particular product in a particular size. From Smart View, you can access a predefined, detail-level drill-through report that is based on the member intersections of Essbase data cells in the sheet. Oracle's Essbase® Integration Services then retrieves the detail data from the relational source and returns the report in the context of the data already displayed in the sheet.

➤ To access a drill-through report:

- 1 In the **Connection Manager**, connect to the data source from which you will be accessing drill-through reports.

If you do not know which data source to access, contact your system administrator. See [“Connecting to a Data Source” on page 37](#) for information on connecting.

- 2 **Optional:** To aid in recognizing the cells to which a drill-through report is attached, set a style for drill-through cells using the procedure described in [“Setting Cell Styles” on page 211](#).
- 3 Navigate in the sheet and locate one or more drill-through cells.
- 4 Select a single cell or a continuous range of cells from the same parent in the sheet to display all drill-through reports associated with the cell you select.

Note that in order for Integration Server to return a valid drill-through report when multiple cells are selected, all members selected for multi-cell drill-through must come from:

- The same physical table and column in the relational source database
- The same member level in the underlying OLAP metaoutline
- The same hierarchy

A multi-cell drill-through operation is valid only if all three criteria noted above are met. A message is displayed if the combination of cells you select is not valid for performing a multi-cell drill-through operation.

- 5 Select **Hyperion > Ad Hoc Analysis > Drill-Through Reports**.

The Drill-Through Reports dialog box is displayed.

- 6 Choose a report from the list and click **Launch**.

Essbase launches drill-through, generates the report, and displays the results in a new worksheet within the current workbook. The new sheet is after the existing sheets in the workbook.

- 7 View the drill-through report.

- 8 **Optional:** If more than one drill-through report was associated with the selected cell or cells, repeat [step 4](#) through [step 7](#) to select and view another drill-through report.

# 8

## Using Free-Form Reporting to Retrieve Data

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## About Free-Form Reporting

In addition to Ad Hoc retrieval and Member Selection operations, Smart View supports *free-form reporting*.

Free-form reporting enables you to tell the connected data source specifically what you want to retrieve by typing member names into the worksheet. This free-form mode of reporting is especially useful when you are familiar with the dimensions and members in the database outline.

When you construct a report by entering names directly into a worksheet, Smart View queries the connected data source, interprets the member names entered, and creates a default view that is based on the location of the labels.

Free-form mode also provides most of the retrieval capabilities types of retrieval capabilities, enabling you to incorporate into the sheet many of the Ad Hoc retrieval techniques described in this chapter, such as zoom in and zoom out, pivot, and member selection.

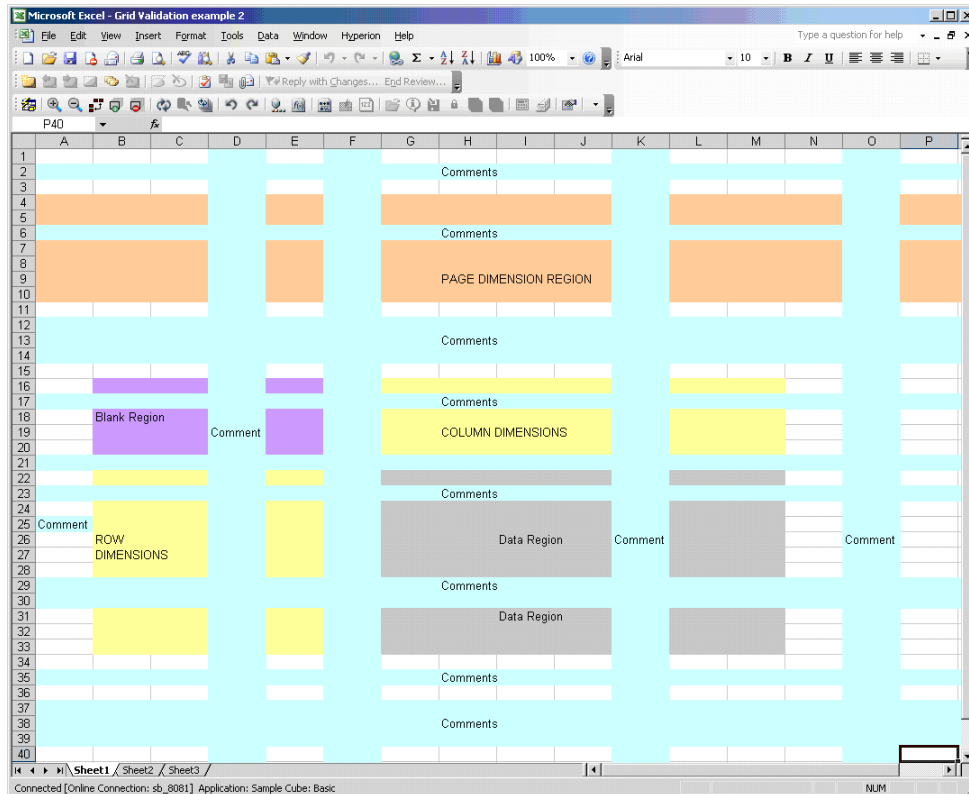
With free-form, you can:

- Type dimension or member names directly into the grid
- Expand what you type using the POV and Member Selection
- Format member and data cells
- Create a template that can be shared with other users

- Use VBA functions to customize and automate worksheets

## Smart View Grid Components

The graphic in this section shows the Smart View grid components. In the example Smart View grid, the Row dimensions are to the left and to the bottom of the Column dimensions. The Page dimensions can occur anywhere in the rows above the Column dimensions (applies to Essbase only).



The components of the Smart View grid are described in [Table 5](#).

**Table 5** Smart View Grid Components

Grid Component	Color in Example Grid	Description
Row Dimension	Yellow	A dimension or dimension members that are placed down one column across one or more rows on a worksheet
Column Dimension	Yellow	A dimension or dimension members that are placed on a row across one or multiple columns in a worksheet
Page Dimension	Orange	A dimension or dimension member that is placed in the area above the column dimensions in a worksheet (Essbase only)
Comments	Light Blue	Descriptive text added by the user into the worksheet
Data Region	Gray	After a grid operation such as a Refresh, Zoom In, or Zoom Out—the area where the row, column, and page data is placed

Grid Component	Color in Example Grid	Description
Blank Region	Purple	Areas of the worksheet that are not yet affected by any grid operations

See [“Free-Form Guidelines” on page 103](#) for some general rules for free-form and descriptions of valid and invalid free-form grid layouts.

See [“Answering Business Questions Using Free-Form” on page 122](#) for an example scenario that incorporates many aspects of free-form reporting.

## Free-Form Guidelines

Keep in mind the following guidelines when you are working in free-form mode:

- When typing member names that consist of numbers into a blank worksheet, precede the member name with a single quotation mark. For example, when accessing the Essbase Sample Basic database, type '100 in the worksheet for Product dimension member 100.
- Hyperion recommends using Member Selection, as described in [“Selecting Members for Ad Hoc Analysis” on page 81](#), to input member names into a free-form worksheet. Manually typing member names is permitted, but can be error prone.
- Member strings that are admissible in free-form mode are member names and their aliases from the current alias table. Aliases from a noncurrent alias table that are input into a free-form sheet are identified and processed as comment strings.
- When connected to an Essbase or Hyperion Enterprise data source, if you cut and paste from certain sources, such as Microsoft Word, into an Excel worksheet, some of the strings you paste into the grid may be prefixed by hidden characters (control characters). The hidden characters may result in ad hoc or free-form behavior that is misleading or error messages that are not obvious. In such cases, contact your Smart View administrator, who can identify the issue through logs.
- When connected to a duplicate member Essbase data source, be sure to select the Description Only option in the Display tab of the Options dialog box, as described in [“Specifying Data Display Options” on page 207](#). Smart View then displays qualified member names in the worksheet.
- When creating or editing a sheet that is connected to a duplicate member Essbase data source, you must use qualified member names for the duplicate members in the sheet.

The following topics contain particular information on working with free-form grids:

- [“Working with Attribute Dimensions” on page 104](#)
- [“Entering Dynamic Time Series Members” on page 104](#)
- [“Submitting Dirty Cells” on page 105](#)
- [“Comment Handling” on page 105](#)
- [“Preserving Comments, Formulas, and Format” on page 106](#)
- [“Handling the #Missing and the #No Access Label” on page 106](#)

For more information about the kinds of grids you can and cannot create with free-form reporting, and on Smart View handling of free-form, see [“Valid and Invalid Grids” on page 107](#).

## Working with Attribute Dimensions

In structured grid processing operations, attribute dimensions are not shown. In free-form, you can type an attribute dimension member in the grid and it will be processed and validated. Only the attribute dimension member that you added will be displayed and used during processing and validation; the remaining attribute dimension members will not be included. Structured grid operations that follow this free-form request will retain the attribute dimension member.

### Note:

Attribute dimension members are not supported for Hyperion Enterprise.

## Entering Dynamic Time Series Members

Smart View supports Dynamic Time Series members typed directly into free-form grids. This section contains some (not all) examples of supported and unsupported formats.

For a complete list of Dynamic Time Series members, see [“Working with Dynamic Time Series Members” on page 86](#).

### Note:

Dynamic time series members are not supported for Hyperion Enterprise.

## Supported Format Examples

When entering dynamic time series members into a free-form grid, some examples of supported formats are:

- Q-T-D(Jan)
- QTD(Jan)
- Y-T-D(Mar)
- YTD(Mar)
- M-T-D(Jun)
- MTD(Jun)

## Unsupported Format Examples

When entering dynamic time series members into a free-form grid, some examples of unsupported formats are:

- Q-T-Date(Jan)



- QDate(Jan)
- Y-T-Date(Mar)
- YDate(Mar)
- M-T-Date(Jun)
- MDate(Jun)

## Submitting Dirty Cells

If you modify a data cell in a Smart View grid, Smart View marks the cell “dirty.” During a Submit Data operation, dirty cells are updated in the data source.

For Hyperion Enterprise, the default color of dirty cells is yellow.

The Submit Data command is enabled only when you perform either of the following tasks:

- Type over a data cell.
- Select a range of cells and use one of the options in the Adjust Data dialog box to change a data value, as described in [“Adjusting and Spreading Data Values” on page 57](#).

The Submit Data command is disabled in free-form mode when you type over non-data.

In free-form mode, if you want to change and submit new data, refresh the worksheet as described in [“Refreshing the Grid” on page 88](#); make your changes to the data cell; and then use the Hyperion > Submit command to update the changed, or dirty, cells in the data source.

### Note:

When the grid layout is changed (such as by inserting a column or row) or when the area outside of the data region is changed, the Submit Data option will be disabled (except Hyperion Enterprise). Select Hyperion > Refresh to refresh the grid so that the data region can be established by Smart View, then the Submit Data option will be enabled and data can be changed and submitted.

### Note:

In Hyperion Enterprise, when you try to submit data after changing the grid layout, you will be prompted to refresh the grid.

See [“Submitting Data” on page 98](#) for information on the Submit command.

## Comment Handling

Comments can be placed in various places in the grid. In the example in [“Smart View Grid Components” on page 102](#), you can see comments marked in light blue color.

Comments can be placed as follows:

- Between Row dimensions
- Between Column dimensions
- Between Page dimensions
- Between dimensions and data
- To the left, right, top, bottom of the grid
- Inside the grid range
- Interleaved with members of Page dimensions
- Comment rows and Comment columns can be interleaved with row and columns dimension member
- Interleaved with members of Row, Column and Page dimensions

Comments can be placed anywhere in the grid with the exceptions described in the section, [“Valid and Invalid Grids” on page 107.](#)

## Preserving Comments, Formulas, and Format

Smart View tries to preserve all comments, formulas, and customized report layouts. Some exceptions that may result in unexpected behavior are when the following actions are performed:

- Zoom in on a Page dimension
- Pivot a dimension from the POV to a row or column
- Drag and drop a dimension from the POV to the worksheet
- Pivot a Row dimension to a Column dimension
- Switch the location of a Row dimension to another row
- Switch the location of a Column dimension to another column
- Change member aliases using the Change Alias Table command

## Handling the #Missing and the #No Access Label

Smart View correctly identifies the #Missing label and the #No Access label as data and not as comments. You can set this label in the Display tab of the Options dialog box, using any string you choose, including a blank. In the free-form request, Smart View sends the label string to the data source. If the label is found in member intersection cells in the data region, the cell is correctly identified as data and not as a comment. If this string in a member intersection cell in the data region is anything but the label, Smart View determines the grid to be invalid.

### Note:

You can choose to have Smart View display numeric zeroes instead of #Missing or other text. See [“Replacement Labels for Data” on page 206.](#)

## Valid and Invalid Grids

The following sections contain samples of valid and invalid grid layouts. Use these samples as guidelines when building your own free-form grids. The sample free-form grids pertaining to page dimensions and dynamic time series members are not applicable for Hyperion Enterprise.

For Hyperion Enterprise data sources, you cannot type dimension names in the free-form grids. You can type only member names.

### Valid Simple Grid

Figure 1 is a valid simple grid, where Year is the Row dimension, Measures is the Column dimension and Product is the Page dimension. Figure 2 on page 107 is a valid simple grid specific for Hyperion Enterprise.

Figure 1

	A	B	C	D	E
1				Product	
2		Profit	Inventory	Ratios	Measures
3	Qtr1				
4	Qtr2				
5	Qtr3				
6	Qtr4				
7	Year				

Figure 2

	A	B	C	D
1		ORG1	ORG2	ORG3
2	Q1 08			
3	Q2 08			
4	Q3 08			
5	Q4 08			

### Valid Grid that Starts in Cell Other Than Cell A1

In Smart View, a valid simple free-form grid does not necessarily have to start in cell A1 on the sheet. Figure 3 is also a valid free-form grid. Dimension or member names are simply typed on the grid prior to retrieval.

Figure 3 Valid Grid with Different Start Location

	A	B	C
1			
2			Measures
3		Year	

## Invalid Grid with Dimension in Both Row and Column Dimensions

Members of a dimension can only be typed in one of the following regions:

- In the same row
- In the same column
- Anywhere in the Page dimension region

Figure 4 is invalid because, with Qtr1 typed in cell F2, the Year dimension occurs in both a Row and a Column dimension.

Figure 4

	A	B	C	D	E	F
1			Product			
2		Profit	Inventory	Ratios	Measures	Qtr1
3	Year					

## Invalid Grid with Dimension in Both Row and Page Dimensions

Figure 5 is invalid because the Year dimension occurs in both a Row and a Page dimension.

Figure 5

	A	B	C	D	E
1			Product		Qtr1
2		Profit	Inventory	Ratios	Measures
3	Year				

## Valid Grid with Different Dimensions in Page Dimension Region

The Page dimension region can contain members of different dimensions. In Figure 6, the Product, Market (member East), Scenario are all Page dimensions.

Figure 6

	A	B	C	D	E
1			Product	East	Scenario
2		Profit	Inventory	Ratios	Measures
3	Year				

## Invalid Grid with Two Members from Same Dimension in Page Dimension Region

No two members in the Page dimension region can belong to the same dimension. In [Figure 7](#), dimension Market (Market and member East) occurs twice as a Page dimension and the grid is invalid.

Figure 7

	A	B	C	D	E
1				East	
2			Market		
3		Profit	Inventory	Ratios	Measures
4	Year				

## Invalid Grid Where Column Dimension Contains Its Members and a Different Dimension

Every Row and Column dimension can only have members from the same dimension in their rows and columns respectively. [Figure 8](#) is an invalid grid because the Column dimension, Measures, also contains its members in addition to a different dimension, Market. [Figure 9](#) is specific for Hyperion Enterprise. [Figure 9](#) is an invalid grid because the Column dimension (Account), also contains its members in addition to a member from a different dimension (Entity). Smart View interprets the additional Entity dimension (US) as a comment.

Figure 8

	A	B	C	D	E	F
1			Product			
2		Profit	Inventory	Ratios	Measures	Market
3	Year					

Figure 9

	A	B	C	D
1		ORG1	ORG2	US
2	JAN 07			
3	FEB 07			

## Valid Grid Where Smart View Interprets Column Dimensions as Page Dimensions

A valid free-form grid must have at least one row and at least one column dimension. However, [Figure 10](#) is an example of a special case. At first glance, it may seem like [Figure 10](#) does not have any Column dimensions and that Measures, Product and Market are all Page dimensions based

on the rules stated in the preceding grids. Yet, Smart View validates this grid and interprets it as Row dimension Year, Column dimension Measures, and Page dimension Product and Market.

Where there are no obvious Column dimensions, only one member in only one Row dimension, and multiple members all of different dimensions on the same row and to the top and to the right of the single Row dimension, Smart View interprets the first dimension to be a Column dimension and the dimensions to the right of it as Page dimensions.

Figure 10

	A	B	C	D
1		Measures	Product	Market
2	Year			

### Invalid Grid with Multiple Members on Same Row With Another Dimension

The grid shown in Figure 11 is invalid because it has both Market and East, both belonging to the same dimension, on the first row along with another dimension, Measures.

Figure 11

	A	B	C	D
1		Measures	Market	East
2	Year			

### Invalid Grid Where Smart View Interprets Stacked Dimensions

The first row that has multiple members, all of the same dimension, is identified as a Column dimension. All the dimensions that are placed above this row are candidates for Page dimension, if they comply with the rules for Page dimension. There is an exception to this rule, as shown in Figure 12. According to the rules described to this point, you might expect Product and Market to be interpreted as Page dimensions. However, Smart View interprets Product and Market as Column dimensions, making this grid invalid.

Figure 12

	A	B	C	D	E
1		Market			
2		Product			
3		Profit	Inventory	Ratios	Measures
4	Year				

The Smart View logic is that if you identify the first Column dimension on row R, and let C be the first column on this row R that contains a member, for each subsequent row above row R, if there is a member on the same column C and that row does not contain any other members, then that row is identified as a Column dimension. Each such row that contains a member that

is “stacked” on top of column C is a Column dimension. A row that does not obey this condition is a candidate for a Page dimension as long as it complies with the rules for Page dimensions.

### Valid Grid Where Stacked Dimensions Are Interpreted as Page Dimensions

Rows above a page dimension can only be candidates for a Page dimension and cannot be a Column dimension even if they obey the condition for “stackable” members. In [Figure 13](#), Product is a Column dimension since it stacked on top of Profit; Market is a Page dimension since it is not stacked on top of Profit. However, Scenario is a Page dimension, even though it is stacked on top of Profit, because it is a row that is above a Page dimension; hence, it cannot be a Column dimension.

Figure 13

	A	B	C	D	E
1		Scenario			
2			Market		
3		Product			
4		Profit	Inventory	Ratios	Measures
5	Year				

### Zooming In On a Page Dimension

If you zoom in on a Page dimension, the result is that the Page dimension is moved to a Row dimension through a POV to Grid operation.

Figure 14

	A	B	C	D	E
1			Product		
2		Profit	Inventory	Ratios	Measures
3	Year	105522	117405	55.26163	105522

### Results of Zoom In

For example, if you zoom in on Market in [Figure 14](#), it will result in [Figure 15](#).

Figure 15

	A	B	C	D	E	F
1			Profit	Inventory	Ratios	Measures
2	Product	Year	105522	117405	55.26163	105522

## Valid Grid Where Member Overrides Dimension in the Page Dimension Region

If you type a dimension or member name into the Page dimension region, this Page dimension overrides any default or existing POV. For example, in [Figure 16](#), where the user types East into an existing grid which has Product, Market, and Scenario as the POV, then East overrides Market in the POV.

Figure 16

	A	B	C	D	E
1				East	
2		Profit	Inventory	Ratios	Measures
3	Year				

## Invalid Grid Where Data Region Cells Cannot Be Comments

Member intersection cells in the Data region must be data cells and cannot contain comments. [Figure 17](#) is invalid.

Figure 17

	A	B
1		Measures
2	Year	Comment

## Invalid Grid Where Blank Region Cells Cannot Be Comments

Member intersection cells in the Blank region must be blank and cannot contain comments. [Figure 18](#) is invalid.

Figure 18

	A	B
1	Comment	Measures
2	Year	105522

## Invalid Row and Column Dimensions and First Members

The first members of every column dimension must occur on the same column, and the first members of every row dimension must occur on the same row. [Figure 19](#) is invalid because cell B2 is on the first column of the column dimensions and it has to be a member of the Measures dimension, whereas it is a comment.



Figure 19

	A	B	C	D
1		100-10	100-30	100
2		Comment	Measures	Measure
3	Year			

### Invalid Grid that Contains Comment Row and Comment Column in Dimension Region

Row and column dimension regions can be interleaved with comment rows and comment columns. [Figure 20](#) below is invalid because the comment in cell C2 does not belong to either a comment row or a comment column. (Both row 2 and column C have dimension members.)

Figure 20

	A	B	C	D
1		100-10	100-30	100
2		Measures	Comment	Measures
3	Year			

### Valid Grid Containing Dynamic Time Series Member

Dynamic Time Series (DTS) members can be placed on the free-form grid using Member Selection. Additionally, you can also manually type a DTS member name into a grid. [Figure 21](#) is a valid free-form grid and the member name Q-T-D(Jan) can be manually typed into the grid.

Figure 21

	A	B
1		Measures
2	Year	
3	Qtr1	
4	Q-T-D(Jan)	

**Note:**

DTS member formats such as Q-T-D(Jan), QTD (Jan), YTD(Mar), Y-T-D(Mar), MTD (Jun), and M-T-D(Jun) are supported. Formats such as QTDdate(Jan) are not supported.

### Valid Grid with Duplicate Member Names

In free-form mode, when editing a sheet that is connected to a duplicate member Essbase data source, you must use the qualified member names for the duplicate members in the sheet. [Figure 22](#) shows the syntax to use when typing in duplicate member names.

Figure 22

	A	B
1		New York
2	[Income].[Other]	
3	[Expenses].[Other]	

## Valid Grid That Contains Numeric Member Names

Member and dimension names cannot be comments.

If you want to type a numeric member name using free-form, tag the numeric name as a member by typing a single quote ( ' ) in front of the member name when you enter it in the Excel cell. For example, '100.

By typing the single quote, you differentiate between a numeric member name and a numeric comment or numeric data. In [Figure 23](#), 100 is interpreted as a member.

Figure 23

	A	B
1		Year
2	'100	

## Valid Grid With Numeric Comment and Numeric Data

Both numeric comment and numeric data are typed the same by the user. Smart View identifies if it is a numeric comment or numeric data depending on the region in which the number is placed. If it is in the data region, then Smart View identifies it as a data cell; otherwise, it is marked as a comment. In [Figure 24](#), 2005 is identified as data.

Figure 24

	A	B
1		Measures
2	Year	2005

## Valid Grid Where Numeric Data is Identified as a Comment

In [Figure 25](#), 2005 is identified as a comment since it is not in the data region, and the grid is identified to be valid.

Figure 25

	A	B	C
1		Report for Q3 in	
2		2005	
3			
4		Measures	
5	Year	105522	

### Valid Grid Consisting of Two Columns by Two Rows

Figure 26 is a basic two columns by two rows layout showing the Product and Market dimensions in the first row and column, and members of Sales and Year in the second row and column. Figure 26 is specific for Hyperion Enterprise. Figure 26 is a basic two columns by two rows layout showing the Scenario and Entity dimensions in the first row and column, and members of Account and Period dimensions in the second row and column.

Figure 26

	A	B	C	D	E	F
1			Product	Product	Product	Product
2			Profit	Inventory	Ratios	Measures
3	Market	Qtr1				
4	Market	Qtr2				
5	Market	Qtr3				
6	Market	Qtr4				
7	Market	Year				

Figure 27

	A	B	C	D	E	F
1			Actual	Budget	Daily	Fcst
2			GROUP1	GROUP3	GROUP2	GROUP4
3	[ORG].ORG1	Q1 08				
4	USDIV	Q2 08				
5	US100	Q3 08				
6	US100A	Q4 08				

### Valid Grid with Blank Row and Column Inserted

Figure 28 builds on Figure 26 by inserting a blank row and column to the top and left of the grid. These cells could be used for formatting purposes, such as adding a title to the worksheet. The title text would be considered a comment.

Figure 28

	A	B	C	D	E	F	G
1							
2				Product	Product	Product	Product
3				Profit	Inventory	Ratios	Measures
4		Market	Qtr1				
5		Market	Qtr2				
6							
7		Market	Qtr3				
8		Market	Qtr4				
9		Market	Year				

### Valid Grid with Comments Inserted in Blank Row and Column

Figure 29 provides an example of comment usage in Smart View. It is a valid grid with comments bordering the data/metadata region. In this case comments are listed in columns A and H, and in rows 1, 2, and 10. These comments are retained for retrieval and zoom operations. For a list of rules when using comments on a grid, see [“Comment Handling” on page 105](#).

Figure 29

	A	B	C	D	E	F	G	H
1			c1	d1				
2			c2	d2				
3				Product	Product	Product	Product	
4				Profit	Inventory	Ratios	Measures	
5	a5	Market	Qtr1					h5
6	a6	Market	Qtr2					h6
7		Market	Qtr3					
8		Market	Qtr4					
9		Market	Year					
10			c10	d10				

### Valid Grid with Formulas Inserted in Blank Row and Column

Figure 30 provides a valid example of Excel-based formula usage in the Smart View environment. Formulas are added to the edges of the grid. These are standard Excel formulas and resolve based on your personal Excel settings. Formulas can be added in any area in which a comment can exist. For a list of formula usage guidelines, see [“Working with Formulas in Ad Hoc Grids” on page 98](#) and [“Preserving Comments, Formulas, and Format” on page 106](#).

Figure 30

	A	B	C	D	E	F
1			Product	Product	Product	Product
2			Profit	Inventory	Ratios	Measures
3	Market	Qtr1				
4	Market	Qtr2				
5	Market	Qtr3				
6	Market	Qtr4				
7	Market	Year				
8			=SUM(C3:C6)			=SUM(F3:F6)

## Valid Grid with POV Region and Attribute

Figure 31 provides a valid example of both the page region and attribute usage. In this example, Pkg Type and Budget are understood (by Smart View) to be page dimensions. Additionally, Pkg Type is an attribute dimension attached to the base member product. By drilling down on Pkg Type you can do attribute based analysis on measures as it relates to specific Product attributes. This can be further used to create a cross-tab analysis of product SKUs by attribute. For a description of zoom behavior when working with the page area see the description on grid “[Zooming In on Dimension Members](#)” on page 89 and “[Zooming Out on Dimension Members](#)” on page 89.

Figure 31

	A	B	C	D	E	F
1	Pkg Type					
2	Budget					
3						
4			Product	Product	Product	Product
5			Profit	Inventory	Ratios	Measures
6	Market	Qtr1				
7	Market	Qtr2				
8	Market	Qtr3				
9	Market	Qtr4				
10	Market	Year				

## Valid Grid with Complex Comments

Figure 32 provides a valid, combined sample of using the Page region, attributes, and comments on a single grid.

Figure 32

	A	B	C	D	E	F	G	H
1	Pkg Type							
2	Budget							
3		B3	C3	D3				
4				Product	Product		Product	Product
5					E5	F5	G5	
6				Profit	Inventory		Ratios	Measures
7	Market		Qtr1					
8	Market		Qtr2					
9		B9			E9	F9	G9	
10	Market		Qtr3					
11	Market		Qtr4					
12	Market		Year					
13								
14				D14	E14	F14		

## Retrieving in Free-Form Mode

► To construct a free-form report:

- 1 Open a worksheet and connect to a data source as described in [“Connecting to a Data Source” on page 37](#).
- 2 In the worksheet, type in the member names for the report in the layout that you want to create.

For example, in a blank worksheet connected to the Sample Basic application and database in Essbase, to see the total product sales in New York, you may type `New York` in cell B1 and `Sales` in cell A2.

If a member name you entered is a duplicate, the Member Name Resolution dialog box is displayed. See [“Resolving Member Names in Free-Form Grids” on page 121](#) for information on using this dialog box.

### Note:

If a member name consists of a number, such as 100, you must precede the member name with a single quotation mark (for example, '100). This rule also applies to member names with spaces between words.

- 3 Refresh the grid using any of the methods described in [“Refreshing the Grid” on page 88](#).

Smart View retrieves data from the connected data source for the members you entered into the free-form report.

- 4 **Optional:** Perform further Ad Hoc operations on the worksheet.

For example, you may proceed by performing one or more of the following operations:

- Zoom in on dimensions and members, as described in [“Zooming In on Dimension Members” on page 89](#).

- Insert rows and add formulas to cells, as described in [“Working with Formulas in Ad Hoc Grids”](#) on page 98.
- Pivot dimensions from the POV to the worksheet, as described in [“Pivoting Dimensions”](#) on page 93.

See [“Answering Business Questions Using Free-Form”](#) on page 122 for an example free-form scenario.

## Resolving Dimension Names

When you select Hyperion > Member Selection in a blank grid, the Dimension Name Resolution dialog box is displayed, where you choose a dimension or members to place on the grid. This process is referred to as resolving dimensions because when you choose the Member Selection option on a blank sheet, the data source has no way of predicting which dimension or members, including attribute members, you want to see and choose from in the Member Selection dialog box.

When you choose dimensions and members using this method, be sure that the first cell you select on the sheet is the cell in which you want to begin your free-form layout.

### Note:

For Hyperion Enterprise data source, you cannot place dimensions on the grid.

➤ To resolve dimensions names in a grid:

**1** In a blank worksheet, select a cell.

For example, to build a grid that starts from the left column, select cell A2. To build a grid that starts on the first row, select cell B1.

**2** Select **Hyperion > Member Selection**. For Office 2007, click **Member Selection** in the **Task** section of the **Hyperion** ribbon.

**3** In the **Dimension Name Resolution** dialog box, select the dimension to place on the sheet.

For example, if you are connected to an Essbase data source, select the Product dimension.

**4** To orient members vertically in the worksheet starting from the cell you selected in [step 1](#), select the **Vertical Orientation** check box.

This check box is cleared by default; meaning that members will be oriented horizontally across the sheet from the cell you selected in [step 1](#).

**5** Click **OK** to launch the **Member Selection** dialog box.

**6** Select the members to place on the worksheet, as described in [“Selecting Members for Ad Hoc Analysis”](#) on page 81, and click **OK**.

**7** View the layout of the dimension or members you just placed on the sheet.

**8** Perform one of the following actions:

- If you placed members vertically on the grid:

- Repeat [step 1](#) through [step 7](#) to place a new set of members horizontally on the grid
  - Use the POV to pivot a dimension to a row
  - Type a dimension or member name (including attribute dimension or member names) directly on the grid
  - If you placed members horizontally on the grid:
    - Repeat [step 1](#) through [step 7](#) to place a new set of members vertically on the grid
    - Use the POV to pivot a dimension to a column
    - Type a dimension or member name (including attribute dimension or member names) directly on the grid
- 9 Refresh the grid using any of the methods described in [“Refreshing the Grid” on page 88](#).

## Retrieving Attribute Dimensions in Free-Form Mode

You retrieve attribute dimensions using a method similar to that described in [“Resolving Dimension Names” on page 119](#).

You can also retrieve an attribute member by typing the name directly in the worksheet, as described in [“Retrieving Attribute Dimensions and Members” on page 90](#). This method can be used when the base dimension already exists on the worksheet.

The method for retrieving attributes described in this section assumes you are starting with a blank worksheet.

### Note:

Hyperion Enterprise does not support Attribute dimensions.

➤ To retrieve an attribute dimension in free-form using Member Selection:

1 In a blank worksheet, select a cell.

For example, to build a grid from the left column, select cell A2. To build a grid that starts on the first row, select cell B1.

2 Select **Hyperion > Member Selection**. For Office 2007, click **Member Selection** in the **Task** section of the **Hyperion** ribbon.

3 In the **Dimension Name Resolution** dialog box, select the attribute dimension.

For example, if you are connected to an Essbase data source, to query by package type, select the Pkg Type attribute dimension.

4 To orient members vertically in the worksheet starting from the cell you selected in [step 1](#), select the **Vertical Orientation** check box.

This check box is cleared by default; meaning that members will be oriented horizontally across the sheet from the cell you selected in [step 1](#).

5 Click **OK** to launch the **Member Selection** dialog box.



- 6 Select the members to place on the worksheet, as described in [“Selecting Members for Ad Hoc Analysis” on page 81](#).

**Note:**

You can also add attribute dimensions and members to the sheet using the procedure in [“Retrieving Attribute Dimensions and Members” on page 90](#).

## Resolving Member Names in Free-Form Grids

When working in a free-form grid, Smart View may not be able to identify the dimension to which a member that you have typed belongs. For example, if you type the member name “Albany” on an empty worksheet, Smart View cannot know whether this signifies the member Albany whose parent is New York or California, or whether the member Albany comes from a market or a customer dimension. In this case, Smart View asks you to resolve the member by providing the dimension to which the member belongs.

When you type a member name that Smart View cannot resolve, the Member Name Resolution dialog box is displayed.

**Note:**

The Member Name Resolution dialog box only appears when you are connected to a Financial Management or Hyperion Enterprise data source. If you are connected to an Essbase data source, an error message is displayed. In this case, use Member Selection to choose member names, as described in [“Selecting Members for Ad Hoc Analysis” on page 81](#).

► To resolve a member name:

- 1 In the **Member Name Resolution** dialog box, select the dimension to which the member belongs from the drop-down list.

If a second unresolved member exists, a second drop-down list is displayed.

- 2 **Optional:** If a second unresolved member exists, select the dimension to which the member belongs from the second drop-down list.
- 3 Click **OK**.
- 4 Refresh the grid using any of the methods described in [“Refreshing the Grid” on page 88](#).

Smart View retrieves data from the connected data source and displays the resolved members in the following format: [Dimension] . [Member]. This format is not supported for Hyperion Enterprise data sources. For Hyperion Enterprise, Smart View displays the resolved member names in the following format: Member. The number of members displayed in the name depends on the number of members necessary to uniquely identify the member.

## Answering Business Questions Using Free-Form

Free-Form reporting gives you the ability to answer business questions beyond those represented on a standard report. By providing the ability to quickly create an ad hoc grid, through typing or using member selection, Free-Form reporting moves you from question to answer. For example, what if you wanted to know: *What are my actual sales in New York?*

The following steps lead you through a series of questions based on the Essbase Sample Basic database. The process starts with a single business and culminates with a reusable report template.

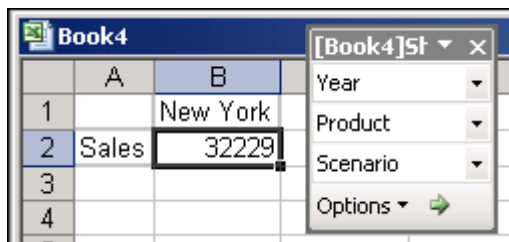
### Note:

The scenario in this topic assumes that you are connected to the Essbase Sample Basic database.

➤ To construct an example free-form report:


- 1 Type the member names **Sales** in cell A2 and **New York** in cell B1, and then select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

You should see a grid similar to this:

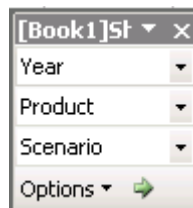


	A	B
1		New York
2	Sales	32229
3		
4		

The total Sales figure for New York is \$32,229. But how does this figure break down? This leads to new questions, such as what are the sales by product? What are the sales by quarter?

- 2 View sales by product using the **Select Member** option in the **POV** to select all the products from **Product dimension**.
  - a. In the **POV**, click **Options > Select Members > Product**.
  - b. In the **Select Member** dialog box, select **Product** and members 100, 200, 300, and 400 and then click .
  - c. Click **OK**.

The **POV** should look similar to this:



- Click the arrow in the Product dimension, select 100, and refresh the grid to view only the sales total for product 100.

Refresh the grid by selecting **Hyperion > Refresh**; clicking , or clicking the green arrow in the POV. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

- In the POV, click the arrow next to 100 and select 200, then refresh the grid to view the sales total for product 200; repeat to view sales totals for products 300 and 400.
- Click the arrow next to 400 and select **Product**; and then drag **Product** from the POV to the grid and drop it on the **Sales** cell.

