Initial Setup of Application and Data

Stratum.Connector for Viewer 6

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Getting Started

What is Stratum.Connector for Viewer?

Stratum.Connector for Viewer consists of easy to use windows for use in creating then managing the Analysis Services database and cube for Stratum.Viewer. Use it to:

- Select the dimensions, hierarchies, levels, attribute relationships, measures, and partitions for Stratum.Viewer.
- Create hierarchies from attribute relationships.
- Make Stratum.Planner user lists and calculations available in Stratum.Viewer.

Various types of administrative functionality are built into the application as well, such as registering or unregistering the Analysis Services database from Stratum.Viewer, processing updates made to roles in Stratum.Viewer, and batch processing of dynamic user lists defined in Stratum.Viewer.

Quick Start – Initial Setup of Application and Data

Here is a high level look at the steps for initially setting up your Stratum.Connector for Viewer Analysis Services database and cube. Before you proceed with this set up and perform an initial process of the database and cube, you need to make sure that Stratum.Server master file commands have been run and an OLAP parameter/switch has been enabled. See Run Master File Commands and Enable OLAP Parameter/Switch.

1 *Define the Stratum.Server Data Source*

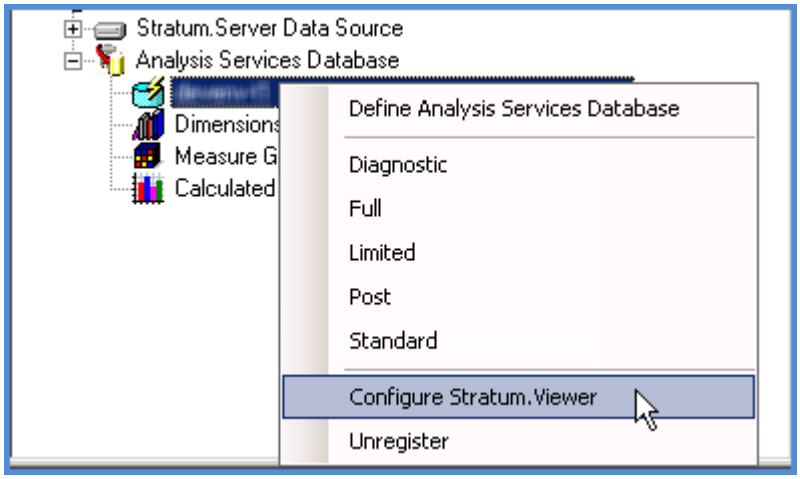
- Right-click the Stratum.Server Data Source node , and select Define Stratum.Server Data Source.
- Use the Define Stratum.Server Data Source window to specify the location and name of the Stratum.Server database that will be the data source.

2 *Define the Analysis Services Database*

- Right-click the Analysis Services Database node , and select Define Analysis Services Database.
- Use the Analysis Services Database window to specify the Analysis Services database and cube properties.

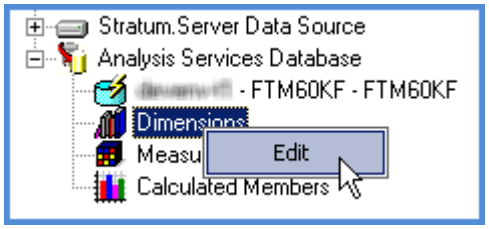
3 *Define the Stratum.Viewer Data Source*

- Right-click the name of the Analysis Services database , and select Configure Stratum.Viewer.
- Then click New in the Configure Stratum.Viewer window, and use the Define Stratum.Viewer Data Source window to specify the location and name of the Stratum.Viewer SQL Server database for use with this Stratum.Connector for Viewer environment.



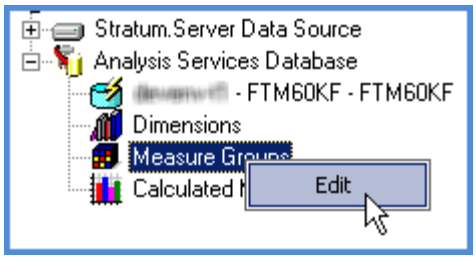
4 *Make Dimension Selections*

- Right-click the Dimensions node , and select Edit.
- Use the Dimension Selection window to choose the dimensions, hierarchies, levels, and attribute relationships for your cube.



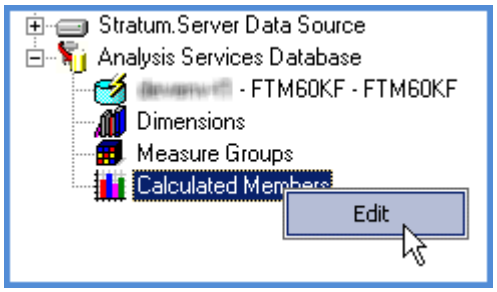
5 *Make Measure Group Selections*

- Right-click the Measure Groups node , and select Edit.
- Use the Measure Group Selection window to choose the measure groups, measures, partitions, and dimensions to make available in Stratum.Viewer.



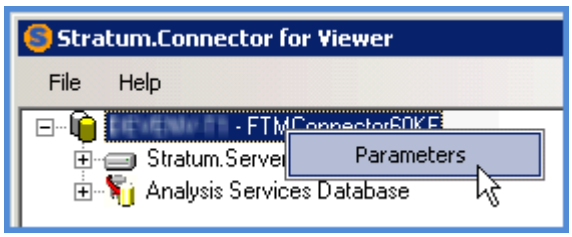
6 *Make Calculated Member Selections*

- Right-click the Calculated Members node , and select Edit.
- Use the Calculated Member Selection window to choose the calculated members for your cube.



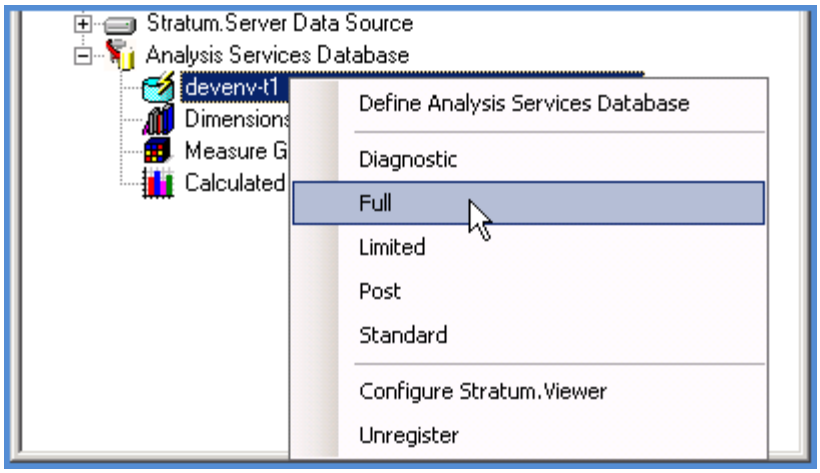
7 *Customize Parameter Settings*

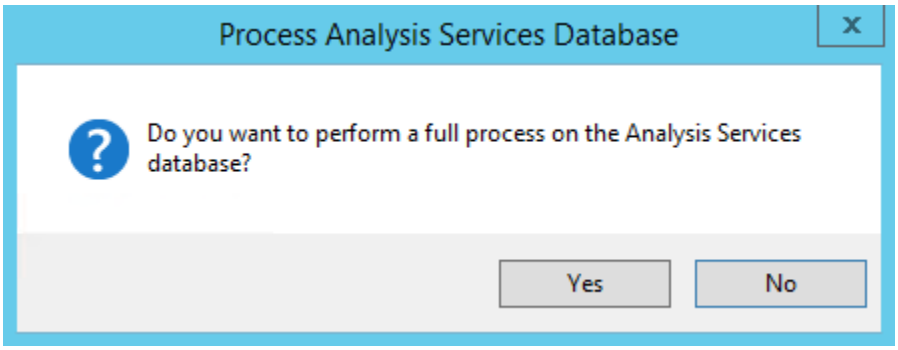
- Right-click the name of the Stratum.Connector for Viewer SQL Server database , and select Parameters.
- Use the Parameter Settings window to customize several settings including those for the handling of key errors and the batch processing of Stratum.Connector for Viewer updates.



8 *Process the Database*

- Right-click the name of the Analysis Services database , and select Full.
- Use the Full window to initiate a full process of the database. You will be asked to confirm that you want to proceed with a Full process.





Tasks

Define the Stratum.Server Data Source

1. Right-click the Stratum.Server Data Source node in the main window, and select Define Stratum.Server Data Source.

2. In the Define Stratum.Server Data Source - Select Type window, choose the type of database that will be the data source – either SQL Server or DB2 for i.

3. Click Next.

4. Use the next screen that displays to enter the properties of your database.

   - SQL Server Properties - Enter the name of your Stratum.Server database and name of the SQL Server server on which it resides.

OR

- DB2 for i Properties:
  - Enter the name of your Stratum.Server database and name of the IBM i server on which it resides.
  - Enter the directory entry of the database.
  - Enter the user name and password for Stratum.Connector for Viewer to use whenever it needs to connect to the database.
  - Specify the Rowset Cache Size.

5. {Optional} Test the ability to connect to the database 

.