The grid and POV should look similar to this:

	A	B	C	D	E
1			New York		
2	Product	Sales	32229	[Book1]St	x
3	100	Sales	8940	Year	
4	200	Sales	7939	Scenario	
5	300	Sales	9305	Options	→
6	400	Sales	8514		
7	Diet	Sales	#Missing		

- Select **Hyperion > Options** (or Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon) and in the **Options** dialog box, set the following options:
  - In the **Ad Hoc** tab, select **Suppress Repeated Members** options.
  - In the **Display** tab, clear the **#No Data/Missing Label** text box.

Refresh the grid to view the effect of these options changes.

**Note:**

The **Suppress Repeated Members** option only affects member names in the outermost row or columns.


- Change the nesting order by moving **Sales**; right-click **Sales** and drag it on top of the **Product** cell.

The grid should look similar to this:

	A	B	C	D	E
1			New York		
2	Sales	Product	32229	[Book1]St	x
3		100	8940	Year	
4		300	9305	Scenario	
5		200	7939	Options	→
6		400	8514		
7		Diet			

**Note:**

When **Sales** was moved to the outer column in the grid, the repeated members in the column were suppressed.

- 8 Pivot the dimensions on the grid by selecting either the Sales or Product dimension and clicking  or selecting **Hyperion > Ad Hoc Analysis > Pivot**; try this several times to see different layouts of the grid.

When there are two row dimensions, pivot one of the row dimensions. When there are two column dimensions, pivot one of the column dimensions.

- 9 Click the **Undo** button, , until the grid appears as it was in [step 7](#).


Next, we will take a look at how New York breaks down across product lines and scenarios.

- 10 **Pivot the Scenario dimension to a column.**

In the POV, click Options > Pivot to Column > Scenario to place the Scenario dimension on the worksheet. The Scenario dimension should appear above New York in the grid.

- 11 **In the worksheet, zoom in on Scenario.**

Select Scenario and zoom in by performing one of the following actions:


- Select **Hyperion > Ad Hoc Analysis > Zoom In**. For Office 2007, click **Zoom In** in the **As Hoc Analysis** section of the **Hyperion** ribbon.
- Click .
- Double-click **Scenario**.

- 12 **Change the replacement text to display for missing or no label cells to a hyphen (-).**

- Select **Hyperion > Options** (or Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon), and then click **Display**.
- In the #NoData/Missing Label text box, type a hyphen, -, then click **OK**.
- Refresh the grid to view the changes in the Diet row.


- 13 **Remove the Scenario column.**

After the zoom in operation, we decide that the Scenario column is not really needed. To remove the Scenario column:

- Select the cell that contains “Scenario.” This should be cell G1, but may be different in your worksheet.
- Select **Hyperion > Ad Hoc Analysis > Remove Only** (For Office 2007, click **Remove**. **Only** in the **Ad Hoc Analysis** section of the **Hyperion** ribbon) or click . The entire column is removed from the grid.

- 14 **Move Product to the bottom of the grid.**

Perform the following steps to move the Product dimension below the product members in the worksheet:

- Zoom out on member 100 by selecting 100 in the grid and clicking . Your grid should look similar to this:

	A	B	C	D	E	F
1			Actual	Budget	Variance	Variance %
2			New York	New York	New York	New York
3	Sales	Product	32229	31790	439	1.380937402
4		Product	32229	31790	439	1.380937402

- b. Delete row 4, the row that is the result of the zoom out operation. Select the row and use the Excel command, Edit > Delete, to delete the row.
- c. Zoom in on the Product dimension to expand it and place Product at the bottom of the grid, as shown:

	A	B	C	D	E	F
1			Actual	Budget	Variance	Variance %
2			New York	New York	New York	New York
3	Sales	100	8940	8300	640	7.710843373
4		200	7939	7630	309	4.049803408
5		300	9305	6910	2395	34.65991317
6		400	8514	8950	-436	-4.87150838
7		Diet	-	-	-	-
8		Product	32229	31790	439	1.380937402

Now we would like to see a quarterly breakdown.


#### 15 Pivot the Year dimension to a row.

In the POV, click **Options > Pivot to Row > Year** to place the Year dimension on the worksheet. The Year dimension should appear to the left of the Sales dimension in the grid.

Now we want to see a quarterly breakdown.

#### 16 Zoom in on the Year dimension.

Zoom in by performing one of the following actions:

- Select Year and then select Hyperion > Ad Hoc Analysis > Zoom In.
- Click .
- Double-click on Year.

The grid expands, as shown in the following graphic:

	A	B	C	D	E	F	G
1				Actual	Budget	Variance	Variance %
2				New York	New York	New York	New York
3	Qtr1	Sales	100	1998	1890	108	5.714285714
4			200	1778	1710	68	3.976608187
5			300	2033	1570	463	29.49044586
6			400	1896	2020	-124	-6.138613861
7			Diet	-	-	-	-
8			Product	5236	7190	-1954	-27.17663421
9	Qtr2	Sales	100	2358	2220	138	6.216216216
10			200	1989	1930	59	3.056994819
11			300	2543	1950	593	30.41025641
12			400	2195	2320	-125	-5.387931034
13			Diet	-	-	-	-
14			Product	9085	8420	665	7.897862233
15	Qtr3	Sales	100	2612	2470	142	5.748987854
16			200	1879	1810	69	3.812154696
17			300	2421	1850	571	30.86486486
18			400	2413	2550	-137	-5.37254902
19			Diet	-	-	-	-
20			Product	9325	8680	645	7.430875576
21	Qtr4	Sales	100	1972	1720	252	14.65116279
22			200	2293	2180	113	5.183486239
23			300	2308	1540	768	49.87012987
24			400	2010	2060	-50	-2.427184466
25			Diet	-	-	-	-
26			Product	8583	7500	1083	14.44
27	Year	Sales	100	8940	8300	640	7.710843373
28			200	7939	7630	309	4.049803408
29			300	9305	6910	2395	34.65991317
30			400	8514	8950	-436	-4.87150838
31			Diet	-	-	-	-
32			Product	32229	31790	439	1.380937402


The grid getting long. We will shorten the length.

**17 Perform the following steps to shorten the grid length:**

- Drag 100 in cell C3 on top of New York in cell D2.
- Next, drag New York in cell C3 on top of Actual in cell C1.

Now the grid is wide. We will shorten the width.

**18 Perform the following steps to remove the Variance and Diet members from the grid.**

- Select the cell that contains “Variance.” This should be cell O2, but may be different in your worksheet.
- Select Hyperion > Ad Hoc Analysis > Remove Only or click  to remove the entire column and associated columns from the grid.
- Select the cell that contains “Diet.” This should be cell S3, but may be different in your worksheet.
- Repeat [step 18.b.](#)

The grid should look similar to this:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1			New York														
2			Actual					Budget					Variance %				
3			100	200	300	400	Product	100	200	300	400	Product	100	200	300	400	Product
4	Qtr1	Sales	1998	1778	2033	1896	5236	1890	1710	1570	2020	7190	5.714285714	3.976608187	29.49044586	-6.138613861	-27.17663421
5	Qtr2	Sales	2358	1989	2543	2195	9085	2220	1930	1950	2320	8420	6.216216216	3.056994819	30.41025641	-5.387931034	7.897862233
6	Qtr3	Sales	2612	1879	2421	2413	9325	2470	1810	1850	2550	8680	5.748987854	3.812154696	30.86486486	-5.37254902	7.430875576
7	Qtr4	Sales	1972	2293	2308	2010	8583	1720	2180	1540	2060	7500	14.65116279	5.183486239	49.87012987	-2.427184466	14.44
8	Year	Sales	8940	7939	9305	8514	32229	8300	7630	6910	8950	31790	7.710843373	4.049803406	34.65991317	-4.87150838	1.380937402

After a review of the worksheet, we would like to add first and second half totals to the grid, as well a variance for those totals. In the next series of steps, we will add several formulas to the worksheet.

**19 Add three new rows at the bottom of the worksheet, above Year.**

You should have three blank rows between Q4 and Year.

**20 Type labels for the new rows.**

- In cell A8, type *First Half Total*.
- In cell A9, type *Second Half Total*.
- In cell A10, type *First/Second Variance*.

**21 Use Excel's formula functionality to add formulas for the first half and second half totals.**

- In the first new row (row 8), enter a formula in the 100 column under Actual to total Q1 and Q2.

For example, in cell C8, enter the formula:

=SUM(C4:C5)

Then, copy the formula across the row from cell D8 to cell L8.

- In the second new row (row 9), enter a formula in the 100 column under Actual to total Q3 and Q4.

For example, in cell C9, enter the formula:

=SUM(C6:C7)

Then, copy the formula across the row from cell D9 to cell L9.

**22 Use Excel's formula functionality to add a formula to figure the difference between first half and second half sales totals.**

In the third new row (row 10), add a formula in the 100 column under Actual.

For example, in cell C10, enter the formula:

=SUM(C8-C9)

Then, copy the formula across the row from cell D10 to cell L10.

**23 Use Excel's formula functionality to add formulas to average the variance figures for the first half and second half.**

- In cell M8 of the first new blank row, enter a formula in the 100 column under Variance % to average the Q1 and Q2 variance percentages.

For example, in cell M8, enter the formula:

=AVERAGE(M4:M5)

Then, copy the formula across the row from cell N8 to cell Q8.

- b. In cell M9 of the second new blank row, enter a formula in the 100 column under Variance % to average the Q3 and Q4 variance percentages.

For example, in cell M9, enter the formula:

=AVERAGE (M6 : M7 )

Then, copy the formula across the row from cell N9 to cell Q9.

- 24 Use Excel's formula functionality to add a formula to figure the difference between the first half and second half average variance figures.**

In cell M10 of the third new blank row, add a formula in the 100 column under Variance % to figure the difference between the first half and second half variance percentages.

For example, in cell M10, enter the formula:

=SUM (M8 -M9 )

Then, copy the formula across the from cell N10 to cell Q10.

- 25 Use Excel's formula functionality to add formulas to average the variance figures for the first half and second half.**

In cell M11, on the same row as Year, add a formula in the 100 column under Variance % to average the first half and second variance percentages.

For example, in cell M11, enter the formula:

=AVERAGE (M8 : M9 )

Then, copy the formula across the row from cell N11 to cell Q11.

The following is a portion of the grid. Your grid should look similar to this.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1			New York											
2			Actual					Budget					Variance %	
3			100	200	300	400	Product	100	200	300	400	Product	100	200
4	Qtr1	Sales	1998	1778	2033	1896	5236	1890	1710	1570	2020	7190	5.71428571	3.97660819
5	Qtr2	Sales	2358	1989	2543	2195	9085	2220	1930	1950	2320	8420	6.21621622	3.05699482
6	Qtr3	Sales	2612	1879	2421	2413	9325	2470	1810	1850	2550	8680	5.74898785	3.81215470
7	Qtr4	Sales	1972	2293	2308	2010	8583	1720	2180	1540	2060	7500	14.65116279	5.18348624
8	First Half Total		4356	3767	4576	4091	14321	4110	3640	3520	4340	15610	5.96525097	3.51680150
9	Second Half Total		4584	4172	4729	4423	17908	4190	3990	3390	4610	16180	10.20007532	4.49782047
10	First/Second Variance		-228	-405	-153	-332	-3587	-80	-350	130	-270	-570	8.08266314	4.00731099
11	Year	Sales	8940	7939	9305	8514	32229	8300	7630	6910	8950	31790	7.71064337	4.04980341

Now we can create a template from our worksheet. By doing so, this worksheet can be shared with other users. First, we will do some further formatting of the sheet.

- 26 Select Hyperion > Options > Display tab and select the Use Excel Formatting check box.**

Alternatively, you may choose to clear the Use Excel Formatting check box and use the Capture Formatting command to retain the formatting styles that you apply, or use Cell Styles to apply styles based on intersections in the connected database. However, certain Excel styles you apply using Capture Formatting or Cell Styles may be lost upon refresh.

- 27 Decrease the decimal places of the variance percentage figures.**



In Excel, highlight the range of variance percentage figures, select Format > Cells, and for the Number category on the Number tab, decrease the decimal places to 2.

**28 Add dollar signs and decimal places to the Sales figures.**

In Excel, highlight the range of sales figures, select Format > Cells, and for the Currency category on the Number tab, increase the decimal places to 2 and choose the dollar sign (\$) as the currency symbol.

The grid should look similar to this:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1			New York											
2			Actual					Budget						Variance %
3			100	200	300	400	Product	100	200	300	400	Product	100	200
4	Qtr1	Sales	\$1,998.00	\$1,778.00	\$2,033.00	\$1,896.00	\$5,236.00	\$1,890.00	\$1,710.00	\$1,570.00	\$2,020.00	\$7,190	5.71	3.98
5	Qtr2	Sales	\$2,358.00	\$1,989.00	\$2,543.00	\$2,195.00	\$9,085.00	\$2,220.00	\$1,930.00	\$1,950.00	\$2,320.00	\$8,420	6.22	3.06
6	Qtr3	Sales	\$2,612.00	\$1,879.00	\$2,421.00	\$2,413.00	\$9,325.00	\$2,470.00	\$1,810.00	\$1,850.00	\$2,550.00	\$8,680	5.75	3.81
7	Qtr4	Sales	\$1,972.00	\$2,293.00	\$2,308.00	\$2,010.00	\$8,583.00	\$1,720.00	\$2,180.00	\$1,540.00	\$2,060.00	\$7,500	14.65	5.18
8	First Half Total		\$4,356.00	\$3,767.00	\$4,576.00	\$4,091.00	\$14,321.00	\$4,110.00	\$3,640.00	\$3,520.00	\$4,340.00	\$15,610	5.97	3.52
9	Second Half Total		\$4,584.00	\$4,172.00	\$4,729.00	\$4,423.00	\$17,908.00	\$4,190.00	\$3,990.00	\$3,390.00	\$4,610.00	\$16,180	10.20	4.50
10	First/Second Variance		-\$228.00	-\$405.00	-\$153.00	-\$332.00	-\$3,587.00	-\$80.00	-\$350.00	\$130.00	-\$270.00	-\$570	8.08	4.01
11	Year	Sales	\$8,940.00	\$7,939.00	\$9,305.00	\$8,514.00	\$32,229.00	\$8,300.00	\$7,630.00	\$6,910.00	\$8,950.00	\$31,790	7.71	4.05

**29 Use Excel formatting to add background colors to the grid.**

Alternatively, you may choose to use the Capture Formatting command to retain the colors after a refresh.

For example, select cells C4 through F7, select a fill color from the Excel toolbar, then select Hyperion > Capture Formatting. Be sure the range of cells is still highlighted when you select the Capture Formatting command.

Capture Formatting only retains formats on data cells that were derived from your ad hoc operations. It does not retain formats for the cells that were manually added to the grid.

**30 Display aliases for member names in the worksheet.**

Select Hyperion > Ad Hoc Analysis > Change Alias Table and, for this example, choose “Default” in the Select Alias Table dialog box.

For more information on using aliases for member names, see “Displaying Aliases for Member Names” on page 91.

**31 Save the workbook.**

**32 Using VBA functionality, add buttons to the worksheet.**

To simplify connecting and refreshing for users with whom you may share this worksheet, use Excel’s Visual Basic Editor to add buttons to the worksheet and use the Smart View VBA code samples listed to attach functionality to each button:

- Connect button, to invoke the Connection Manager dialog box to make a data source connection  
`x = HypMenuVConnect`
- Refresh button, to perform a refresh of the worksheet  
`x = HypMenuVRefresh`
- Disconnect button, to invoke the Connection Manager to disconnect from the data source

x = HypMenuVDisconnect

Instructions for using VBA functions are in [Chapter 17, “VBA Functions.”](#)

See [“Using Smart View VBA Functions” on page 224](#) for instructions on adding a button and assigning a VBA macro to it.

### 33 Refresh the worksheet and review the formatting and layout.

For example, check the following items:

- Review the formatting of the sheet. Has Excel formatting you applied been retained? Note that selections made in the Cell Styles tab of the Options dialog box are overridden if you are using Excel formatting.
- Test the buttons you added in [step 32](#). Is the correct functionality attached to the button?
- Are the Excel formulas you entered are still valid?

[Figure 33](#) is an example of the spreadsheet developed in this section, with the exception of the background color formatting and the placement on the worksheet. Also, a title was added to the page and the cells surrounding the active grid were filled with white using the Fill Color button on Excel’s Formatting toolbar.

This worksheet provides information to users about the sales of product in New York. It provides easy data source connection access and refresh functionality. It can be reused by other regional managers, for example, by replacing the state name, New York, with another state name, like Florida.

**Figure 33 Formatted Free-Form Report**

New York Quarterly Sales Report													
		New York								Variance %			
		Actual		Budget									
		100	200	400	100	200	300	400	100	200	300	400	
Qtr1	Sales	1998	1778	1896	1890	1710	1570	2020	5.714	3.977	29.490	-6.139	
Qtr2	Sales	2358	1989	2195	2220	1930	1950	2320	6.216	3.057	30.410	-5.388	
Qtr3	Sales	2612	1879	2413	2470	1810	1850	2550	5.749	3.812	30.865	-5.373	
Qtr4	Sales	1972	2293	2010	1720	2180	1540	2060	14.651	5.183	49.870	-2.427	
First Half Total		4356	3767	4091	4110	3640	3520	4340	5.965	3.517	29.950	-5.763	
Second Half Total		4584	4172	4423	4190	3990	3390	4610	10.200	4.498	40.367	-3.900	
First/Second Variance		4584	4172	4423	4190	3990	3390	4610	20.400	4.498	40.367	-3.900	
Year	Sales	8940	7939	8514	8300	7630	6910	8950	16.165	4.007	35.159	-4.832	

Items highlight in blue are derived values. Variance % is derived in Analytic Services via a member formula. Other formulae are derived directly in Excel.

Connect Refresh Disconnect

# Constructing an Example Free-form Report Using a Hyperion Enterprise Data Source

Consider an application in Hyperion Enterprise which has a schedule with the following POV (Point Of View):

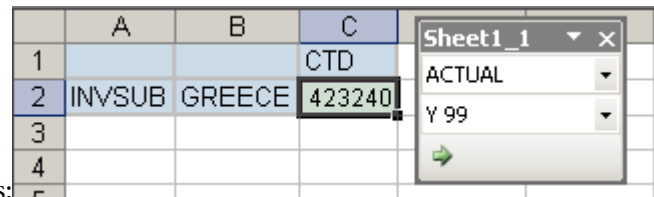
- Category-Actual
- Period-Jan 99
- Organization-Europe
- Entity-Greece
- Account-INVSUB (Investments in Subsidiaries)

The scenario in this section assumes that you are connected to this application and the following steps lead you through a series of questions based on this application. For example, what if you wanted to know: *What are my investments in subsidiarires of Greece?*

The process starts with a single business and culminates with a reusable report template.

► To construct an example free-form report:

- 1 Type the member names `INVSUB` in cell `A2`, `GREECE` in cell `B2`, and `CTD` in cell `C1`. Select **Hyperion > Refresh**.




	A	B	C
1			CTD
2	INVSUB	GREECE	423240
3			
4			

The screenshot shows a grid with columns A, B, and C, and rows 1, 2, 3, and 4. Cell A2 contains 'INVSUB', B2 contains 'GREECE', and C2 contains '423240'. A dropdown menu is open over cell C2, showing 'ACTUAL' and 'Y 99'. The menu also has a green arrow icon at the bottom.

You should see a grid similar to this:

The total investments in subsidiarires for New York is \$423240. But how does this figure break down? This leads to new questions, such as what are the investments by each subsidiary? What are the investments by quarter?

- 2 View investments by each subsidiary using **Member Selection** to select all the subsidiarires from Account dimension.
  - a. Click cell A2 and select **Hyperion > Member Selection**.
  - b. In **Member Selection**, select Account and children members of INVSUB and then click .
  - c. Click OK.

The grid and POV should look similar to this:

	A	B	C
1			CTD
2	INVSUB	GREECE	400715
3	INVSUB.ITALY	GREECE	26048
4	INVSUB.FRANCE	GREECE	21892
5	INVSUB.UK	GREECE	17432
6	INVSUB.GERMANY	GREECE	16100
7	INVSUB.SPAIN	GREECE	#Missing

3 Select **Hyperion > Options** and in the **Options** dialog box, set the following options:

- In the **Ad Hoc** tab, select **Suppress Repeated Members** options.
- In the **Display** tab, clear the **#No Data/Missing Label** text box.

Refresh the grid to view the effect of these options changes.

**Note:**

The **Suppress Repeated Members** option only affects member names in the outermost row or columns.


4 Change the nesting order by moving **GREECE**; right-click **GREECE** and drag it on top of the **INVSUB** cell.

The grid should look similar to this:


	A	B	C	D	E
1			CTD		
2	GREECE	INVSUB	400715		
3		INVSUB.ITALY	26048		
4		INVSUB.FRANCE	21892		
5		INVSUB.UK	17432		
6		INVSUB.GERMANY	16100		
7		INVSUB.SPAIN			

**Note:**

When **GREECE** was moved to the outer column in the grid, the repeated members in the column were suppressed.

5 Pivot the dimensions on the grid by selecting either the **GREECE** or **INVSUB** member and clicking  or selecting **Hyperion > Ad Hoc Analysis > Pivot**; try this several times to see different layouts of the grid.

When there are two row dimensions, pivot one of the row dimensions. When there are two column dimensions, pivot one of the column dimensions.


6 Click the **Undo** button, , until the grid appears as it was in [step 7](#).

7 Pivot the member **Y 99** to a column.

In the POV, right-click, drag and drop **Y 99** on top of cell **C1**. The **Y 99** member should appear above **CTD** in the grid.

**8 In the worksheet, zoom in on Y 99.**

Select Y 99 and zoom in by performing one of the following actions:


- Select **Hyperion > Ad Hoc Analysis > Zoom In**.
- Click .
- Double-click on Y 99.

**9 Change the replacement text to display for missing or no label cells to a hyphen (-).**

- Select **Hyperion > Options**, and then click **Display**.
- In **#NoData/Missing Label**, type a hyphen, -, then click **OK**.
- Refresh the grid to view the changes in the **INVSUB.SPAIN** row.


**10 Remove the Y 99 column.**

After the zoom in operation, we decide that the Y 99 column is not really needed. To remove the Y 99 column:

- Select the cell that contains “Y 99.” This should be cell C1, but may be different in your worksheet.
- Select **Hyperion > Ad Hoc Analysis > Remove Only** or click . The entire column is removed from the grid.

**11 Move INVSUB to the bottom of the grid.**

Perform the following steps to move the **INVSUB** member below the children members in the worksheet:

- Zoom out on member **INVSUB.ITALY** by selecting it in the grid and clicking . Your grid should look similar to this:

	A	B	C	D
1			HY1 99	HY2 99
2			CTD	CTD
3	GREECE	INVSUB	377971	400715
4				

- Select **Hyperion > Options** and click **Ad Hoc**. In **Ancestor Position**, select **Bottom** and click **OK**.
- Zoom in on the **INVSUB** member to expand and place it at the bottom of the grid, as shown:

	A	B	C	D
1			HY1 99	HY2 99
2			CTD	CTD
3	GREECE	INVSUB.ITALY	32075	26048
4		INVSUB.FRANCE	23840	21892
5		INVSUB.UK	11369	17432
6		INVSUB.GERMANY	3497	16100
7		INVSUB.SPAIN	-	-
8		INVSUB	377971	400715


Now we would like to see a quarterly breakdown.

**12 Pivot Year dimension members to a row.**

Select HY1 99 in the grid and select **Hyperion > Ad Hoc Analysis > Pivot**.

**13 Zoom in on HY1 99 member.**

Zoom in by performing one of the following actions:

- Select HY1 99 and then select **Hyperion > Ad Hoc Analysis > Zoom In**.
- Click .
- Double-click on HY1 99.

- 14 Repeat step 12 for HY2 99. Remove HY1 99 and HY2 99 rows by selecting it in the grid and selecting **Hyperion > Ad Hoc Analysis > Remove Only**. Your grid should look similar to this:

	A	B	C	D
1				CTD
2	Q1 99	GREECE	INVSUB.ITALY	19489
3			INVSUB.FRANCE	8928
4			INVSUB.UK	31982
5			INVSUB.GERMANY	9535
6			INVSUB.SPAIN	-
7			INVSUB	405035
8	Q2 99	GREECE	INVSUB.ITALY	32075
9			INVSUB.FRANCE	23840
10			INVSUB.UK	11369
11			INVSUB.GERMANY	3497
12			INVSUB.SPAIN	-
13			INVSUB	377971
14	Q3 99	GREECE	INVSUB.ITALY	7833
15			INVSUB.FRANCE	19810
16			INVSUB.UK	6608
17			INVSUB.GERMANY	22015
18			INVSUB.SPAIN	-
19			INVSUB	356954
20	Q4 99	GREECE	INVSUB.ITALY	26048
21			INVSUB.FRANCE	21892
22			INVSUB.UK	17432
23			INVSUB.GERMANY	16100
24			INVSUB.SPAIN	-
25			INVSUB	400715


The grid getting long, we will shorten the length.

- 15 Drag **INVSUB.ITALY** in cell **C2** on top of **CTD** in cell **D1** to shorten the grid length.

Now the grid is wide. We will shorten the length.

- 16 Perform the following steps to remove the **INVSUB.SPAIN** member from the grid.

a. Select the cell that contains “**INVSUB.SPAIN.**”

b. Select **Hyperion > Ad Hoc Analysis > Remove Only** or click  to remove the entire column and associated columns from the grid. The grid should look similar to this

	A	B	C	D	E	F	G
1			INVSUB.ITALY	INVSUB.FRANCE	INVSUB.UK	INVSUB.GERMANY	INVSUB
2			CTD	CTD	CTD	CTD	CTD
3	Q1 99	GREECE	19489	8928	31982	9535	405035
4	Q2 99	GREECE	32075	23840	11369	3497	377971
5	Q3 99	GREECE	7833	19810	6608	22015	356954
6	Q4 99	GREECE	26048	21892	17432	16100	400715

After a review of the worksheet, we would like to add first and second half totals to the grid, as well a variance for those totals. In the next series of steps, we will add formulae to the worksheet.

**17 Add three new rows at the bottom of the worksheet.**

You should have three blank rows after Q4 99.

**18 Type labels for the new rows.**

- In cell A7, type `First Half Total`.
- In cell A8, type `Second Half Total`.
- In cell A9, type `First/Second Variance`.

**19 Use Excel's formula functionality to add formulas for the first half and second half totals.**

- In the first new row (row 8), enter a formula in the `INVSUB.ITALY` column to total Q1 99 and Q2 99.

For example, in cell C7, enter the formula:

`=SUM(C3 : C4)`

Then, copy the formula across the row from cell D7 to cell G7.

- In the second new row (row 9), enter a formula in the `INVSUB.ITALY` column to total Q3 99 and Q4 99.

For example, in cell C8, enter the formula:

`=SUM(C5 : C6)`

Then, copy the formula across the row from cell D8 to cell G8.

**20 Use Excel's formula functionality to add a formula to figure the difference between first half and second half sales totals.**

In the third new row (row 9), add a formula in the `INVSUB` column .

For example, in cell C9, enter the formula:

`=SUM(C7-C8)`

Then, copy the formula across the row from cell D9 to cell G9.

The grid should look similar to this:

	A	B	C	D	E	F	G
1			INVSUB.ITALY	INVSUB.FRANCE	INVSUB.UK	INVSUB.GERMANY	INVSUB
2			CTD	CTD	CTD	CTD	CTD
3	Q1 99	GREECE	19489	8928	31982	9535	405035
4	Q2 99	GREECE	32075	23840	11369	3497	377971
5	Q3 99	GREECE	7833	19810	6608	22015	356954
6	Q4 99	GREECE	26048	21892	17432	16100	400715
7	First Half Total		51564	32768	43351	13032	783006
8	Second Half Total		33881	41702	41702	24040	757669
9	First/Second Variance		17683	-8934	1649	-11008	25337

**21 Select Hyperion > Options > Display and select the Use Excel Formatting check box.**



Alternatively, you may choose to clear the Use Excel Formatting check box and use the Capture Formatting command to retain the formatting styles that you apply, or use Cell Styles to apply styles based on intersections in the connected database. However, certain Excel styles you apply using Capture Formatting or Cell Styles may be lost upon refresh.

**22 Add dollar signs and decimal places to the figures in data region cells.**

In Excel, highlight the range of data region cells, select Format > Cells, and for the Currency category on the Number tab, increase the decimal places to 2 and choose the dollar sign (\$) as the currency symbol.

**23 Use Excel formatting to add background colors to the grid.**

Alternatively, you may choose to use the Capture Formatting command to retain the colors after a refresh.

For example, select cells C7 through G9, select a fill color from the Excel toolbar, then select **Hyperion > Capture Formatting**. Be sure the range of cells is still highlighted when you select the Capture Formatting command.

Capture Formatting only retains formats on data cells that were derived from your ad hoc operations. It does not retain formats for the cells that were manually added to the grid.

**24 Save the workbook.**

**25 Refresh the worksheet and review the formatting and layout.**

For example, check the following items:

- Review the formatting of the sheet. Has Excel formatting you applied been retained? Note that selections made in the Cell Styles tab of the Options dialog box are overridden if you are using Excel formatting.
- Are the Excel formulas you entered are still valid?

Figure 24 is an example of the spreadsheet developed in this section, with the exception of the background color formatting and the placement on the worksheet. Also, a title was added to the page and the cells surrounding the active grid were filled with white using the Fill Color button on Excel's Formatting toolbar.

This worksheet provides information to users about the investments in subsidiaries in GREECE . It provides easy data source connection access and refresh functionality. It can be reused by other regional managers, for example, by replacing the state name, GREECE, with another name, like New York.

Figure 34 Formatted Free-Form Report

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										

Items highlighted in blue are derived values.  
Formulae are derived directly in excel

## Analyzing Time-Related Data in Free-Form Mode

(Essbase only) Using Smart View, you can analyze flash metrics such as sales of cost of goods sold against time-based metrics. This enables you to look for trends, find averages for different time periods, and so forth. To do this, you use **linked attributes** which enable periodicity of members. Periodicity is a shared pattern among time dimension members that make them meaningful for time-based analysis (January and April share periodicity as first months of quarters, for example). Day by month, day by week, and week by year are examples of linked attributes. You can also set ranges for linked attributes and apply filters.

- To analyze time-related data in free-form mode:
  - 1 Open an Excel worksheet and connect to a data source.
  - 2 Select **Date-Time** member and select **Hyperion > Member Selection** to open **Member Selection**, where you can select members and apply filters as described in [“Filtering Members in Queries”](#) on page 74. For Office 2007, click **Member Selection** in the **Task** section of the **Hyperion** ribbon.
  - 3 To enter linked attributes, insert a new column to the left of the Date-Time member and select **Hyperion > Member Selection**. Linked attributes are selectable from the **Dimensions** dropdown menu in the **Dimension Name Resolution** dialog box.
  - 4 Select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Highly Formatted Free-Form Report Example

You can use Free-Form to build and customize a report to your own specifications, using the formatting options you require. [Figure 35](#) is an example of a highly formatted free-form report. This report example was created using the following Excel formats:

- Standardized column widths
- Cell fill (using multiple colors for each scenario, including dark line breaks)
- Cell-based double-underscoring above totals (for example, row 6)
- Currency and percentage symbols added in various columns
- Excel formulas to derive additional values (rows 23-30)

- Excel Conditional formatting for dynamic highlighting (for example rows 26 and 27)
- Text box with stylized text for the grid label

Figure 35 Highly Formatted Free-Form Report

Eastern Region Actual Versus Plan							
		New York	Massachusetts	Florida	Connecticut	New Hampshire	East
Actual	Sales	\$ 8,940.00	\$ 6,518.00	\$ 2,799.00	\$ 3,378.00	\$ 1,570.00	\$ 23,205.00
	COGS	\$ 3,573.00	\$ 783.00	\$ 1,116.00	\$ 1,348.00	\$ 623.00	\$ 7,443.00
	Margin	\$ 5,367.00	\$ 5,735.00	\$ 1,683.00	\$ 2,030.00	\$ 947.00	\$ 15,762.00
	Marketing	\$ 1,245.00	\$ 262.00	\$ 363.00	\$ 437.00	\$ 200.00	\$ 2,487.00
	Payroll	\$ 618.00	\$ 372.00	\$ 372.00	\$ 372.00	\$ 372.00	\$ 2,106.00
	Misc	\$ 6.00	\$ 6.00	\$ 6.00	\$ 4.00	\$ 8.00	\$ 30.00
	Total Expenses	\$ 1,869.00	\$ 630.00	\$ 741.00	\$ 813.00	\$ 580.00	\$ 4,633.00
	Profit	\$ 3,498.00	\$ 5,105.00	\$ 942.00	\$ 1,217.00	\$ 367.00	\$ 11,129.00
Budget	Sales	\$ 8,300.00	\$ 6,030.00	\$ 2,560.00	\$ 3,100.00	\$ 1,400.00	\$ 21,390.00
	COGS	\$ 3,300.00	\$ 660.00	\$ 990.00	\$ 1,180.00	\$ 520.00	\$ 6,660.00
	Margin	\$ 5,000.00	\$ 5,370.00	\$ 1,570.00	\$ 1,910.00	\$ 880.00	\$ 14,730.00
	Marketing	\$ 1,050.00	\$ 160.00	\$ 260.00	\$ 310.00	\$ 110.00	\$ 1,890.00
	Payroll	\$ 470.00	\$ 230.00	\$ 230.00	\$ 230.00	\$ 230.00	\$ 1,390.00
	Misc	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Expenses	\$ 1,520.00	\$ 390.00	\$ 490.00	\$ 540.00	\$ 340.00	\$ 3,280.00
	Profit	\$ 3,480.00	\$ 4,980.00	\$ 1,080.00	\$ 1,370.00	\$ 540.00	\$ 11,450.00
Actual vs. Plan	Sales_	7.7%	8.0%	9.34%	8.37%	12.14%	8.4%
	COGS_	8.27%	18.64%	12.73%	13.28%	18.8%	11.76%
	Margin_	\$ 367.00	\$ 365.00	\$ 113.00	\$ 120.00	\$ 67.00	\$ 1,032.00
	Marketing_	-16.66%	-36.6%	-28.37%	-29.06%	-45.00%	-24.31%
	Payroll_	-23.95%	-38.17%	-38.17%	-38.17%	-38.17%	-34.00%
	Misc_	-	-	-	-	-	-
	Total Expenses_	\$ (349.00)	\$ (240.00)	\$ (251.00)	\$ (273.00)	\$ (240.00)	\$ (1,353.00)
	Profit_	\$ 18.00	\$ 125.00	\$ (138.00)	\$ (153.00)	\$ (173.00)	\$ (321.00)

## Creating and Distributing Report Templates Using Free-Form

Free-form reporting provides a solid foundation for the creation and distribution of report templates. For the scenario in this section, assume that part of your job was creating a report such as that shown in “Highly Formatted Free-Form Report Example” on page 138. Also assume that you want to create a series of product line detail reports across multiple markets, based on the highly-formatted report. Furthermore, the reporting requirements span data sources in both Essbase and Financial Management. You can use the free-form capabilities of Smart View to create your report templates.

The following steps use the sample applications provided with Essbase. Note that these steps work for Financial Management or Hyperion Enterprise or Essbase data sources.

These sections comprise the taskflow for report template creation and distribution:

- “Creating a Base Grid Using Dimension Name Resolution” on page 139
- “Using Free-Form to Expand the Layout” on page 140
- “Leveraging Excel Formulas” on page 141
- “Formatting the Grid” on page 143
- “Using the POV as a Page Selector” on page 144
- “Creating Additional Reports” on page 144

## Creating a Base Grid Using Dimension Name Resolution

With Smart View, you can select members into empty cells in a grid. This process is referred to as dimension name resolution and allows you to select members without typing or using the

POV member selector. Additionally, you can use this option to lay out a simple grid as a foundation for analysis.

**Note:**

Before beginning the procedure, ensure that Indentation option is set to “Subitems,” as described in “[Indenting Member Names](#)” on page 202.

- To create a base grid using dimension name resolution:
  - 1 On a blank Excel worksheet, connect to the Essbase Sample Basic data source.
  - 2 Place the cursor in cell C5 and select **Hyperion > Member Selection** to display the **Dimension Name Resolution** dialog box. For Office 2007, click **Member Selection** in the **Task** section of the **Hyperion** ribbon.
  - 3 Select **Measures** from the list, and select **Vertical Orientation**, and then click **OK**.

Selecting Vertical Orientation places the resulting members vertically onto the grid, whereas clearing Vertical Orientation places the resulting members horizontally onto the grid.

- 4 In **Member Selection**, from the **Members** list, select these members, and click **OK**:

Profit	Total Expenses
Margin	Marketing
COGS	Payroll
Sales	Misc

- 5 Place the cursor in D4 and select **Hyperion > Member Selection**.
- 6 In **Dimension Name Resolution**, select **Product** from the list; do not select **Vertical Orientation**.
- 7 In **Member Selection**, from the **Members** list, select one product line and its children; for example, select product line 100 and its children.
- 8 Refresh the worksheet.

The grid should look similar to this:

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4				100	100-10	100-20	100-30		
5			Profit	30468.00	22777.00	5708.00	1983.00		
6			Margin	60786.00	38626.00	15685.00	6475.00		
7			Sales	106134.00	62824.00	30469.00	12841.00		
8			COGS	45348.00	24198.00	14784.00	6366.00		
9			Total Expenses	30318.00	15849.00	9977.00	4492.00		
10			Marketing	16683.00	8673.00	5681.00	2329.00		
11			Payroll	13392.00	7062.00	4212.00	2118.00		
12			Misc	243.00	114.00	84.00	45.00		



## Using Free-Form to Expand the Layout

You can use Smart View free-form capabilities to further expand the grid by:

- Typing directly onto the grid
- Using the Microsoft Office copy and paste functionality

► To make further member selections using free-form capabilities:

1 Select cell B5 and type *Actual*.

2 Refresh the worksheet.

Notice that *Scenario* is removed from the POV because a member from the Scenario dimension, *Actual*, is now represented on the grid.

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4				100	100-10	100-20	100-30		
5		Actual	Profit	30468.00	22777.00	5708.00	1983.00		
6			Margin	60786.00	38626.00	15685.00	6475.00		
7			Sales	106134.00	62824.00	30469.00	12841.00		
8			COGS	45348.00	24198.00	14784.00	6366.00		
9			Total Expenses	30318.00	15849.00	9977.00	4492.00		
10			Marketing	16683.00	8673.00	5681.00	2329.00		
11			Payroll	13392.00	7062.00	4212.00	2118.00		
12			Misc	243.00	114.00	84.00	45.00		

3 Select cells C5 through C12, copy them, and then paste them starting in cell C13.

4 In cell B13, type *Budget*.

5 Refresh the worksheet.

The grid should look similar to this:

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4				100	100-10	100-20	100-30		
5		Actual	Profit	30468	22777	5708	1983		
6			Margin	60786	38626	15685	6475		
7			Sales	106134	62824	30469	12841		
8			COGS	45348	24198	14784	6366		
9			Total Expenses	30318	15849	9977	4492		
10			Marketing	16683	8673	5681	2329		
11			Payroll	13392	7062	4212	2118		
12			Misc	243	114	84	45		
13		Budget	Profit	41940	28900	9530	3510		
14			Margin	65870	41570	17410	6890		
15			Sales	114310	67190	33520	13600		
16			COGS	48440	25620	16110	6710		
17			Total Expenses	23930	12670	7880	3380		
18			Marketing	13250	7060	4440	1750		
19			Payroll	10680	5610	3440	1630		
20			Misc	-	-	-	-		

## Leveraging Excel Formulas

Smart View provides the capability of preserving Excel-based formulas entered on a grid. These can be used to further extend the analysis begun with an ad hoc query. Assume for this example that you want to determine budget variances in Excel.

► To leverage Excel formulas in the worksheet:

1 Select cells C5 through C12, copy them, and then paste them starting in cell C21.

- In cells C21 to C28, type an underscore ( \_ ) at the end of each member name; for example, Profit\_.

Adding the underscore character changes the cell from a member cell to a label cell. This allows you to use labels for the budget variance rows that are almost the same as the member cells.

**Tip:**

The underscore is suggested because it is fairly imperceptible to users, but Smart View treats it as a label.

- In cell B21, type Actual vs. Plan.
- Refresh the grid to validate that the labels in the variance area remain undisturbed.

The grid should look similar to this:

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4				100	100-10	100-20	100-30		
5		Actual	Profit	30468.00	22777.00	5708.00	1983.00		
6			Margin	60786.00	38626.00	15685.00	6475.00		
7			Sales	106134.00	62824.00	30469.00	12841.00		
8			COGS	45348.00	24198.00	14784.00	6366.00		
9			Total Expenses	30318.00	15849.00	9977.00	4492.00		
10			Marketing	16683.00	8673.00	5681.00	2329.00		
11			Payroll	13392.00	7062.00	4212.00	2118.00		
12			Misc	243.00	114.00	84.00	45.00		
13		Budget	Profit	41940.00	28900.00	9530.00	3510.00		
14			Margin	65870.00	41570.00	17410.00	6890.00		
15			Sales	114310.00	67190.00	33520.00	13600.00		
16			COGS	48440.00	25620.00	16110.00	6710.00		
17			Total Expenses	23930.00	12670.00	7890.00	3380.00		
18			Marketing	13250.00	7060.00	4440.00	1750.00		
19			Payroll	10680.00	5610.00	3440.00	1630.00		
20			Misc	-	-	-	-		
21		Actual vs. Plan	Profit_						
22			Margin_						
23			Sales_						
24			COGS_						
25			Total Expenses_						
26			Marketing_						
27			Payroll_						
28			Misc_						

- In cell D21, enter this formula:

=D5-D13

- Fill the formula down and across all of the cells in the variance region, and refresh the worksheet.

After refresh, the formulas are preserved. The grid should look similar to this:

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4				100	100-10	100-20	100-30		
5		Actual	Profit	30468.00	22777.00	5708.00	1983.00		
6			Margin	60786.00	38626.00	15685.00	6475.00		
7			Sales	106134.00	62824.00	30469.00	12841.00		
8			COGS	45348.00	24198.00	14784.00	6366.00		
9			Total Expenses	30318.00	15849.00	9977.00	4492.00		
10			Marketing	16683.00	8673.00	5681.00	2329.00		
11			Payroll	13392.00	7062.00	4212.00	2118.00		
12			Misc	243.00	114.00	84.00	45.00		
13		Budget	Profit	41940.00	28900.00	9530.00	3510.00		
14			Margin	65870.00	41570.00	17410.00	6890.00		
15			Sales	114310.00	67190.00	33520.00	13600.00		
16			COGS	48440.00	25620.00	16110.00	6710.00		
17			Total Expenses	23930.00	12670.00	7890.00	3380.00		
18			Marketing	13250.00	7060.00	4440.00	1750.00		
19			Payroll	10680.00	5610.00	3440.00	1630.00		
20			Misc	-	-	-	-		
21		Actual vs. Plan	Profit_	-11472.00	-6123.00	-3622.00	-1527.00		
22			Margin_	-5084.00	-2944.00	-1725.00	-415.00		
23			Sales_	-8176.00	-4366.00	-3051.00	-759.00		
24			COGS_	-3092.00	-1422.00	-1326.00	-344.00		
25			Total Expenses_	6388.00	3179.00	2097.00	1112.00		
26			Marketing_	3433.00	1613.00	1241.00	579.00		
27			Payroll_	2712.00	1452.00	772.00	488.00		
28			Misc_	#/VALUE!	#/VALUE!	#/VALUE!	#/VALUE!		

## Formatting the Grid

Smart View provides a myriad of formatting options. You can take advantage of the Smart View capture formatting feature, Hyperion product-specific styles, and Excel-based formatting. This example demonstrates applying Excel-based formatting to the grid.

► To apply Excel-based formatting to the grid:

1 Select **Hyperion > Options** to display the **Options** dialog box. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.

2 Select the **Display** tab, select **Use Excel Formatting**, and click **OK**.

3 Apply these Excel-based formats:

- Fill the worksheet, outside of the data region light grey.
- Fill product cells in row 4 with light yellow
- Fill cells B5 through C12 with light green
- Fill cells B13 through C20 with light blue
- Fill cells B21 through C28 with white
- Place double-underlines beneath all total accounts, and place these in a larger, bold font
- Insert a row, filled with black, in between each scenario region
- Make all column widths 20
- Place currency symbols on all values
- Using a text box, place a title on the report

The resulting grid should look similar to the following:


	A	B	C	D	E	F	G	H	I
1									
2									
3									
4				<b>Regional Product Detail Actual vs. Plan</b>					
5		Actual	Profit	100	100-10	100-20	100-30		
6			Margin	\$ 30,468.00	\$ 22,777.00	\$ 5,708.00	\$ 1,983.00		
7			Sales	\$ 106,134.00	\$ 62,824.00	\$ 30,469.00	\$ 12,841.00		
8			COGS	\$ 45,348.00	\$ 24,198.00	\$ 14,784.00	\$ 6,366.00		
9			Total Expenses	\$ 30,318.00	\$ 15,849.00	\$ 9,977.00	\$ 4,492.00		
10			Marketing	\$ 16,683.00	\$ 8,673.00	\$ 5,681.00	\$ 2,329.00		
11			Payroll	\$ 13,392.00	\$ 7,062.00	\$ 4,212.00	\$ 2,118.00		
12			Misc	\$ 243.00	\$ 114.00	\$ 84.00	\$ 45.00		
13									
14		Budget	Profit	\$ 41,940.00	\$ 28,900.00	\$ 9,530.00	\$ 3,510.00		
15			Margin	\$ 65,870.00	\$ 41,570.00	\$ 17,410.00	\$ 6,890.00		
16			Sales	\$ 114,310.00	\$ 67,190.00	\$ 33,520.00	\$ 13,600.00		
17			COGS	\$ 48,440.00	\$ 25,620.00	\$ 16,110.00	\$ 6,710.00		
18			Total Expenses	\$ 23,930.00	\$ 12,670.00	\$ 7,880.00	\$ 3,380.00		
19			Marketing	\$ 13,250.00	\$ 7,060.00	\$ 4,440.00	\$ 1,750.00		
20			Payroll	\$ 10,680.00	\$ 5,610.00	\$ 3,440.00	\$ 1,630.00		
21			Misc						
22									
23		Actual vs. Plan	Profit_	\$ (11,472.00)	\$ (6,123.00)	\$ (3,822.00)	\$ (1,527.00)		
24			Margin_	\$ (5,084.00)	\$ (2,944.00)	\$ (1,725.00)	\$ (415.00)		
25			Sales_	\$ (8,176.00)	\$ (4,366.00)	\$ (3,051.00)	\$ (759.00)		
26			COGS_	\$ (3,092.00)	\$ (1,422.00)	\$ (1,326.00)	\$ (344.00)		
27			Total Expenses_	\$ 6,388.00	\$ 3,179.00	\$ 2,097.00	\$ 1,112.00		
28			Marketing_	\$ 3,433.00	\$ 1,613.00	\$ 1,241.00	\$ 579.00		
29			Payroll_	\$ 2,712.00	\$ 1,452.00	\$ 772.00	\$ 488.00		
30			Misc_	#/VALUE!	#/VALUE!	#/VALUE!	#/VALUE!		
31									

4 Refresh the worksheet and verify that the formats and formulas are preserved.

## Using the POV as a Page Selector

Once you have a formatted grid in place, you can select members from dimensions in the POV to quickly view the worksheet from the point of view of the member selected and still preserve overall grid formatting. For example, you may select the region members from the Market dimension, then select a specific region from the POV. After refreshing the grid, your formulas and data points are updated to reflect the point of view of the selected region, preserving any grid formatting you have applied.

► To use the POV as a page selector:

- 1 View sales by market using the **Select Member** option in the POV to select all products from all regions in the **Market** dimension.
  - a. In the POV, click **Options > Select Members > Market**.
  - b. In **Member Selection**, select **Market** and members **East**, **West**, **South**, and **Central**, and then click .
  - c. Click **OK**.
- 2 Click the arrow in the **Market** dimension, select **East**, and refresh the grid to view only the totals for the **East** region.
- 3 In the POV, click the arrow next to **East** and select **West**, then refresh the grid to view the totals for the **West** region; repeat to view totals for the **South** and **Central** regions.

## Creating Additional Reports

Once you have a report that contains, for example, the formatting and formulas you want, you can use this report as a template for creating additional reports.

For example, assume you want a product detail report for each product line. Using the free-form capabilities previously described, you can create subsequent reports for product lines 200 through 400.

► To create additional reports using the original report as a template:

- 1 Ensure that the Excel workbook contains five worksheets.
- 2 Copy the contents of **Sheet 1** onto **Sheet 2**.
- 3 On **Sheet 2**, select product 100 in cell D4.
- 4 Select **Hyperion > Member Selection** to display the **Member Selection** dialog box.
- 5 In the **Members** area, select product 200 and its children members, and then add them to the **Selection** area.
- 6 If product 100 is in the selection area, remove it.

The Selection area should contain the members:

- 200



- 200-10
- 200-20
- 200-30
- 200-40

**7 Refresh the worksheet.**

Notice that after the new members are on the grid, one column extends past the previously formatted region:

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

**8 To format the new column to match the existing columns, use the Excel format paint option or manually apply the Excel formats so that the resulting grid looks similar to the following:**

	B	C	D	E	F	G		
1	<b>Regional Product Detail Actual vs. Plan</b>							[Book1.xls]!
2							Year	
3							Market	
4			200	200-10	200-20	200-30	200-40	
5	Actual	Profit	\$ 27,954.00	\$ 7,201.00	\$ 12,025.00	\$ 4,636.00	\$ 4,092.00	
6		Margin	\$ 60,586.00	\$ 22,542.00	\$ 21,581.00	\$ 9,912.00	\$ 6,551.00	
7		Sales	\$ 109,086.00	\$ 41,537.00	\$ 38,240.00	\$ 17,559.00	\$ 11,750.00	
8		COGS	\$ 48,500.00	\$ 18,995.00	\$ 16,659.00	\$ 7,647.00	\$ 5,199.00	
9		Total Expenses	\$ 32,632.00	\$ 15,341.00	\$ 9,556.00	\$ 5,276.00	\$ 2,459.00	
10		Marketing	\$ 19,108.00	\$ 9,843.00	\$ 5,056.00	\$ 2,736.00	\$ 1,473.00	
11		Payroll	\$ 13,239.00	\$ 5,388.00	\$ 4,395.00	\$ 2,484.00	\$ 972.00	
12		Misc	\$ 285.00	\$ 110.00	\$ 105.00	\$ 56.00	\$ 14.00	
13								
14	Budget	Profit	\$ 35,950.00	\$ 11,640.00	\$ 14,730.00	\$ 5,050.00	\$ 4,530.00	
15		Margin	\$ 61,340.00	\$ 23,890.00	\$ 22,030.00	\$ 8,860.00	\$ 6,560.00	
16		Sales	\$ 106,740.00	\$ 42,300.00	\$ 37,860.00	\$ 15,270.00	\$ 11,310.00	
17		COGS	\$ 45,400.00	\$ 18,410.00	\$ 15,830.00	\$ 6,410.00	\$ 4,750.00	
18		Total Expenses	\$ 25,390.00	\$ 12,250.00	\$ 7,300.00	\$ 3,810.00	\$ 2,030.00	
19		Marketing	\$ 15,570.00	\$ 8,290.00	\$ 4,020.00	\$ 2,040.00	\$ 1,220.00	
20		Payroll	\$ 9,820.00	\$ 3,960.00	\$ 3,280.00	\$ 1,770.00	\$ 810.00	
21		Misc	-	-	-	-	-	
22								
23	Actual vs. Plan	Profit_	\$ (7,996.00)	\$ (4,439.00)	\$ (2,705.00)	\$ (414.00)	\$ (438.00)	
24		Margin_	\$ (754.00)	\$ (1,348.00)	\$ (449.00)	\$ 1,052.00	\$ (9.00)	
25		Sales_	\$ 2,346.00	\$ (763.00)	\$ 380.00	\$ 2,289.00	\$ 440.00	
26		COGS_	\$ 3,100.00	\$ 585.00	\$ 829.00	\$ 1,237.00	\$ 449.00	
27		Total Expenses_	\$ 7,242.00	\$ 3,091.00	\$ 2,256.00	\$ 1,466.00	\$ 429.00	
28		Marketing_	\$ 3,538.00	\$ 1,553.00	\$ 1,036.00	\$ 696.00	\$ 253.00	
29		Payroll_	\$ 3,419.00	\$ 1,428.00	\$ 1,115.00	\$ 714.00	\$ 162.00	
30		Misc_	#/VALUE!	#/VALUE!	#/VALUE!	#/VALUE!	#/VALUE!	

- 9 Repeat step 3 through step 8 for the remaining worksheets and products, adding or removing data columns and applying the appropriate formats as necessary.

## Using the POV as a Page Drop-down

When you have completed the grids, you can then set up the POV as a type of page drop-down to help users leverage the report.

- To set up the POV as a page drop-down:
  - 1 In the POV on Sheet 1, select **Options > Select Members > Market** to display **Member Selection**.
  - 2 Select all members from the **Market** dimension and click **OK**.
  - 3 Dock the POV at the top of the Excel window.

You can now select members from the POV as needed and refresh the grid. As you do so, the data values on the grid are recalculated based on the selection in the POV:

In this example, California is about to be selected:

		100	100-10	100-20	100-30
Actual	Profit	\$ 12,656.00	\$ 11,129.00	\$	\$ 413.00
	Margin	\$ 18,418.00	\$ 15,762.00	\$	\$ 871.00
	Sales	\$ 27,740.00	\$ 23,205.00	\$	\$ 1,467.00
	COGS	\$ 9,322.00	\$ 7,443.00	\$	\$ 596.00
	Total Expenses	\$ 5,762.00	\$ 4,633.00	\$ 671.00	\$ 458.00
	Marketing	\$ 3,072.00	\$ 2,497.00	\$ 391.00	\$ 184.00
	Payroll	\$ 2,649.00	\$ 2,106.00	\$ 276.00	\$ 267.00
	Misc	\$ 41.00	\$ 30.00	\$ 4.00	\$ 7.00
Budget	Profit	\$ 13,150.00	\$ 11,450.00	\$ 1,120.00	\$ 580.00
	Margin	\$ 17,200.00	\$ 14,730.00	\$ 1,640.00	\$ 830.00
	Sales	\$ 25,500.00	\$ 21,390.00	\$ 2,800.00	\$ 1,310.00
	COGS	\$ 8,300.00	\$ 6,660.00	\$ 1,160.00	\$ 480.00
	Total Expenses	\$ 4,050.00	\$ 3,280.00	\$ 520.00	\$ 250.00
	Marketing	\$ 2,290.00	\$ 1,890.00	\$ 290.00	\$ 110.00
	Payroll	\$ 1,760.00	\$ 1,390.00	\$ 230.00	\$ 140.00
	Misc	-	-	-	-
Actual vs. Plan	Profit_	\$ (494.00)	\$ (321.00)	\$ (6.00)	\$ (167.00)
	Margin_	\$ 1,218.00	\$ 1,032.00	\$ 145.00	\$ 41.00
	Sales_	\$ 2,240.00	\$ 1,815.00	\$ 268.00	\$ 157.00
	COGS_	\$ 1,022.00	\$ 783.00	\$ 123.00	\$ 116.00

## Tips

- Name the sheets to match the product line represented on each sheet.
- Use the Refresh All option to refresh all sheets in a workbook at one time, versus manually selecting and refreshing each sheet.

### Note:

The techniques shown in [Creating and Distributing Report Templates Using Free-Form](#), and in [Answering Business Questions Using Free-Form](#) work correctly whether you are connected to an Essbase or Financial Management or Hyperion Enterprise data source.

## Retrieving Data into Asymmetric Reports

When you retrieve data into a worksheet, the resulting report can be either *symmetric* or *asymmetric*. Symmetric reports are characterized by repeating identical groups of members. For example, a symmetric report may contain Actual and Budget members nested below Year members (Qtr1, Qtr2, Qtr3, and Qtr4).

An asymmetric report is characterized by groups of nested members that differ by at least one member. There can be a difference in the number of members or in the names of members.

You can create asymmetric reports in one of the following ways:

- Enter member names into the worksheet in free-form retrieval mode.

- Use a zoom in action with the “Within Selected Group” option selected from the Ad Hoc tab of the Options dialog box. See [“Member Retention Options” on page 205](#) for information on setting this property.
- Suppress rows that contain missing values, zero values, or underscore characters during data retrievals. See [“Suppressing Types of Data” on page 201](#) for information on suppressing rows.

Note that if you retrieve data into an asymmetric report, Smart View must perform additional internal processing to maintain the asymmetric layout. This processing may increase the retrieval time on large reports.

# 9

## Accessing Dynamic Data Across Microsoft Office

### In This Chapter

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## Copying and Pasting Live Data into Word and PowerPoint

To present data, Word or PowerPoint is often preferable to Excel. Smart View enables you to copy data points from Excel and paste them into Word or PowerPoint, creating linked views (dynamic data) between applications.

### Note:

When creating connections to data source providers, do not use semicolons (;) in connection names planned for using functions. An error occurs when pasting function data points, if connection names contain semicolons.

You can copy and paste data points from:

- Excel to Word and PowerPoint
- Word to Word and PowerPoint
- PowerPoint to Word and PowerPoint

The data points retain their original Excel-based query information, thus enabling users to perform data analysis. Word and PowerPoint can contain data points from multiple data sources, such as Essbase, Financial Management, and Hyperion Enterprise within one document.

Notes:

- Dynamic data points are maintained only in Word and PowerPoint. If you copy and paste data points within Excel, the data points are not linked to the Excel grid.
- When copying and pasting from Word to PowerPoint, or vice versa, data is displayed in a straight line. The tabular format is preserved only when copying data from Excel into Word or PowerPoint.
- Excel formatting is preserved when data is pasted into Word and PowerPoint. Apply the formatting in Excel before copying and pasting data.
- You can use Word or PowerPoint tools to change number formatting.

- To copy and paste data from Excel to Word or PowerPoint:
  - 1 In Excel, select a data cell or range (may or may not include members).
  - 2 Select **Hyperion > Copy Data Points**. For Office 2007, click **Copy Data** in the **Task** section of the **Hyperion** ribbon.
  - 3 Open a Word or PowerPoint document.
  - 4 When asked if you want to create a connection, click **Yes**.
  - 5 Select **Hyperion > Paste Data Points**. For Office 2007, click **Paste Data** in the **Task** section of the **Hyperion** ribbon.
  - 6 Select **Hyperion > Refresh** or **Hyperion > Refresh All**. For Office 2007, click **Refresh** or **Refresh All** in the **Review** section of the **Hyperion** ribbon.

The procedure for copying and pasting data points from Word to Word and PowerPoint or PowerPoint to Word and PowerPoint are similar.

**Note:**

When pasting data points into Word and saving the document in another format, such as a .htm or .mht file, you cannot refresh the data.

You can retrieve the Excel queries from which the data points were copied.

- To retrieve the Excel spreadsheets from which data points were copied:
  - 1 In a Word or PowerPoint document into which Excel data points were pasted, select the data cells.
  - 2 Select **Hyperion > Link View > Visualize in Excel**. For Office 2007, click **Visualize in Excel** in the **Visualize** section of the **Hyperion** ribbon.
  - 3 If asked to log on the data source, enter the username and password.

Excel displays the spreadsheet associated with the data cells. You can perform ad hoc analysis on the data.

You can view dynamic data in Visual Explorer.

**Note:**

Hyperion Enterprise does not support display of dynamic data in Visual Explorer.

- To display the data in Hyperion Visual Explorer:
  - 1 In a Word or PowerPoint document into which Excel data points were pasted, select the data cells.
  - 2 Select **Hyperion > Link View > Visualize in HVE**. For Office 2007, click **Visualize in Excel** in the **Visualize** section of the **Hyperion** ribbon.

Visual Explorer is displayed. See *Visual Explorer Online Help*.

## Changing POV in Word and PowerPoint

After pasting Excel data points into Word or PowerPoint, you can use the POV Manager to change the POV.

- To change the POV in Word or PowerPoint:
  - 1 In a Word or PowerPoint document into which Excel data points were pasted, select **Hyperion > POV Manager**. For Office 2007, click **POV Manager** in the **Task** section of the **Hyperion** ribbon.
  - 2 In POV Manager, expand the POV list.

The data source connection information and active POV members are listed.
  - 3 To change the POV, double-click a member in the POV list or click **Member Selector**.

The Member Selection dialog box is displayed.
  - 4 Select a member using the **Member Selection** dialog box. See [“Selecting Members for Ad Hoc Analysis” on page 81](#).
  - 5 **Optional:** To modify the URL connection:
    - a. Under **Connection**, double-click the URL.
    - b. In **Add Data Source**, connect to a new data source.

See [“Adding a Data Source Connection” on page 34](#).
  - 6 Click **Close**.
  - 7 Select **Hyperion > Refresh** or **Hyperion > Refresh All**. For Office 2007, click **Refresh** or **Refresh All** in the **Review** section of the **Hyperion** ribbon.





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## Viewing Data in Graphical Format

Visual Explorer (HVE) is a visual analysis and reporting tool that enables Essbase users licensed to use HVE to explore and analyze databases. HVE can be launched from Excel, Word, or PowerPoint with or without Smart View. With Smart View, data can be passed from HVE back to the Excel worksheet from which it was launched or inserted into a new worksheet where you can do additional analysis.

**Note:**

See the Visual Explorer online help for information on what Visual Explorer can do and how it works.

## Viewing Data in Excel

- To view data in Excel using Visual Explorer:
  - 1 **Open a worksheet in Excel.**
  - 2 **Connect to an Essbase data source.**
  - 3 **Create a report or use an existing one.**
  - 4 **Select **Hyperion > Link View > Visualize in HVE**. For Office 2007, click **Visualize in HVE** in the **Visualize** section of the **Hyperion** ribbon.**

The Visual Explorer interface is displayed.

- 5 **In **Show Me! Alternatives**, select a format and click **OK**.**

## Viewing Data from Word or PowerPoint

Smart View enables you to copy data points from Excel to Word or PowerPoint and have those data points retain their original spreadsheet query information. See [Chapter 9, “Accessing Dynamic Data Across Microsoft Office.”](#) You can also view the data in Word or PowerPoint in graphical format using Visual Explorer.

► To view data in Word or PowerPoint in Visual Explorer:

- 1 **Select the data cells in Word or PowerPoint.**
- 2 **Select Hyperion > Visualize in HVE.**

For Office 2007, click Visualize in Excel in the Visualize section of the Hyperion ribbon.

- 3 **In *Show Me! Alternatives*, select a graphical format and click OK.**

Visual Explorer displays the spreadsheet associated with the data cells in graphical format.

## Starting Visual Explorer Independently of Smart View

You can start Oracle's Hyperion® Essbase® Visual Explorer as a stand-alone application, independent of Excel and Smart View.

► To start Visual Explorer as a stand-alone application:

- 1 **Navigate to the location of your Smart View installation.**

The default location is C:\Hyperion\SmartView.

- 2 **In the bin folder, double-click hve.exe.**

- 3 **To connect to an Essbase data source, select *Data > Connect to Data Source* and follow the procedure in “[Connecting to a Data Source](#)” on [page 37](#) to complete the connection.**

# 11

## Importing Reporting and Analysis Documents into Microsoft Office

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## Importing Reporting and Analysis Documents

Using Smart View, you can import Reporting and Analysis documents into Microsoft Excel, Word, or PowerPoint.

- For Financial Reporting and Web Analysis, you can import reports.
- For Interactive Reporting, you can import charts, dashboards, and reports. Using the latest run of BQY jobs, Interactive Reporting supports refresh capabilities.
- For SQR Production Reporting, you can import jobs and job outputs.

Important tasks:

- “Importing Interactive Reporting Documents” on page 158
- “Importing Financial Reporting Documents” on page 162
- “Importing Production Reporting Documents” on page 165
- “Importing Web Analysis Documents” on page 168
- “Using Smart Tags to Import Reporting and Analysis Documents ” on page 172
- “Creating PowerPoint Templates for Financial Reporting” on page 173

## Editing and Refreshing Documents

In Office, the Hyperion menu (Hyperion ribbon in Office 2007) provides the ability to edit and refresh documents that were previously imported from Workspace. The Hyperion menu or ribbon provides the following edit and refresh options:

- Edit—change filters, POVs, or parameters of embedded Workspace documents.
- Refresh—refresh the selected job with the latest Workspace data. Only the job selected in Office is updated; not the entire Office document.
- Refresh All— update all jobs in the Office document.

### General edit and refresh behavior

- After the initial import into Office, you can delete any number of pages. Then, when you perform a Refresh, an update is performed on the remaining pages; the deleted pages are not reinstated into the document. For example, if you delete page 2 of 4 pages, only pages 1, 3, and 4 are updated.
- If during Edit or refresh the number of imported pages are less than the original import, the removed pages display as blanks pages in Office.
- If an Edit or Refresh results in additional Workspace pages, those pages are appended to the end of the document in Office.
- With refresh, formatted pages such as headings and comments are retained in Word and PowerPoint. In Excel, formatting is not retained on refreshed pages.

### Maintaining cell references during document refresh

In Excel, a customized worksheet that references imported document cells or ranges is updated when you execute a Refresh All on the imported documents. For example, imported worksheet A and B are referenced in customized worksheet C. When you execute Refresh All on worksheet A and B, worksheet C is refreshed with updated data from worksheets A and B.

## Refreshing Reporting and Analysis Documents

Refreshing updates the report with the latest data from Workspace.

Refresh behavior in SQR Production Reporting and Interactive Reporting:

- In Word, if a report is selected, the entire report is refreshed. If no report is selected, the first report found in the document is refreshed. The first report is not necessarily the report at the beginning of the document.
- In PowerPoint, if no report is selected, the first report found in the slide is updated.

When refreshing job outputs in SQR Production Reporting, new outputs in Workspace are updated.

Refresh behaviors in Financial Reporting and Web Analysis:

- You must select a page in the report to refresh. In Word and PowerPoint, if you do not select any pages when refreshing, a message is displaying stating that no pages are updated.

- If you select Refresh, all pages of the report are refreshed. If you select Refresh All, then all reports in the document are refreshed.
- To refresh Workspace documents in Excel, Word, or PowerPoint, perform an action:
- 1 Select **Hyperion > Refresh** to update the selected Reporting and Analysis document, including all pages associated with that document. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.
  - 2 Or, select **Hyperion > Refresh All** to update all Reporting and Analysis documents. For Office 2007, click **Refresh All** in the **Review** section of the **Hyperion** ribbon.

Refreshing Reporting and Analysis documents against Essbase or Financial Management connections

**Note:**

This applies to Financial Reporting and Web Analysis reports imported into query-ready HTML.

Refreshing against Essbase or Financial Management connections updates the report with the latest data from Analytic Services and enables you to perform ad hoc analysis on the Reporting and Analysis document, such as retrieving, zooming, or pivoting data. See [Chapter 7, “Working with Ad Hoc Analysis”](#).

Refresh for a report imported in query-ready HTML applies to the current page and not all pages.

### Important Tasks

- [“Editing Interactive Reporting Documents” on page 161](#)
- [“Editing Financial Reporting Documents” on page 164](#)
- [“Editing Production Reporting Jobs ” on page 168](#)
- [“Editing Web Analysis Documents” on page 171](#)

## Financial Reporting and Web Analysis Import Formats

You can import Financial Reporting and Web Analysis documents as fully-formatted HTML, which you can display in Excel, or in query-ready HTML, which enables you to connect to Financial Management or Essbase data sources and run queries.

When you import Reporting and Analysis documents as query-ready HTML, the selected pages of the current data object is converted to HTML, and Hyperion-specific formatting is removed. Thus, Smart View can re-query the data source independent of the Web application.

When you import Reporting and Analysis documents as fully formatted HTML, the selected pages of the current data object is converted to HTML, and Hyperion formatting definitions and calculated members are retained. Thus, Smart View cannot directly query the data source, but Hyperion content can be leveraged by Microsoft Office applications.

**Tip:**

After importing an image in Word or PowerPoint, use the Microsoft Office Format Picture option to format it; for example, to crop and resize. The Format Picture settings are preserved, even after you refresh the image.

## Adding Security Certificates for SSL-enabled Workspace Servers

When accessing Workspace servers running on HTTPS protocols, the server's security certificate must be issued by a trusted company. To avoid unnecessary prompts when importing documents, you must add the security certificate into the Internet Explorer certificate path on the Smart View client's machine.

► To add security certificates:

**1** In Internet Explorer, connect to Workspace; for example:

`https://<workspace_webserver>.hyperion.com/workspace/index.jsp.`

**2** If prompted with the warning message, “The security certificate was issued by a company you have not chosen to trust,” select **View Certificate**.

**3** Select **Certification Path**.

**4** Ensure that all certificates in the certification path have been trusted.

## Importing Interactive Reporting Documents

- [“Importing Interactive Reporting Documents into Excel” on page 159](#)
- [“Importing Interactive Reporting Documents into Word and PowerPoint” on page 160](#)
- [“Editing Interactive Reporting Documents” on page 161](#)

Imported Interactive Reporting documents are section-specific.

**Table 6** Interactive Reporting Import Object Types

Section	Excel	Word, PowerPoint
Table	Formatted data	NA
Results	Formatted data	NA
Chart	Formatted data	Image
Pivot	Formatted data	NA
Report	Formatted data	Image
Dashboard	Image	Image
Query	NA	NA

Section	Excel	Word, PowerPoint
Data model	NA	NA

The following restrictions apply when Interactive Reporting documents are imported into Excel:

- Hidden sections are displayed during import.
- Importing dashboard sections into Excel resizes A1 cells.
- Importing report sections into Excel places chart images before tables.
- Importing into Excel may not preserve colors correctly.
- Results sections that contain the euro currency format do not import into Excel.
- Results sections with "+" in their name do not import.

## Importing Interactive Reporting Documents into Excel

► To import Interactive Reporting documents into Excel:

**1** Using **Connection Manager**, connect to a **Workspace** data source.

See [“Adding a Data Source Through Direct Connection”](#) on page 35 and [“Adding a Data Source Through Shared Services”](#) on page 36.

**2** If you have multiple connections, select **Hyperion > Active Connections**, and select a data source. For Office 2007, click **Activate** in the **Connections** section of the **Hyperion** ribbon.

**3** Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.

The Import Workspace Document dialog box is displayed.

**4** In **Select a Document**, expand the repository, select an Interactive Reporting document, and click **OK**.

A wizard screen is displayed.

### Note:

Some wizard screens do not apply to some documents.

**5** In **Select an Action**, select an option:





- **Process and Preview**, to change filters or values prior to previewing the document
- **Preview**, to preview the document with default settings

**6** Click **Next**.

**7** If you selected **Process and Preview**:

- If user authentication is required to change filters, such as variable, value, or option in the document's settings, in **Specify Database Credentials**, enter the username and password, and click **Next**.

The connection name is displayed in parentheses (for example, `Sample.ocr`).

- b. In **Specify Filters**, select a value.
- 8 Click **Apply**, and click **Next**.
  - 9 If importing a multiple-page document in **Preview**, use the **Page** navigation buttons to select a page to preview:
    -  goes to the first page of the report
    -  goes to the previous page of the report
    -  goes to the next page of the report
    -  goes to the last page of the report
  - 10 Optional: to import all pages of the document, select **All Pages**.
  - 11 If your document contains multiple pages, select **Split pages across worksheets** to display each page on a separate Excel worksheet.
  - 12 Click **Finish**.
- The document is displayed in Excel.

## Importing Interactive Reporting Documents into Word and PowerPoint

- To import Interactive Reporting documents into Word:
- 1 Using **Connection Manager**, connect to a Workspace data source.  
See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).
  - 2 Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.  
The Import Workspace Document dialog box is displayed.
  - 3 In **Select a Document**, expand the repository, select an Oracle's Hyperion® Interactive Reporting – System 9 document, and click **OK**.
- Note:**
- Some wizard screens do not apply to some documents.
- 4 In **Select an Action**, select an option:
    - **Process and Preview**, to change filters or values prior to previewing the document
    - **Preview**, to preview the document with default settings
  - 5 Click **Next**.
  - 6 If you selected **Process and Preview**:







- a. If user authentication is required to change filters, such as variable, value, or option in the document settings, in **Specify Database Credentials**, enter the username and password, and click **Next**.