6. Click Finish.

7. Go to the next step in setting up the application. See Define the Analysis Services Database and Cube.

Define the Analysis Services Database and Cube

1. Right-click the Analysis Services Database node  in the main window, and select Define Analysis Services Database.

2. Use the window that displays to specify the properties for your Stratum.Connector for Viewer Analysis Services database and cube:

   - Server name
   - Database name
   - {Optional} Database description
   - Cube name
   - {Optional} Cube description

3. Save  the properties.

4. Go to the next step in setting up the application. See Define the Stratum.Viewer Data Source.

Define the Stratum.Viewer Data Source

1. Right-click the name of the Analysis Services database  in the main window, and select Configure Stratum.Viewer.

2. Click New  in the Configure Stratum.Viewer window.

3. In the Define Stratum.Viewer Data Source window that displays:

   - Enter the name of your Stratum.Viewer database (the data source) and name of the SQL Server server on which it resides.
   - {Optional} Test the ability to connect to the database 

.
   - Click OK.

4. {Optional} Select the Process User Lists option to make the Stratum.Planner user lists available in Stratum.Viewer. If you also want the migrated user lists to be maintainable via Stratum.Viewer, select the Maintain In Viewer option.

5. Save the properties.

6. Go to the next step in setting up the application. See Make Dimension Selections.

Make Initial Dimension Selections

1. Right-click the Dimensions node, and select Edit to open the Dimension Selection window.

2. Select the dimensions and related objects for your database -- the hierarchies, levels, and attribute relationships. Optionally edit the properties of objects as you select them.

   - Selecting a dimension automatically selects all of its hierarchies, levels, and attribute relationships.
   - Expand ⊞ the nodes for a dimension, hierarchy, and level if you need to review selections and de-select any of the automatically-selected objects.
   - See also Create Hierarchies from Attribute Relationships.

3. Save the changes and close the window.

4. Go to the next step in setting up the application. See Make Measure Group Selections.

Make Initial Measure Group Selections

1. Right-click the Measure Groups node, and select Edit to open the Measure Group Selection window.

2. Select the measure groups and related objects for your database -- the partitions, dimensions, and measures. Optionally edit the properties of measures as you select them.

   - Selecting a measure group automatically selects all of its partitions, dimensions, and measures.
   - If Stratum.Viewer users will need to perform planning on measures from this group, select the Update Enabled option for the measure group. See also Impact of Update Enabled Setting on Roles and Planning in Stratum.Viewer.
   - Expand ⊞ the nodes for measure groups, partitions, dimensions, and measures if you need to review selections and de-select any of the automatically-selected objects.

3. Save the changes and close the window.

4. Go to the next step in setting up the application. See Make Calculated Member Selections.

Make Initial Calculated Member Selections

1. Right-click the Calculated Members node, and select Edit to open the Calculated Member Selection window.

2. Select the calculated members for your database. Optionally edit the name, description, or format string as you select each member.

3. Save the changes and close the window.

4. Go to the next step in setting up the application. See Customize Parameter Settings. If you are not customizing the settings, go to the final step. See Process the Database.

Customize Parameter Settings

1. Right-click the name of the Stratum.Connector for Viewer SQL Server database  in the main window, and select Parameters.

2. Use tabs in the Parameter Settings window to customize the following properties.

General

- **Process Log Verbosity** – By default, set to Diagnostic, which means information about the databases and servers in your implementation will be retrieved and displayed in the processing logs when you initiate a Stratum.Connector for Viewer process. Diagnostic information retrieval can be disabled by selecting Minimal or Normal.
- **Enable Group By for Detail Flip-up Views** – Controls whether or not the Stratum server database engine will apply an aggregation on the result set and send less data to the Analysis Services server to process. The option is enabled by default.
- **Automatically Select New Dimensions** - Enable this option if you want all dimensions that are added *after* the initial Analysis Services database set up to be automatically selected for all applicable measure groups. The selections pertain to the Measure Group Selection window and will be made for you once the database is processed again.
- **Currency Dimension Name** - Use to customize the name of that dimension.
- **Registration Key -** If a valid key is not associated with your copy of Stratum.Connector for Viewer, you will need to enter a key using this property.

Note: Keys are required for licensed copies of Stratum.Connector for Viewer. If you receive a message about a missing or invalid key, contact Silvon Support at (800) 474-5866 or product.support.usa@silvon.com.

Key Errors

- **Stop processing on key errors** - Select if you want Stratum.Connector for Viewer to stop processing the Analysis Services database when it finds a dimension value (members) in the Stratum.Server database for which no Master File information exists. If you leave this check box de-selected, processing will continue even if key errors are found.
- **Key Error Limit -** Use to specify how many key errors can occur before database processing will be stopped. For example 0 (zero), 10, 20, etc. This field is enabled only if the stop processing option has been selected.
- **Override Key Error Log File -** Use to customize the location and name of the log file that captures key errors. Select the checkbox and then specify a location. A log file is created whether or not you choose to stop processing for key errors.

Batch Process

- **Process Type** - Use this and other Batch Process settings to set up default parameters for use when Stratum.Connector for Viewer updates are processed in batch. Batch processes are typically executed on a nightly basis in order to update the Analysis Services database and cube with the most recent data from Stratum.Server. While setting up a batch process, you can optionally override these default settings – a list of relevant batch command parameters to use for that purpose is provided in the topic Batch Command Parameters for Silvon.Connector.exe.
- **Email Properties** - Use these fields to control the email that will be generated by the batch process. The email notifies recipients that a process occurred. Recipients can review a log file attached to the email for information about the process such as whether or not it completed successfully. If you enter multiple email addresses in the From or To field, use commas or semi-colons to separate the addresses.

- **SMTP Server Name** - Use this field to determine how Stratum.Connector for Viewer will deliver Batch Process emails -- either using the SMTP configurations for the server where Stratum.Connector for Viewer resides (localhost) or by another SMTP server that you specify (enter the server name in a format that will be recognized by your network, such as the server name or IP address).

3. Save the changes and close the window.

4. If you are setting up the database for the first time, continue with any remaining steps for setting up the application -- see Quick Start - Initial Setup of Application and Data. If you are editing the database, see When to use a Full, Limited, Post, Standard, or Trickle Process to determine what type of database process to run after making your changes.

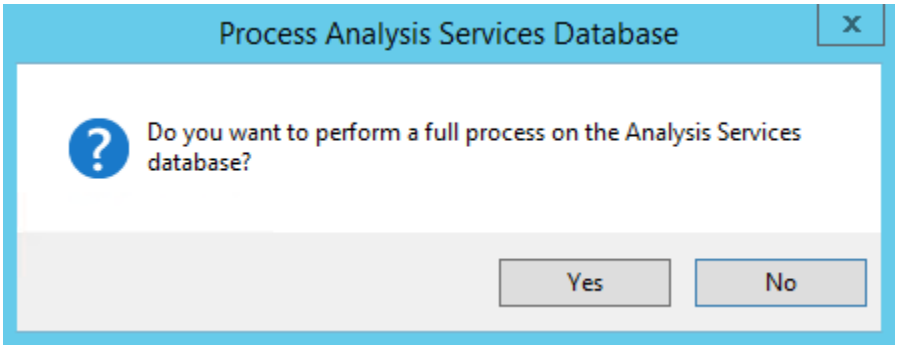
Process the Database

When you are done with the initial setup of the application and data, initiate a Full process.

1. Right-click the name of the Analysis Services database in the main window, and select Full.

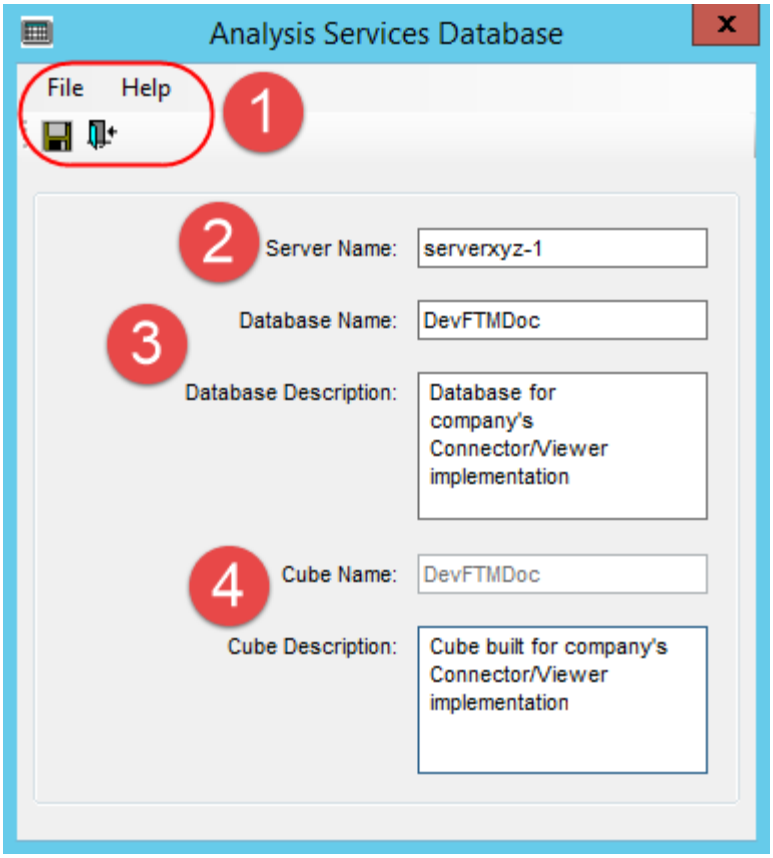
2. Click Start in the Full window that displays.

3. Confirm that you want to proceed with a full process.



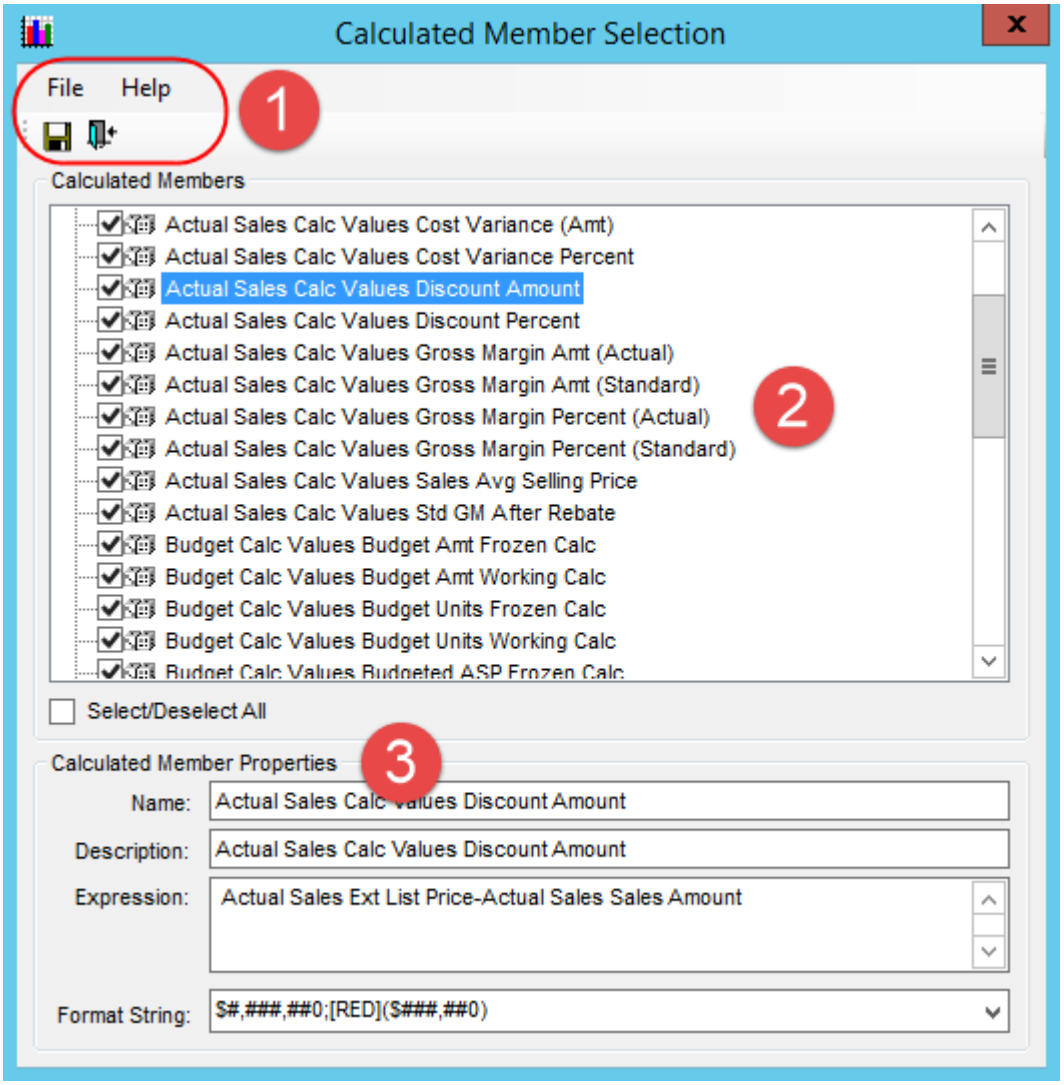
4. After the process has completed, close the Full window.

Analysis Services Database Window



1	**Menus and Toolbar** - There are standard File and Help menus at the top of selection windows. Use options on the File menu or the icons below it to save edits in or close a window. Use options on the Help menu to access the help file or version information about Stratum.Connector for Viewer.
2	**Server Name** - Enter the name of the Analysis Services server for the Analysis Services database.
3	**Database Name and Database Description** - Enter an Analysis Services database name. Choose a unique and meaningful name that will let you easily identify this database from other Analysis Services databases on the server and help you easily see which implementation of Stratum.Connector for Viewer and Stratum.Viewer to which it pertains. Entering a description is optional.
4	**Cube Name and Cube Description** - Enter a cube a name. Choose a unique and meaningful name that will let you easily identify this cube. Entering a description is optional.

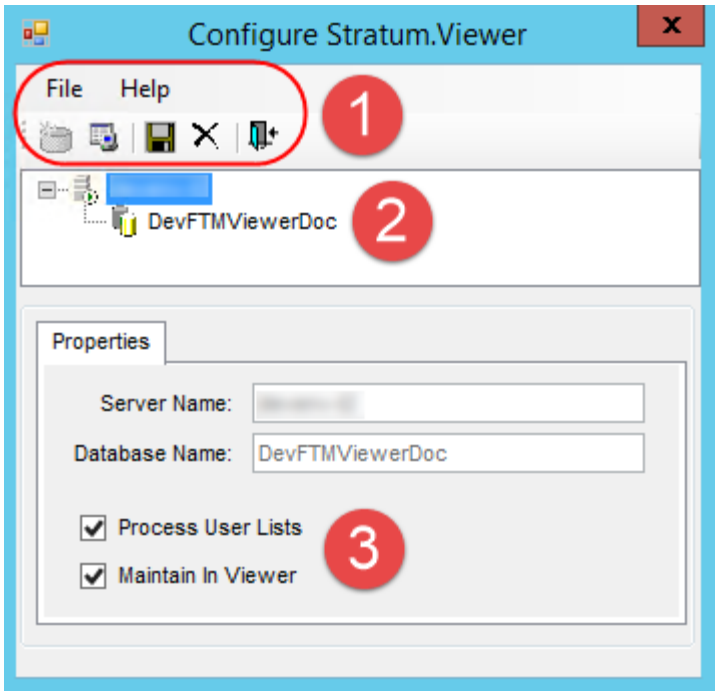
Calculated Member Selection Window



1	**Menus and Toolbar** - There are standard File and Help menus at the top of selection windows. Use options on the File menu or the icons below it to save edits in or close a window. Use options on the Help menu to access the help file or version information about Stratum.Connector for Viewer.
2	**Calculated Members** - This section displays any Stratum.Administration calculations that exist for the measures selected in the Measure Group Selection window. • **Individual Members** - Use the checkboxes of individual calculated members to add or remove them. • **Select/Deselect All** - Use this checkbox to select or deselect all members at once.
3	**Calculated Member Properties** - Click a calculated member to see its properties. All properties can be edited except for the Expression, which is read only. **Note:** All properties will remain disabled in the case of calculated members that haven't been selected for your database. • **Name and Description** - Defaults to the Stratum.Administration name and description.

	• **Expression** - Displays the Stratum.Administration expression for the calculated member. • **Format String** - Defaults to the member's Stratum.Administration format. This property determines the default format for this member when used in Stratum.Viewer.