The connection name is displayed in parentheses (for example, `Sample.occ`).

- b. In **Specify Filters**, select a value.

**7 Click **Apply**, and click **Next**.**

**8 If importing a multiple-page document, in **Preview**, use the **Page** navigation buttons to select a page to preview:**

-  goes to the first page of the report
-  goes to the previous page of the report
-  goes to the next page of the report
-  goes to the last page of the report

**9 Optional: To import all pages of the document, select **All Pages**.**

**10 Click **Finish**.**

The document is imported.

## Editing Interactive Reporting Documents

► To edit Interactive Reporting documents in Excel, Word, and PowerPoint:

**1 Select a page.**

### Note:

When editing a report, select a page from the report, then **Edit**. If you do not select a page, a message is displayed stating that no pages are updated.

**2 Select **Hyperion > Reporting and Analysis Document > Edit**. For Office 2007, click **BI Edit** in the **Task** section of the **Hyperion** ribbon.**

**3 If you selected **Process and Preview**:**





- a. If user authentication is required to change filters, such as variable, value, or option in the document settings, in **Specify Database Credentials**, enter the username and password, and click **Next**.

The connection name is displayed in parentheses (for example, `Sample.occ`).

- b. In **Specify Filters**, select a value.

**4 Click **Apply**, and click **Next**.**

**5 If importing a multiple-page document, in **Preview**, use the **Page** navigation buttons to select a page to preview.**

-  goes to the first page of the report
-  goes to the previous page of the report
-  goes to the next page of the report
-  goes to the last page of the report

6 Click **Finish**.

## Importing Financial Reporting Documents

- [“Financial Reporting and Web Analysis Import Formats”](#) on page 157.
- [“Importing Financial Reporting Documents into Excel”](#) on page 162
- [“Importing Financial Reporting Documents into Word and PowerPoint”](#) on page 164
- [“Editing Financial Reporting Documents”](#) on page 164

**Table 7** Financial Reporting Import Document Types

Document Type	Excel	Word, PowerPoint
Report	Fully formatted, query-ready	Image
Snapshot report	Fully formatted	Image
Book	NA	NA
Snapshot Book	NA	NA
Batch	NA	NA
Grid Object	NA	NA
Image Object	NA	NA
Chart Object	NA	NA
Text Object	NA	NA
Row and Column template	NA	NA

## Importing Financial Reporting Documents into Excel

➤ To import Financial Reporting documents into Excel:

1 Using **Connection Manager**, connect to a Workspace data source.

See [“Adding a Data Source Through Direct Connection”](#) on page 35 and [“Adding a Data Source Through Shared Services”](#) on page 36.

- 2 If you have multiple connections, select **Hyperion > Active Connections** and select a data source to activate. For Office 2007, click **Activate** in the **Connections** section of the **Hyperion** ribbon.
- 3 Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.

The Import Workspace Document dialog box is displayed.

- 4 In **Select a Document**, expand the repository, select a Financial Reporting document, and click **OK**.

The document is previewed in the Import Workspace Document window.

**Note:**

Some options may not be available for some documents.

- 5 If the **Preview User Point of View** is displayed, preview the current POV or change the members of the POV.

**Note:**

To display this screen, select Preview in Workspace preferences, for User Point of View.

- 6 Click **Next**.

- 7 Optional: If you want to change the default value, in **Respond to Prompts**, make a selection for prompts, and click **Next**.

**Note:**

This screen is displayed only if the document contains prompts.

- 8 **Optional: In Preview from Grid POV**, change the POV by selecting a POV.
- 9 Change the page dimension by selecting **Page**.
- 10 To import all pages of the document, select **All Pages** to import all pages of the document.
- 11 To display each page on a separate Excel worksheet, select **Split Pages across worksheets**.
- 12 In **Import Document As**, select an option:
  - **Fully-Formatted** (displays reports in a fully-formatted HTML)
  - **Query-Ready** (enables you to run ad hoc analysis on reports when connected to Financial Management and Essbase data sources)
- 13 Click **Finish**.

The document is imported into Excel. If you used the Fully-Formatted option, you can only view the Reporting and Analysis document. If you used the Query-Ready option, then connect to a Financial Management or Essbase data source, you can perform ad hoc analysis, such as retrieving, zooming, or pivoting data. See [Chapter 7, “Working with Ad Hoc Analysis”](#).

## Importing Financial Reporting Documents into Word and PowerPoint

► To import Financial Reporting documents into Word and PowerPoint:

- 1 Using **Connection Manager**, connect to a **Workspace** data source.

See “[Adding a Data Source Through Direct Connection](#)” on page 35 and “[Adding a Data Source Through Shared Services](#)” on page 36.

- 2 Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.

The Import Workspace Document dialog box is displayed.

- 3 In **Select a Document**, expand the repository, select a **Financial Reporting** document, then click **OK**.

The document is previewed in the Import Workspace Document window.

### Note:

Some screens do not apply to some documents.

- 4 If the **Preview User Point of View** screen is displayed, preview the current POV or change the members of the POV by selecting a member.

### Note:

To display this screen, select **Preview** in **Workspace preferences**, for **User Point of View**.

- 5 Optional: If you want to change the default value, in **Respond to Prompts**, make a selection for prompts, and click **Next**.

### Note:

This screen is displayed only if the document contains prompts.

- 6 In **Preview** from **Grid POV**, change the POV by selecting a POV.
- 7 Change the page dimension by selecting **Page**.
- 8 Select **All Pages** to import all pages of the document.
- 9 In **Import Document As**, select **Image** to import the document as an image.
- 10 Click **Finish**.

The document is imported.

## Editing Financial Reporting Documents

► To edit Financial Reporting documents in Excel, Word, and PowerPoint:

- 1 Select a page.

**Note:**

When editing a report, select a page from the report, then Edit.

- 2 Select **Hyperion > Reporting and Analysis Document > Edit**. For Office 2007, click **BI Edit** in the **Task** section of the **Hyperion** ribbon.
- 3 If the **Preview User Point of View** screen is displayed, preview the current POV or change the members of the POV.

**Note:**

To display this screen, select Preview in Workspace preferences, for User Point of View.

- 4 Optional: If you want to change the default value, in **Respond to Prompts**, make a selection for prompts, and click **Next**.

**Note:**

This screen is displayed only if the document contains prompts.

- 5 If you want to change the POV, in **Preview** from **Grid POV** select a POV.
- 6 Click **Finish**.

## Importing Production Reporting Documents

SQR Production Reporting documents consist of jobs and job outputs, which you can import into Excel, Word, and PowerPoint.

- [“Importing Production Reporting Jobs into Excel” on page 165](#)
- [“Importing Production Reporting Jobs into Word and PowerPoint” on page 166](#)
- [“Importing Production Reporting Job Outputs into Excel, Word, and PowerPoint” on page 167](#)
- [“Editing Production Reporting Jobs ” on page 168](#)

**Table 8** Production Reporting Import Object Types

Object Type	Excel	Word, PowerPoint
Job	Formatted data	Image
Job output	Formatted data	Image

Some limitations exist for importing:

- Images and charts are not imported into Excel.
- Secure jobs are supported, but jobs imported as generic jobs are not supported.

## Importing Production Reporting Jobs into Excel

- To import Production Reporting jobs into Excel:
- 1 Using **Connection Manager**, connect to a Workspace data source. See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).
  - 2 If you have multiple connections, select **Hyperion > Active Connections** and select a data source to activate. For Office 2007, click **Activate** in the **Connections** section of the **Hyperion** ribbon.
  - 3 Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.  
The Import Workspace Document dialog box is displayed.
  - 4 In **Select a Document**, expand the repository, select a SQR Production Reporting job, then click **OK**.  
The import wizard screen is displayed.





**Note:**

Depending on the document, some screens may not be applicable.

- 5 If the **Specify Parameters** screen is displayed, define the job parameters, and click **Next**.

**Note:**

This screen is displayed only if the job contains parameters.

- 6 In **Preview**, if importing a multiple page job, use the **Page** navigation buttons to select a page to preview:
  -  goes to the first page of the report
  -  goes to the previous page of the report
  -  goes to the next page of the report
  -  goes to the last page of the report
- 7 To import all pages of the job, select **All Pages**.
- 8 Select **Split Pages across worksheets** to display each page on a separate Excel worksheet.
- 9 Click **Finish**.  
The document is displayed in Excel.

## Importing Production Reporting Jobs into Word and PowerPoint

The procedures for importing SQR Production Reporting jobs into Word and PowerPoint are similar.

- To import SQR Production Reporting jobs into Word and PowerPoint:
- 1 Using **Connection Manager**, connect to a Workspace data source.

See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).

- 2 Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.

The Import Workspace Document dialog box is displayed.

- 3 In **Select a Document**, expand the repository, select a Reporting and Analysis document, then click **OK**.

The import wizard is displayed.

**Note:**





Some screens may not apply to some documents.

- 4 If the **Specify Parameters** screen is displayed, define the job parameters, and click **Next**.

**Note:**

This screen is displayed only if the job contains parameters.

- 5 If importing a multiple-page job, in **Preview**, use the **Page** navigation buttons to select a page to preview:

-  goes to the first page of the report
-  goes to the previous page of the report
-  goes to the next page of the report
-  goes to the last page of the report

- 6 To import all pages of the job, select **All Pages**.

For Word, **Split pages across pages** is disabled. For PowerPoint, **Split pages across slides** is selected and disabled because by default, the pages from jobs or job outputs always split across pages and slides.

- 7 Click **Finish**.

The job is imported.

## Importing Production Reporting Job Outputs into Excel, Word, and PowerPoint

- To import Production Reporting job outputs into Excel, Word, and PowerPoint:

- 1 Using **Connection Manager**, connect to a Workspace data source. See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).
- 2 If you have multiple connections, select **Hyperion > Active Connections** and select a data source to activate. For Office 2007, click **Activate** in the **Connections** section of the **Hyperion** ribbon.

- 3 Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.

The Import Workspace Document dialog box is displayed.

- 4 In **Select a Document**, expand the repository, select a SQR Production Reporting job output, then click **OK**.

The job output is imported.

## Editing Production Reporting Jobs

You can edit imported Oracle's Hyperion® SQR® Production Reporting – System 9 jobs, but not job outputs. You can edit only job parameters.

- To edit SQR Production Reporting jobs:

- 1 **Select a page.**

**Note:**

When editing a report, select a page from the report, then Edit. If you do not select a page, a message is displayed stating that no pages are updated.

- 2 Select **Hyperion > Reporting and Analysis Document > Edit**. For Office 2007, click **BI Edit** in the **Task** section of the **Hyperion** ribbon.

The Import Workspace Document dialog box is displayed.

- 3 If the **Specify Parameters** screen is displayed, define the job parameters, and click **Next**.

**Note:**

This screen is displayed only if the job contains parameters.

- 4 In **Preview**, view the job.

**Note:**

If you deleted any imported pages, edit updates only the remaining pages of the job.

- 5 **Click Finish.**

The job is updated.

## Importing Web Analysis Documents

Web Analysis includes five data object display types, but Smart View can import only three (spreadsheet, chart, and pinboard). Smart View cannot import freeform grid and SQL spreadsheets. See [“Financial Reporting and Web Analysis Import Formats” on page 157](#).

- [“Importing Web Analysis Documents into Excel” on page 169](#)



- “Importing Web Analysis Documents into Word and PowerPoint” on page 170
- “Editing Web Analysis Documents” on page 171

**Table 9** Web Analysis Import Document Type

Document Type	Excel	Word, PowerPoint
Report	Fully formatted, query-ready	Image

**Table 10** Web Analysis Import Data Object Type

Data Object	Excel	Word, PowerPoint
Spreadsheet	Data + formatting	Image
Chart	Data + formatting	Image
Pinboard	Data + formatting	Image

## Importing Web Analysis Documents into Excel

► To import Web Analysis documents into Excel:


- 1 Using **Connection Manager**, connect to a Workspace data source. See “Adding a Data Source Through Direct Connection” on page 35 and “Adding a Data Source Through Shared Services” on page 36.
- 2 If you have multiple connections, select **Hyperion > Active Connections** and select a data source to activate. For Office 2007, click **Activate** in the **Connections** section of the **Hyperion** ribbon.
- 3 Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.




The Import Workspace Document dialog box is displayed.

- 4 In **Select a Document**, expand the repository, select a Web Analysis document, and click **OK**.
- 5 If database credentials are not saved with the Web Analysis document, then the **Specify Database Credentials** page is displayed where you are required to enter valid log on credentials to data sources used in the report. If a report has only one data source and you skip entering credentials, the report is not imported. If you have data objects with different data sources in one report and only want to import one of the data objects, you can enter the credentials for the data objects you want to import and skip credential for the data object you do not wish to import. Enter the user name and password or select **Skip** to skip entering credentials to any of the data sources, and click **Next**.

### Tip:

Select **Save Credentials** to save credentials with a Web Analysis document.

- 6 Select a data object (spreadsheet, chart, or pinboard) to import.
- 7 In **Preview**, using the **Pages** navigation buttons, select a page to import:
  -  goes to the first page of the report

-  goes to the previous page of the report
-  goes to the next page of the report
-  goes to the last page of the report

**8 Optional:** To import all pages of the document, select **All Pages**.

**9** If your document contains multiple pages, select **Split Pages across worksheets** to display each page on a separate Excel worksheet.

**10** To import multiple objects on multiple sheets, select **All Report Objects**.

**Note:**

You can select **Split pages across worksheets** to import objects on separate worksheets instead of one worksheet.

**11** In **Import Document As**, select an option:

- **Fully Formatted** (imports reports in fully-formatted HTML)
- **Query-Ready** (imports reports in query-ready HTML)

**12** Click **Finish**.

The document is imported in Excel. If you used the Fully Formatted option, you can only view the Reporting and Analysis document. If you used the Query-Ready option, connect to a Financial Management or Essbase data source, to perform ad hoc analysis on the Reporting and Analysis document, such as retrieving, zooming, or pivoting data. See [Chapter 7, “Working with Ad Hoc Analysis.”](#)

## Importing Web Analysis Documents into Word and PowerPoint

➤ To import Web Analysis documents into Word and PowerPoint:

**1** Using **Connection Manager**, connect to a Workspace data source.

See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).

**2** Select **Hyperion > Reporting and Analysis Document > Import**. For Office 2007, click **BI Import** in the **Task** section of the **Hyperion** ribbon.

The **Import Workspace Document** dialog box is displayed.





**3** In **Select a Document**, expand the repository, select a Web Analysis document, and click **OK**.

**4** If database credentials are not saved with the Web Analysis document, then the **Specify Database Credentials** page is displayed where you are required to enter valid log on credentials to data sources used in the report. If a report has only one data source and you skip entering credentials, the report is not imported. If you have data objects with different data sources in one report and only want to import one of the data objects, you can enter the credentials for the data objects you want to import and skip credential for the

data object you do not wish to import. Enter the **User Name** and **Password**, or select **Skip** to skip entering credentials to any of the data sources, and click **Next**.

**Tip:**

Select **Save Credentials** to save credentials with a Web Analysis document. It enables you to refresh an imported document later. Currently, you cannot refresh imported documents without saving credentials.

- 5 Select a data object (spreadsheet, chart, or pinboard) to import.
- 6 In **Preview**, using the **Page** navigation buttons, select a page to import:
  -  goes to the first page of the report
  -  goes to the previous page of the report
  -  goes to the next page of the report
  -  goes to the last page of the report
- 7 Optional: To import all pages of the document, select **All Pages**.
- 8 In **Import Document As**, select **Image** to import the document as image objects.
- 9 To import multiple objects on multiple sheets, select **All Report Objects**.
- 10 Click **Finish**.

The document is imported.

## Editing Web Analysis Documents

► To edit Web Analysis documents:

- 1 Select a page (Excel) or an image (Word or PowerPoint).





**Note:**

When editing a report, select a page (Excel) or an image (Word or PowerPoint) from the report, then Edit. If you do not select a page or an image, a message is displayed stating that no pages are updated.

- 2 Select **Hyperion > Reporting and Analysis Document > Edit**. For Office 2007, click **BI Edit** in the **Task** section of the **Hyperion** ribbon.
- 3 If database credentials are not saved with the Web Analysis document, then the **Specify Database Credentials** page is displayed. In **Specify Database Credentials**, enter the user name and password, or select **Skip**, then click **Next**.

**Tip:**

You can select Save Credentials to save them with the Oracle's Hyperion® Web Analysis – System 9 document.

- 4 Select a data object (spreadsheet, chart, or pinboard) to import.
- 5 In **Preview**, using the **Page** navigation buttons, select a page to import:
  -  goes to the first page of the report
  -  goes to the previous page of the report
  -  goes to the next page of the report
  -  goes to the last page of the report
- 6 Select **All Pages** to import all pages of the document. Leave the box cleared to import only the current page.
- 7 Select **Split Pages across worksheets** to display each page on a separate worksheet (Excel only).
- 8 In **Import Document As**, select:
  - Fully Formatted (Excel only)
  - Query-Ready (Excel only)
  - Image (Word and PowerPoint)
- 9 Click **Finish**.

## Using Smart Tags to Import Reporting and Analysis Documents

For Microsoft Office 2003, smart tags provide an alternative way of importing Reporting and Analysis documents, enabling you to import fully-formatted image objects from Workspace into documents.

Smart tags are supported in Outlook 2003 only if the e-mail editor uses Microsoft Word. By default, smart tags are turned off. Smart tags are not supported in Office versions prior to Microsoft Office 2003.

- [“Using Smart Tags to Import Reporting and Analysis Documents”](#) on page 172
- [“Removing Smart Tags for a Single Instance”](#) on page 187
- [“Stopping Hyperion Smart Tag Recognition”](#) on page 188
- [“Recognizing Smart View Smart Tags Again”](#) on page 189

➤ To turn on smart tags:

- 1 Select **Tools > AutoCorrect Options**.
- 2 Select **Smart Tags**.
- 3 Select **Label text with smart tags**.
- 4 Click **OK**.

- To import Reporting and Analysis documents using smart tags:

- 1 Open a Microsoft Office document.
- 2 Select **Hyperion > Connection Manager** and connect to a Workspace data source. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).

- 3 Type `smartview` anywhere in the document, then move the mouse over the word.

The smart tags action icon  is displayed. The smartview keyword is not case-sensitive.

- 4 Click  to display the **Smart View** menu.
- 5 From **Smart View**, select **Reporting and Analysis Content**.

The Import Workspace Document dialog box is displayed.

- 6 Follow the procedures for importing Reporting and Analysis documents after opening the **Import Workspace Document** dialog box:
  - [“Importing Interactive Reporting Documents” on page 158](#)
  - [“Importing Financial Reporting Documents” on page 162](#)
  - [“Importing Production Reporting Documents” on page 165](#)
  - [“Importing Web Analysis Documents” on page 168](#)

## Creating PowerPoint Templates for Financial Reporting

Using Smart View, you can create PowerPoint templates into which you can import multiple Financial Reporting reports to form PowerPoint presentations that can be saved and later refreshed.

- To create a template:

- 1 Open PowerPoint.
- 2 Select **Hyperion > Connection Manager** and connect to a Reporting and Analysis provider.
- 3 Select **Hyperion > BI+ Document > Create Template** to choose a Financial Reporting report. This action creates a new PowerPoint slide for the report.
- 4 Repeat step 3 as needed to import additional Financial Reporting reports into the PowerPoint presentation
- 5 Select **File > Save** to save the PowerPoint presentation.

- To refresh a template:

- 1 Open the PowerPoint presentation containing the template to be refreshed
- 2 Select **Hyperion > Connection Manager** and connect to a Oracle's Hyperion® Reporting and Analysis – System 9 provider.

**3 Select Hyperion > BI+ Document > Refresh Template.**

The template is replaced with a new presentation, and each Financial Reporting report placeholder in the template is replaced with the current Oracle's Hyperion® Financial Reporting – System 9 report using the current Oracle's Hyperion® Workspace Point of View. To run the template again you need to reopen the original emplate PowerPoint presentation.

**4 Edit and save the PowerPoint presentation as needed.**

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You can use functions to retrieve data from a Microsoft Excel worksheet and save it to your data source, or send data from a data source to a worksheet. You can also use functions to retrieve currency values, display member descriptions and labels, and send and retrieve cell text. Functions are available when accessing Financial Management, Essbase, and Hyperion Enterprise data source providers. You can also use smart tags to access functions.

### Note:

When creating connections to data source providers, do not use semicolons (;) in connection names planned for using functions. An error occurs when using Function Builder to create functions.

When a worksheet that contains saved functions is opened on a different machine than the one on which it was created, the functions include the path of the original machine. Smart View automatically updates the function paths when you open the worksheet.

**Note:**

If you are prompted to manually update the links, click Cancel and the links update automatically. Functions are not updated automatically if the Excel “Ask to Update Automatic Links” option is selected. In that case, you must manually update functions using the Excel Edit > Links option. Functions on a protected worksheet are not automatically updated.

## About Functions

You create functions by either of the following:

- The Function Builder (see “[The Function Builder](#)” on page 177).
- Creating function syntax manually (see “[Creating Functions Manually](#)” on page 189).

When you use the Function Builder to create functions, you can validate the function syntax before you paste it to a worksheet. When you create functions manually in worksheet cells, the functions are validated only when you refresh them.

[Table 11](#) lists the available functions.

**Table 11** Smart View Functions

Function	Description
<a href="#">HsGetValue</a>	Retrieves data from a data source for a given Point of View. Supported for Financial Management, Hyperion Enterprise, and Essbase.
<a href="#">HsSetValue</a>	Sends values to the data source for a given Point of View. Supported for Financial Management, Hyperion Enterprise, and Essbase.
<a href="#">HsCurrency</a>	Retrieves the entity currency for the selected members. Supported for Financial Management and Hyperion Enterprise.
<a href="#">HsDescription</a>	Displays the description for the default Point of View member. Supported for Financial Management and Hyperion Enterprise.
<a href="#">HsLabel</a>	Displays the label for the default Point of View member. Supported for Financial Management and Hyperion Enterprise.
<a href="#">HsGetText</a>	Retrieves cell text from the data source. Supported for Financial Management.
<a href="#">HsSetText</a>	Sends cell text to the data source. Supported for Financial Management.

For each function, you can specify a connection and a full or partial Point of View. If you do not specify a connection, the system uses the default connection. Some functions also require a value. For example, the HsSetValue function requires that you set a value in addition to the connection and Point of View.



If you do not specify a dimension in a function, the system uses the dimension member specified in the POV Manager. See [Chapter 15, “Using the POV Manager”](#).

If specified, the connection must precede the Point of View. The Point of View is made up of *dimension#member* pairs, where the pound symbol (#) is a separator between dimension and member, for example, Entity#Connecticut. Parent-child relationships can be represented with a period, for example, Entity#UnitedStates.Maine.

The connection and Point of View can be grouped as one parameter, for example “My\_connection;Entity#UnitedStates”. Alternatively, they can be split up into several function parameters, for example, “My\_connection”, “Entity#UnitedStates”, “Account#Sales”. If the connection and Point of View are in the same function parameter, the connection and each *dimension#member* pair are separated by a semi-colon (;) character, for example, “My\_connection;Entity#UnitedStates;Account#Sales”.

## Examples

```
HsGetValue (B4, "HFM01", "Scenario#Actual;Year#2004;Period#July;View#YTD;  
Entity#UnitedStates.Connecticut;Value#USD;Account#Sales;ICP#[ICP  
None];Custom1#GolfBalls;Custom2#Customer2;Custom3#[None];Custom4#  
Increases")
```

```
HsGetValue (B4, "HE01", "Scenario#Actual;Period#July;View#YTD;  
Entity#UnitedStates.Connecticut;Account#Sales")
```

```
HsCurrency ("HFM03", "Entity#UnitedStates.Connecticut", "Value#USD")
```

```
HsSetText  
("text", "Scenario#Budget;Year#2004;Period#July;View#YTD;Entity#UnitedStates  
.Connecticut;Value#USD;Account#Purchases;ICP#[ICP  
None];Custom1#GolfBalls;Custom2#Customer2;Custom3#[None];Custom4#  
Increases")
```

You can also use cell references in functions. For example, the following HsSetValue function uses cell references for the data value in the H4 cell and for the period:

```
HsSetValue (H4, "Comma"; "Period#" & B$2 & "; Entity#UnitedStates.Connecticut")
```

## The Function Builder

The Function Builder provides a graphical interface for creating functions. From the Function Builder, you can select a function, then select dimension members for the Point of View. You can view and validate the function before you paste it to the selected worksheet.

If a dimension does not apply for a specific function, the dimension is not available for selection. If you do not select a member for a dimension, the system uses the default members from the Point of View.

For information on selecting members, see [“Selecting Members for Functions” on page 180](#).

You can use cell references for all functions except HsLabel. When you enter a cell number, for example, B3, in the Member text box and select Cell Reference as the Member Type, the function uses the value from the referenced cell.

**Note:**

Before you begin this procedure, connect to all data sources that your functions will access.

► To create functions using the Function Builder:

- 1 Select the spreadsheet cell in which you want to paste the function.
- 2 Select **Hyperion > Functions > Function Builder**. For Office 2007, click **Function Builder** in the **Task** section of the **Hyperion** ribbon.

- 3 From **Select Connection**, select a data source.

Only connected data sources are displayed.

- 4 From the list of functions, select one of the following functions and then proceed to [step 5](#):

- To retrieve values, select **HsGetValue**.
- To send values, select **HsSetValue**.
- To retrieve the entity currency, select **HsCurrency**.
- To display the description for the default Point of View member, select **HsDescription**.
- To display the label for the default Point of View member, select **HsLabel**.
- To retrieve cell text, select **HsGetText**.
- To submit cell text, select **HsSetText**.

**Note:**

When connected to Provider Services, only **HsGetValue** and **HsSetValue** are displayed in Function Builder.

- 5 Depending on the function you selected in [step 4](#), select parameters as follows:

Function	Parameters
<a href="#">HsGetValue</a>	<ol style="list-style-type: none"><li>Select a dimension.</li><li>In the <b>Member</b> column, do one of the following:<ul style="list-style-type: none"><li>● Double-click to enter a member name.</li><li>● Click <b>Select Member</b> to select members as described in <a href="#">“Selecting Members for Functions” on page 180</a>.</li><li>● To use a cell reference, enter a cell identity.</li></ul></li><li>Double-click in the <b>Member Type</b> column. From the drop-down list, select <b>Member</b> or <b>Cell Reference</b>.</li></ol>
<a href="#">HsSetValue</a>	<ol style="list-style-type: none"><li>Select a dimension.</li><li>In the <b>Member</b> column, do one of the following:<ul style="list-style-type: none"><li>● Double-click to enter a member name.</li><li>● Click <b>Select Member</b> to select members as described in <a href="#">“Selecting Members for Functions” on page 180</a>.</li><li>● To use a cell reference, enter a cell identity.</li></ul></li></ol>

Function	Parameters
	<p>c. Double-click in the <b>Member Type</b> column, then from the drop-down list, select either <b>Member</b> or <b>Cell Reference</b>.</p> <p>d. Select <b>Data</b> or <b>Cell Reference</b> and enter the value to send.</p>
HsCurrency	<p>a. Select the Entity or Value dimension.</p> <p>b. In the <b>Member</b> column, do one of the following:</p> <ul style="list-style-type: none"> <li>● Double-click to enter a member name.</li> <li>● Click <b>Select Member</b> to select members as described in <a href="#">“Selecting Members for Functions” on page 180</a>.</li> <li>● To use a cell reference, enter a cell identity.</li> </ul> <p>c. Double-click in the <b>Member Type</b> column. From the drop-down list, select <b>Member</b> or <b>Cell Reference</b>.</p>
HsDescription	<p>a. From the Dimension drop-down list, select a dimension.</p> <p>b. In the <b>Member</b> column, do one of the following:</p> <ul style="list-style-type: none"> <li>● Double-click to enter a member name.</li> <li>● Click <b>Select Member</b> to select members as described in <a href="#">“Selecting Members for Functions” on page 180</a>.</li> <li>● To use a cell reference, enter a cell identity.</li> </ul> <p>c. Double-click in the <b>Member Type</b> column. From the drop-down list, select <b>Member</b> or <b>Cell Reference</b>.</p>
HsLabel	<p>From the <b>Dimension</b> drop-down list, select a dimension.</p>
HsGetText	<p>a. Select a dimension.</p> <p>b. In the <b>Member</b> column, do one of the following:</p> <ul style="list-style-type: none"> <li>● Double-click to enter a member name.</li> <li>● Click <b>Select Member</b> to select members as described in <a href="#">“Selecting Members for Functions” on page 180</a>.</li> <li>● To use a cell reference, enter a cell identity.</li> </ul> <p>c. Double-click in the <b>Member Type</b> column. From the drop-down list, select <b>Member</b> or <b>Cell Reference</b>.</p>
HsSetText	<p>a. Select a dimension.</p> <p>b. In the <b>Member</b> column, do one of the following:</p> <ul style="list-style-type: none"> <li>● Double-click to enter a member name.</li> <li>● Click <b>Select Member</b> to select members as described in <a href="#">“Selecting Members for Functions” on page 180</a>.</li> <li>● To use a cell reference, enter a cell identity.</li> </ul> <p>c. Double-click in the <b>Member Type</b> column. From the drop-down list, select <b>Member</b> or <b>Cell Reference</b>.</p> <p>d. Select <b>Comment</b> or <b>Cell Reference</b> and enter the text to send.</p>

**6** Click **Add to Function**.

**7** **Optional:** To add another function, click **Add to Function**.

- Optional:** If you have manually edited the function in the Function text box, to validate the function syntax before inserting it into the worksheet, click **Validate Syntax**.

**Note:**

Validate Syntax validates only the syntax you are using for the function. It does not validate the members you have selected.

- Click **OK** to paste the function into the worksheet.
- To execute the function, select **Hyperion > Refresh** or **Refresh All**. For Office 2007, click **Refresh** or **Refresh All** in the **Review** section of the **Hyperion** ribbon.

**Note:**

Selecting Hyperion > Refresh updates the sheet, but removes the function.

## Selecting Members for Functions

You use the Member Selection dialog box to select dimension members. You can filter the list of members and view labels or descriptions for dimension members. For example, when you select to view descriptions, the P\_Series member is displayed as “P\_Series - Phones and PDAs”.

You can use the Select button to select multiple members simultaneously. For example, you can select the Children option for all immediate dependents of a member, select the Base Members option for all base members, or select both the Children and Base Members options to select all dependents.

You can also search for dimension members. See [step 10 on page 181](#).

- To select dimension members:

- From the Function Builder, click **Select Member**.
- From **Dimension**, select a dimension.
- Optional:** To filter the list of members, select a member list from the **Filter** drop-down list.
- Optional:** For advanced filtering, highlight a member without selecting its check box, then select a member list.

This uses the highlighted member as the filter parameter. For example, if you highlight United States and change the filter list to Children, the system displays the children of United States.

- Optional:** To display dimension descriptions instead of labels, select **Use Descriptions**.
- Optional:** To display Dynamic Time Series members for a time dimension, select **Dynamic Time Series Members**.

**Note:**

The Dynamic Time Series option is available only with Essbase data sources.

- Optional:** To display active entities only, select **Active Members**.

**Note:**

Active Members is available only if the application has been set up for Organization by Period. Active Members is unavailable for Hyperion Enterprise data sources.



**8 Select each member that you want to use.**

**Tip:**


To deselect all selected members, click Select None, .

**9 Click Add, , to move the selected members to the Selection list.**


**Tip:**


To remove members from the Selection list, select the members, then click Remove, . To remove all members from the Selection list, click Remove All, .



**10 Optional: To search for members in the selected dimension, complete the following steps:**

- a. Click  and enter the member name or pattern for which you want to search in the text box.

You can enter the start of a text pattern or a trailing asterisk as a wildcard symbol. For example, to find EastSales, you can enter “east” or “ea\*.”

- b. Click  to find the first member within the dimension that matches the search criteria.

Select the member if you want to use it and then click .

- c. Click  again to search for the next occurrence and, if you want to use the member, select the member and click .

**Tip:**

If you are at the bottom of the member list, click  to find the next member that matches the search criteria.

**Tip:**

F3 enables the Find text box. Selecting F3 again searches down and Shift F3 searches up.

**11 When you finish selecting members, click OK.**

## HsGetValue

The HsGetValue function retrieves data from a data source for the dimension members that you specify. You can specify all dimension members. Any member not specified is considered a default POV member and uses the default in the POV Manager.

When users select Refresh or Refresh All, only HsGetValue is called. When users select Submit, HsSetValue is called first, HsGetValue is then called only if HsSetValue returns successfully.

The syntax is as follows:

```
HsGetValue ("Connection", "POV")
```

Here are two examples:

The function in the following example returns the value from the HFM01 application for the default Point of View.

### *Example 1:*

```
HsGetValue ("HFM01"; "Scenario#Actual;Year#2004;Period#July;View#YTD;  
Entity#UnitedStates.Connecticut;Value#USD;Account#Sales;ICP# [ICP  
None];Custom1#GolfBalls;Custom2#Customer2;Custom3#[None];Custom4#  
Increases")
```

The function in the following example returns the value from the HE application for the default Point of View.

### *Example 2:*

```
HsGetValue ("HE01"; "Scenario#Actual;Period#July;View#YTD;  
Entity#UnitedStates.Connecticut;Account#Sales")
```

## HsSetValue

HsSetValue sends a data value from a worksheet to a data source for the dimension members that you specify. You can select any dimension member.

The syntax is as follows:

```
HsSetValue (dollar amount, "Connection", "POV")
```

Here are two examples:

The function in the following example sends the value from the H4 cell to the HFM01 application.

### *Example 1:*

```
HsSetValue (H4, "HFM01", "Scenario#Actual;Year#2004;Period#"&B  
$2&";View#<Scenario View>;Entity#UnitedStates.Connecticut;Value#<Entity  
Currency>;Account#"&$A4&";ICP# [ICP  
None];Custom1#GolfBalls;Custom2#Customer2;Custom3#[None];Custom4#  
Increases")
```

The function in the following example sends the value from the H4 cell to the HE application.

### *Example 2:*

```
HsSetValue (H4, "HE01", "Scenario#Actual;Period#" & B$2 & ";View#<Scenario View>;Entity#UnitedStates.Connecticut;Account#" & $A4)
```

**Note:**

To send data to a data source, you must have the appropriate load rule and write access for the data source.

## HsCurrency

HsCurrency retrieves the currency value of the specified dimension member. Entity and Value are the only valid members for the HsCurrency function. Hyperion Enterprise does not support the Value dimension member.

The syntax for Financial Management is as follows:

```
HsCurrency ("Connection,Entity;Value")
```

**Note:**

The syntax for Hyperion Enterprise is the same as that of Financial Management with the exception of Value dimension member.

The following lines show an example of retrieving the entity currency where the currency for the East Sales entity is USD, and the currency for the UKSales entity is GBR.

```
HsCurrency("Comma", "Entity#EastRegion.EastSales;Value#<Entity Currency>.")  
HsCurrency("Comma", "Entity#EastRegion.UKSales;Value#<Entity Currency>.")
```

In this example, the EastSales entity displays USD, and UKSales displays GBR.

## HsDescription

HsDescription displays the description of the specified dimension member. You must specify the dimension members one at a time.

The syntax is as follows:

```
HsDescription ("Connection", "Dimension#Member")
```

For example, the following function displays the description for Custom 4.

```
HsDescription("HFM01","Custom4#Increases")
```

## HsLabel

HsLabel displays the default member label for a specified dimension member.

The syntax is as follows:

```
HsLabel ("Connection,Dimension#")
```

For example, the following function retrieves the label for the Scenario dimension in the Comma application:

```
HsLabel ("Comma","Scenario#")
```

## HsGetText

HsGetText retrieves cell text from a data source. You can use all dimension members, or use cell references, the default Point of View, or a combination of all three.