Configure Stratum.Viewer Window

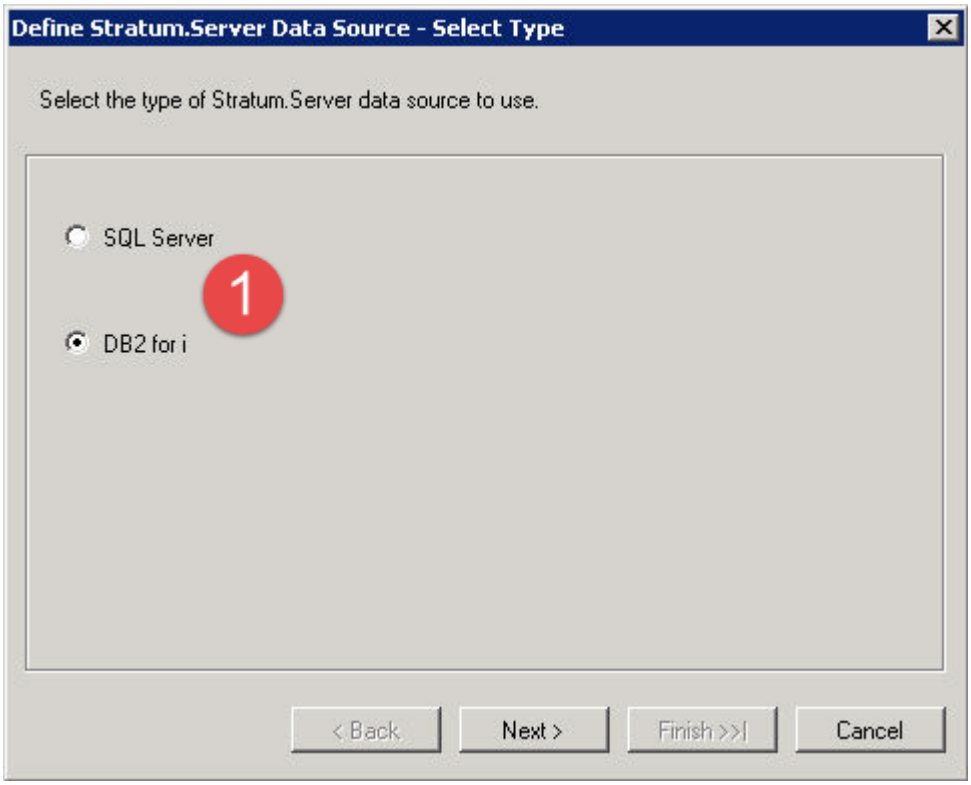


1	**Menus and Toolbar** - There are standard File and Help menus at the top of selection windows. Use options on the File menu or the icons below it to carry out the following actions. • **New** - Click to open the Define Stratum.Viewer Data Source window and define the Stratum.Viewer database (the data source) for use with your Stratum.Connector for Viewer implementation. Once you have configured a Stratum.Viewer database to Stratum.Connector for Viewer, certain types of updates and actions will be carried out with each process of the Analysis Services database. Those actions include registering the Analysis Services database in Stratum.Viewer, batch processing of Stratum.Viewer dynamic user lists, and updating Stratum.Viewer roles in the Analysis Services database. The New icon will be grayed out once you define a database. • **Edit** - Click when you edit information about the Stratum.Viewer database that has been defined as the data source. For example, if the location (SQL Server server) for it has changed. The Edit icon opens the Define Stratum.Viewer Data Source window. • **Save** - Click to save changes made to the user list properties in the window. • **Delete** - Click to delete the currently defined connection properties between Stratum.Connector for Viewer and the Stratum.Viewer database. You will be prompted to confirm the deletion. This task does not delete the database, but it does remove all Stratum.Connector for Viewer properties required for it to connect to and update the database. • **Exit** - Click to close the window. Use options on the Help menu to access the help file or version information about Stratum.Connector for Viewer.

2	**Stratum.Viewer Server and Database** - This section displays the name of the SQL Server server where your Stratum.Viewer database resides and the name of the database. The section is populated with that information once you define the Stratum.Viewer database. You can click the name and then an icon at the top of the window to carry out certain tasks, such as an Edit or Delete.
3	**Properties** - The properties in this section are used to control whether or not Stratum.Planner user lists will be available in Stratum.Viewer. • **Process User Lists -** Select this checkbox if you want the user lists to be available in Stratum.Viewer. Lists will be migrated into Stratum.Viewer when the Analysis Services database is processed by Stratum.Connector for Viewer. When additional database processes occur in the future, after the initial migration, Stratum.Connector for Viewer will check for and migrate any new Stratum.Planner user lists. The application also continues to migrate all attributes for previously migrated lists. This means attribute changes made in Stratum.Planner will be reflected in the lists when they are used in Stratum.Viewer. Attributes that are migrated include members and user list properties such as description and their global or personal type. Stratum.Connector for Viewer also checks that lists meet the following condition. This check makes sure lists will function in Stratum.Viewer. The condition is: • The Owner ID associated with the user lists in Stratum.Planner is a valid User ID in Stratum.Viewer. • **Maintain In Viewer -** This checkbox is available for use only when the Process User Lists checkbox has been selected. Otherwise, the checkbox is grayed out and inactive. If Maintain in Viewer is selected, after the initial migration, these user lists will no longer be updated by Stratum.Connector for Viewer. They can only be maintained via Stratum.Viewer.

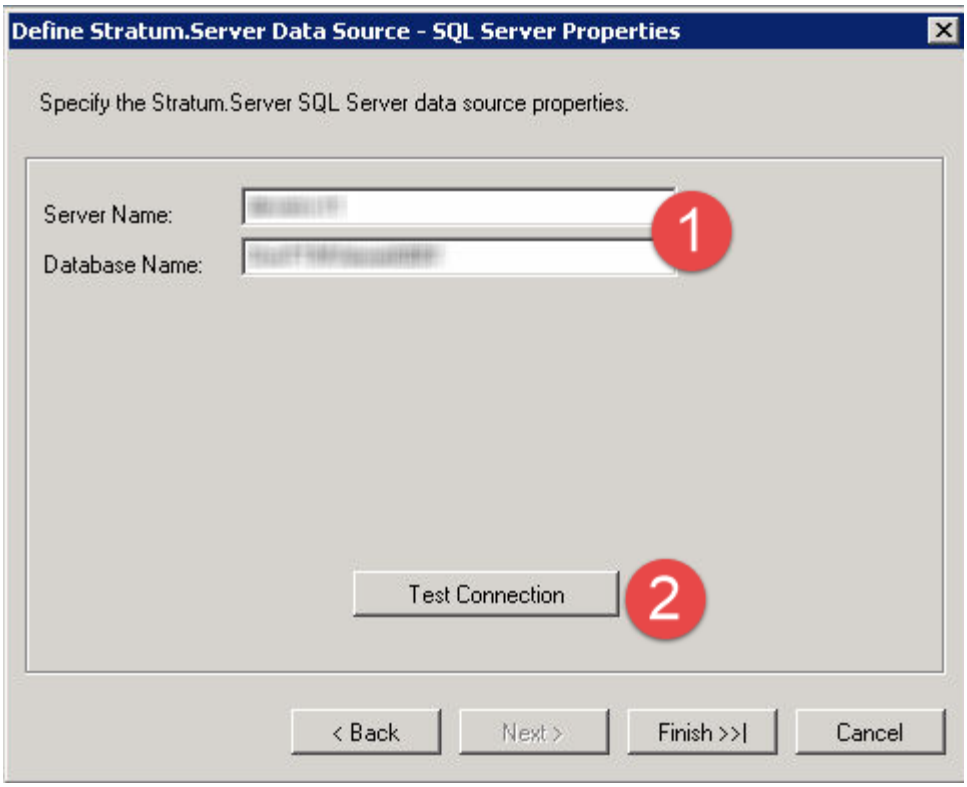
Define Stratum.Server Data Source Window

Select Type Screen



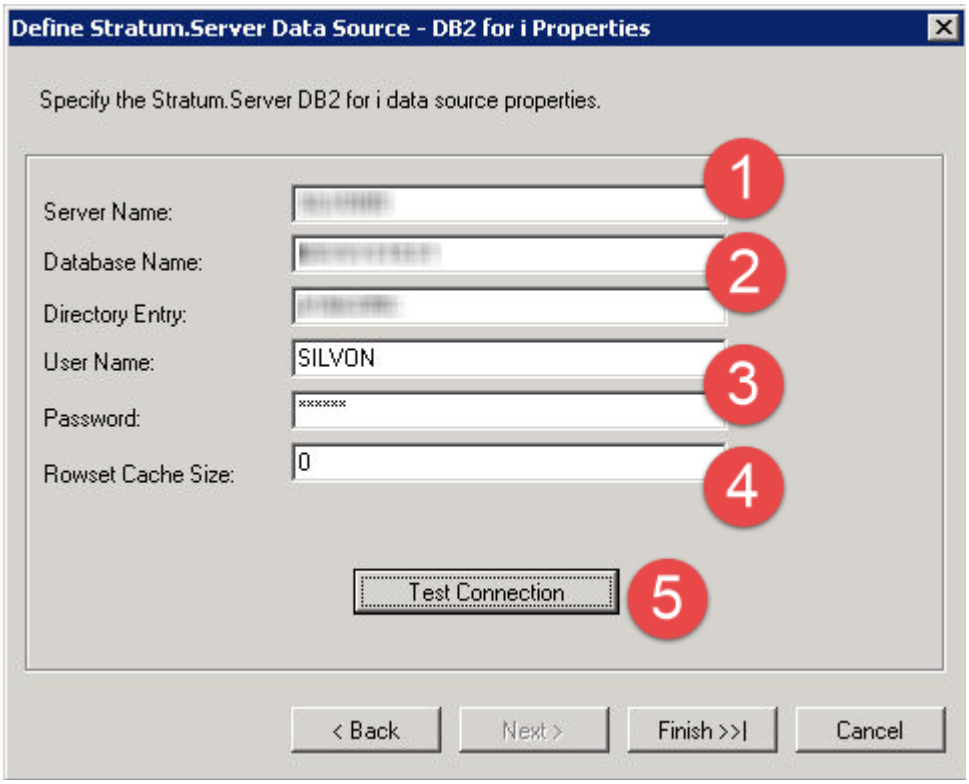
1	Select an option for the type of Stratum.Server database (the data source) that you are using, either SQL Server or DB2 for i.