The syntax is as follows:

```
HsGetText ("Connection","POV")
```

For example, the following function returns the cell text from the HFM01 data source for the default Point of View.

```
HsGetText ("HFM01", "Scenario#Actual;Year#2004;Period#"&B$2&";View#<Scenario View>;Entity#UnitedStates.Connecticut;Value#<Entity Currency>;Account#"&$A3&";ICP#[ICP None];Custom1#GolfBalls;Custom2#Customer2;Custom3#[None];Custom4#Increases")
```

## HsSetText

HsSetText sends cell text to a data source. You can use all dimension members, or use cell references, the default Point of View, or a combination of all three.

The syntax is as follows:

```
HsSetText("Cell Text Comments","Connection;POV")
```

For example, the following function sends the text from the H3 cell to the HFM01 application.

```
HsSetText ("H3", "HFM01;Scenario#Actual;Year#2004;Period#"&B$2&";View#<Scenario View>;Entity#UnitedStates.Connecticut;Value#<Entity Currency>;Account#"&$A3&";ICP#[ICP None];Custom1#GolfBalls;Custom2#Customer2;Custom3#[None];Custom4#Increases")
```

## Accessing Functions Using Smart Tags

Smart tags is a Microsoft Office 2003 feature designed to save time by performing actions in Office that you would otherwise have other programs do. Smart tags recognizes specific keywords that invoke associated functionality. Smart View supports smart tags in Excel, Word, Power Point, and Outlook 2003. Using smart tags, you can type the "smartview" keyword in Excel, Word, Power Point, or Outlook to invoke a Smart View menu. Smart tags provide an alternative way of accessing functions for Financial Management, Hyperion Enterprise, and Essbase. You can also use smart tags to import BI+ content. See ["Using Smart Tags to Import](#)



[Reporting and Analysis Documents](#)” on page 172. The “smartview” keyword is not case-sensitive.

**Note:**

Smart tags are supported in Outlook 2003 only if the email editor is using Microsoft Word. Smart tags are not supported in Office versions before Microsoft Office 2003.

You can perform the following tasks in Smart View using smart tags:

- [“Retrieving Values” on page 185](#)
- [“Retrieving Cell Text” on page 186](#)
- [“Retrieving Entity Currency” on page 186](#)
- [“Displaying the POV Description” on page 187](#)
- [“Removing Smart Tags for a Single Instance” on page 187](#)
- [“Stopping Hyperion Smart Tag Recognition” on page 188](#)
- [“Recognizing Smart View Smart Tags Again” on page 189](#)

**Note:**

By default, smart tags are disabled. To enable smart tags, go to Tools >AutoCorrect Options >Smart Tags tab and select Label text with smart tags.

## Retrieving Values


Using smart tags, you can retrieve a single data value using the HsGetValue function from Financial Management, Hyperion Enterprise, and Essbase.

► To retrieve a single value using smart tags:

- 1 **Select **Hyperion > Connection Manager**** to connect to a Hyperion Financial Management, Hyperion Enterprise, or Essbase data source. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).

- 2 **Type `smartview` anywhere in the document, then move the mouse over the word.**

The Smart Tags Action icon  is displayed.

- 3 **Click  to display the **Smart View** menu.**
- 4 **Select **Functions > <connection name> > HsGetValue**.**

The Member Selection dialog box is displayed.

- 5 **Follow the directions for [“Selecting Members for Functions” on page 180](#).**

The value is displayed in your document.

## Retrieving Cell Text

Using smart tags, you can retrieve cell text using the HsGetText function from Financial Management.

### Note:


Essbase and Hyperion Enterprise does not support the HsGetText function.

► To retrieve cell text using smart tags:

- 1 Select **Hyperion > Connection Manager** to connect to a Hyperion Financial Management data source. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

See “Adding a Data Source Through Direct Connection” on page 35 and “Adding a Data Source Through Shared Services” on page 36.

- 2 Type `smartview` anywhere in the document, then move the mouse over the word.

The Smart Tags Action icon  is displayed.

- 3 Click  to display the **Smart View** menu.
- 4 Select **Functions > <connection name> > HsGetText**.

The Member Selection dialog box is displayed.

- 5 Follow the directions for “Selecting Members for Functions” on page 180.

The cell text is displayed in your document.

## Retrieving Entity Currency

Using smart tags, you can retrieve the entity currency for the selected members using the HsCurrency function from Financial Management and Hyperion Enterprise.



### Note:

Essbase does not support the HsCurrency function.

► To retrieve the entity currency using smart tags:

- 1 Select **Hyperion > Connection Manager** to connect to a Hyperion Financial Management or Hyperion Enterprise data source. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

See “Adding a Data Source Through Direct Connection” on page 35 and “Adding a Data Source Through Shared Services” on page 36.



- 2 Type `smartview` anywhere in the document, then move the mouse over the word. The Smart Tags Action icon  is displayed.
- 3 Click  to display the **Smart View** menu.
- 4 Select **Functions > <connection name> > HsCurrency**.  
The Member Selection dialog box is displayed.
- 5 Follow the directions for [“Selecting Members for Functions” on page 180](#).  
The entity currency is displayed in your document.

## Displaying the POV Description

Using smart tags, you can display the description for the default Point of View member using the HsDescription function from Financial Management and Hyperion Enterprise.

### Note:

Essbase does not support the HsDescription function.


- To display the POV description using smart tags:
  - 1 Select **Hyperion > Connection Manager** to connect to a Hyperion Financial Management or Hyperion Enterprise data source. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.  
See [“Adding a Data Source Through Direct Connection” on page 35](#) and [“Adding a Data Source Through Shared Services” on page 36](#).
  - 2 Type `smartview` anywhere in the document, then move the mouse over the word. The Smart Tags Action icon  is displayed.
  - 3 Click  to display the **Smart View** menu.
  - 4 Select **Functions > <connection name> > HsDescription**.  
The Member Selection dialog box is displayed.
  - 5 Follow the directions for [“Selecting Members for Functions” on page 180](#).  
The POV description is displayed in your document.

## Removing Smart Tags for a Single Instance

If you want to use “smartview” as a word in your document, rather than as a smart tag, you can disable the smart tag icon or that instance. When you later type “smartview” in the document, the smart tag is still recognized.

► To remove smart tags:

- 1 Type `smartview` anywhere in the document, then move the mouse over the word.

The Smart Tags Action icon  is displayed.

- 2 Click  to display the **Smart View** menu.
- 3 Select **Remove this Smart Tag**.

## Stopping Hyperion Smart Tag Recognition


If you no longer want Office to recognize Hyperion smart tags, you can turn them off. You can turn off smart tags for a data type (for example, all Hyperion smart tags) or individual data items (specific keyword).


You can stop recognizing the Hyperion smart tag in two ways:

- Accessing the Smart View menu item
- Modifying the smart tag options

► To stop recognizing Hyperion smart tags directly through the Smart View menu:

- 1 Type `smartview` anywhere in the document, then move the mouse over the word.


The Smart Tags Action icon  is displayed.

- 2 Click  to display the **Smart View** menu.
- 3 Select **Stop Recognizing “smartview”**, then select one of the following options:
  - as **Hyperion®** to prevent Word or Power Point from recognizing all Hyperion smart tags
  - as **Smart Tag** to stop recognizing the “smartview” keyword

Microsoft Office stops recognizing “smartview” as a smart tag. You must edit the XML exceptions file to add “smartview” back as a smart tag. See [“Recognizing Smart View Smart Tags Again” on page 189](#).

► To stop recognizing Hyperion smart tags using smart tag options:

- 1 Type `smartview` anywhere in the document, then move the mouse over the word.

The Smart Tags Action icon  is displayed.

- 2 Click  to display the **Smart View** menu.
- 3 Select **Smart Tag Options**.

The AutoCorrect dialog box with the Smart Tags tab is displayed.

- 4 In **Recognizers**, clear **Hyperion® (Hyperion® Smart View recognizer)**.

**Note:**

The AutoCorrect dialog box has other smart tag options. See the Microsoft Office documentation for more information.

**5 Click OK.**

Microsoft Office stops recognizing “smartview” as a smart tag. You must edit the XML exceptions file to add “smartview” back as a smart tag. See “[Recognizing Smart View Smart Tags Again](#)” on page 189.

## Recognizing Smart View Smart Tags Again

When you stop recognizing a smart tag, the keyword is permanently deleted as a smart tag. To enable Microsoft Office to recognize a smart tag again, you must edit an XML file that contains all the exceptions. Usually, this XML file is located at a user’s directory:

```
<Drive letter>:\Documents and Settings\<username>\Application Data  
\Microsoft\Smart Tags\Exceptions
```

You can find more information about editing the XML exceptions file at:

<http://msdn.microsoft.com/library/en-us/stagsdk/html/stconExceptionList.asp>

## Creating Functions Manually

When you create functions in worksheets manually, you must precede each function with an equal sign (=). In each function, you can specify a connection and a full or partial Point of View. If you do not specify a connection, the system uses the default connection. Some functions also require a value. For example, the HsSetValue function requires that you set a value in addition to the connection and Point of View.

The connection, if specified, must precede the Point of View. The Point of View is made up of *dimension#member* pairs, where the pound symbol (#) is used as a separator between the dimension and member, for example, Entity#Connecticut. Parent-child relationships can be represented with a period, for example, Entity#UnitedStates.Maine.

The connection and Point of View can be grouped as one parameter, for example “My\_connection;Entity#UnitedStates”. Alternatively, they can be split up into several function parameters, for example, “My\_connection”, “Entity#UnitedStates”, “Account#Sales”. If the connection and Point of View are in the same function parameter, the connection and each *dimension#member* pair are separated by a semi-colon (;) character, for example, “My\_connection;Entity#UnitedStates;Account#Sales”.

**Note:**

Functions can contain a maximum of 256 characters.

*Example:*

```
=HsGetValue("HFM01", "Scenario#Actual;Year#2004;Period#July;View#YTD;  
Entity#UnitedStates.Connecticut;Value#USD;Account#Sales;ICP#[ICP  
None];Custom1#GolfBalls;Custom2#Customer2;Custom3#[None];Custom4#  
Increases")
```

- To create functions manually:
  - 1 Select the cell in which you want to create the function.
  - 2 Enter the function, then select the parameters for the function.
  - 3 To refresh the worksheet, select **Hyperion > Refresh**.

## Editing Functions

You can edit a previously-defined function to change the dimension members.

To change the default Point of View, you use the POV Manager. See [“Using the POV Manager” on page 213](#).

- To edit a function:
  - 1 Open a worksheet and select the cell for which you want to edit the function.
  - 2 Select **Hyperion > Functions > Function Builder**. For Office 2007, click **Function Builder** in the **Task** section of the **Hyperion** ribbon.

The function is displayed in the Function dialog box.
  - 3 Click **Select Member**, then from the list of dimension members, select the members that you want to use.
  - 4 To add another function, click **Add to Function**.

The function is added after the currently displayed function. To replace the current function or clear all functions, click **Clear**.
  - 5 To validate the function syntax before pasting it to the worksheet, click **Validate**.
  - 6 Click **OK** to paste the function to the worksheet.
  - 7 To refresh the worksheet, select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Running Functions

After you have created functions, you can run the functions to retrieve the current values automatically and update the worksheet.

- To run functions:
  - 1 Open the worksheets for which you want to run functions.
  - 2 Select one of the following:
    - To run functions and update all worksheets, select **Hyperion > Refresh All**.

- To run functions and update only the active worksheet, select **Hyperion > Refresh**.

## Common Function Error Codes

Some common error codes displayed in functions:

#NO CONNECTION - You are not connected or logged on to a data source.

#INVALID - Invalid metadata. These cells are displayed in red in data grids. Invalid cells that contain a value display the value as zero.

#LOCKED - The cell is locked.

#NO ACCESS - You do not have access to this cell.

#NO DATA - The cell contains NoData. You can select to display zeros instead of NoData. Cells use the Replacement text that you specify in the Options dialog box.

#INVALID INPUT - The HsSetValue data value is not valid, for example, a text string.

#READ ONLY - This is for the HsSetValue function only when the cell is Read-only.

#NO ROLE ACCESS - You do not have the Financial Management LoadExcelData security role.

#NEEDS REFRESH - Data needs to be refreshed.

#INVALID DIMENSION - An invalid dimension is specified in the function.

#INVALID MEMBER - An invalid dimension member name is specified in the function.

#NAME - Microsoft Excel doesn't recognize text in a formula. When you forward a spreadsheet that contains functions to a user who does not have Smart View, users can view the same data as the functions remain displayed on the spreadsheet. When the user edits the function or selects Refresh, the function changes to #Name.





## In This Chapter

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## About Working Offline

Working disconnected from the Planning server, planners can work much as they do online. After taking data forms offline, planners can adjust data, view instructions, add supporting detail, and create data manipulation formulas, then save the changes to the Planning server. Thus, planners can work with plans and forecasts in any location, such as on planes, hotels, or home, with or without an Internet connection.

Typical offline working cycle:

- Create an offline connection (see [Chapter 4, “Using Connection Manager”](#)).
- Select and download the data forms, dimensions, and members “[Taking Data Forms Offline](#)” on page 194.
- Close Excel.
- At your destination, start Excel, open the offline connection you created, and work with the data forms, dimensions, and members that you took offline.
- When you are done, save the changed data to the Planning server (see “[Synchronizing Data to the Planning Server](#)” on page 196).

Follow these guidelines when using data forms offline:

- Synchronize data with the server only once during an offline session to save processing time.  
Each time you select Sync Back To Server, all data changed within the data forms taken offline since the beginning of the session is saved to the server.
- Currency conversion is not supported offline.
- If you lose a row or column of data when you refresh a data form, contact the administrator.
- After you reconnect to the server, check that the work you completed offline is correct in the database.

# Taking Data Forms Offline

## Note:

You can include both online and offline data forms in the same Excel workbook.

► To take data forms offline:

- 1 In Excel, establish a connection to the online Planning data source that contains the preferred data form or forms (see “Adding a Data Source Through Direct Connection” on page 35 for instructions).
- 2 Select **Hyperion > Forms > Take Offline**. For Office 2007, click **Take Offline** in the **Forms** section of the **Hyperion** ribbon.

The Take Offline Wizard is displayed; all data forms that you can take offline are listed.

## Note:

If Take Offline is not available, see the Planning administrator.

- 3 From the **Available Forms/Folders** list, select or browse for data forms.

- Click the expand (+) and collapse (-) signs next to the folder and data form names to expand or collapse the list.
- To select a folder or data form, select the check box next to its name.
- If you clear the check box next to a folder name, no data forms in that folder are selected.




- 4 Click **Next**.

- 5 Double-click a dimension.





If you selected multiple data forms, the dimensions displayed are merged from the dimensions available for the selected data forms. Note that you can select only one dimension.

- 6 Select members and system variables from the **Member Selection** page.

The list contains members and system variables of the selected dimension.

- To select all members, select the check box next to the dimension name.
- Click the plus or minus sign to expand or collapse the list.
- To search for a member or system variable in the dimension hierarchy, click . For Search, type part or all the member or system variable name and click  or .

To Move members or system variables to or from the Selected Members list:

- Click  to add selected members or system variables.
- Click  to remove selected members or system variables.
- Click  to remove all members or system variables.
- Click the arrow to the right of  to list the available member relationships.

About member relationships:

**Table 12** Member Relationships

Relationship	Members Included on the Data Form
Member	The selected member
Descendants	All members below the selected member
Descendants (inc)	The selected member and all its descendants
Ancestors	All members above the selected member
Ancestors (inc)	The selected member and all its ancestors
Siblings	All members from the same level in the hierarchy as the selected member, excluding the selected member
Siblings (inc)	The selected member and all its siblings
Parents	The member in the level above the selected member
Parents (inc)	The selected member and its parent
Children	All members in the level immediately below the selected member
Children (inc)	The selected member and all its children
Level 0 Descendants	All descendants of the selected member that have no children

**Note:**

Different data forms may have children and page-member selections. The Page drop-down list should contain at least one member for each data form from each dimension.

- 7 Click **OK**.
- 8 Repeat steps 5–7 to select members or system variables for each dimension in the list.
- 9 Click **Next**.
- 10 Supply a unique name and a description for the offline connection (for example, you may want to describe the types of data forms included).
- 11 Click **Finish** to download the selected data forms and members.
- 12 Click **OK**, then click **Done**.

You can now view and select the new offline connection in the Connection Manager dialog box.

## Working with Data Forms Offline

For an overview of working offline, see [“About Working Offline” on page 193](#).

► To work with data forms offline:

1 Launch Excel and select **Hyperion > Connection Manager**. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

2 Select the offline connection.

Online connections specify *Planning* in the Provider column; offline connections specify *Offline Planning*.

3 Click **Connect**.

4 Select **Hyperion > Forms > Select Form** to select a data form. For Office 2007, click **Select Form** in the **Forms** section of the **Hyperion** ribbon.

**Note:**

If you have a data form open while you are directly connected to the Planning server, then take the data form offline in the same session, you must reopen the data form from the offline connection to work with it offline.

5 In the offline data form add or change data.

6 Select **Hyperion > Submit Data**. For Office 2007, click **Submit** in the **Review** section of the **Hyperion** ribbon.

The changed data is saved locally. You can exit Excel without losing the changed data.

## Synchronizing Data to the Planning Server

► To save changed data to the Planning server for all data forms and members taken offline:

1 Select **Hyperion > Forms > Sync Back To Server**. For Office 2007, click **Sync Back to Server** in the **Forms** section of the **Hyperion** ribbon.

The Sync Back To Server option is available only when the current connection is an offline connection.

2 Logon to the Planning server.

3 Click **Sync Back All**.

4 Click **OK**.

► To save changed data to the Planning server for selected data forms and members taken offline:

1 Select **Hyperion > Forms > Sync Back To Server**. For Office 2007, click **Sync Back to Server** in the **Forms** section of the **Hyperion** ribbon.

The Sync Back To Server option is available only when the current connection is an offline connection.




2 Logon to the Planning server.

3 Click **Next**.




4 Double-click a dimension.

**5 Select members and system variables from the Member Selection page.**

The list contains members and system variables of the selected dimension.

- To select all members and system variables, select the check box next to the dimension name.
- Click the plus or minus sign to expand or collapse the list.
- To search for a member or system variable in the dimension hierarchy, click . For Search, type part or all the member or system variable name and click  or .

To Move members and system variables to or from the Selected Members list:

- Click  to add selected members or system variables.
- Click  to remove selected members or system variables.
- Click  to remove all members or system variables.

**6 Click OK.**

**7 Repeat steps 4–6 to select members or system variables for each dimension in the list.**

**8 Select Finish to save data.**

**9 Click OK and Done.**

## Refreshing the Offline Data Form Definition and Data

When you refresh the offline data form definition, you:

- Update data on the offline data forms with current values from the online data forms.
- Add or delete members or data forms from the ones available during an offline session.

► To update offline data and the offline data form definition:

**1** If necessary, launch Excel and select **Hyperion > Connection Manager**. For Office 2007, click **Connect** in the **Connections** section of the **Hyperion** ribbon.

**2** Select the connection associated with the current offline session.

For information, see [“About Connection Manager” on page 34](#).

**3** Select **Hyperion > Forms > Refresh Offline Definition**. For Office 2007, click **Refresh Offline** in the **Forms** section of the **Hyperion** ribbon.

**Note:**

If you are using an offline connection and the Refresh Offline Definition option is not available, contact the Planning administrator. This option is not available if you are using an online connection.

**4** Enter the user name and password for the online data source.

Because you want to refresh the offline data from the Planning server, you must log on to the server.

**5 Take an action:**

- Click **Refresh All** to update all members and data forms taken offline with current online values and definitions. Skip to Step 10.

**Note:**




Refresh All maintains the current offline data form definition. You change the offline data form definition if you do not select Refresh All. The members and data forms that you refresh remain part of the offline data form definition; the members and data forms that you do not select are no longer part of the definition. For example, if you take five data forms offline, then select only two of them when you refresh the offline data form definition, the three data forms you do not select are no longer available offline.

- Click **Next** to select which data forms, members, and system variables to update.




**6 Double-click a dimension.**

**7 Select members and system variables from the Member Selection page.**

The list contains members and system variables of the selected dimension.

- To select all members, select the check box next to the dimension name.
- Click the plus or minus sign to expand or collapse the list.
- To search for a member or system variable in the dimension hierarchy, click . For **Search**, type part or all the member or system variable name and click  or .

To Move members and system variables to or from the Selected Members list:

- Click  to add selected members or system variables.
- Click  to remove selected members or system variables.
- Click  to remove all members or system variables.

**8 Click OK.**

**9 Repeat steps 6–8 to select members or system variables for each dimension in the list.**

**10 Click Finish to start the refresh.**

**11 Click OK, then click Done when the refresh is complete.**

When you connect to the Planning server to synchronize offline data to it, your access privileges are checked to ensure that your read-write rights have not changed since you went offline. This check largely involves verifying your access. It also tracks changes to metadata, data form definition, security, and Planning Unit ownership.

## Entering Data with Menus

The administrator can set up data forms that include menus. Using menus, you right-click a member and select a menu item to open a URL, data form, workflow, or business rule. For example, a menu item can open another data form to let you drill down into the data, go to another scenario and version in the planning unit, or launch a calculation.

► To enter data with menus:

- 1 **Open a data form containing a menu.**
- 2 **Click a row member, and select a menu option from the list.**

The values in the list depend on how your administrator sets up this feature. If the menu includes submenus, you can select a value from the submenu. The menu can also be set up on a column member.

Depending on the action that was performed by the menu item, you can continue your work on the Web page, data form, or workflow.

If a business rule was launched that includes a runtime prompt, enter the required information. See “Entering Runtime Prompts” on page 40.

Your administrator can customize the runtime prompt that displays for menus. For example, it can be displayed with a Classic or Streamlined interface, and the Launch button can use another name, such as OK.





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This section explains user preference settings in the Options dialog box.

## Ad Hoc Options

The ad hoc options control how data is retrieved into the spreadsheet and which data is retrieved in ad hoc queries.

The following topics describe the tasks you can perform on the Ad Hoc tab of the Options dialog box:

- [“Suppressing Types of Data” on page 201](#)
- [“Indenting Member Names” on page 202](#)
- [“Navigating Without Data” on page 202](#)
- [“Double-clicking in Ad Hoc Operations” on page 203](#)
- [“Undo and Redo” on page 203](#)
- [“Zoom Options in Connected Sheets” on page 204](#)
- [“Member Retention Options” on page 205](#)
- [“Ancestor Positions in Hierarchies” on page 205](#)

**Note:**

Options dialog box settings are applied globally to all sheets in the workbook.

## Suppressing Types of Data

You may want to prevent Smart View from displaying rows in Ad Hoc grids that contain certain types of data.

➤ To suppress rows:

- 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
- 2 Under **Suppress Rows**, select any of the following options:
  - **No Data/#Missing** to suppress rows containing cells for which no data exists in the database (no data is not the same as zero)  
  
If you later deselect **No Data/#Missing**, suppressed values are returned only from that point on. You must drill up then drill down on a member to retrieve values that were suppressed while this option was selected.
  - **Zero** to suppress rows that contain a zero
  - **No Access** to suppress rows that contain data that you do not have the security access to view
  - **Invalid** to suppress rows that contain invalid values
  - **Underscore Characters** to suppress underscore characters in member names
  - **Repeated Members** to suppress repeated member names
- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Indenting Member Names

Indenting member names makes it easier to view relationships between members in the spreadsheet.

➤ To indent member names in the spreadsheet:

- 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
- 2 Under **Indentation**, select one of the following:
  - **None**
  - **Subitems** to indent only descendants. Ancestors are left-justified in the column
  - **Totals** to indent only ancestors. Descendants are left-justified in the column
- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Navigating Without Data

You can speed up navigation operations such as Pivot, Zoom, Keep Only and Remove Only by preventing the calculation of source data while you are navigating.

➤ To navigate through the sheet without retrieving data:

- 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.

- 2 Under **Mode**, select **Navigate without Data**.
- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.
- 4 When you are ready to retrieve data, clear **Navigate without Data**.

## Double-clicking in Ad Hoc Operations

Normally, double-clicking in an Excel cell puts its contents in edit mode, but you can change it to Smart View Ad Hoc functionality for Essbase, Financial Management, or Hyperion Enterprise data sources (double-clicking in Planning retains standard Planning functionality).

Enabled for Ad Hoc operations, double-clicking in a blank spreadsheet connected to an Essbase, Financial Management, or Hyperion Enterprise data source retrieves the default grid from the server. Once the grid is loaded, double-clicking on members drills down or up to more or less detail.

### Note:

If Essbase Spreadsheet Add-in and Smart View are installed on the same computer and you have not completed the steps in [“Smart View and Essbase Spreadsheet Add-in” on page 28](#), double-clicking invokes the login dialog box for Essbase Spreadsheet Add-in. This behavior is applicable only for Spreadsheet Add-in in Essbase Release 7.1.2.

- To enable double-clicking for ad hoc operations:
- 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
  - 2 Under **Mouse Operation**, select **Use Double-click for Ad Hoc Operations**.
  - 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Undo and Redo

You must enable Undo and Redo functions before they are available from the Hyperion menu. Smart View Undo and Redo behave differently depending on the data source to which you are connected.

- Using Ad Hoc analysis with Essbase, Financial Management, or Hyperion Enterprise data sources: Undo undoes Zoom In, Zoom Out, Keep Only, Remove Only, or Refresh command and restores the previous database view to the worksheet. Performing an Undo after modifying member data returns the sheet to its state before the last refresh, not to its state before the data modification.
- Using data forms with Financial Management, Hyperion Enterprise, or Planning: Undo undoes the last user action in a cell. Using Undo and Redo you can go backward and forward through actions that were performed in the data form until you submit data to the server.

**Note:**

You cannot undo operations that are performed on the server rather than in Smart View, such as calculation status.

## Enabling Undo and Redo

When you enable Undo, you are also enabling Redo.

- To enable Undo and specify the number of Undo operations allowed:
  - 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
  - 2 Under **Undo**, select **Enable**.
  - 3 In **Number of Undo Actions**, specify the number of permissible Undo operations – 2 through 100. This is also the number of Redo operations allowed.
  - 4 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Using Undo and Redo

- To undo one or more operations:
  - 1 From the Excel menu bar, select **Hyperion > Undo**.
  - 2 **Optional:** To redo one or more Undo operations, select **Hyperion > Redo**.

You can undo and redo as many times as specified on the Options dialog box Ad Hoc tab.

## Zoom Options in Connected Sheets

The Zoom group controls the behavior of all Zoom In operations except within the selected group.

- To specify zoom options in the connected sheets:
  - 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
  - 2 Under **Zoom-In**, select one of the following:
    - **Next Level** to retrieve data for the children of the selected members (default)
    - **All Levels** to retrieve data for all descendants of the selected members
    - **Bottom Level** to retrieve data for the lowest level of members in a dimension

**Note:**

These options are available only for Essbase, Hyperion Enterprise, and Financial Management . If an option in this group cannot be selected, then it is not available for your data source.

- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Member Retention Options

- To specify member retention in the connected sheets:

- 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.

- 2 Select one or more of the following:

- **Include Selection** to retain the selected member along with the other members retrieved as a result of the zoom

Include Selection is enabled by default.

- **Within Selected Group** to apply only to the group of members in which the selection is made

This setting is meaningful only when the sheet contains two or more dimensions of data down a sheet as rows or across a sheet as columns. (This setting also affects the behavior of Keep Only and Remove Only operations.)

- **Remove Unselected Groups** to remove all dimension groups that are not in the selected group

- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Ancestor Positions in Hierarchies

Ancestor position determines the order in which hierarchies display in the spreadsheet.

**Note:**

Ancestor Position options are not available for Essbase data sources.

- To set the ancestor position for hierarchies:

- 1 Select **Hyperion > Options > Ad Hoc**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.

- 2 Under **Ancestor Position**, select one of the following:

- **Top** to display hierarchies in order from the highest level of the hierarchy to the lowest

For example, when you expand Sales, you see Gross Margin.

- **Bottom** to display hierarchies in order from the lowest level of the hierarchy to the highest

For example, when you expand Gross Margin, you see Sales.

- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Display Options

The options on the Display tab control how data is displayed in the spreadsheet.

The following topics describe the tasks that you can perform on the Display tab of the Options dialog box:

- “Replacement Labels for Data” on page 206
- “Specifying Data Display Options” on page 207
- “Using Excel Formatting” on page 209
- “Enabling Formula Preservation After POV Changes” on page 209
- “Displaying and Logging Messages” on page 210

## Replacement Labels for Data

By default, Smart View uses text in Excel cells to indicate that the data they contain is missing or invalid, or that you do not have permission to view that data. You can edit this text.

### Replacing Invalid Data with Numeric Zeroes or Text

For data cells that contain invalid or missing data, Smart View can display either a text replacement label such as #INVALID or a numeric zero (0). The numeric zero option is available in ad hoc, forms, and function-based grids.

Text labels can be descriptive, but text causes Excel functions to fail. The use of zeroes permits Excel functions; however, when you submit data, Smart View removes all zeroes from submission even if they are actual zeroes and not labels for invalid data. As a result, you cannot submit the actual value 0 with this option.

- To specify labels for missing or invalid data in Excel cells:
  - 1 Select **Hyperion > Options > Display**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
  - 2 Under **Replacement**, in **#NoData/Missing Label**:
    - To display numeric zeroes, enter #NumericZero. This changes all text replacement labels to 0 in data cells.
    - To display text, enter #MISSING or other text.
  - 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Editing Text for Inaccessible Data

By default, Smart View replaces the data in cells that you do not have permission to view with #No Access.

- ▶ To edit the # No Access replacement label:
  - 1 Select **Hyperion > Options > Display**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
  - 2 Under **Replacement**, in **#No Access Label**, edit the text.
  - 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Specifying Data Display Options

In data grids you can toggle the display of actual data, calculation status, and the process review level of the data. The calculation status indicates, for example, whether data needs to be calculated, translated, or consolidated. The review levels indicate the process management level for combinations of data called process units. The data grid automatically refreshes to reflect any changes.

You can also select whether to display member names only or member names with descriptions in grids.

If you are working with a grid that contains duplicate members, you can choose to display the qualified member names directly in the worksheet.

Finally, you can choose the scaling options and decimal places and automatically view samples of the selections that you make.

- ▶ To set the data display options in grids:
  - 1 Select **Hyperion > Options > Display**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
  - 2 In the **Cell Status** group, select one of the following options:
    - **Data** to show data
    - **Calculation Status** to show whether data needs to be calculated, translated, or consolidated (Hyperion Enterprise and Financial Management data sources only)
    - **Process Management** to show the process management level for combinations of data called process units (Financial Management data sources only)
  - 3 From **Scale**, select a scale value, or use the default scale defined for the currency assigned to the entity.

Your selection results are displayed in the “Value 1 will be” text box.
  - 4 From the **Decimal Places** drop-down list, select the number of decimal places (0 to 8) to be displayed in the spreadsheet (Hyperion Enterprise, Planning, and Financial Management data sources only).

Your selection results are displayed in the “Value 1 will be” text box.

- 5 To use a thousands separator, select the **Use Thousands Separator** check box (Hyperion Enterprise, Planning, and Financial Management data sources only).

If you select this option, do not use the pound sign (#) as the thousands separator in Excel's International Options.

**Note:**

The Use Excel Formatting option (described in “Using Excel Formatting” on page 209) overrides the Use Thousands Separator option when both are selected.

- 6 To compress the Smart View metadata maintained in the worksheet, select **Reduce Excel File Size**.
- 7 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Member Name Display Options

If your Essbase system permits the use of duplicate member names, you can choose whether to display member names with or without their descriptions or aliases.

➤ To select how member names are displayed:

- 1 Select **Hyperion > Options > Display**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
- 2 Under **Member Name Display Options**, select one of the following options:
  - **Member Name Only** to display fully-qualified names
  - **Member Name and Description** to display fully-qualified names and descriptions (aliases) in the same cell. (Hyperion Enterprise data source only)
  - **Description Only** to display aliases only. (Not available if connected to Hyperion Enterprise data source)

**Note:**

If you select Description Only in free-form mode, fully-qualified names are displayed initially. After you manually add, remove, or edit any comments and refresh, aliases are displayed.

- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## UI Colors

You can specify one or two background colors for Smart View dialog boxes that contain rows of information.

➤ To select dialog box colors:

- 1 Select **Hyperion > Options > Display**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.



- 2 **Select UI Colors.** Two color buttons are displayed.
- 3 **One at a time, click a color button and select a color.**
- 4 **Click OK.** The setting takes effect after you refresh or perform a drill operation.
- 5 **Optional:** To see your color choices in a dialog box, select **Hyperion > Connection Manager**.

## Using Excel Formatting

You can let Smart View control cell formatting or you can control formatting by using Excel formatting functionality. Using Excel formatting is generally preferably for highly-formatted reports, and you *must* use Excel formatting for data sources whose application-specific colors are not supported by Excel's color palate.

When you use Excel formatting, Smart View does not reformat cells based on the grid operations you perform, and it does not mark cells as dirty when you change data values. Smart View does preserve the formatting on the worksheet between operations.

Use **Excel Formatting** is supported for refresh and submit actions but not for zoom or pivot operations.

The Use Excel Formatting option overrides the following:

- The Use Thousands Separator option on the Display tab of the Options dialog box
- Styles selected in the Cell Styles tab of the Options dialog box
- Styles set using Capture Formatting

### Note:

Member and numeric formats may unexpectedly change after pivot operations. For example, member names may be centered and numeric values may be left justified. You can reset the grid to the proper format using the formatting options of Excel.

➤ To use Excel formatting:

- 1 **Select Hyperion > Options > Display.** For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
- 2 **Select Use Excel Formatting.**
- 3 **Click OK.** The setting takes effect after you refresh the worksheet.

## Enabling Formula Preservation After POV Changes

Select **Preserve Formula on POV Change** to preserve formulas after you change the POV. Upon refresh, formulas that have been entered into data forms are maintained; only the point of view of the formula changes.

**Note:**

The “Preserve Formula on POV Change” option only applies to data forms in Hyperion Enterprise, Planning, and Financial Management.

For example, suppose you inserted a formula into a data form grid, with a reference to cell B4 on Sheet 2 of the workbook. The entity dimension is currently set to “Fairfield” within the page POV:

```
=Sheet2!B4
```

Now suppose you want to apply the same formulas to the “Hartford” entity. Change the entity dimension within the page POV from Fairfield to Hartford and refresh the data form. This preserves the existing formula:

```
=Sheet2!B4
```

The data for Hartford is retrieved onto the data form.

Using the “Preserve Formula on POV Change” option has no impact on formulas in the data form; it simply retains the existing formulas within the data grid.

However, formulas will be lost under these circumstances:

- If they reside on intersections that are invalidated due to suppression options set at the data source level.
- If a cell changes from input level to Read Only, Invalid, and so on.

For example, a valid cell reference made on one data form may reference a Read Only cell on another data form.

Note that when a formula is lost, it does not reappear on the data form. You must reenter it.

➤ To enable formula preservation after changes have been made to the POV:

- 1 Select **Hyperion > Options > Display**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
- 2 Select **Preserve Formula on POV Change**.
- 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Displaying and Logging Messages

All error, warning and informational messages from the connected data source are displayed when they occur, but you can choose which of these message levels to record in a log file. The actual messages displayed depend on the provider (Hyperion Enterprise, Planning, Financial Management, Essbase, etc.) to which you are connected.

➤ To display and log messages:


- 1 Select **Hyperion > Options > Display**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.

Under Log Messages, select one of the following:

- **Information** to display all messages, including warnings and errors — recommended to diagnose problems. Adversely impacts performance.
- **Warnings** to display warning and error level messages. Adversely impacts performance.
- **Errors** to display error messages only — recommended for general use; has minimal impact on performance.
- **None** to suppress all messages.

2 If you want to keep a record of messages in a log file, select **Route Messages to Log File**.

**Note:**

Click  to select a new location for the log file. Documents and Settings\`"user name"`\Local Settings\TEMP\SmartViewLogs.log is the default location.

3 **Optional:** To clear the log file each time Smart View is launched, select **Clear Log File on Next Launch**.

4 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

## Setting Cell Styles

Smart View data source providers each have a set of default cell styles to identify cell types. For example, Planning designates dirty cells by a yellow background and read-only cells by a gray background. You can modify default styles in Smart View change cell styles by selecting different fonts, background colors, or border colors.

► To set cell styles for member and data cells:

1 Select **Hyperion > Options > Cell Styles**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.

2 Expand the list and select a member or data cell.

3 Click **Properties** and select one of the following:

- **Font** to choose a font and its color, size, and other properties.
- **Background** to choose a cell background color.
- **Border** to choose a cell border color.

4 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

5 **Optional:** To revert cell styles to the default styles of the connected Smart View provider, click **Default Styles**.

**Note:**

Do not use Smart View worksheets and worksheets created by means other than Smart View in the same workbook; this causes colors in the non-Smart View sheets to change into unintended colors when you refresh.

**Note:**

The Use Excel Formatting option (described in “Using Excel Formatting” on page 209) overrides all style options set in the Cell Styles tab of the Options dialog box.

## Cell Style Precedence

Because cells can be of more than one type, they can have more than one style. You can determine the order in which styles are applied in such cells.

**Note:**

To see a child member style, turn off the parent member style. To see a shared member style, turn off both parent and child member styles.

- ▶ To change the order of precedence for member and data cell styles:
  - 1 Select **Hyperion > Options > Cell Styles**. For Office 2007, click **Options** in the **Options** section of the **Hyperion** ribbon.
  - 2 Select the member or data cell and then click **Move Up** or **Move Down** to give higher or lower precedence, respectively, to the style for that cell type.
  - 3 Click **OK**. The setting takes effect after you refresh or perform a drill operation.

**Note:**

To revert cell precedence of cell styles to their defaults, click Default Styles.

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When you select a Point of View, the system retrieves and calculates values for the Point of View dimension settings from the data source unless you specify different settings. You can use the POV Manager to edit a Point of View, save it to a workbook, copy and paste a saved Point of View, or delete a Point of View from a workbook.

## Editing the Point of View

Each connection has a default Point of View. You can select dimension members for the default connection Point of View. When you select the connection in the POV Manager, the details of the connection and the dimension selections or defaults are displayed.

► To edit the Point of View:

- 1 Select **Hyperion > POV Manager**. For Office 2007, click **POV Manager** in the **Task** section of the **Hyperion** ribbon.
- 2 Expand the POVs list.
- 3 From the **Active POV** list, select the active connection for which you are changing the Point of View.
- 4 Click the **Member Selector** button and select the dimension members that you want to use for the Point of View.

For more information, see [“Selecting Dimension Members for the POV”](#) on page 214.

The worksheet is refreshed with the Point of View changes.

- 5 Click **Close**.
- 6 To refresh the worksheet, select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Selecting Dimension Members

You can select dimension members to use in Point of View Manager, data forms, functions, and Ad Hoc grids. From the Member Selection dialog box, you can view labels or descriptions for dimension members and expand and collapse dimension hierarchies.

You can access the Member Selection dialog box in various ways:

- For POV Manager, see [“Selecting Dimension Members for the POV” on page 214](#).
- For data forms, see [“Selecting Members for Financial Management and Hyperion Enterprise Data Forms” on page 46](#).
- For Functions, see [“Selecting Members for Functions” on page 180](#).
- For Ad Hoc grids, see [“Selecting Members for Ad Hoc Analysis” on page 81](#).

When selecting members for Functions and POV Manager, here are some points to keep in mind:

- You can select only one member at a time to add to the Selection box.
- You cannot reorder the selections.

When selecting members for Ad Hoc grids and data forms, here are some points to keep in mind:

- You can select multiple members and you can reorder the selections.
- You can remove multiple members from the Selection box.

## Selecting Dimension Members for the POV

In the POV Manager, you can select dimension members to use as a default POV for an Ad Hoc grid, or for the background POV for dimensions when using functions. From the POV Manager, you can select only one member per dimension.

### Note:

Any changes to the background POV are not reflected in the cell until a refresh is completed.

To change the starting POV for an Ad Hoc grid, you must first open the POV Manager, select members for the POV, and then start the Ad Hoc grid. For example, in a Financial Management data source, the top member, which is None, is used by default. You might want to change Account to start with Gross Margin, and change Entity to start with North America.

### Note:

After the Ad Hoc grid has been started, you can no longer make changes through the POV Manager, but instead make changes using the member selector in the Ad Hoc grid.

You use the Member Selection dialog box to select members. You can filter the list of members and you can view labels or descriptions for dimension members. For example, when you select to view descriptions, the P\_Series member is displayed as “P\_Series - Phones and PDAs”.

You can also search for dimension members. For more information, see [step 10 on page 215](#).

► To select dimension members:

- 1 From the POV Manager, click **Member Selector**.
- 2 From the **Dimension** drop-down list, select a dimension.
- 3 **Optional:** To filter the list of members, select a member list from the **Filter** drop-down list. See [“Filtering Members” on page 83](#).
- 4 **Optional:** For advanced filtering, highlight a member without selecting its check box, then select a member list.

This uses the highlighted member as the filter parameter. For example, if you highlight United States and change the filter list to Children, the system displays the children of United States.

- 5 **Optional:** To display dimension descriptions instead of labels, select **Use Descriptions**.
- 6 **Optional:** To display Dynamic Time Series members for a time dimension, select **Dynamic Time Series Members**.

**Note:**

The Dynamic Time Series option is available only when working with Essbase data sources.

- 7 **Optional:** To display active entities only, select **Active Members**.

**Note:**

The Active Members option is available only if the application has been set up for Organization by Period. For information on Org by Period, see the *Hyperion Financial Management Administrator's Guide*.



- 8 Select the check box next to each member that you want to use.

**Tip:**


To deselect members, click Select None.

- 9 Click **Add** to move the selected members to the **Selection** list.


**Tip:**


To remove members from the Selection list, select the members, then click Remove, . To remove all members from the Selection list, click Remove All, .



- 10 **Optional:** To search for members in the selected dimension, complete the following steps:

- a. Click  and enter the member name or pattern for which you want to search in the text box.


You can enter the start of a text pattern for the search, or you can use a trailing asterisk as a wildcard symbol. For example, to find EastSales, you can enter “east” or “ea\*.”

- b. Click  to find the first member within the dimension that matches the search criteria.

Select the check box next to the member if you want to use it and then click .

- c. Click  again to search for the next occurrence and, if you want to use the member, select the check box next to the member and click .

**Tip:**

If you are at the bottom of the member list, click  to find the next member that matches the search criteria.

- 11 When you finish selecting members, click **OK**.

## Copying and Pasting a Point of View

You can copy a Point of View that has been saved in a workbook and paste it to another workbook. For example, suppose another user has created a worksheet with functions and saved the connection Point of View to the workbook. They can send you the workbook and to ensure that you're looking at the same data, you can use the saved Point of View.

Saved POVs are referenced with the data source name of the computer on which they were saved. When you use a saved POV, you must have the same data source as the one for the saved POV.

For example, suppose someone saves a Point of View to a workbook using the Comma data source and referencing the Comma application, then sends it to you with instructions to use the saved POV. You must have a data source named Comma that references the Comma application/cube at the same URL and server to use the saved POV. If the data sources do not match, or if one references a different application or uses a different Web or application server, you cannot paste the POV into the active worksheet.

When using the POV manager to select POV values for ad hoc analysis, you must copy the POV defined in the POV Manager to a worksheet that is not associated with a connection, otherwise the POV has no effect. When you copy the POV to an unconnected sheet and then refresh, the POV values are used.

► To copy and paste a Point of View:

- 1 Select **Hyperion > POV Manager**. For Office 2007, click **POV Manager** in the **Task** section of the **Hyperion** ribbon.
- 2 From the **Active** folder, select the Active application connection.



- 3 Select the members for the POV and save the workbook.
- 4 Click **Copy**.
- 5 Expand the **Saved** folder to select the workbook and worksheet into which you want to paste the POV, and click **Paste**.

**Tip:**

You can also drag and drop a Point of View to copy and paste it. For example, from the **Saved** POV list, you can select a POV from a workbook, and then drag it to the **Active** POV list. Or, conversely, you can select a POV from the **Active** POV list, and then drag it to the **Saved** POV list.

- 6 Save the workbook.
- 7 **Optional:** To copy a saved POV from another workbook, open the workbook and select the saved POV.  
The **Saved** folder displays your source workbook and the new workbook.
- 8 Copy and paste the source POV to the target worksheet in the **Saved** folder.
- 9 To close the POV Manager, click **Close**.
- 10 To refresh the worksheet, select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Deleting a Point of View

You can delete a Point of View that has been saved in a workbook.

- To delete a Point of View:
- 1 Select **Hyperion > POV Manager**. For Office 2007, click **POV Manager** in the **Task** section of the **Hyperion** ribbon.
  - 2 Expand the POV list.
  - 3 From the **POV** drop-down list, select the worksheet that contains the Point of View that you want to delete.
  - 4 Select the Point of View that you want to delete.
  - 5 Click **Delete**.
  - 6 Click **Close**.
  - 7 To refresh the worksheet, select **Hyperion > Refresh**. For Office 2007, click **Refresh** in the **Review** section of the **Hyperion** ribbon.

## Printing POV Members in Header and Footer

You can print active POV members of the POV toolbar in the header or footer of an Excel document.

➤ To print POV members in the header or footer:

- 1 In Excel, select **File > Page Setup**.
- 2 Under **Header/Footer**, click **Custom Header** or **Custom Footer**.
- 3 In the **Left section**, **Center section**, or **Right section box**, type a statement that includes `POV: {}`, such as `My current POV members are POV: {}`.
- 4 Click **OK**.
- 5 In **Page Setup**, click **OK**.

When you print the Excel document, the POV members are printed in the header or footer, or both.

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The migration utility converts existing Financial Management and Hyperion Enterprise spreadsheet add-in functions to the new syntax when you upgrade. You can convert a single workbook or convert multiple workbooks using the batch option.

## Considerations Before Converting Workbooks

You can convert workbooks that contain Financial Management Retrieve Data functions or Hyperion Enterprise HP Retrieve and VBA Retrieve functions from previous releases by using a migration utility. For example, you can convert Financial Management functions such as HFMMVal, HFMLnk, HFMLab, HFMDes, and HFMCur and Hyperion Enterprise functions such as HPVAl, HPLnk, HPCur, HPHea, HPCde, and HPFul.

The utility might not be able to convert all of your existing functions. Some functions might require manual adjustment. The following are considerations for converting workbooks.

For functions that use cell references, the following functions can be converted:

- If every parameter in the function is a cell reference, the function will convert. For example: =HFMMVal(\$B\$1&\$C\$1&\$B\$2&\$C\$3&\$B\$5&\$C\$5&\$B\$6&\$C\$6).
- If the dimension parameters are specified in the function, the members are cell references, but the period separator is hard coded in the function, the function will convert. For example: =HFMMVal(“S#”&D2&”.Y#”&D3&”.VW#”&D5&”).

The following functions that use cell references are not converted:

- If the dimension parameters are specified in the function and the members and period separator are cell references, the function is not converted. For example: =HFMMVal(“S#”&E2&”Y#”&E3&”VW#”&E5), where E2=Actual, E3=2004, E5=“<Scenario View>.”
- If the dimension parameters are specified in the function, the members are cell references, but the period separator is in a separate cell, the function is not converted. For example: =HFMMVal(“S#”&F2&C1&”Y#”&F3&C1&”VW#”&F5&C1), where C1=. (period separator).

- If the application specified in the function is a cell reference, the function does not convert properly.

Before you run the migration utility, ensure that the path is correct (the default path is C:\Hyperion\SmartView). During the migration process, Microsoft Excel inserts the original path of the add-in file to functions, which can make the functions too long and can cause problems in the migration process. Smart View functions cannot contain more than 256 characters per a limit within Excel.

## Converting One Workbook

You can convert a workbook with existing Financial Management spreadsheet add-in functions to the new Hyperion Smart View syntax. For example, if you have a spreadsheet that contains the `HFMVal(POV)` function, it is converted to the `HsGetValue(POV)` function.

► To convert one workbook:

- 1 Select **Hyperion > Functions > Migrate Active Workbook**.
- 2 If your functions contain application references, you must map the application to the corresponding connection.
- 3 Click **Convert**.
- 4 On the conversion completed message, click **OK**.

The system displays the migration result. For example, it displays a list of any functions that failed to convert. You can manually adjust those functions.

- 5 To save the conversion results, click **Save Result**.
- 6 Select a location to store the results file, then click **Save**.
- 7 Click **Close**.

## Converting Multiple Workbooks

You can convert multiple workbooks in a batch operation.

### Note:

Financial Management users skip step 3 and Hyperion Enterprise users skip steps 6 and 7 in the following procedure.

► To convert multiple workbooks:

- 1 Select **Hyperion > Functions > Migrate Batch**.
- 2 Click **Add** and select the workbooks that you want to convert.
- 3 To select workbooks for conversion, perform an action:

- Select **Select All/None** to select all workbooks.
- Select the check box next to each workbook to select specific workbooks.

**4** Click **Next**. If your functions contain application references, you must map the application to the connection.

**5** Click **Next**.

Migration results are displayed, including a list of functions that failed to convert. You can manually adjust those functions.

**6** Click **Save Result**.

**7** Select a location to store the results file and click **Save**.

**8** Click **Done**.

For Hyperion Enterprise users, the converted workbooks are automatically saved in the location of the original workbooks.



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## Using VBA Functions for Smart View

Smart View enables you to customize and automate common tasks by using Visual Basic for Applications (VBA) functions.

The menu equivalents are Visual Basic functions that execute the Hyperion menu commands.

**Note:**

To use VBA functions, the sheet must be active.

**Note:**

The VBA functions for Smart View are separately licensed.

## Migrating Legacy VBA Applications

To work in Smart View, VBA applications created using VBA functions from Essbase Spreadsheet Add-in Toolkit must be migrated to Smart View, although you can continue to use them in Spreadsheet Add-in. In most cases, you can replace the prefix “EssV” with “Hyp” for analogous function names in your VBA applications. See [“VBA Functions” on page 230](#) for a list of supported VBA functions. For example, for `EssVRemoveOnly`, change the name to `HypRemoveOnly`. For VBA menu functions, replace “EssMenuV” with “HypMenuV.” For example, for `EssMenuVZoomIn`, change the name to `HypMenuVZoomIn`. Additionally, you must replace the declarations from `essxlvba.txt` with the declarations in `smartview.bas`.

## Creating a Visual Basic Module

To use the VBA functions, you must first create Visual Basic modules to contain the VBA code.

► To create a Visual Basic module:

- 1 In Excel, select **Tools > Macro > Visual Basic Editor** to open the Visual Basic application.
- 2 In the Visual Basic application, select **Insert > Module**.

A new module is displayed with a labeled Module1 (or labeled with the next highest module number, if you have already inserted one or more modules).

## Using Smart View VBA Functions

This procedure is an example of how to use VBA functions in Smart View.

► To use VBA functions (HypConnect in this example):

- 1 Select **View > Toolbars > Forms** to display the Forms toolbar.
- 2 Select **Tools > Macro > Visual Basic Editor** to display the Visual Basic Editor.
- 3 In the Visual Basic Editor, select **File > Import File**.
- 4 In **Import File**, select `smartview.bas` in `\SmartView\bin` to declare all functions or just the function you plan to use.

### Tip:

For convenience, copy the entire text of `smartview.bas` into a separate module from the other VBA code.

- 5 Select **Insert > Module** to create a module.
- 6 In the module, type the VBA code for the function.

For example, type the following VBA code for the [HypConnect](#) function:

```
Sub Conn()  
    X=HypConnect(vtSheetName, User, Password, vtFriendlyName  
End Sub
```

Substitute your own user name, password, and connection name for the data source provider.

- 7 From the Excel **Forms** toolbar, select the button to create a button. The **Assign Macro** dialog box is displayed.
- 8 In **Assign Macro**, select the name of the subroutine from the list of functions.

In this example, select `Conn`.

- 9 Click **OK**.

The function is now associated with the button that you just created.

- 10 **Optional:** Rename the button.
- 11 To run this function, select **Tools > Macro > Macros**, select the function name, then click **Run**.

Alternatively, you can click the button that you just created.



## Declaring Functions

Before you can use Visual Basic functions in an Excel project, you must declare them in a module. A declaration outlines the necessary elements of the function so Visual Basic can run it. You must declare only those functions you plan to use, or you may declare all the VBA functions.

► To declare all Smart View VBA functions:

- 1 In Visual Basic Editor, select **File > Import File**.
- 2 From **Import File**, select `smartview.bas` in `\SmartView\bin`.

The file is copied into the module. Now you can use any Smart View Excel VBA function in your program. If there are functions you do not need in your module, you can delete their declarations.

► To declare individual Smart View VBA functions:

- 1 In Visual Basic Editor, select **Insert > File**.
- 2 Move the cursor to the top of the module.
- 3 Type the appropriate declarations for the functions you will use.

Refer to the description of each function for its declaration, or refer to `smartview.bas`. For example:

```
Declare Function HypConnect Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtUserName As Variant, ByVal vtPassword As Variant, ByVal vtFriendlyName As Variant) As Long
```

## Guidelines for Declaring Functions

When typing the declaration, observe the following guidelines:

- Do not substitute specific values for each parameter name.  
In the `HypConnect` example, the first parameter is *vtSheetName*. In the declaration, you type it as *vtSheetName*. When you actually call the `HypConnect` function in your VBA module, you substitute the appropriate name of the sheet.
- Type the declaration on one line.

## Calling Functions

Once the functions are declared at the top of the module, you can call them in your VBA code. When you call a function, you tell it to perform its intended action and return a value. You can then test the returned value to see if the function ran successfully.

The following example shows the syntax for `HypConnect`.

```
HypConnect(vtSheetName, vtUser, vtPassword, vtFriendlyName)
```

When you call a function, observe the following guidelines:

- Substitute the appropriate value for each parameter, shown in italics.

- Type a value for every parameter. All parameters are required.  
Many parameters have default values. If you do not want to specify a value for such parameters, type Null or Empty. This tells Essbase to use the default value for that parameter.
- Assign the function to a variable. After the function runs, the variable stores the return value, which indicates the success or failure of the function.

```
x=HypConnect(Empty, username, password, "My Sample Basic")
```

## Dynamic Link Views

A link view is used to display the details about a data point in an adjacent window without disturbing the contents in the main window. Link views can be either static or dynamic.

In a static link view, the link action is predefined and details about a data point being queried are displayed in the adjacent window. Static link view behavior is already built in to Smart View.

With a dynamic link view, VBA programmers have the option to change the link behavior as required. Using the set options, you can change the row, column, POV, column information, and the connection information.

For instructions on working with dynamic link views, see:

- [“Setting Up Dynamic Link Views” on page 227](#)
- [“Automating Macro Execution” on page 227](#)

The VBA functions related to dynamic link view:

- [HypUseLinkMacro](#)
- [HypSetLinkMacro](#)
- [HypGetLinkMacro](#)
- [HypGetSourceGrid](#)

### Note:

For all of the following dynamic link view VBA functions, it is assumed that a call has already been made to HypGetSourceGrid to initialize the dynamic link query, which contains the information about the active data source and the grid on the sheet.

- [HypGetConnectionInfo](#)
- [HypSetConnectionInfo](#)
- [HypGetRowCount](#)
- [HypGetColCount](#)
- [HypGetPOVCount](#)
- [HypGetRowItems](#)
- [HypGetCollItems](#)

- [HypGetPOVItems](#)
- [HypSetRowItems](#)
- [HypSetColItems](#)
- [HypSetPOVItems](#)
- [HypDisplayToLinkView](#)

When the dynamic link query has been initialized, all the subsequent setinfo, getinfo, displaytolinkview calls are performed on that saved dynamic link query. If the user changes the grid on the sheet and wants to perform the dynamic link action as per the new grid, the user must again initialize the query, using the various setinfo calls available.

Prerequisite to HypGetSourceGrid is that a connected grid must exist on the active sheet and a valid data point should be selected.

## Setting Up Dynamic Link Views

Use dynamic link views to customize the link behavior according to your requirements. With dynamic link view, you can change the row, column, POV, and column information as well as the connection information.

► To set up a dynamic link view:

- 1 Set the [HypUseLinkMacro](#) flag to true.
- 2 Set the macro name to run.

The macro name you set should contain all the function calls to initialize the grid and to set the connection, row, POV, and column items as needed.

- 3 Connect the sheet and retrieve the appropriate grid onto the sheet.
- 4 Select a data point on the sheet.
- 5 Select **Hyperion > Link View > Visualize in Excel**. For Office 2007, click **Visualize in Excel** in the **Visualize** section of the **Hyperion** ribbon.

The macro name set in [step 2](#) is executed and the link action is performed.

### Note:

When the HypUseLinkMacro flag is set to false, the predefined link query is performed.

## Automating Macro Execution

You can automate execution of a macro through the Hyperion menu.

► To set up a macro to execute manually through the Hyperion menu:

- 1 Set the [HypUseLinkMacro](#) flag to false.
- 2 Connect the sheet and retrieve the grid you want onto the sheet.

- 3 Select a data point on the sheet.
- 4 Run the macro which contains all the function calls to initialize the grid and set the connection, row, column, and POV items.

## VBA Parameters

Most Visual Basic functions require you to supply one or more parameters. [Table 13](#) lists the parameter types and how to supply a valid value for each type:

**Table 13** VBA Parameters

Parameters	Valid Values
Text	A word or phrase or name in quotes. For example, "Smart View" "[Book2.xls]Sheet1"
Boolean	True False
Range Object	A cell, row or column, one or more selections of cells, or a three-dimensional range address, surrounded by quotes. For example: RANGE("A1") RANGE("A1:B2") RANGE("A1:B2") RANGE("G:G,I:I,K:K") RANGE("A1:B5,C1:C10,D5:L8") RANGE("Sheet1!C3:R20,Sheet2!C3:R20")
Number	A number without quotes and without commas. For example: 1 2.5 50000
List of Strings	A list of Text values, separated by commas. For example: "Qtr1", "Actual", "Oregon"
Constant	A predefined constant from <code>smartview.bas</code> .
Default Value	Null Empty <b>Note:</b> Many parameters have default values or behavior that the function uses if you specify Null or Empty. If you do not specify a value for such parameters, use Null or Empty. See the description of each function for default values of such parameters.

## VBA Return Values

The Smart View VBA functions return values indicating the success or failure of the function. The functions return several types of values:

- 0 (zero) — the function was successful. Functions can run successfully but still have undesirable results.
- 1 — typically means the user pressed Escape or clicked Cancel from a dialog box.
- -1 — indicates a valid return value, True.
- Negative number — the function failed due to a problem with the client machine, a problem with the syntax, or a problem with the local environment.
- large positive number, the function failed due to a problem originating on the server, such as the server not running or an invalid user name.

Table 14 lists the return values for local problems, represented by negative numbers.

**Table 14** VBA Return Values

Return Value	Meaning
0	Function ran successfully
-1	Valid return value, True
-2	Termination error
-3	Initialization error
-4	Spreadsheet is not yet connected to the server
-6	Not used
-7	Spreadsheet has become unstable
-8	No Undo information exists
-9	Operation has been canceled
-12	Undo is not enabled
-13	Not enough memory resources are available
-14	Appropriate dialog box could not be displayed
-15	Function contains an invalid parameter
-16	Calculation is in progress
-17	Obsolete setting
-18	Operation is not allowed because the spreadsheet is in formula preservation mode
-19	Operation cannot take place on the specified sheet
-20	Current sheet cannot be determined

Return Value	Meaning
-21	Spreadsheet name was not specified and no active sheet is selected
-22	Calculation cannot be canceled because no calculation is running
-23	Selection parameter is invalid
-25	Cascade list file cannot be created, or you are attempting to cascade while the spreadsheet is embedded in another document
-26	Spreadsheet macros cannot be run due to a licensing agreement
-27	Spreadsheet macros which update the database cannot be run due to a licensing constraint
-28	Database cannot be updated because you have a read-only license for the database
-29	Obsolete setting
-30	Menu is removed already
-31	Menu is added already
-39	The specified worksheet is protected. Unprotect the worksheet and try the operation again.
-40	Calc script not found

## VBA Functions

Table 15 lists the Smart View VBA functions alphabetically and specifies the data source provider that support the function. A detailed description for each function, including the syntax, parameter, return value, and sample code, follows the table.

### Note:

For this release, VBA functions for Oracle's Hyperion® Planning – System 9 are not supported. To use ad hoc with data forms, you must be connected to an Essbase or Hyperion Enterprise data source.

**Table 15** VBA Functions and Supported Providers

VBA Functions	Essbase	Financial Management	Hyperion Enterprise
<a href="#">HypCalculate</a>		X	X
<a href="#">HypCalculateContribution</a>		X	X
<a href="#">HypCell</a>	X		
<a href="#">HypConnect</a>	X	X	X
<a href="#">HypConnected</a>	X	X	X

<b>VBA Functions</b>	<b>Essbase</b>	<b>Financial Management</b>	<b>Hyperion Enterprise</b>
HypConnectionExists	X	X	X
HypConsolidate		X	X
HypConsolidateAll		X	X
HypConsolidateAllWithData		X	X
HypCreateConnection	X	X	X
HypDeleteCalc	X		
HypDisconnect	X	X	X
HypDisplayToLinkView	X	X	X
HypExecuteCalcScript	X		
HypExecuteQuery	X		
HypFindMember	X		
HypForceCalculate		X	X
HypForceCalculateContribution		X	X
HypForceTranslate		X	X
HypFreeDataPoint	X	X	X
HypFindMember	X	X	X
HypGetAncestor	X		
HypGetChildren	X		
HypGetColCount	X	X	X
HypGetColItems	X	X	X
HypGetConnectionInfo	X	X	X
HypGetDataPoint	X	X	X
HypGetGlobalOption	X	X	X
HypGetLinkMacro	X	X	X
HypGetParent	X		
HypGetPOVCount	X	X	X
HypGetPOVItems	X	X	
HypGetRowCount	X	X	

<b>VBA Functions</b>	<b>Essbase</b>	<b>Financial Management</b>	<b>Hyperion Enterprise</b>
HypGetRowItems	X	X	
HypGetSheetOption	X	X	
HypGetSourceGrid	X	X	
HypGetSubstitutionVariable	X		
HypIsAttribute	X		
HypIsDescendant	X		
HypIsExpense	X		
HypIsParent	X		
HypIsUDA	X		
HypKeepOnly	X	X	X
HypListCalcScripts	X		
HypLoginSetPassword	X	X	X
HypOtlGetMemberInfo	X		
HypPivot	X	X	X
HypPivotToGrid	X	X	
HypPivotToPOV	X	X	
HypQueryMembers	X		
HypRedo	X	X	X
HypRemoveConnection	X	X	X
HypRemoveOnly	X	X	X
HypRetrieve	X	X	X
HypRetrieveRange			
HypSetActiveConnection	X	X	X
HypSetBackgroundPOV	X	X	X
HypSetCellsDirty	X	X	X
HypSetCollItems	X	X	X
HypSetConnectionInfo	X	X	X
HypSetGlobalOption	X	X	X



VBA Functions	Essbase	Financial Management	Hyperion Enterprise
HypSetLinkMacro	X	X	X
HypSetMenu	X	X	X
HypSetPOV	X	X	X
HypSetPOVItems	X	X	X
HypSetRowItems	X	X	X
HypSetSheetOption	X	X	X
HypSetSubstitutionVariable	X		
HypSubmitData	X	X	X
HypTranslate		X	X
HypUndo	X	X	X
HypUseLinkMacro	X	X	X
HypZoomIn	X	X	X
HypZoomOut	X	X	X

## HypCalculate

### Description

HypCalculate() calls the Calculate method for Financial Management data sources.

### Syntax

HypCalculate (vtSheetName, vtRange)

ByVal vtSheetName As Variant

By Val vtRange As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

## Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

## Example

```
Declare Function HypCalculate Lib "HsAddin" (ByVal vtSheetName As Variant,  
ByVal vtRange As Variant) As Long
```

```
sts = HypCalculate ("Sheet1", Empty)
```

## HypCalculateContribution

### Description

HypCalculateContribution() calls the Calculate Contribution method for Financial Management data sources.

### Syntax

```
HypCalculateContribution (vtSheetName, vtRange)
```

ByVal vtSheetName As Variant

By Val vtRange As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

## Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

## Example

```
Declare Function HypCalculateContribution Lib "HsAddin" (ByVal vtSheetName  
As Variant, ByVal vtRange As Variant) As Long
```

```
sts = HypCalculateContribution ("Sheet1", Empty)
```

## HypCell

### Description

HypCell() retrieves a cell value for a single member combination.

### Syntax

HypCell(vtSheetName, ParamArray MemberList())

ByVal vtSheetName As Variant

ByVal ParamArray MemberList() As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
MemberList	A list of strings which describe the member combination for which a data value will be retrieved. If MemberList is Null or Empty, the top level value is used.  Represent members as "Dimension#Member"; for example, "Year#Jan" or "Market#East".

### Return Value

Returns the value of the data point if successful. Returns #No Connection if the sheet cannot be determined or is not connected to a data source. Returns "Invalid Member *MemberName* or dimension *DimensionName*" if a member is incorrect.

### Example

```
Declare Function HypCell Lib "HsAddin" (ByVal vtSheetName As Variant,  
ParamArray MemberList() As Variant) As Variant
```

```
Sub InCell()  
Dim X As String  
X=HypCell("[Book2.xls]Sheet1", "Year#Qtr1", "Scenario#Actual",  
"Market#Oregon")  
If X = "#No Connection" Then  
MsgBox("Not logged in, or sheet not active.")  
Else  
If Left(X, 15) = "#Invalid member" then  
MsgBox("Member name incorrect.")  
Else  
MsgBox(X + " Value retrieved successfully.")  
End If  
End If  
End Sub
```

**Note:**

The value of the data point returned is not placed in a cell in the spreadsheet automatically. To place the value in a cell, use the Visual Basic select method and the ActiveCell property. See your Visual Basic documentation for more information.

## HypConnect

### Description

HypConnect() logs into a data source provider and associates the worksheet with that connection. HypConnect() must be called for each sheet in order to associate this connection with that sheet.

### Syntax

```
HypConnect(vtSheetName, vtUserName, vtPassword, vtFriendlyName)
```

ByVal vtSheetName As Variant

ByVal vtUserName As Variant

ByVal vtPassword As Variant

ByVal vtFriendlyName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtUserName	Text name of a valid user for the data source provider.
vtPassword	Text name of the password for this user.
vtFriendlyName	The friendly connection name for the data source provider. This is the connection name created by <a href="#">HypCreateConnection</a> .

### Return Value

Returns 0 if successful. A negative number indicates a local failure. A return value greater than zero indicates a failure on the server.

### Example

```
Declare Function HypConnect Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtUserName As Variant, ByVal vtPassword As Variant, ByVal vtFriendlyName As Variant) As Long
```

```

Sub Conn()
    X=HypConnect(Empty, username, password, "My Sample Basic")
End Sub

```

## HypConnected

### Description

HypConnected() provides the connection status of the sheet. A true value indicates that the sheet is connected to a provider; a false value indicates that the sheet is not connected.

### Syntax

```

HypConnected (vtSheetName)
ByVal vtSheetName As Variant

```

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.

### Return Value

If the sheet is connected, return value of the variant is -1. If the sheet is not connected, return value of the variant is 0.

### Example

```

Declare Function HypConnected Lib "HsAddin" (ByVal vtSheetName As Variant)
As Variant

Sub Sample_HypConnected
    Dim X as Variant
    X = HypConnected("Sheet1")
End sub

```

## HypConnectionExists

### Description

HypConnectionExists() is used to check if a particular connection name exists in the list of all connections, as viewed in Connection Manager. The particular connection may or may not be active (i.e., connected).

## Syntax

HypConnectionExists(vtConnectionName)

ByVal vtConnectionName as Variant

## Parameters

Parameter	Syntax
vtConnectionName	Name of the connection to search for in the list of all connections. It is not case-sensitive.

## Return Value

Boolean. If successful, return value is TRUE; otherwise, return value is FALSE.

## Example

```
Declare Function HypConnectionExists Lib "HsAddin.dll" (ByVal  
vtConnectionName As Variant) As Variant
```

```
Sub Sample_SetActiveConnection  
    Dim bIsConnection as Boolean  
    bIsConnection = HypConnectionExists ("Demo_Basic")  
End sub
```

## HypConsolidate

### Description

HypConsolidate calls the Consolidate method for Financial Management data sources.

### Syntax

HypConsolidate (vtSheetName, vtRange)

ByVal vtSheetName As Variant

By Val vtRange As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

## Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

## Example

```
Declare Function HypConsolidate Lib "HsAddin" (ByVal vtSheetName As Variant, ByVal vtRange As Variant) As Long
```

```
sts = HypConsolidate ("Sheet1", Empty)
```

## HypConsolidateAll

### Description

HypConsolidateAll() calls the Consolidate All method for Financial Management data sources.

### Syntax

HypConsolidateAll (vtSheetName, vtRange)

ByVal vtSheetName As Variant

By Val vtRange As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

## Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

## Example

```
Declare Function HypConsolidateAll Lib "HsAddin" (ByVal vtSheetName As Variant, ByVal vtRange As Variant) As Long
```

```
sts = HypConsolidateAll ("Sheet1", Empty)
```

## HypConsolidateAllWithData

### Description

HypConsolidateAllWithData calls the Consolidate All With Data method for Financial Management data sources.

### Syntax

HypConsolidateAllWithData (vtSheetName, vtRange)

ByVal vtSheetName As Variant

By Val vtRange As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

### Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

### Example

```
Declare Function HypConsolidateAllWithData Lib "HsAddin" (ByVal vtSheetName As Variant, ByVal vtRange As Variant) As Long
```

```
sts = HypConsolidateAllWithData ("Sheet1", Empty)
```

## HypCreateConnection

### Description

HypCreateConnection() creates a connection to the data source provider from the specified information.

### Note:

Use [HypConnect](#) to establish the connection.



## Syntax

HypCreateConnection(vtSheetName, vtUserName, vtPassword, vtProvider, vtProviderURL, vtServerName, vtApplicationName, vtDatabaseName, vtFriendlyName, vtDescription)

ByVal vtSheetName As Variant

ByVal vtUserName As Variant

ByVal vtPassword As Variant

ByVal vtProvider As Variant

ByVal vtProviderURL As Variant

ByVal vtServerName As Variant

ByVal vtApplicationName As Variant

ByVal vtDatabaseName As Variant

ByVal vtFriendlyName As Variant

ByVal vtDescription As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtUserName	Text name of a valid user on the server.
vtPassword	Text name of the password for this user.
vtProvider	Description for the data source provider. Supported vtProvider types are: <ul style="list-style-type: none"><li>● Global Const HYP_ANALYTIC_SERVICES = "Oracle's Hyperion® Provider Services"</li><li>● Global Const HYP_FINANCIAL_MANAGEMENT = "Hyperion Financial Management"</li></ul>
vtProviderURL	Data source provider URL which to connect.
vtServerName	Name of the server on which the application resides.
vtApplication	Name of the application.
vtDatabase	Name of the database.
vtFriendlyName	Connection name for the data source provider.
vtDescription	Description for the data source provider.

## Return Value

Returns 0 if successful. A negative number indicates a local failure. A return value greater than zero indicates a failure on the server.

## Example

```
Declare Function HypCreateConnection Lib "HsAddin" (ByVal vtSheetName As Variant, ByVal vtUserName As Variant, ByVal vtPassword As Variant, ByVal vtProvider As Variant, ByVal vtProviderURL As Variant, ByVal vtServerName As Variant, ByVal vtApplicationName As Variant, ByVal vtDatabase As Variant, ByVal vtFriendlyName As Variant, ByVal vtDescription As Variant) As Long

Sub Conn()
    X=HypCreateConnection(Empty, username, password, HYP_ANALYTIC_SERVICES, "http://localhost:13080/smartview/SmartView", "localhost", "Sample", "Basic", "My Connection", "Analytic Provider Services")
End Sub
```

## HypDeleteCalc

### Description

HypDeleteCalc() allows the user to delete a calculation script object from an Analytic Server.