SQL Server Properties Screen



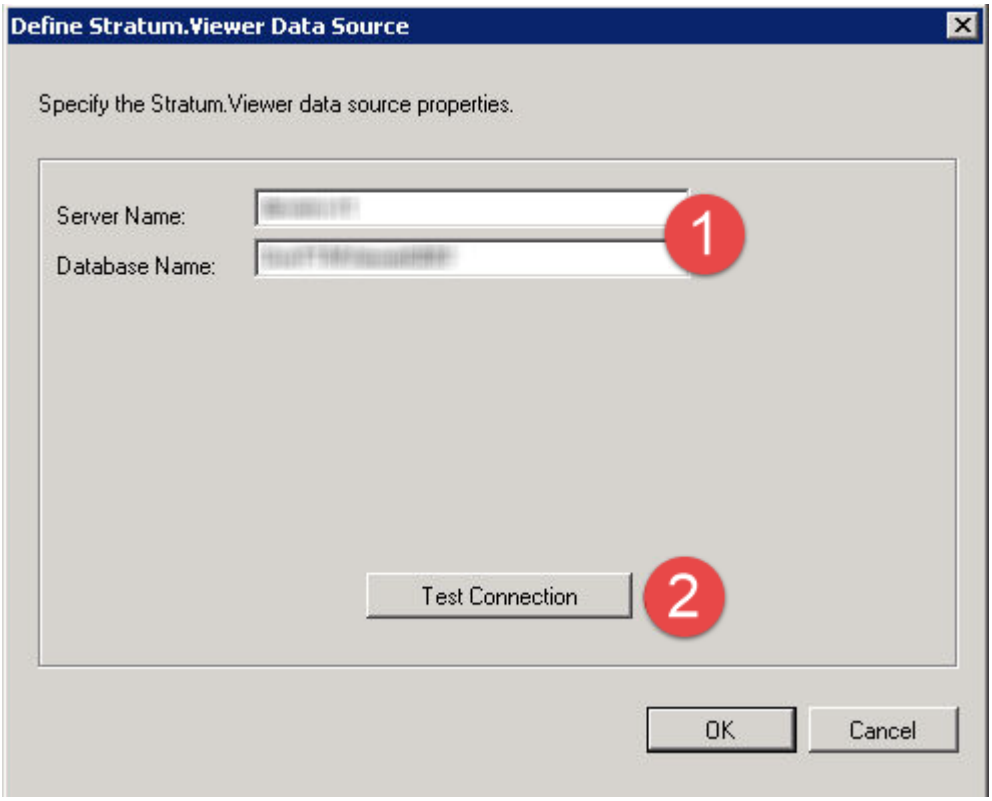
1	**Server Name and Database Name -** Enter the name of your Stratum.Server database and name of the SQL Server server on which it resides.
2	**Test Connection -** Use this button to test the ability to connect to the Stratum.Server database. Stratum.Connector for Viewer will attempt to connect to the specified Stratum.Server database using the Windows credentials of the person currently using the application. You will be provided with a Connection Succeeded message if the connection is successful. You will be provided with a Connection Failed message if a connection cannot be made (for example, if the person currently using the application doesn't have permission to access the database). Additional validations occur when you click Finish, such as verifying that the GILOADOLAP and GICRTOMAST Stratum.Server programs have been run for the database. See also Run Master File Commands and Enable OLAP Parameter/Switch.

DB2 for i Properties Screen



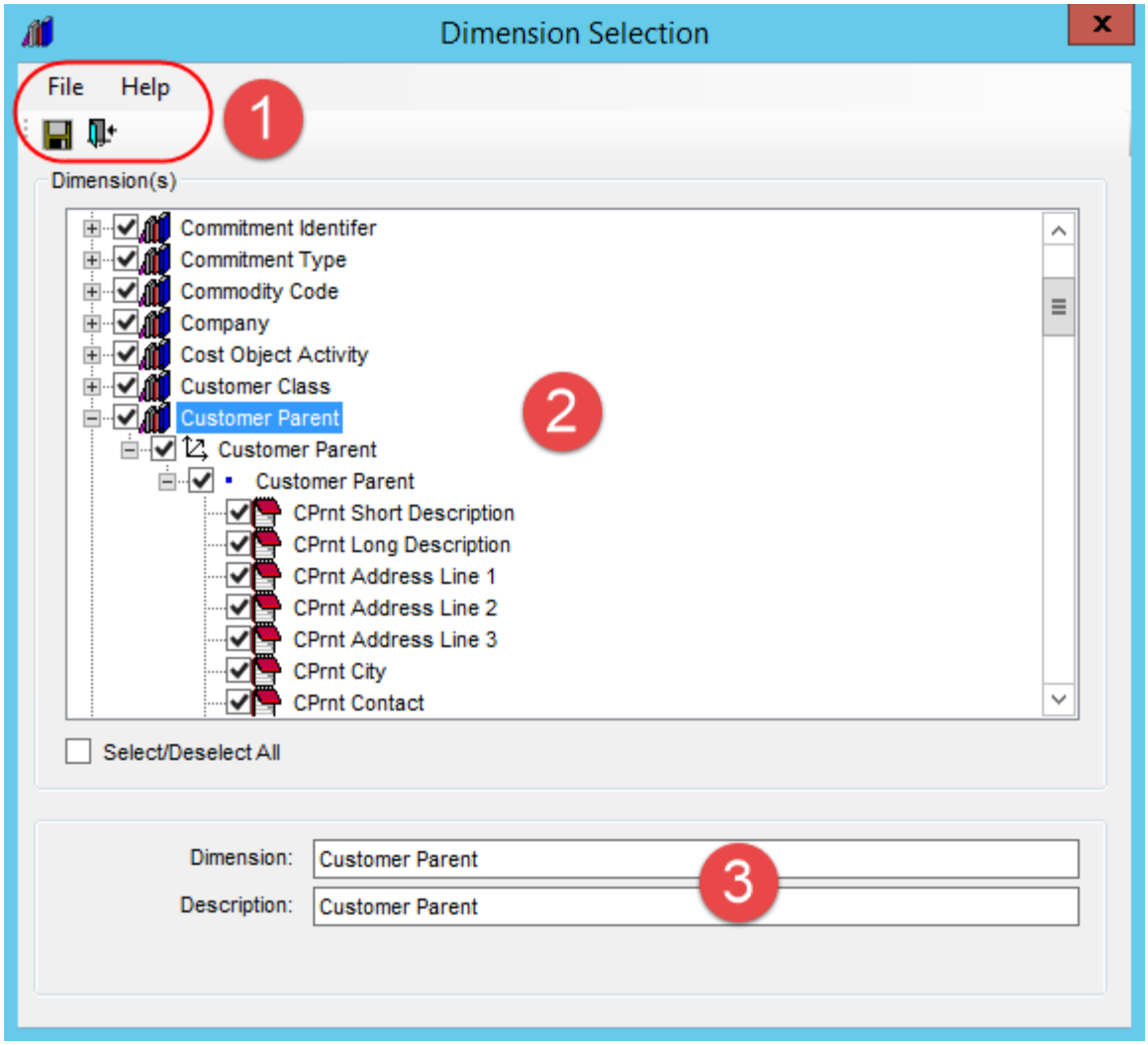
1	**Server Name and Database Name -** Enter the name of your Stratum.Server database and name of the IBM i server on which it resides.
2	**Directory Entry -** Enter the directory entry of your Stratum.Server database.
3	**User Name and Password -** Enter a user name and password for Stratum.Connector for Viewer to use whenever it needs to connect to the database.
4	**Rowset Cache Size -** Optionally customize the rowset cache size. This property impacts how many rows of data are pre-fetched by the Microsoft OLE DB Provider for DB2 provider during data retrieval for Stratum.Connector for Viewer. The property can be set to a value in the range of 0 to 200. This property is valid only for a SQL Server 2008 R2 Enterprise edition or SQL Server 2012 Enterprise edition implementation.
5	**Test Connection -** Use this button to test the ability to connect to the Stratum.Server database. Stratum.Connector for Viewer will attempt to connect to the specified Stratum.Server database using the specified user name and password. You will be provided with a Connection Succeeded message if the connection is successful. You will be provided with a Connection Failed message if a connection cannot be made (for example, if the person currently using the application doesn't have permission to access the database). Additional validations occur when you click Finish, such as verifying that the DALOADOLAP and DACRTOMAST Stratum.Server programs have been run for the database. See also Run Master File Commands and Enable OLAP Parameter/Switch.

Define Stratum.Viewer Data Source Window



1	**Server Name and Database Name -** Enter the name of your Stratum.Viewer database (the data source) and name of the SQL Server server on which it resides.
2	**Test Connection -** Use this button to test the ability to connect to the Stratum.Viewer database. Stratum.Connector for Viewer will attempt to connect to the specified Stratum.Viewer database using the Windows credentials of the person currently using the application. You will be provided with a Connection Succeeded message if the connection is successful. You will be provided with a Connection Failed message if a connection cannot be made (for example, if the person currently using the application doesn't have permission to access the specific server and/or database).

Dimension Selection Window



1	**Menus and Toolbar** - There are standard File and Help menus at the top of selection windows. Use options on the File menu or the icons below it to save edits in or close a window. Use options on the Help menu to access the help file or version information about Stratum.Connector for Viewer.

2	**Dimension(s)** - Use this section to select or de-select the dimensions and related objects for your database -- the hierarchies, levels, and attribute relationships.
	
	• **Individual Objects** - Expand ⊞ the nodes for objects to see subsequent nodes or detail for an object. Then use the checkboxes of individual dimensions, hierarchies, levels, or attribute relationships to add or remove them. Checkboxes of objects belonging to the same dimension are interdependent, and the window will automatically select or de-select related objects for you as you use the checkboxes. For example:
	
	  • Selecting a dimension automatically selects all of its hierarchies, levels, and attribute relationships.
	  • De-selecting a hierarchy automatically de-selects its level plus the dimension to which it belongs.
	  • Selecting a level automatically selects its attribute relationships plus the hierarchy and dimension to which it belongs.

- **Select/Deselect All** - Use this checkbox to select or deselect all objects in the window at once.