### Syntax

HypDeleteCalc (vtSheetName, vtApplicationName, vtDatabaseName, vtCalcScript)

ByVal vtSheetName As Variant

ByVal vtApplicationName As Variant

ByVal vtDatabaseName As Variant

ByVal vtCalcScript As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtApplicationName	Specify the application name containing the calculation script.
vtDatabaseName	Specify the database name containing the calculation script.
vtCalcScript	Specify the calculation script name to be deleted.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypDeleteCalc Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtApplicationName As Variant, ByVal vtDatabaseName As Variant, ByVal vtCalcScript As Variant) As Long

Sub Sample_HypDeleteCalc
    Dim X as Long
    X = HypDeleteCalc ("Sheet1", "Sample", "Basic", "CalcYear")
End Sub
```

## HypDisconnect

### Description

HypDisconnect() logs out from the data source provider.

### Syntax

HypDisconnect(vtSheetName, bLogoutUser)

ByVal vtSheetName As Variant

ByVal bLogoutUser As Boolean

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
bLogoutUser	Optional. Set to True to disconnect and log out from the provider session. Default value is False.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code..

## Example

```
Declare Function HypDisconnect Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal bLogoutUser As Boolean) As Long

Sub DisConn()
    X=HypDisconnect(Empty, True)
End Sub
```

## HypDisplayToLinkView

### Description

HypDisplayToLinkView() displays Office documents to Word or PowerPoint; or displays a grid to Excel.

#### Note:

The link action is performed as per the latest content of the dynamic link query.

#### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

HypDisplayToLinkView (vtDocumentType, vtDocumentPath)

ByVal vtDocumentType as Variant

ByVal vtDocumentPath as Variant

### Parameters

Parameters	Description
vtDocumentType	Indicates the destination for the link view. Valid values: <ul style="list-style-type: none"><li>● EXCEL_APP</li><li>● WORD_APP</li><li>● PPOINT_APP</li></ul>
vtDocumentPath	The path to the document. <b>Note:</b> Required only in case of WORD_APP or PPOINT_APP.

### Return Value

Returns 0 if successful; otherwise, returns the negative error code.

### Example

```
Declare Function HypDisplayToLinkView Lib "HsAddin.dll" (ByVal vtDocumentType As Variant, ByVal vtDocumentPath As Variant) As Long
```

```
Sub Macro()  
    Dim vtGrid as Variant  
    Sts = HypConnect("Sheet1", "system", "password", "MyDemoBasic")
```

```

Sts = HypRetrieve("Sheet1")
Range ("B2").Select
Sts = HypGetSourceGrid ("Sheet1", vtGrid)
Sts = HypSetColItems (1, "Market", "East", "West", "South", "Central",
    "Market")
Sts = HypDisplayToLinkView ("EXCEL_APP", "")
End sub

```

## HypExecuteCalcScript

### Description

HypExecuteCalcScript() uses a calculation script (business rule script) to initiate a calculation on the server.

### Syntax

HypExecuteCalcScript (vtSheetName, vtCalcScript, bSynchronous)

ByVal vtSheetName As Variant

ByVal vtCalcScript As Variant

ByVal bSynchronous As Boolean

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtCalcScript	Text name of the calculation script on the Analytic Server in the database directory to run. To run the default calculation script, use "Default".
bSynchronous	Boolean value indicating whether the calculation script should be run synchronously. If synchronous is Null or Empty, True is used. Currently this flag is unused.

### Return Value

Returns 0 if successful. A negative number indicates a local failure. A return value greater than zero indicates a failure in one of the servers.

### Example

```

Declare Function HypExecuteCalcScript Lib "HsAddin.dll" (ByVal vtSheetName
As Variant, ByVal vtCalcScript As Variant, ByVal bSynchronous As Variant)
As Long

```

```

Sub RunCalculate()

```

```

X = HypExecuteCalcScript (Empty, "Default", False)
  If X = 0 Then
    MsgBox("Calculation complete.")
  Else
    MsgBox("Calculation failed.")
  End If
End Sub

```

## HypExecuteQuery

### Description

HypExecuteQuery() executes an MDX query and displays the results on a worksheet. (If you do not want to display the query results on a worksheet, use HypExecuteMDXEx instead.)

### Syntax

```

HypExecuteQuery (ByVal vtSheetName As Variant, ByVal vtMDXQuery As Variant) As Long
ByVal vtSheetName As Variant
ByVal vtMDXQuery

```

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtMDXQuery	The MDX query statement to be executed on the worksheet.

### Return Value

Long. If successful, return value is 0; otherwise, returns the appropriate error code.

### Example

```

Declare Function HypExecuteQuery Lib "HsAddin.dll" (ByVal vtSheetName As
Variant, ByVal vtMDXQuery As Variant) As Long

```

```

Sub Sample_HypExecuteQuery ()
  Dim vtQuery As Varian
  vtQuery = "SELECT {[Jan]} on COLUMNS, {[East]} on ROWS from
    Sample.Basic"
  sts = HypConnect ("Sheet1", "system", "password", "Sample_Basic")
  sts = HypExecuteQuery ("Sheet1", vtQuery)
  sts = HypDisconnect ("Sheet1", True)
End sub

```

## HypFindMember

### Description

HypFindMember() retrieves member information like dimension, alias, generation and level names.

### Syntax

HypFindMember (vtSheetName, vtMemberName, vtAliasTable, vtDimensionName, vtAliasName, vtGenerationName, vtLevelName)

ByVal vtSheetName As Variant

ByVal vtMemberName As Variant

ByVal vtAliasTable As Variant

ByRef vtDimensionName As Variant

ByRef vtAliasName As Variant

ByRef vtGenerationName As Variant

ByRef vtLevelName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtMemberName	The name of the member. This parameter is required because there is no default value.
vtAliasTable	The name of the alias table to search for the alias name. If Null, the default alias table is searched.
vtDimensionName	The output parameter that contains the dimension, if successful.
vtAliasName	The output parameter that contains the alias name of the member, if successful.
vtGenerationName	The output parameter that contains the generation name of the member, if successful.
vtLevelName	The output parameter that contains the level name of the member, if successful.

### Return Value

Returns zero if successful.

### Example

```
Declare Function HypFindMember Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByVal vtAliasTable As Variant,
```

```
ByRef vtDimensionName As Variant, ByRef vtAliasName As Variant, ByRef  
vtGenerationName As Variant, ByRef vtLevelName As Variant) As Long
```

```
Sub FindMember()  
    X = HypFindMember(Empty, "100", "Default", dimName, aliasName,  
        genName, levelName)  
    MsgBox (dimName)  
    MsgBox (aliasName)  
    MsgBox (genName)  
    MsgBox (levelName)  
End Sub
```

## HypForceCalculate

### Description

HypForceCalculate() calls the Force Calculate method for Financial Management data sources.

### Syntax

```
HypForceCalculate(vtSheetName, vtRange)
```

ByVal vtSheetName As Variant

By Val vtRange As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

### Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

### Example

```
Declare Function HypForceCalculate Lib "HsAddin" (ByVal vtSheetName As  
Variant, ByVal vtRange As Variant) As Long
```

```
sts = HypForceCalculate ("Sheet1", Empty)
```



## HypForceCalculateContribution

### Description

HypForceCalculateContribution calls the Force Calculate Contribution method for Financial Management data sources.

### Syntax

HypForceCalculateContribution (vtSheetName, vtRange)

ByVal vtSheetName As Variant

By Val vtRange As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

### Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

### Example

```
Declare Function HypForceCalculateContribution Lib "HsAddin" (ByVal vtSheetName As Variant, ByVal vtRange As Variant) As Long
```

```
sts = HypForceCalculateContribution (Empty, Empty)
```

## HypForceTranslate

### Description

HypForceTranslate calls the Force Translate method for Financial Management data sources.

### Syntax

HypForceTranslate (vtSheetName, vtRange)

ByVal vtSheetName As Variant

By Val vtRange As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

## Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

## Example

```
Declare Function HypForceTranslate Lib "HsAddin" (ByVal vtSheetName As Variant, ByVal vtRange As Variant) As Long
```

```
sts = HypForceTranslate (Empty, Empty)
```

## HypFreeDataPoint

### Description

HypFreeDataPoint() frees any memory allocated by HypGetDataPoint.

### Syntax

```
HypFreeDataPoint()
```

```
ByRef vtInfo As Variant
```

## Parameters

Parameter	Description
vtInfo	Variant array returned by HypGetDataPoint.

## Return Value

Returns 0 if successful; returns -15 if not successful.

## Example

See [“HypGetDataPoint” on page 256](#) for an example of HypFreeDataPoint.

## HypGetAncestor

### Description

HypGetAncestor() returns the ancestor at any specific generation/level for the specified member.

### Syntax

HypGetAncestor (vtSheetName, vtMemberName, vtLayerType, intLayerNum, vtAncestor)

ByVal vtSheetName As Variant

ByVal vtMemberName As Variant

ByVal vtLayerType As Variant

ByVal intLayerNum As Integer

ByRef vtAncestor As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtMemberName	Specify a member name. Required field.
vtLayerType	Specify either "Gen" or "Level". If vtLayerType is Null or Empty, Gen is taken as default.
intLayerNum	Specify the Level/Generation number. Required Field.
vtAncestor	Output. Contains the ancestor name on successful execution of the macro.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

### Example

```
Declare Function HypGetAncestor Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByVal vtLayerType As Variant, ByVal intLayerNumber As Integer, ByRef vtAncestor As Variant) As Long
```

```
Sub Sample_HypGetAncestor
    Dim X as Long
    Dim vtAncestor as Variant
    X = HypGetAncestor ("Sheet1", "100-20", "Level", 1, vtAncestor)
End Sub
```

## HypGetChildren

### Description

HypGetChildren() returns the children for the specified member.

### Syntax

HypGetChildren (vtSheetName, vtMemberName, intChildCount, vtChildArray)

ByVal vtSheetName As Variant

ByVal vtMemberName As Variant

ByVal intChildCount As Integer

ByRef vtChildArray As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtMemberName	Specify a member name. Required Field.
intChildCount	To restrict the number of children returned. <ul style="list-style-type: none"><li>ChildCount &lt;=0. All children are returned.</li><li>ChildCount &gt;0. The result set is limited to the number specified as the argument. If the result set is less than the specified argument, all result are returned.</li></ul>
vtChildArray	Output Result Vector that contains the list of the children. Its contents are unknown if the macro fails.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

### Example

```
Declare Function HypGetChildren Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByVal intChildCount As Integer, ByRef vtChildNameArray As Variant) As Long
```

```
Sub Sample_HypGetChildren
    Dim vtChildren as Variant
    Dim vtChild as Variant
    Dim X as Long
    X = HypGetChildren ("sheet1", "Market", 0, vtChildren)
    If IsArray (vtChildren) Then
        For i = LBound (vtChildren) To UBound (vtChildren)
```

```

        VtChild = vtChildren (i)
    Next
End If
End Sub

```

## HypGetColCount

### Description

HypGetColCount() returns the number of column dimensions.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

HypGetColCount()

### Return Value

Returns the number of column dimensions if successful; otherwise, returns the negative error code.

### Example

```

Declare Function HypGetColCount Lib "HsAddin.dll" () As Long

Sub Macro()
    Dim vtGrid as Variant
    Sts = HypConnect("Sheet1", "system", "password", "MyDemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range ("B2").Select
    Sts = HypGetColCount ()
End sub

```

## HypGetCollItems

### Description

HypGetCollItems() returns the members present in the dynamic link query for the nth column dimensions.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

## Syntax

HypGetColItems(vtColumnID, vtDimensionName, vtMembers)

ByVal vtColumnID As Variant

ByRef vtDimensionName As Variant

ByRef vtMembers As Variant

## Parameters

Parameters	Description
vtColumnID	The column number n.
vtDimensionName	Returns the nth column dimension name.
vtMembers	Returns members for the nth column dimensions.

## Return Value

Returns 0 if successful; otherwise, returns the negative error code.

## Example

```
Declare Function HypGetColItems Lib "HsAddin.dll" (ByVal vtColID As Variant, ByRef vtDimensionName As Variant, ByRef vtMembers As Variant) As Long
```

```
Sub Macro()  
    Dim vtGrid as Variant  
    Dim vtDimensionName as Variant  
    Dim vtMembers as Variant  
    Sts = HypConnect("Sheet1", "system", "password", "AnamikaDemoBasic")  
    Sts = HypRetrieve("Sheet1")  
    Range ("B2").Select  
    Sts = HypGetSourceGrid ("Sheet1", vtGrid)  
    Sts = HypGetColItems(1, vtDimensionName, vtMembers)  
End sub
```

## HypGetConnectionInfo

### Description

HypGetConnectionInfo() returns the connection information for the dynamic link query.

HypGetConnectionInfo assumes that a call has already been made to HypGetSourceGrid to initialize the dynamic link query, which contains the information about the active data source and the grid on the sheet.

**Note:**

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

**Syntax**

HypGetConnectionInfo(vtServerName, vtUserName, vtPassword, vtApplicationName, vtDatabaseName, vtFriendlyName, vtURL, vtProviderType)

ByRef vtServerName As Variant

ByRef vtUserName As Variant

ByRef vtApplicationName As Variant

ByRef vtDatabaseName As Variant

ByRef vtFriendlyName As Variant

ByRef vtURL As Variant

ByRef vtProviderType As Variant

**Parameters**

Parameters	Description
vtServerName	Output. Contains the server name for the dynamic link query.
vtUserName	Output. Contains the user name for the dynamic link query.
vtApplicationName	Output. Contains the application name for the dynamic link query.
vtDatabaseName	Output. Contains the database name for the dynamic link query.
vtFriendlyName	Output. Contains the friendly connection name for the dynamic link query.
vtURL	Output. Contains the URL for the dynamic link query.
vtProviderType	Output. Contains provider type for the dynamic link query.

**Return Value**

Returns 0 if successful; otherwise, returns the appropriate error code.

**Example**

```
Declare Function HypGetConnectionInfo Lib "HsAddin.dll" (ByRef vtServerName As Variant, ByRef vtUserName As Variant, ByRef vtApplicationName As Variant, ByRef vtDatabaseName As Variant, ByRef vtFriendlyName As Variant, ByRef vtURL As Variant, ByRef vtProviderType As Variant) As Long
```

```
Sub Macro()  
    Dim vtGrid as Variant
```

```

Dim server As Variant
Dim user As Variant
Dim app As Variant
Dim pass As Variant
Dim db As Variant
Dim provider As Variant
Dim conn As Variant
Dim url As Variant
Sts = HypConnect("Sheet1", "system", "MyDemoBasic")
Sts = HypRetrieve("Sheet1")
Range("B2").Select
Sts = HypGetSourceGrid("Sheet1", vtGrid)
Sts = HypGetConnectionInfo(server, user, app, db, conn, url, provider)
End sub

```

## HypGetDataPoint

### Description

HypGetDataPoint() retrieves member information for a single data cell. For example, to find out the members that consist of the data intersection at cell B6, HypGetDataPoint may return the members January, California, Actual, Root Beer, Profit.

### Syntax

HypGetDataPoint (vtSheetName, vtCell)

By Val vtSheetName As Variant

By Val vtCell As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of the worksheet containing the currency information. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtCell	Cell name that describes the reference cell for which to retrieve the member combination information.

### Return Value

Returns an array of member names.

### Example

```

Declare Function HypGetDataPoint Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal cell As Variant) As Variant

```

```

Sub DataPointsSub()

```



```

Dim vt As Variant
Dim cbItems As Variant
Dim i As Integer
Dim pMember As String
vt = HypDataPoint(Empty, "B3")
If IsArray(vt) Then
    cbItems = UBound(vt) - LBound(vt) + 1
    MsgBox ("Number of elements = " + Str(cbItems))

    For i = LBound(vt) To UBound(vt)
        MsgBox ("Member = " + vt(i))
    Next
    X = HypFreeDataPoint(vt)
Else
MsgBox ("Return Value = " + Str(vt))
End If
End Sub

```

## HypGetGlobalOption

### Description

HypGetGlobalOption() returns information about individual Smart View workspace options.

#### Note:

For option descriptions, see [Chapter 14, "User Preferences."](#)

### Syntax

HypGetGlobalOption(vtItem)

ByVal vtItem As Long

### Parameters

Parameter	Description
vtItem	Number indicating which option is to be retrieved. See <a href="#">Table 16</a> for values.

[Table 16](#) indicates which options are returned for the vtItem parameter.

**Table 16**

item	Option	Return Data Type
1	Enable Excel formatting	Boolean
2	Enable double-click for Ad Hoc operations	Boolean
3	Enable Undo	Boolean

item	Option	Return Data Type
4	Not used	Boolean
5	Specify message level setting: 0 Information messages 1 Warning messages 2 Error messages 3 No messages	Number
6	Use thousands separator	Boolean
7	Enable route messages to log file	Boolean
8	Clear log file on next launch	Boolean
9	Enable Navigate Without Data	Boolean

### Return Value

Returns a number or Boolean value indicating the state of the requested option. Returns an error code if parameter item is out of range.

### Example

The following example sets the option for specifying a message level and checks whether the value set is valid.

```
Declare Function HypGetGlobalOption Lib "HsAddin.dll" (ByVal vtItem As Long) As Variant
```

```
Sub GetGlobal()
    sts = HypGetGlobalOption(5)
    If sts = -15 then
        MsgBox ("Invalid Parameter")
    Else
        MsgBox ("Message level is set to" & sts)
    End Sub
```

## HypGetLinkMacro

### Description

HypGetLinkMacro() returns the macro name currently set to be run to perform the dynamic link query.

**Note:**

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

**Syntax**

HypGetLinkMacro (vtMacroName)

ByRef vtMacroName As Variant

**Parameters**

Parameter	Description
vtMacroName	Output. Returns the currently set macro name.

**Return Value**

Returns 0 if successful; otherwise, returns the appropriate error code.

**Example**

```
Declare Function HypGetLinkMacro Lib "HsAddin.dll" (ByRef vtMacroName As Variant) As Long
```

```
Sub Auto_Open()
    Dim Macroname as Variant
    Sts = HypUseLinkMacro(True)
    Sts = HypSetLinkMacro("Sheet1.Macro8")
    Sts = HypGetLinkMacro(Macroname)
    If (StrComp(MacroName, "Sheet1.Macro8")) Then
        MsgBox ("Error Occurred")
    End If
End Sub
```

**HypGetParent****Description**

HypGetParent() returns the parent name for the specified member.

**Syntax**

HypGetParent(vtSheetName, vtMemberName, vtParentName)

ByVal vtSheetName As Variant

ByVal vtMemberName As Variant

ByRef vtParentName As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtMemberName	Specify a member name. Required Field.
vtParentName	Output. Contains the parent name on successful execution of the macro.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypGetParent Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByRef vtParentName As Variant) As Long
```

```
Sub Sample_HypGetParent  
    Dim vtParent as Variant  
    X = HypGetParent ("Sheet1", "East", vtParent)  
End sub
```

## HypGetPOVCount

### Description

HypGetPOVCount() returns the number dimensions in the POV from the dynamic link query.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

HypGetPOVCount()

### Return Value

Returns the number of column dimensions if successful; otherwise, returns the negative error code.

## Example

```
Declare Function HypGetPOVCount Lib "HsAddin.dll" () As Long

Sub Macro()
    Dim vtGrid as Variant
    Sts = HypConnect("Sheet1", "system", "password", "MyDemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range ("B2").Select
    Sts = HypGetSourceGrid ("Sheet1", vtGrid)
    Sts = HypGetPOVCount ()
End sub
```

## HypGetPOVItems

### Description

HypGetPOVItems() returns the dimensions in the POV and the currently selected member for each dimension.

#### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

HypGetPOVItems(vtDimensionNames, vtPOVNames)

ByRef vtDimensionNames As Variant

ByRef vtPOVNames As Variant

### Parameters

Parameter	Description
vtDimensionNames	The dimension names in the POV.
vtPOVNames	The currently selected member for each dimension in the POV.

### Return Value

Returns 0 if successful; otherwise, returns the negative error code.

## Example

```
Declare Function HypGetPOVItems Lib "HsAddin.dll" (ByRef vtDimensionNames
As Variant, ByRef vtPOVNames As Variant) As Long
```

```

Sub Macro()
    Dim vtGrid as Variant
    Dim vtDimNames As Variant
    Dim vtPOVNames As Variant
    Sts = HypConnect("Sheet1", "system", "password", "MyDemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range ("B2").Select
    Sts = HypGetSourceGrid ("Sheet1", vtGrid)
    Sts = HypGetPOVItems (vtDimNames, vtPOVNames)
End sub

```

## HypGetRowCount

### Description

HypGetRowCount() returns the number of row dimensions.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

HypGetRowCount()

### Return Value

Returns number of row dimensions if successful; otherwise, returns the negative error code.

### Example

```

Declare Function HypGetRowCount Lib "HsAddin.dll" () As Long

```

```

Sub Macro()
    Dim vtGrid as Variant
    Sts = HypConnect("Sheet1", "system", "password", "MyDemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range ("B2").Select
    Sts = HypGetSourceGrid ("Sheet1", vtGrid)
    Sts = HypGetRowCount ()
End sub

```

## HypGetRowItems

### Description

HypGetRowItems() returns the members present for the nth row dimension in the dynamic link query.

**Note:**

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

**Syntax**

HypGetRowItems(vtRowID, vtDimensionName, vtMemberNames)

ByVal vtRowID As Variant

ByRef vtDimensionName As Variant

ByRef vtMemberNames As Variant

**Parameters**

Parameter	Description
vtRowID	The row number n.
vtDimensionName	Returns the nth row dimension name.
vtMemberNames	Returns the members for the nth row dimensions.

**Return Value**

Returns 0 if successful; otherwise, returns the negative error code.

**Example**

```
Declare Function HypGetRowItems Lib "HsAddin.dll" (ByVal rowID As Variant,
ByRef vtDimensionName As Variant, ByRef vtMemberNames As Variant) As Long
```

```
Sub Macro()
    Dim vtGrid as Variant
    Dim vtDimName as Variant
    Dim vtMembers as Variant
    Sts = HypConnect("Sheet1", "system", "password", "AnamikaDemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range("B2").Select
    Sts = HypGetSourceGrid("Sheet1", vtGrid)
    Sts = HypGetRowItems(1, vtDimName, vtMembers)
End sub
```

**HypGetSheetOption****Description**

HypGetSheetOption() returns information about individual spreadsheet options.

## Syntax

HypGetSheetOption(vtSheetName, vtItem)

ByVal vtSheetName As Variant ByVal vtItem As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form " [Book.xls]Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtItem	Number indicating which option is to be retrieved. See <a href="#">Table 17</a> for a list of values.

[Table 17](#) indicates which options are returned for the vtItem parameter.

**Table 17**

vtItem	Option	Data Type and Values
1	Set zoom in level: 0 Next level 1 All levels 2 Bottom level	Number
2	Enable Include Selection setting	Boolean
3	Enable Within Selection Group setting	Boolean
4	Enable Remove Unselected Groups setting	Boolean
5	Specify Indent setting: 0 No indentation 1 Indent sub items 2 Indent totals	Number
6	Enable suppress missing setting	Boolean
7	Enable suppress zeros setting	Boolean
8	Enable suppress underscores setting	Boolean
9	Enable No Access setting	Boolean
10	Enable Repeated Members setting	Boolean
11	Enable invalid setting	Boolean
12	Ancestor Position: 0 Top 1 Bottom	Number



<b>vtItem</b>	<b>Option</b>	<b>Data Type and Values</b>
13	Specify Missing text label	Text
14	Specify No Access label	Text
15	Cell status: 0 Data 1 Calculation status 2 Process Management	Number
16	Member Name Display options: 0 Name only 1 Name and Description 2 Description only	Number

### Return Value

Returns the value of the current setting as a string, number, or Boolean. Returns an error code if parameter item is out of range.

### Example

```
Declare Function HypGetSheetOption Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtItem As Variant) As Variant
```

```
Sub GetSheet()
sts = HypGetSheetOption("Sheet", 5)
If sts = -15 then
Msgbox ("Invalid Parameter")
Else
Msgbox ("Indentation is set to" & sts)
End Sub
```

## HypGetSourceGrid

### Description

HypGetSourceGrid() creates a query from the source grid for the dynamic link query.

This function applies to both static and dynamic link views.

### Note:

A cell in the grid must be selected before this making this call.

**Note:**

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

**Syntax**

HypGetSourceGrid(vtSheetName, vtGrid)

ByVal vtSheetName As Variant

ByRef vtGrid As Variant

**Parameters**

Parameters	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtGrid	The grid XML is returned on successful execution.

**Return Value**

Returns 0 if successful or the appropriate error code otherwise.

**Example**

```
Declare Function HypGetSourceGrid Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByRef vtGrid As Variant) As Long
```

```
Sub Macro()
    Dim vtGrid as Variant
    Range ("B2").Select
    Sts = HypGetSourceGrid ("Sheet1", vtGrid)
End sub
```

**HypGetSubstitutionVariable****Description**

HypGetSubstitutionVariable() retrieves substitution variables and their current value from Analytic Server.

**Syntax**

HypGetSubstitutionVariable (vtSheetName, vtApplicationName, vtDatabaseName, vtVariableNameList, vtVariableValueList)

ByVal vtSheetName As Variant

ByVal vtApplicationName As Variant

ByVal vtDatabaseName As Variant

ByVal vtVariableName As Variant

ByRef vtVariableNameList As Variant

ByRef vtVariableValueList As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of the worksheet on which to operate. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtApplicationName	The application name to return variables scoped for the specified application. If vtApplicationName is Null or Empty all the applications are considered.
vtDatabaseName	The database name to return variables scoped for the specified database. If vtDatabaseName is Null or Empty all the databases are considered.
vtVariableName	The variable name to be retrieved. If vtVariableName is Null or Empty the entire list of variables is returned.
vtVariableNameList	Output Result Vector that contains the list of the variable names. Its contents are unknown if the macro fails.
vtVariableValueList	Output Result Vector that contains the list of the variable values corresponding to each variable returned. Its contents are unknown if the macro fails.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypGetSubstitutionVariable Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtApplicationName As Variant, ByVal vtDatabaseName As Variant, ByVal vtVariableName As Variant, ByRef vtVariableNames As Variant, ByRef vtVariableValues As Variant) As Long
```

```
Sub Sample_HypGetSubstitutionVariable
    Dim vtVarNameList as Variant
    Dim vtVarValueList as Variant
    Dim vtVarVal as Variant
    Dim vtVar as Variant
    X = HypGetSubstitutionVariable ("Sheet1", "Sample", "Basic", Empty, vtVarNameList, vtVarValueList)
    If IsArray (vtVarNameList) Then
        For i = LBound (vtVarNameList) To UBound (vtVarNameList)
            vtVar = vtVarNameList (i)
        Next
    End If
```

```

    If IsArray (vtVarValueList) Then
        For i = LBound (vtVarValueList) To UBound (vtVarValueList)
            vtVarVal = vtVarValueList (i)
        Next
    End If

```

## HypIsAttribute

### Description

HypIsAttribute() checks to see if the specified member has a specific attribute.

### Syntax

HypIsAttribute(vtSheetName, vtDimensionName, vtMemberName, vtAttributeName)

ByVal vtSheetName As Variant

ByVal vtDimensionName As Variant

ByVal vtMemberName As Variant

ByVal vtAttributeName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtDimensionName	The name of the dimension where the member belongs.
vtMemberName	The name of the member for which we must test the condition.
vtAttributeName	Input string that is compared against the attributes of the member.

### Return Value

Returns a variant in which -1 is true, 0 is false; otherwise, returns the appropriate error code.

### Example

```

Declare Function HypIsAttribute Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtDimensionName As Variant, ByVal vtMemberName As Variant, ByVal vtAttribute As Variant) As Variant

```

```

Sub CheckAttribute()
    vtret = HypIsAttribute("Sheet1", "Market", "Connecticut", "MyAttribute")
    If vtret = -1 Then
        MsgBox ("Found MyAttribute")
    ElseIf vtret = 0 Then

```

```

        MsgBox ("MyAttribute not available for Connecticut")
    Else
        MsgBox ("Error value returned is" & vtret)
    End If
End Sub

```

## HypIsDescendant

### Description

HypIsDescendant() checks if the specified member is the descendant of another specified member.

### Syntax

HypIsDescendant(vtSheetName, vtMemberName, vtAncestorName)

ByVal vtSheetName As Variant

ByVal vtMemberName As Variant

ByVal vtAncestorName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet on which to operate. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtMemberName	A member name. Required.
vtAncestorName	The member name of the ancestor. Required.

### Return Value

Returns a variant in which -1 is true, 0 is false; otherwise, returns the appropriate error code.

### Example

```

Declare Function HypIsDescendant Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByVal vtDescendantName As Variant) As Boolean

```

```

Sub Sample_HypIsDescendant
    Dim b as Boolean
    b = HypIsDescendant ("Sheet1", "Year", "Jan")
End sub

```

## HypIsExpense

### Description

HypIsExpense() verifies that the member specified has an Expense tag.

### Syntax

HypIsExpense(vtSheetName, vtDimensionName, vtMemberName)

ByVal vtSheetName As Variant

ByVal vtDimensionName As Variant

ByVal vtMemberName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtDimensionName	The name of the dimension where the member belongs. If vtDimensionName is Null or Empty, the active dimension is used.
vtMemberName	The name of the specified member.

### Return Value

Returns a variant in which -1 is true, 0 is false; otherwise, returns the appropriate error code.

### Example

```
Declare Function HypIsExpense Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtDimensionName As Variant, ByVal vtMemberName As Variant) As Variant
```

```
Sub CheckExpense()  
vtret = HypIsExpense("Sheet1", "Measures", "Opening Inventory")  
If vtret = -1 Then  
    MsgBox ("Opening Inventory has expense flag set")  
ElseIf vtret = 0 Then  
    MsgBox ("Expense flag has not been set")  
Else  
    MsgBox ("Error value returned is" & vtret)  
End If  
End Sub
```

## HypIsParent

HypIsParent() checks if the specified member is the parent of another specified member.

### Syntax

HypIsParent(vtSheetName, vtMemberName, vtParentName)

ByVal vtSheetName As Variant

ByVal vtMemberName As Variant

ByVal vtParentName As Variant

### Parameters

Parameter	Description
vtSheetName	The text name of worksheet on which to operate. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtMemberName	A member name. Required.
vtParentName	The member name of the parent. Required.

### Return Value

Returns a variant in which -1 is true, 0 is false; otherwise, returns the appropriate error code.

### Example

```
Declare Function HypIsParent Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByVal ParentName As Variant) As Boolean
```

```
Sub Sample_HypIsParent
    Dim b as Boolean
    b = HypIsParent ("sheet1", "East", "Market")
End Sub
```

## HypIsUDA

### Description

HypIsUDA() checks to verify if the member specified has a specific UDA.

### Syntax

HypIsUDA (vtSheetName, vtDimensionName, vtMemberName, vtUDAString)

ByVal vtSheetName As Variant

ByVal vtDimensionName As Variant

ByVal vtMemberName As Variant

ByVal vtUDAString As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtDimensionName	The name of the dimension where the member belongs.
vtMemberName	The name of the member for which we must test the condition.
vtUDAString	Input string that is compared against the attributes of the member.

## Return Value

Returns a variant in which -1 is true, 0 is false; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypIsUDA Lib "HsAddin.dll" (ByVal vtSheetName As Variant,  
ByVal vtDimensionName As Variant, ByVal vtMemberName As Variant, ByVal  
vtUDAString As Variant) As Variant
```

```
Sub CheckUDA()  
vtret = HypIsUDA("Sheet1", "Market", "Connecticut", "MyUDA")  
    If vtret = -1 Then  
        MsgBox ("Found MyUDA")  
    ElseIf vtret = 0 Then  
        MsgBox ("Did not find MyUDA")  
    Else  
        MsgBox ("Error value returned is" & vtret)  
    End If  
End Sub
```

## HypKeepOnly

### Description

HypKeepOnly() retains only the selected member(s) in the sheet and removes unselected members.

The selection must be limited to member cells only, not data cells.



## Syntax

HypKeepOnly(vtSheetName, vtSelection)

ByVal vtSheetName As Variant

ByVal vtSelection As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtSelection	Range object which refers to the member(s) that will be kept. If selection is Null or Empty, the active cell is used.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypKeepOnly Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtSelection As Variant) As Long
```

```
Sub KOnly()  
    ' Keep Only on one member name  
    X=HypKeepOnly(" [Book2.xls]Sheet1", RANGE("D2"))  
    If X = 0 Then  
        MsgBox("Keep Only successful.")  
    Else  
        MsgBox("Keep Only failed." + X)  
    End If  
    ' Keep Only on two member names  
    X=HypKeepOnly(" [Book2.xls]Sheet1", RANGE("D2:A5"))  
    If X = 0 Then  
        MsgBox("Keep Only successful.")  
    Else  
        MsgBox("Keep Only failed." + X)  
    End If  
End Sub
```

## HypListCalcScripts

### Description

HypListCalcScripts() lists all calculation scripts present on Analytic Server.

## Syntax

HypListCalcScripts (vtSheetName, vtScriptArray)

ByVal vtSheetName As Variant

ByRef vtScriptArray As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtScriptArray	The business rule scripts are returned in this array.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypListCalcScripts Lib "HsAddin.dll" (ByVal sheetName As Variant,ByRef scriptArray) As Long
```

```
Dim sts As Long
Dim paramList As Variant
sts=HypListCalcScripts ("sheet1",paramList)
If IsArray(paramList) Then
    cbItems = UBound(paramList) - LBound(paramList) + 1
    MsgBox ("Number of elements = " + Str(cbItems))
    For i = LBound(paramList) To UBound(paramList)
        MsgBox ("Member = " + paramList(i))
    Next
Else
    MsgBox ("Return Value = " + sts)
End If
```

## HypLoginSetPassword

### Description

HypLoginSetPassword() sets the password upon login, then logs the user out.

### Syntax

HypLoginSetPassword (vtSheetName, vtNewPassword, vtOldPassword, vtServerName, vtUserName)

ByVal vtSheetName As Variant

ByVal vtNewPassword As Variant

ByVal vtOldPassword As Variant

ByVal vtServerName As Variant

ByVal vtUserName As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtNewPassword	Text name of the new password you want to set for the user name.
vtOldPassword	Text name of the old password that you want to replace for the user name.
vtServerName	Text name of the server you want to change the password for.
vtUserName	Text name of the valid user name on the server.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypLoginSetPassword Lib "HsAddin.dll" (ByVal vtSheetName as Variant, ByVal vtNewPassword As Variant, ByVal vtOldPassword As Variant, ByVal vtServerName As Variant, ByVal vtUserName As Variant) As Long
```

```
Sub SetPassword()  
Dim X As Long  
'This sets the login password to password2 from password1 for the  
'user User1 on server Local.X  
=HypLoginSetPassword (" [Budget.xls]Sheet1", "password2", "password1",  
"Local", "User1")  
If X=0 then  
    MsgBox("Set Password Successful.")  
Else  
    MsgBox("Set Password Unsuccessful.")  
End If  
End Sub
```

## HypOtlGetMemberInfo

### Description

HypOtlGetMemberInfo() returns the following information related to a member selection: member comment, formula, UDA, attribute, etcetera.

## Syntax

HypOtlGetMemberInfo (vtSheetName, vtDimensionName, vtMemberName, vtPredicate, vtMemberArray)

ByVal vtSheetName As Variant

ByVal vtDimensionName As Variant

ByVal vtMemberName As Variant

ByVal vtPredicate As Variant

ByRef vtMemberArray As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtDimensionName	The name of the dimension. Can be Null; if Null, search for the predicate in the whole outline. Dimension to limit the scope of the query.
vtMemberName	Member name for which information is being queried on.
vtPredicate	Member selection criteria: 1 HYP_COMMENT 2 HYP_FORMULA 3 HYP_UDA 4 HYP_ATTRIBUTE
vtMemberArray	Output that contains the result of the query. Its contents are unknown if the macro fails.

## Return Value

Returns a zero if successful; otherwise returns the appropriate error code.

## Example

```
Declare Function HypOtlGetMemberInfo Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByVal vtPredicate As Variant, ByRef vtMemberArray As Variant) As Long
```

```
Sub HypOtlGetMemberInfo()  
    vtRet = HypOtlGetMemberInfo (vtSheetName, "Year", "Jan",  
        HYP_COMMENT, vt)  
    If IsArray(vt) Then cbItems = UBound(vt) + 1  
    MsgBox ("Number of elements = " + Str(cbItems))  
    For i = 0 To UBound(vt)  
        MsgBox ("Member = " + vt(i))  
    Next
```

```

Else
MsgBox ("Return Value = " + vtRet)
End If
End Sub

```

## HypPivot

### Description

HypPivot() transposes spreadsheet rows and columns, based on the selected dimension.

### Syntax

```
HypPivot(vtSheetName, vtStart, vtEnd)
```

```
ByVal vtSheetName As Variant
```

```
ByVal vtStart As Variant
```

```
ByVal vtEnd As Variant
```

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtStart	Range object which refers to the single cell starting point of the pivot.
vtEnd	Range object which refers to the single cell ending point of the pivot.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

### Example

```

Declare Function HypPivot Lib "HsAddin.dll" (ByVal vtSheetName As Variant,
ByVal vtStart As Variant, ByVal vtEnd As Variant) As Long

```

```

Sub DoPivot()
X=HypPivot("[Book2.xls]Sheet1", RANGE("B2"), RANGE("D1"))
  If X = 0 Then
    MsgBox("Pivot successful.")
  Else
    MsgBox("Pivot failed.")
  End If
End Sub

```

## HypPivotToGrid

### Description

HypPivotToGrid() moves the selected dimension and members from the POV to the spreadsheet grid.

### Syntax

HypPivotToGrid (vtSheetName, vtDimensionName, vtSelection)

ByVal vtSheetName as Variant

ByVal vtDimensionName as Variant

ByVal vtSelection as Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtDimensionName	Currently selected dimension from the toolbar.
vtSelection	Range object which refers to the single cell starting point of the pivot. Orientation is calculated based on the selection.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

### Example

```
Declare Function HypPivotToGrid Lib "HsAddin.dll" (By Val vtSheetName As Variant, ByVal vtDimensionName as Variant, ByVal vtSelection as Variant) As Long
```

```
Sub DoPivotGrid()  
X=HypPivotToGrid("[Book2.xls]Sheet1", "Product", RANGE("E6"))  
If X = 0 Then  
    MsgBox("Pivot to grid successful.")  
Else  
    MsgBox("Pivot to grid failed.")  
End If  
End Sub
```

## HypPivotToPOV

### Description

HypPivotToPOV() pivots from the spreadsheet grid to the POV.

### Syntax

HypPivotToPOV (vtSheetName, vtSelection)

ByVal vtSheetName as Variant

ByVal vtSelection as Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form " [Book.xls]Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtSelection	Range object which refers to the single cell starting point of the pivot. Orientation is calculated based on the selection.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

### Example

```
Declare Function HypPivotToPOV Lib "HsAddin.dll" (By Val vtSheetName As Variant, ByVal vtSelection as Variant) As Long
```

```
Sub DoPivotPOV()  
X=HypPivotToPOV(" [Book2.xls]Sheet1", RANGE("E6"))  
If X = 0 Then  
    MsgBox("Pivot to POV successful.")  
Else  
    MsgBox("Pivot to POV failed.")  
End If  
End Sub
```

## HypQueryMembers

### Description

HypQueryMembers() executes the member selection query.

## Syntax

HypQueryMembers (vtSheetName, vtMemberName, vtPredicate, vtOption, vtDimensionName, vtInput1, vtInput2, vtMemberArray)

ByVal vtSheetName As Variant

ByVal vtMemberName As Variant

ByVal vtPredicate As Variant

ByVal vtOption As Variant

ByVal vtDimensionName As Variant

ByVal vtInput1 As Variant

ByVal vtInput2 As Variant

ByRef vtMemberArray As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtMemberName	The member name on which to perform the query.
vtPredicate	Member selection criteria: 1 HYP_CHILDREN 2 HYP_DESCENDANTS 3 HYP_BOTTOMLEVEL 4 HYP_SIBLINGS 5 HYP_SAMELEVEL 6 HYP_SAMEGENERATION 7 HYP_PARENT 8 HYP_DIMENSION 9 HYP_NAMEDGENERATION 10 HYP_NAMEDLEVEL 11 HYP_SEARCH 12 HYP_WILDSEARCH 13 HYP_USERATTRIBUTE 14 HYP_ANCESTORS 15 HYP_DTSMEMBER 16 HYP_DIMUSERATTRIBUTES
vtOption	Options are dependent on the predicate:



Parameter	Description
	For the predicate values, HYP_SEARCH and HYP_WILDSEARCH, specify query options: HYP_MEMBERSONLY HYP_ALIASESONLY HYP_MEMBERSANDALIASES
vtDimensionName	Dimension to limit the scope of the query. It is used with the following query options and ignored otherwise: HYP_NAMEDGENERATION, HYP_NAMEDLEVEL, HYP_USERATTRIBUTE HYP_SEARCH (set to Null to search through all dimensions), HYP_WILDSEARCH (set to Null to search through all dimensions).
vtInput1	Input string that is determined by the option. It is used with the following query options and ignored otherwise: <ul style="list-style-type: none"> <li>● HYP_NAMEDGENERATION (The name of the generation)</li> <li>● HYP_NAMEDLEVEL (The name of the level)</li> <li>● HYP_SEARCH (The string to search for. The string is defined as an exact)</li> <li>● HYP_WILDSEARCH (The string to search for. The string is defined as an exact search string with an optional '*' at the end to mean any set of characters)</li> <li>● HYP_USERATTRIBUTE (The user-defined attribute)</li> </ul>
vtInput2	Input string that is determined by the option. It is used with the following query options and ignored otherwise: <ul style="list-style-type: none"> <li>● HYP_USERATTRIBUTE (The user-defined attribute)</li> <li>● HYP_SEARCH, HYP_WILDSEARCH (If the options are set to search in the alias tables, this string specifies which alias table to search. If the string is Null, all alias tables will be searched).</li> </ul>
vtMemberArray	Output that contains the result of the query. If unsuccessful, its contents are unknown.

## Return Value

Returns a zero if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypQueryMembers Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtMemberName As Variant, ByVal vtPredicate As Variant, ByVal vtOption As Variant, ByVal vtDimensionName As Variant, ByVal vtInput1 As Variant, ByVal vtInput2 As Variant, ByRef vtMemberArray As Variant) As Long
```

```
Sub QueryMembersEmptyValues()
    vtRet = HypQueryMembers(Empty, Null, HYP_WILDSEARCH,
        HYP_MEMBERSONLY, "Year", "J*", "", vt)
    If IsArray(vt) Then
        cbItems = UBound(vt) + 1
        MsgBox ("Number of elements = " + Str(cbItems))
        For i = 0 To UBound(vt)
            MsgBox ("Member = " + vt(i))
        Next
    Else
        MsgBox ("Return Value = " + Str(vt))
    End Sub
```

```
End If
End Sub
```

## HypRedo

### Description

HypRedo() restores the database view as it was before an Undo was performed.

### Syntax

```
HypRedo (vtSheetName)
ByVal vtSheetName As Variant
```

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form " [Book.xls]Sheet ". If vtSheetName is Null or Empty, the active sheet is used.

### Return Value

Returns 0 if successful. A negative number indicates a local failure. A return value greater than zero indicates a failure on the server.

### Example

```
Declare Function HypRedo Lib "HsAddin" (ByVal vtSheetName As Variant) As Long

Sub Redo()
    X=HypRedo (" [Book2.xls] Sheet1 ")
End Sub
```

## HypRemoveConnection

### Description

HypRemoveConnection() removes the specified connection from the list of all available Smart View connections.

### Syntax

```
HypRemoveConnection(vtFriendlyName)
```

ByVal vtFriendlyName As Variant

## Parameters

Parameter	Description
vtFriendlyName	The friendly connection name for the data source provider.

## Return Value

Returns 0 if successful, otherwise, returns the appropriate error code.

## Example

```
Declare Function HypRemoveConnection Lib "HsAddin" (ByVal vtFriendlyName  
As Variant) As Long  
  
Sub RConn()  
    X=HypRemoveConnection("My Connection")  
End Sub
```

## HypRemoveOnly

### Description

HypRemoveOnly() removes only the selected member(s) in the sheet and retains unselected members in the selected dimension.

Selection should include only member cells, not data cells.

### Syntax

HypRemoveOnly(vtSheetName, vtSelection)

ByVal vtSheetName As Variant

ByVal vtSelection As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtSelection	Range object which refers to the member(s) that will be removed. If selection is Null or Empty, the active cell is used.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypRemoveOnly Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtSelection As Variant) As Long
```

```
Sub ROnly()  
    ' Remove Only on one member name  
    X=HypRemoveOnly("[Book2.xls]Sheet1", RANGE("D2"))  
    If X = 0 Then  
        MsgBox("Remove Only successful.")  
    Else  
        MsgBox("Remove Only failed." + X)  
    End If  
    ' Remove Only on two member names  
    X=HypRemoveOnly("[Book2.xls]Sheet1", RANGE("D2, A5"))  
    If X = 0 Then  
        MsgBox("Remove Only successful.")  
    Else  
        MsgBox("Remove Only failed." + X)  
    End If  
End Sub
```

## HypRetrieve

### Description

HypRetrieve() retrieves data from the database.

### Syntax

HypRetrieve(vtSheetName)

ByVal vtSheetName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypRetrieve Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtRange As Variant, ByVal vtLock As Variant) As Long

Sub RetData()
X=HypRetrieve("[Book2.xls]Sheet1")
If X = 0 Then
    MsgBox("Retrieve successful.")
Else
    MsgBox("Retrieve failed.")
End If
End Sub
```

## HypRetrieveRange

### Description

HypRetrieveRange() gives users the ability to refresh a selected or named range of cells in a grid or worksheet. If the range provided to this function contains more rows or columns than the actual grid has, the additional rows and columns are treated as comments and are thus part of the grid.

Range retrieval clears the Undo buffer, therefore the Undo operation cannot be used afterward.

### Syntax

HypRetrieveRange(vtSheetName,vtRange,vtConnName)

ByVal vtSheetName As Variant

ByVal vtRange As Variant

ByVal vtConnectionName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Single continuous range to be refreshed. If vtRange is Null, the entire worksheet is refreshed, and GetUsedRange is used on the worksheet specified to get the range to be refreshed.
vtConnectionName	Friendly name of the connection to be used to refresh the range. If vtConn is Null, the active connection associated with the worksheet is used to refresh the range on that worksheet. If no connection is associated, an error is returned.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypRetrieveRange Lib "HsAddin" (ByVal vtSheetName As Variant, ByVal vtRange As Variant, ByVal vtConnName As Variant) As Long
Worksheets("Sheet2").Names.Add name:="MyRange", RefersTo:="=$E$11:$F$28"

Sub Sample_RetrieveRange
    Worksheets("Sheet2").Names.Add name:="MyRange", RefersTo:="=$E$11:$F$28"
    sts = HypRetrieveRange("Sheet2", range("E11:F28"), "Sample")
    'retrieve by regular range
    sts = HypRetrieveRange("Sheet2", range("MyRange"), "Sample")
    'retrieve by named range
End sub
```

## HypSetActiveConnection

### Description

HypSetActiveConnection() is used to associate the current active worksheet with one of the active connections.

### Syntax

HypSetActiveConnection (vtConnectionName)

ByVal vtConnectionName as Variant

### Parameters

Parameter	Description
vtConnectionName	Name of the active connection which is to be associated with the current active worksheet. It is not case-sensitive.

### Return Value

Long. If successful, return value is 0; otherwise, the appropriate error code is returned.

## Example

```
Declare Function HypSetActiveConnection Lib "HsAddin.dll" (ByVal vtConnectionName As Variant) As Long

Sub Sample_SetActiveConnection
    sts = HypSetActiveConnection ("Demo_Basic")
End sub
```

## HypSetAliasTable

### Description

HypSetAliasTable() enables users to change alias tables in Essbase

### Syntax

HypSetAliasTable (ByVal vtSheetName As Variant, ByVal vtAliasTableName As Variant)

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form " [Book.xls] Sheet ". If vtSheetName is Null or Empty, the active sheet is used.
vtAliasTableName	Text name of teh alias table. vtAliasTableName is of the form "Default", "Long Names" and so forth.

### Return Value

0 if successul, else negative value

### Example

```
Public Declare Function HypSetAliasTable Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtAliasTableName As Variant) As Long
```

```
Sub Sample_SetActiveConnection  
    sts = HypSetAliasTable("Sheet1", "Long Name")  
End sub
```

## HypSetBackgroundPOV

### Description

HypSetBackgroundPOV() sets the POV for the connection object in the POV Manager.

### Syntax

HypSetBackgroundPOV(vtFriendlyName, ParamArray MemberList())

ByVal vtFriendlyName As Variant

ParamArray MemberList() As Variant

## Parameters

Parameter	Description
vtFriendlyName	Connection name for the data source provider.
MemberList	A list of strings which describe the member combination for which a data value will be retrieved. If MemberList is Null or Empty, the top level value is used.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypSetBackgroundPOV Lib "HsAddin" (ByVal vtFriendlyName, ParamArray MemberList() As Variant) As Long
```

```
Sub SetBGPOV()  
    X=HypSetBackgroundPOV ("My Connection","Year#Qtr1", "Market#East")  
End Sub
```

## HypSetCellsDirty

### Description

HypSetCellsDirty() marks selected data range dirty for submit data.

### Syntax

HypSetCellsDirty (vtSheetName, vtRange)

ByVal vtSheetName As Variant

ByVal vtRange As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Variant data range to be marked as dirty.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.



## Example

```
Declare Function HypSetCellsDirty Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtRange As Variant) As Long

Sub SetDirtyCells()
    X=HypSetCellsDirty ("Sheet1", Range ("A3:B3"))
End Sub
```

## HypSetCollItems

### Description

HypSetCollItems() sets the members for the nth column dimension for the dynamic link query. If the nth column does not exist, a new column is appended.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

HypSetCollItems (vtColumnID, vtDimensionName, ppMemberList())

ByVal vtColumnID As Variant

ByVal vtDimensionName As Variant

ParamArray ppMemberList() As Variant

### Parameters

Parameter	Description
vtColumnID	The column number n.
vtDimensionName	The dimension name.
ppMemberList	The list of member names.

### Return Value

Long. Returns 0 if successful, otherwise, returns the negative error code.

## Example

```
Declare Function HypSetCollItems Lib "HsAddin.dll" (ByVal vtColID As Variant, ByVal vtDimensionName As Variant, ParamArray MemberList() As Variant) As Long
```

```

Sub Macro()
    Dim vtGrid as Variant
    Sts = HypConnect("Sheet1", "system", "password", "SalesDemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range ("B2").Select
    Sts = HypGetSourceGrid ("Sheet1", vtGrid)
    Sts = HypSetColItems (1, "Market", "East", "West", "South",
        "Central", "Market")
End sub

```

## HypSetConnectionInfo

### Description

HypSetConnectionInfo() is used to modify the connection information in the query.

The parameters passed for HypSetConnectionInfo() should be match the connection information stored with that connection name.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

HypSetConnectionInfo (vtServerName, vtUserName, vtPassword, vtApplicationName, vtDatabaseName, vtFriendlyName, vtURL, vtProviderType)

ByVal vtServerName As Variant

ByVal vtUserName As Variant

ByVal vtPassword As Variant

ByVal vtApplicationName As Variant

ByVal vtDatabaseName As Variant

ByVal vtFriendlyName As Variant

ByVal vtURL As Variant

ByVal vtProviderType As Variant

### Parameters

Parameter	Description
vtServerName	The server name in the query.
vtUserName	The user name in the query.

Parameter	Description
vtPassword	The user password in the query.
vtApplicationName	The application name in the query.
vtDatabaseName	The database name in the query.
vtFriendlyName	The friendly connection name in the query.
vtURL	The provider URL in the query.
vtProviderType	The provider type in the query.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypSetConnectionInfo Lib "HsAddin.dll" (ByVal vtServerName As Variant, ByVal vtUserName As Variant, ByVal vtPassword As Variant, ByVal vtApplicationName As Variant, ByVal vtDatabaseName As Variant, ByVal vtFriendlyName As Variant, ByVal vtURL As Variant, ByVal vtProviderType As Variant) As Long
```

```
Sub Macro()
    Dim vtGrid as Variant
    Sts = HypConnect("Sheet1", "system", "password", "DemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range("B2").Select
    Sts = HypGetSourceGrid("Sheet1", vtGrid)
    Sts = HypSetConnectionInfo("localhost", "system",
        "password", "Sample", "Basic", "SampleBasic",
        "http://localhost:13080/aps/SmartView", provider)
End sub
```

## HypSetGlobalOption

### Description

HypSetGlobalOption() sets individual workspace options. For option descriptions, see [Chapter 14, "User Preferences."](#)

### Note:

You can set only one option at a time.

### Syntax

```
HypSetGlobalOption(vtItem, vtGlobalOption)
```

ByVal vtItem As Long

ByVal vtGlobalOption As Variant

## Parameters

Parameter	Description
vtItem	Number indicating which option is to be retrieved. See <a href="#">Table 18</a> for values.
vtGlobalOption	A Boolean or Number value denoting the option being set for vtItem. If vtGlobalOption is Null or Empty, no action is performed.

[Table 18](#) indicates which options are returned for the vtItem parameter.

**Table 18** Values for HypSetGlobalOption item Parameter

vtItem	Option	Return Data Type
1	Enable Excel formatting	Boolean
2	Enable double-click for Ad Hoc operations	Boolean
3	Enable Undo	Boolean
4	Not used	Boolean
5	Specify message level setting: 0 Information messages 1 Warning messages 2 Error messages 3 No messages	Number
6	Use thousands separator	Boolean
7	Enable route messages to log file	Boolean
8	Clear log file on next launch	Boolean
9	Enable Navigate Without Data	Boolean

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

The following example sets the option to display error messages only.

```
Declare Function HypSetGlobalOption Lib "HsAddin.dll" (ByVal vtItem As Long, ByVal vtGlobalOption As Variant) As Long
```

```

Sub SetGlobal()
    X=HypSetGlobalOption(5, 3)
If X=0 Then
    MsgBox("Message level is set to 3 - No messages")
Else
    MsgBox("Error. Message level not set.")
End If
End Sub

```

## HypSetLinkMacro

### Description

HypSetLinkMacro() sets the macro name to be run to perform the dynamic link query action.

#### Note:

Once the link action is triggered from the Hyperion > Link View > Visualize in Excel menu item, the macro name set by this function name will be run.

#### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#).

### Syntax

HypSetLinkMacro (vtMacroName)

ByVal vtMacroName As Variant

### Parameters

Parameter	Description
vtMacroName	The name of the macro to be run.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

### Example

```

Declare Function HypSetLinkMacro Lib "HsAddin.dll" (ByVal vtMacroName As Variant) As Long

```

```

Sub Auto_Open()
    Sts = HypUseLinkMacro(True)

```

```
    Sts = HypSetLinkMacro("Sheet1.Macro8")  
End Sub
```

## HypSetMenu

### Description

HypSetMenu() removes or restores the Hyperion menu from Excel.

### Syntax

```
HypSetMenu(bSetMenu)  
ByVal bSetMenu As Boolean
```

### Parameters

Parameter	Description
bSetMenu	Boolean value indicating whether to remove or restore the Hyperion menu for Excel. A True value indicates that the menu should be restored. A False value indicates that the menu should be removed.

### Return Value

Returns 0 if successful. If the menu cannot be set, returns an error code.

### Example

```
Declare Function HypSetMenu Lib "HsAddin.dll" (ByVal bSetMenu As Boolean)  
As Long  
  
Sub SetMyMenu()  
    X=HypSetMenu(TRUE)  
End Sub
```

## HypSetPOV

### Description

HypSetPOV() sets the POV for the selected sheet.

### Syntax

```
HypSetPOV(vtSheetName ParamArray MemberList())  
ByVal vtSheetName As Variant
```

ParamArray MemberList() As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
MemberList	A list of strings which describe the member combination for which a data value will be retrieved. If MemberList is Null or Empty, the top level value is used.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypSetPOV Lib "HsAddin" (ByVal vtSheetName, ParamArray  
MemberList() As Variant) As Long
```

```
Sub SetPOV()  
    X=HypSetPOV (" [Book2.xls]Sheet1", "Year#Qtr1", "Market#East")  
End Sub
```

## HypSetPOVItems

### Description

HypSetPOVItems() sets the POV dimensions for the dynamic link query.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views”](#) on page 226

### Syntax

```
HypSetPOVItems (ppMemberList())
```

```
ParamArray ppMemberList() As Variant
```

## Parameters

Parameter	Description
ppMemberList	The list of desired POV items in the form Dimension#Current Member.

## Return Value

Returns 0 if successful; otherwise, returns the negative error code.

## Example

```
Declare Function HypSetLinkMacro Lib "HsAddin.dll" (ByVal vtMacroName As Variant) As Long
```

```
Sub Macro()  
    Dim vtGrid as Variant  
    Sts = HypConnect("Sheet1", "system", "password", "MyDemoBasic")  
    Sts = HypRetrieve("Sheet1")  
    Range("B2").Select  
    Sts = HypGetSourceGrid("Sheet1", vtGrid)  
    Sts = HypSetPOVItems("Scenario#Scenario", "Measures#Measures")  
End sub
```

## HypSetRowItems

### Description

Sets the members for the nth row dimension for this dynamic link query. If the nth row does not exist, a new row is appended.

### Note:

This function is used specifically with dynamic link views, as described in [“Dynamic Link Views” on page 226](#)

### Syntax

```
HypSetRowItems (vtRowID, vtDimensionName, ppMemberList())
```

ByVal vtRowID As Variant

ByVal vtDimensionName As Variant

ParamArray ppMemberList() As Variant

### Parameters

Parameter	Description
vtRowID	The row number n.
vtDimensionName	The dimension name.
ppMemberList	The list of member names.



## Return Value

Long. Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypSetRowItems Lib "HsAddin.dll" (ByVal vtRowID As Variant, ByVal vtDimensionName As Variant, ParamArray MemberList() As Variant) As Long

Sub Macro()
    Dim vtGrid as Variant
    Sts = HypConnect("Sheet1", "system", "password", "DemoBasic")
    Sts = HypRetrieve("Sheet1")
    Range ("B2").Select
    Sts = HypGetSourceGrid ("Sheet1", vtGrid)
    Sts = HypSetRowItems(1, "Product", "100", "200", "300", "400", "Diet", "Product")
End sub
```

## HypSetSheetOption

### Description

HypSetSheetOption() sets individual spreadsheet options.

### Note:

You can set only one option at a time (this function is not plural).

### Syntax

HypSetSheetOption(vtSheetName, vtItem, vtOption)

ByVal vtSheetName As Variant

ByVal vtItem As Variant

ByVal vtOption As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtItem	Number indicating which option is to be set. See <a href="#">Table 19</a> for a list of values.
vtOption	A Boolean value denoting the new value of item.

[Table 19](#) indicates which options are set for which number and the expected data type.

**Table 19** vtlItems

<b>vtItem</b>	<b>Option</b>	<b>Data Type and Values</b>
1	Set zoom in level: 0 Next level 1 All levels 2 Bottom level	Number
2	Enable Include Selection setting	Boolean
3	Enable Within Selection Group setting	Boolean
4	Enable Remove Unselected Groups setting	Boolean
5	Specify Indent setting: 0 No indentation 1 Indent sub items 2 Indent totals	Number
6	Enable suppress missing setting	Boolean
7	Enable suppress zeros setting	Boolean
8	Enable suppress underscores setting	Boolean
9	Enable No Access setting	Boolean
10	Enable Repeated Members setting	Boolean
11	Enable invalid setting	Boolean
12	Ancestor Position: 0 Top 1 Bottom	Number
13	Specify Missing text label	Text
14	Specify No Access label	Text
15	Cell status: 0 Data 1 Calculation status 2 Process Management	Number
16	Member Name Display options: 0 Name only 1 Name and Description 2 Description only	Number

## Return Values

Returns 0 if successful. A negative number indicates a local failure. A return value greater than zero indicates a failure on the server.

## Example

```
Declare Function HypSetSheetOption Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtItem As Variant, ByVal vtOption As Variant) As Long
```

```
Sub SetSheet()  
X=HypSetSheetOption(Null, 6, FALSE)  
If X=0 Then  
    MsgBox("#Missing values will appear. ")  
Else  
    MsgBox("Error. #Missing option not set.")  
End If  
End Sub
```

## HypSetSubstitutionVariable

### Description

HypSetSubstitutionVariable() creates substitution variables on Analytic Server. If the variable already exists, then its value is set to the new specified value.

### Syntax

HypSetSubstitutionVariable (vtSheetName, vtApplicationName, vtDatabaseName, vtVariableName, vtVariableValue)

ByVal vtSheetName As Variant

ByVal vtApplicationName As Variant

ByVal vtDatabaseName As Variant

ByVal vtVariableName As Variant

ByVal vtVariableValue As Variant

### Parameters

Parameter	Description
vtSheetName	The text name of the worksheet on which to operate. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtApplicationName	The application name to define the scope for the new variable. If vtApplicationName is Null or Empty, the scope of the variable created is global.

Parameter	Description
vtDatabaseName	The database name to define the scope for the new variable. If vtDatabaseName is Null or Empty, the scope of the variable created is global within the application specified.
vtVariableName	The variable name to be created. Required.
vtVariableValue	The value to be assigned to the variable. Required.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypSetSubstitutionVariable Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtApplicationName As Variant, ByVal vtDatabaseName As Variant, ByVal vtVariableName As Variant, ByVal vtVariableValue As Variant) As Long
```

```
Sub Sample_HypSetSubstitutionVariable
    Dim X as Long
    X = HypSetSubstitutionVariable ("Sheet1", "Sample", "Basic", "Account", "100")
End Sub
```

## HypSubmitData

### Description

HypSubmitData() updates the database with modified data from the specified spreadsheet.

#### Note:

HypSubmitData() is not supported with aggregate storage databases or in a clustered environment.

#### Note:

The ability to update the database depends on the access permissions of the submitter. To update data, you must have at least Write access to the database.

### Syntax

```
HypSendData(vtSheetName)
ByVal vtSheetName As Variant
```

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypSubmitData Lib "HsAddin" (ByVal vtSheetName As Variant)  
As Long
```

```
Worksheets("Sheet1").range("B2").value = 8023  
Worksheets("Sheet1").range("B2").Select  
sts = HypSubmitData("Sheet1")
```

## HypTranslate

### Description

HypTranslate() calls the Translate method for Financial Management data sources.

### Syntax

HypTranslate (vtSheetName, vtRange)

ByVal vtSheetName As Variant

By Val vtRange As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to operate on. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtRange	Range object which refers to the data to be used. Passing an empty or null parameter uses the current selection from the sheet.

## Return Value

Returns 0 if successful; otherwise, returns the corresponding error code.

## Example

```
Declare Function HypTranslate Lib "HsAddin" (ByVal vtSheetName As Variant,  
ByVal vtRange As Variant) As Long
```

```
sts = HypTranslate ("Sheet1", Empty)
```

## HypUndo

### Description

HypUndo() restores the previous database view. A database view is the view of the spreadsheet after performing Zoom In, Zoom Out, Keep Only, Remove Only, or Refresh commands.

### Syntax

HypUndo (vtSheetName)

ByVal vtSheetName As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypUndo Lib "HsAddin.dll" (ByVal vtSheetName As Variant)  
As Long
```

```
Sub Undo()  
    X=HypUndo (" [Book2.xls]Sheet1 ")  
End Sub
```

## HypUseLinkMacro

### Description

HypUseLinkMacro() is used to set the flag to specify the type of link view, static or dynamic.

**Note:**

Static and dynamic link views share the same menu option; therefore, it is necessary to turn the flag on before performing the dynamic link query. Once done with dynamic link views, turn the flag off.

**Note:**

This function is used specifically with link views, as described in [“Dynamic Link Views”](#) on page 226.

**Syntax**

HypUseLinkMacro (bSetView)

ByVal bSetView as Boolean

**Parameters**

Parameter	Description
bSetView	When flag is set to true, dynamic link is performed. When the flag is set to false, static link is performed.

**Return Value**

Returns 0 if successful; otherwise, returns the appropriate error code.

**Example**

```
Declare Function HypUseLinkMacro Lib "HsAddin.dll" (ByVal bUse As Boolean)
As Long

Sub Macro()
    Sts = HypUseLinkMacro(True)
End sub
```

**HypZoomIn****Description**

HypZoomIn() retrieves and expands data from Smart View based on the selected members.

**Syntax**

HypZoomIn(vtSheetName, vtSelection, vtLevel, vtAcross)

ByVal vtSheetName As Variant

ByVal vtSelection As Variant

ByVal vtLevel As Variant

ByVal vtAcross As Variant

## Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtSelection	Range object which refers to the members that will be zoomed. If selection is Null or Empty, the active cell is used.
vtLevel	Number indicating the granularity of the zoom. The following table describes the valid numbers:  level Action 1 Next level 2 All levels 3 Bottom level  If level is Null or Empty, 1 is used.  You could also use the Level Constants instead of 1-3 to set the zoom-in level.
vtAcross	A variant value indicating whether top-level members of a dimension (for example, Products in Sample Basic) should be zoomed across. A True value indicates that the data should be displayed across while a False value indicates that the data should be displayed downward. If across is Null or Empty, False is used. Across is meaningful only for top-level members, also known as dimension or title members.

## Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypZoomIn Lib "HsAddin.dll" (ByVal sheetName As Variant,  
ByVal vtSelection As Variant, ByVal vtLevel As Variant, ByVal vtAcross As  
Variant) As Long
```

```
Sub ZoomData()  
X=HypZoomIn("[Book2.xls]Sheet1", RANGE("B3"), 1, FALSE)  
If X = 0 Then  
    MsgBox("Zoom successful.")  
Else  
    MsgBox("Zoom failed.")  
End If  
End Sub
```



## HypZoomOut

### Description

HypZoomOut() collapses the view of data based on the selected members.

### Syntax

HypZoomOut(vtSheetName, vtSelection)

ByVal vtSheetName As Variant

ByVal vtSelection As Variant

### Parameters

Parameter	Description
vtSheetName	Text name of worksheet to perform the action. vtSheetName is of the form "[Book.xls]Sheet". If vtSheetName is Null or Empty, the active sheet is used.
vtSelection	Range object which refers to the members that will be zoomed out. If selection is Null or Empty, the active cell is used.

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

### Example

```
Declare Function HypZoomOut Lib "HsAddin.dll" (ByVal vtSheetName As Variant, ByVal vtSelection As Variant) As Long
```

```
Sub UnZoomData()  
X=HypZoomOut("[Book2.xls]Sheet1", RANGE("B3"))  
If X = 0 Then  
    MsgBox("Zoom out successful.")  
Else  
    MsgBox("Zoom out failed.")  
End If  
End Sub
```

## About Visual Basic Menu Equivalent Functions

These Visual Basic functions are identical to the equivalent commands on the Hyperion menu. Use the functions to perform actions as if you selected them from the menu. The requirements for the functions are the same as those for the menu commands. For example, if you must be logged in to an instance of Analytic Server to use a menu command, you must also be logged in to an instance of Analytic Server to use the equivalent Visual Basic function.

## Visual Basic Menu Functions

Table 20 lists the Smart View VBA menu equivalent functions alphabetically and specifies the data source provider that supports the function. A detailed description for each function, including the syntax, parameters, return value, and sample code, follows the table.

**Table 20** VBA Menu Equivalent Functions and Supported Providers

VBA Functions	Oracle's Hyperion® Essbase® – System 9	Oracle's Hyperion® Financial Management – System 9	Oracle's Hyperion® Enterprise®
<a href="#">HypMenuVCalculation</a>		X	X
<a href="#">HypMenuVConnect</a>	X	X	X
<a href="#">HypMenuVDisconnect</a>	X	X	X
<a href="#">HypMenuVKeepOnly</a>	X	X	X
<a href="#">HypMenuVOptions</a>	X	X	X
<a href="#">HypMenuVPivot</a>	X	X	X
<a href="#">HypMenuVRemoveOnly</a>	X	X	X
<a href="#">HypMenuVRefresh</a>	X	X	X
<a href="#">HypMenuVSubmitData</a>	X	X	X
<a href="#">HypMenuVZoomIn</a>	X	X	X
<a href="#">HypMenuVZoomOut</a>	X	X	X

### HypMenuVCalculation

#### Description

HypMenuVCalculation() can be used to open the Calculation Scripts dialog box and calculate the active database or checks on the status of an active database calculation.

#### Syntax

HypMenuVCalculation()

#### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVCalculation Lib "HsAddin.dll" () As Long

Sub MCalc()
    X=HypMenuVCalculation()
End Sub
```

## HypMenuVConnect

### Description

HypMenuVConnect() can be used to connect to a data source instance.

### Syntax

```
HypMenuVConnect()
```

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVConnect Lib "HsAddin.dll" () As Long

Sub MConn()
    X=HypMenuVConnect()
End Sub
```

## HypMenuVDisconnect

### Description

HypMenuVDisconnect() disconnects you from any currently connected databases.

### Syntax

```
HypMenuVDisconnect()
```

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVDisconnect Lib "HsAddin.dll" () As Long

Sub MDisConn()
    X=HypMenuVDisconnect()
End Sub
```

## HypMenuVKeepOnly

### Description

HypMenuVKeepOnly() retains only the selected member (the active cell) or member range in the sheet.

### Syntax

HypMenuVKeepOnly()

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVKeepOnly Lib "HsAddin.dll" () As Long

Sub MKeepOnly()
    X=HypMenuVKeepOnly()
End Sub
```

## HypMenuVOptions

### Description

HypMenuVOptions() enables you to select options for the active sheet and customize the behavior of Oracle's Hyperion® Smart View for Office, using the Options dialog box.

### Syntax

HypMenuVOptions()

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVOptions Lib "HsAddin.dll" () As Long

Sub MOptions()
    X=HypMenuVOptions()
End Sub
```

## HypMenuVPivot

### Description

HypMenuVPivot() changes the orientation (from row to column or from column to row) of the group of members associated with the active cell.

### Syntax

```
HypMenuVPivot()
```

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVPivot Lib "HsAddin.dll" () As Long

Sub MPivot()
    X=HypMenuVPivot()
End Sub
```

## HypMenuVRemoveOnly

### Description

HypMenuVRemoveOnly() removes only the selected member (the active cell) or member range in the sheet.

### Syntax

```
HypMenuVRemoveOnly()
```

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVRemoveOnly Lib "HsAddin.dll" () As Long

Sub MRemoveOnly()
    X=HypMenuVRemoveOnly()
End Sub
```

## HypMenuVRefresh

### Description

HypMenuVRefresh() retrieves data into the active sheet, and places the data at the beginning of the active worksheet.

### Syntax

HypMenuVRefresh()

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVRefresh Lib "HsAddin.dll" () As Long

Sub MRetrieve()
    X=HypMenuVRefresh()
End Sub
```

## HypMenuVSubmitData

### Description

HypMenuVSubmitData() updates the active database on the server with data that has been modified in your sheet or marked as “dirty” using the SetCellsDirty call.

### Syntax

HypMenuVSubmitData()

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVSubmitData Lib "HsAddin.dll" () As Long

Sub MSubmit()
    X=HypMenuVSubmitData()
End Sub
```

## HypMenuVZoomIn

### Description

HypMenuVZoomIn() retrieves and expands data from the data source according to the options specified in the Options dialog box.

### Syntax

HypMenuVZoomIn()

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVZoomIn Lib "HsAddin.dll" () As Long

Sub MZoomIn()
    X=HypMenuVZoomIn()
End Sub
```

## HypMenuVZoomOut

### Description

HypMenuVZoomOut() collapses the view of data according to the options specified in the Options dialog box.

### Syntax

HypMenuVZoomOut()

### Return Value

Returns 0 if successful; otherwise, returns the appropriate error code.

## Example

```
Declare Function HypMenuVZoomOut Lib "HsAddin.dll" () As Long

Sub MZoomOut()
    X=HypMenuVZoomOut()
End Sub
```



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