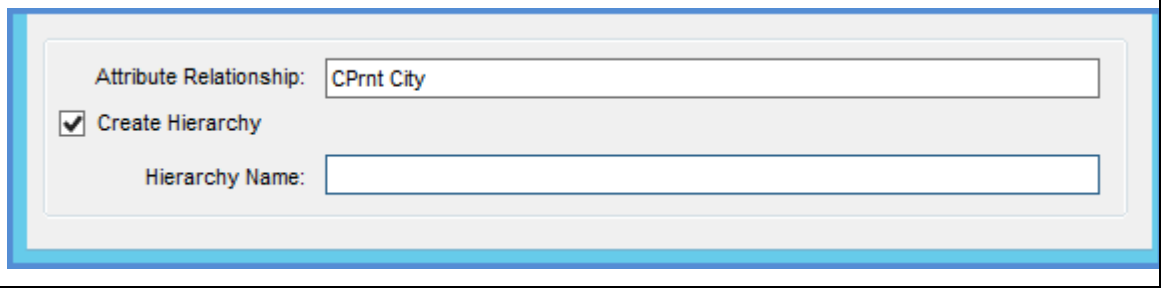
3

Properties - Click on a dimension, hierarchy, or level to see their properties and edit them. Click an attribute relationship to edit its properties or create a hierarchy from it.

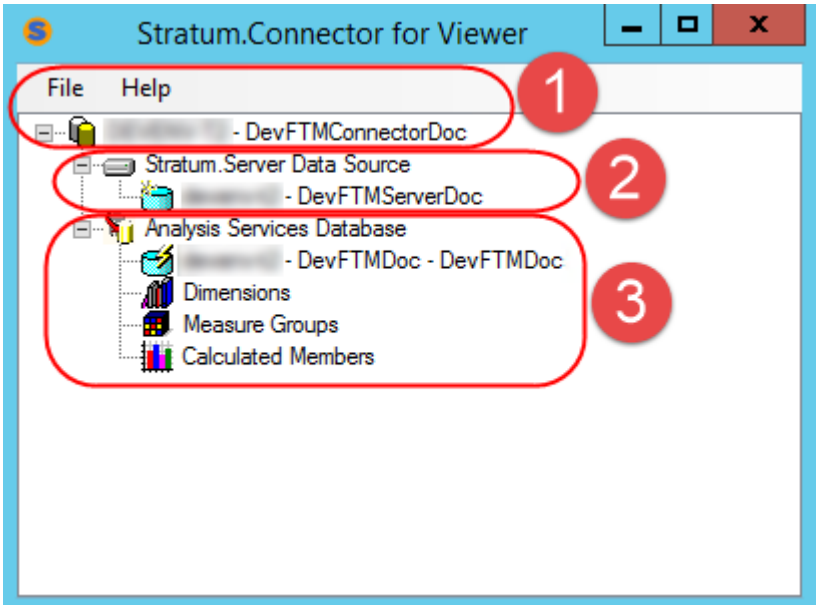
Note: All properties will remain disabled in the case of objects that haven't been selected for your database.

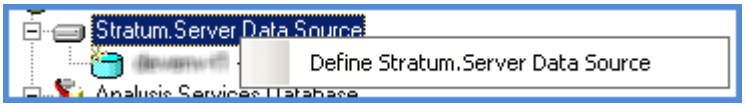
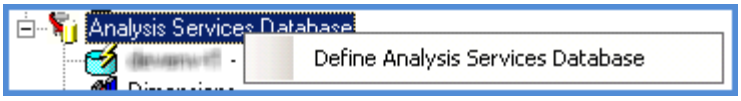
- **Dimensions , Hierarchies , and Levels** - You can change the name and description, which default to their Stratum.Planner name and description.

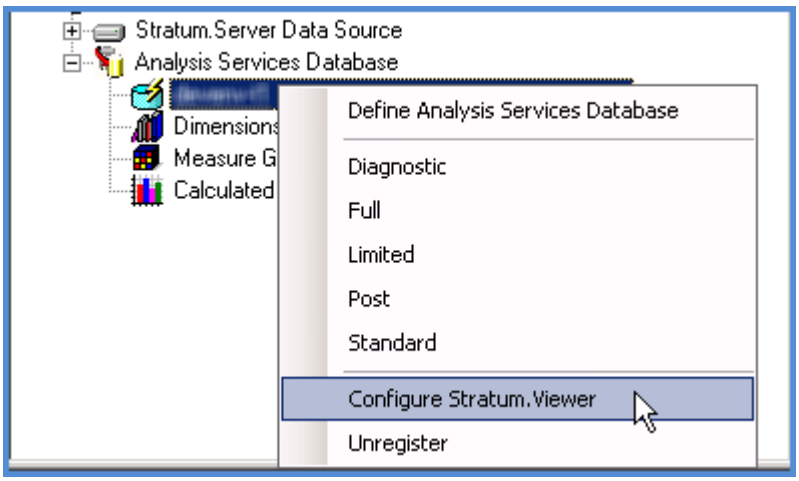
- **Attribute Relationships** - You can change the name, which defaults to the Stratum.Planner name. You can use the Create Hierarchy checkbox when you need to create a hierarchy from an attribute relationship. The Hierarchy Name field only displays when the checkbox is selected.
  - Selecting “Create Hierarchy” will create a new hierarchy with the specified name. This new hierarchy will be part of the associated dimension and can be used to display data in the Stratum.Viewer grid the same as other hierarchies. Security defined for the associated dimension will be applied to this new hierarchy. The new hierarchy will be available to Stratum.Viewer users after the next Analysis Services cube process.
  - To remove this type of hierarchy that you previously set up, click the related attribute relationship and then de-select the Create Hierarchy checkbox. The next cube process will remove all references to this hierarchy from Stratum.Viewer.



Main Window



1	**Main Node and Toolbar -** The main node in this window displays the name of the server for the SQL Server database that was defined for Stratum.Connector for Viewer at the time of installation. The database name is listed after the server name. If you need to adjust parameter settings for the application, right-click this node and select Parameters. See also Customize Parameter Settings.  The main toolbar has a File menu with an option for exiting the application and a Help menu with options for accessing the help file or version information about Stratum.Connector for Viewer.
2	**Stratum.Server Data Source -** Right-click this node and select Define Stratum.Server Data Source to specify the Stratum.Server databases for your Stratum.Connector for Viewer environment. See also Define the Stratum.Server Data Source and Define Stratum.Server Data Source window.  After a data source has been specified, an icon displays under this node followed by the name of the server and database for the related data source.
3	**Analysis Services Database** - Right-click this node and select Define Analysis Services Database to set up the Stratum.Connector for Viewer Analysis Services database and cube. See also Define the Analysis Services Database and Cube and Analysis Services Database window.  After a database and cube have been set up, an icon displays under this node followed by the name of the Analysis Services server for the database, the Analysis Services database name, and the cube name. You can right-click that entry to access the following menu. The menu options and the Dimensions, Measure Groups, and Calculated Members entries are defined after this image.



- **Define Analysis Services Database** - Use this option to re-access the Analysis Services Database window if you need to review the database or cube properties, such as their descriptions, after initially setting them up.
- **Diagnostic, Full, Limited, Post, and Standard Process** - Use the applicable option to select the type of process that you want to initiate -- a Diagnostic, Full, Limited, Post, or Standard process.* The window for starting the type of process that you selected will display.

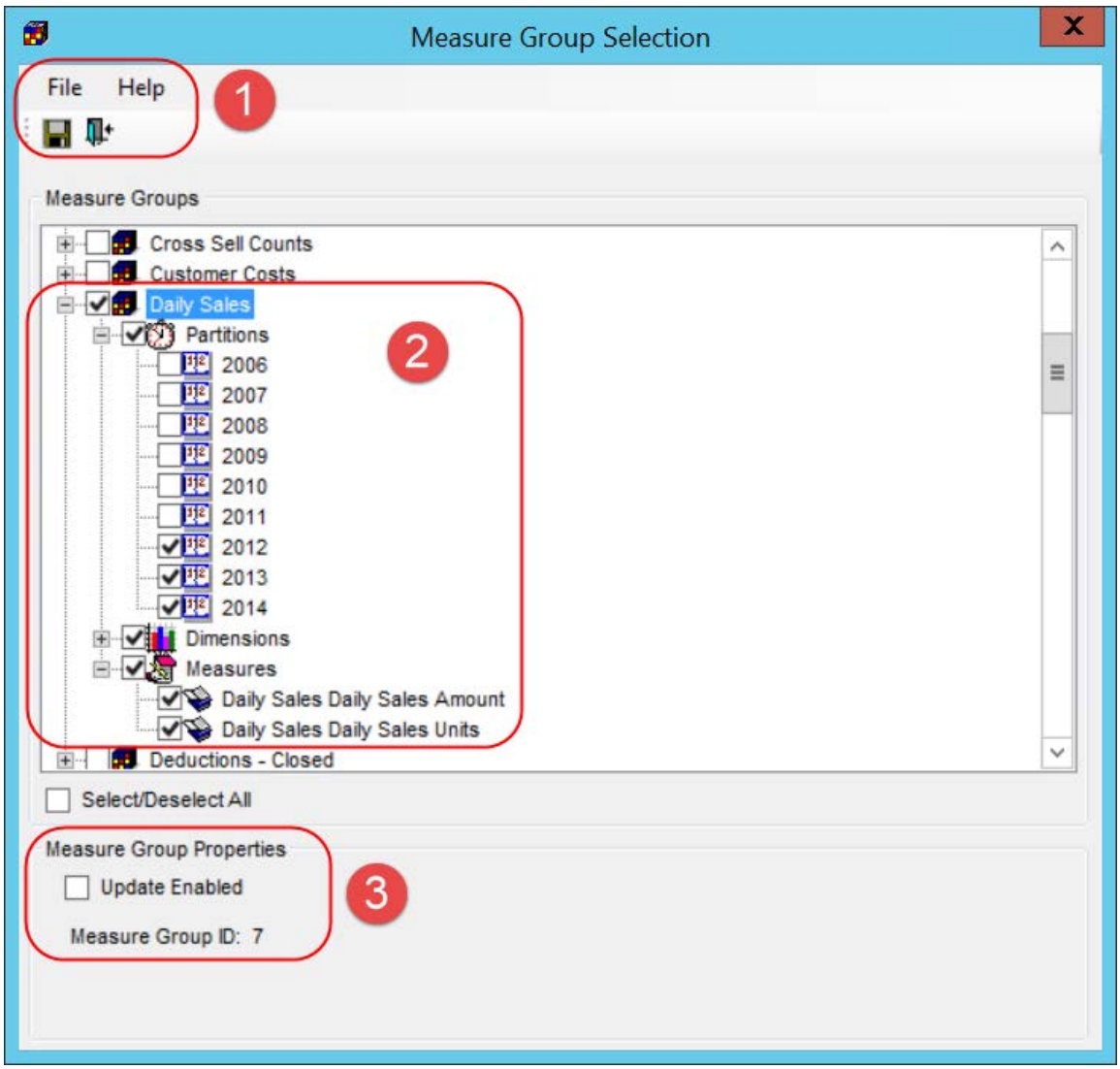
***Note:** A Trickle process can only be initiated by a batch process and therefore does not display on this window.

- **Configure Stratum.Viewer** - Use this option to access the Configure Stratum.Viewer window, which is used to register the Analysis Services database and cube to a Stratum.Viewer environment. The window also is used to control a few options related to using Stratum.Planner user lists in the Stratum.Viewer environment. It is from this window that you can access the Define Stratum.Viewer Data Source window. See also Define the Stratum.Viewer Data Source.
- **Unregister** - Use this option to unregister the Analysis Services database and cube from the Stratum.Viewer application that is configured to your Stratum.Connector for Viewer environment. This action also deletes the definitions for related objects in Stratum.Viewer, such as roles, views, and user lists.

Use these entries under the Analysis Services Database node to select and manage the objects for your cube.

- **Dimensions** - Right-click and select Edit. This opens the Dimension Selection window, which is used to control which dimensions, hierarchies, levels, and attribute relationships are a part of your cube. The window also is used to create hierarchies from attribute relationships.
- **Measure Groups** - Right-click and select Edit. This opens the Measure Group Selection window, which is used to control which measures, partitions (years), and dimensions are available for the measure groups in your cube.
- **Calculated Members** - Right-click and select Edit. This opens the Calculated Member Selection window, which is used to control which Stratum.Administration calculated category values are included as calculated members in your cube.

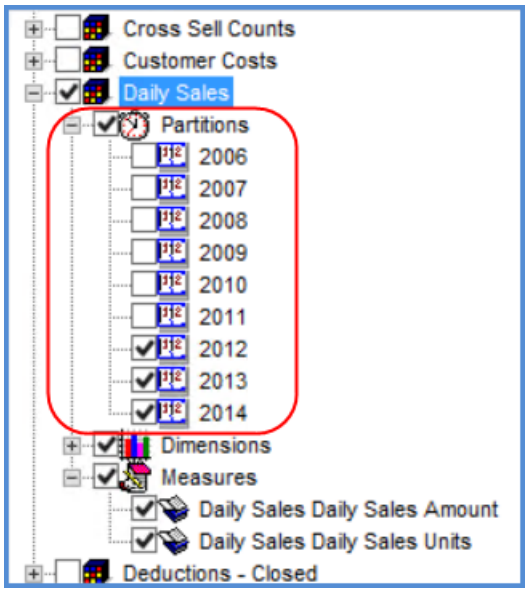
Measure Group Selection Window

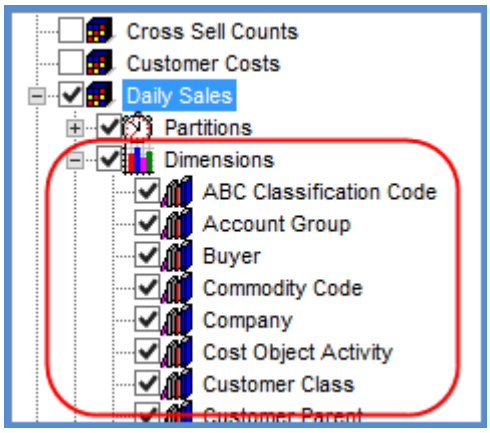


1	**Menus and Toolbar** - There are standard File and Help menus at the top of selection windows. Use options on the File menu or the icons below it to save edits in or close a window. Use options on the Help menu to access the help file or version information about Stratum.Connector for Viewer.
2	**Measure Groups** - Use this section to select or de-select the measure groups and related objects for your database -- the partitions, dimensions, and measures. • **Individual Objects** - Expand ⊞ the nodes for objects to see subsequent nodes or detail for an object. Then use the checkboxes of individual partitions, dimensions, or measures to add or remove them. Checkboxes of objects belonging to the same measure group are interdependent, and the window will automatically select or de-select related objects for you as you use the checkboxes. For example: • Selecting a measure group automatically selects all of its partitions, dimensions, and measures. • De-selecting a partition that is the only one selected for a Partitions node automatically de-selects that node. The other nodes within a measure group behave the same. • Selecting a Measures node automatically selects all the measures in that node.

- **Select/Deselect All** - Use this checkbox to select or deselect all objects in the window at once.

The prior image shows an example of an expanded Measures node, in this case for a Daily Sales measure group. Here are examples of the expanded Partitions and Dimensions nodes for that group. Note that Stratum.Viewer will only display data for the measures selected from a group in relation to the selected partitions and dimensions. For example, data from the 2012 partition would not display for Daily Sales in Stratum.Viewer if that partition wasn't selected for it in Stratum.Connector for Viewer.





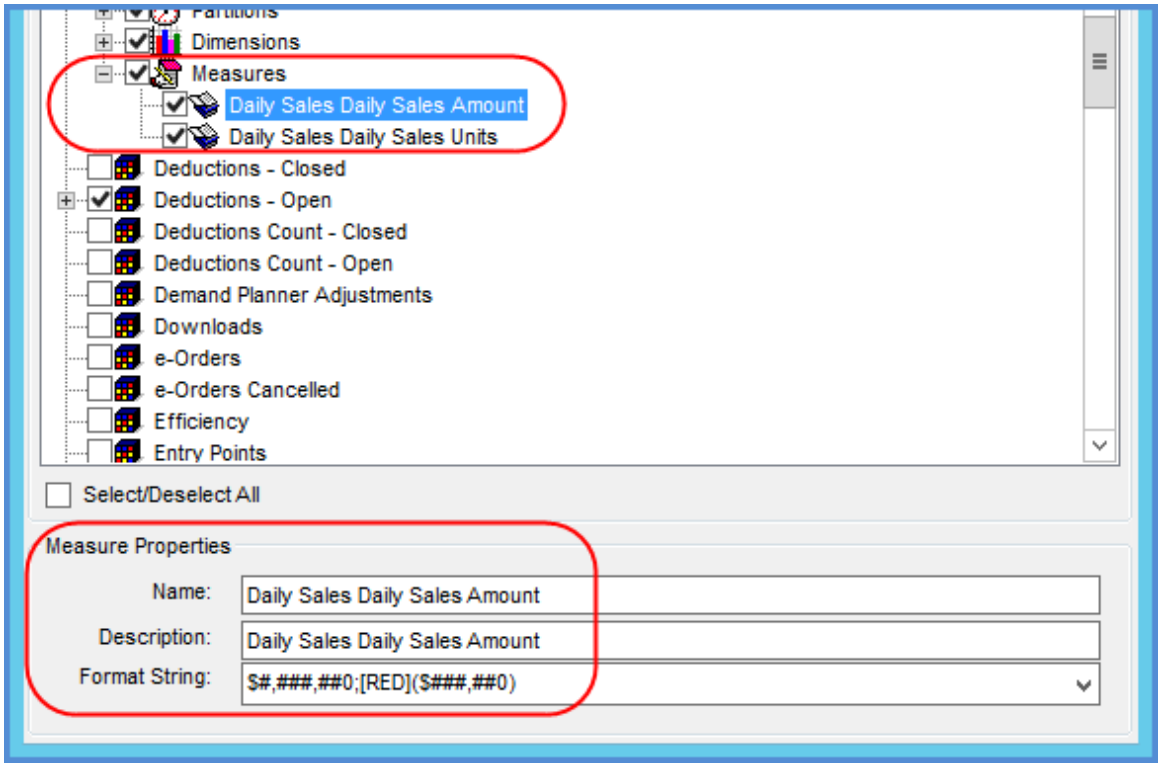
3

Measure Group Properties – If you click a measure group, an Update Enabled checkbox displays at the bottom of this window. The checkbox is deselected by default. Selecting the checkbox will allow Stratum.Viewer administrators to give users Update access to any measures in the group for planning purposes. Also, the unique ID associated with this group displays at the bottom of the window.

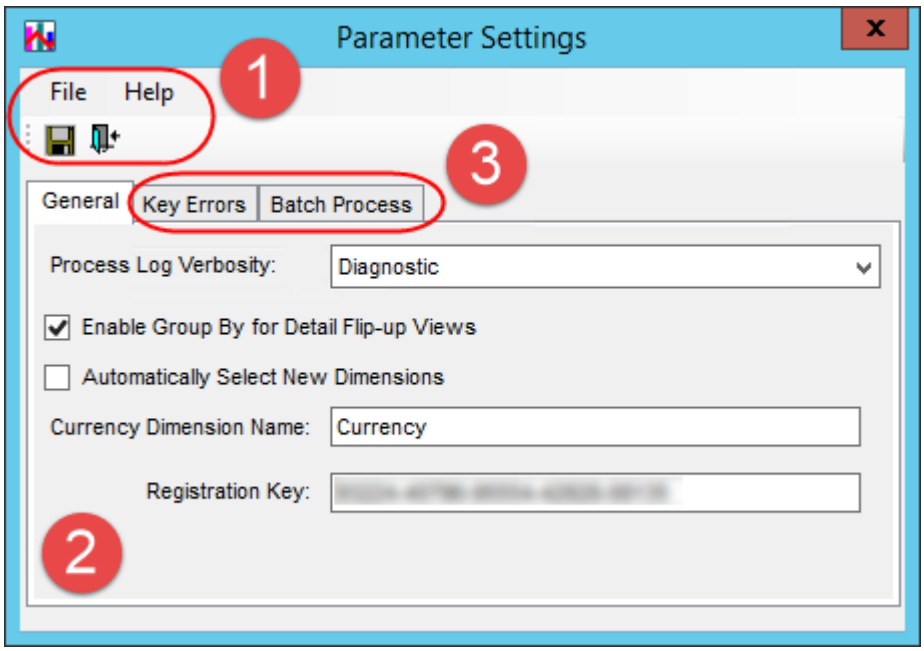
Measure Properties – If you click an individual measure in the group, you will see its properties at the bottom of this window. All properties can be edited.

Note: All properties will remain disabled in the case of measures that haven't been selected for your database and in the case of partitions and dimensions.

- **Name and Description** - Defaults to the Stratum.Planner name and description.
- **Format String** - Defaults to the measure's Stratum.Planner format. This property determines the default format for this measure when used in Stratum.Viewer.



Parameter Settings Window

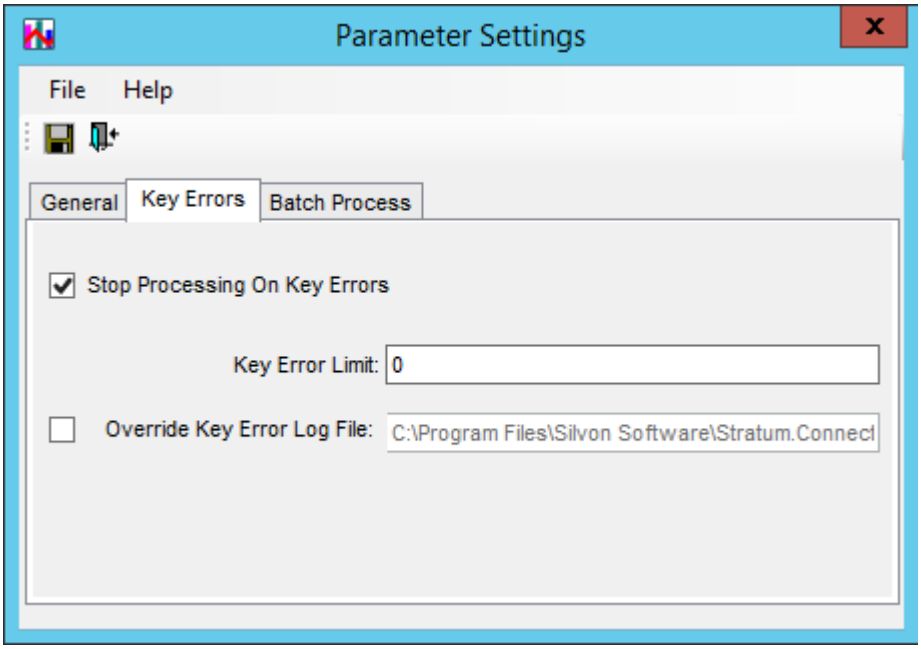


1	**Menus and Toolbar** - There are standard File and Help menus at the top of selection and settings windows. Use options on the File menu or the icons below it to save edits in or close a window. Use options on the Help menu to access the help file or version information about Stratum.Connector for Viewer.
2	**General Tab** - Use this tab to control general properties for the Stratum.Connector for Analysis Services database. • **Process Log Verbosity** – By default, set to Diagnostic, which means information about the databases and servers in your implementation will be retrieved and displayed in the processing logs when you initiate a Stratum.Connector for Viewer process. Diagnostic information retrieval can be disabled by selecting Minimal or Normal. • **Enable Group By for Detail Flip-up Views** – Controls whether or not the Stratum server database engine will apply an aggregation on the result set and send less data to the Analysis Services server to process. The option is enabled by default. • **Automatically Select New Dimensions** - Over time, after you have already set up your Stratum.Connector for Viewer Analysis Services database/cube, you may decide to add more dimensions by selecting additional ones in the Dimension Selection window. If you want all the newly added dimensions to be selected for all applicable measure groups that are a part of the database, you can have Stratum.Connector for Viewer make the selections automatically. The selections will be made once the database is processed. You can enable that option by selecting the Automatically Select New Dimensions checkbox on this General tab. If Automatically Select New Dimensions is de-selected, you will need to manually select the dimensions using the Measure Group Selection window. Manually selecting the dimensions may be preferred if you want the newly added dimensions selected for just some of your measure groups rather than all measure groups. • **Currency Dimension Name** - This field controls the name given to the currency dimension that Stratum.Connector for Viewer creates while processing your Analysis Services database and cube. Customizing the name is optional.

- **Registration Key** – A valid registration key is required for licensed copies of Stratum.Connector for Viewer. If you receive a message about a missing or invalid key, contact Silvon Support at (800) 474-5866 or product.support.usa@silvon.com.

3

Key Errors Tab - Use this tab to control whether or not Stratum.Connector for Viewer will stop processing the Analysis Services database if key errors occur during processing. A key error occurs when Stratum.Connector for Viewer finds a dimension value (members) in the Stratum.Server database for which no Master File information exists.



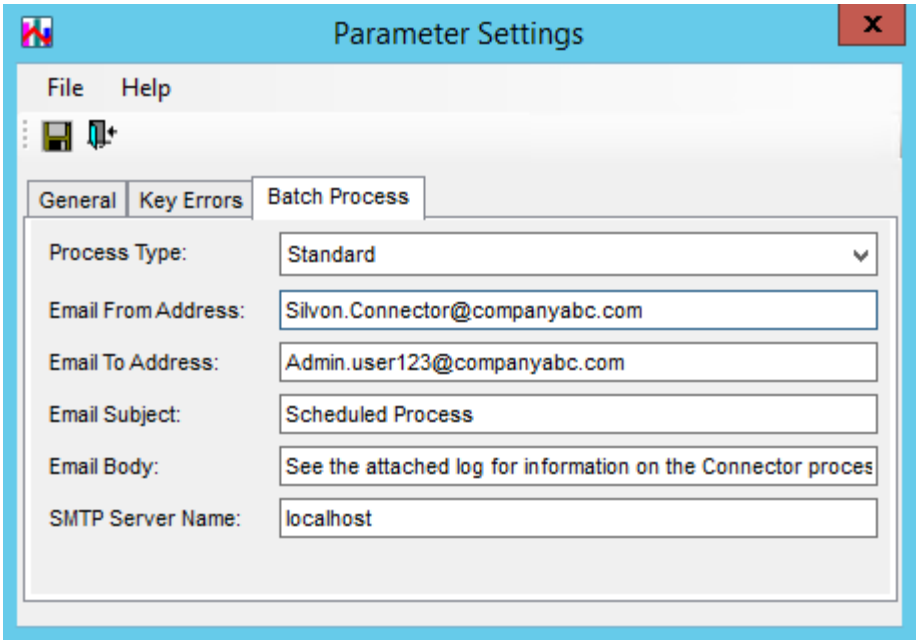
- **Stop Processing on Key Errors** - This option is selected by default, which means processing will be stopped when the Key Error Limit has been reached. Error information will be written to the Key Error Log file. The Key Error Limit is described later in this topic and determines how many key errors can occur before processing will be stopped (for example,1, 20, etc.). When processing is stopped, your Analysis Services database and cube will be locked. This prevents data from being used in Stratum.Viewer until the errors can be corrected and the database is processed successfully. Once a set of errors is fixed, you can initiate the database processing again. If the Key Error limit is reached again, processing will be stopped again so you can fix that set of errors and once again initiate database processing.

  If you de-select this option, database processing will continue regardless of any key errors that occur. Error information will be accumulated in the Key Error Log file. When processing is done, your Analysis Services database and cube will be locked until you correct the key errors and the database is processed successfully.

- **Key Error Limit** - Use to specify how many key errors can occur before database processing will be stopped. For example, when Stop Processing on Key Errors is selected and the Key Error Limit is set to 0 (zero), then processing will stop at the first error that occurs. Or, if Stop Processing on Key Errors is selected and the Key Error Limit is set to 20, then processing will stop if twenty errors occur. This field is disabled when Stop Processing on Key Errors is de-selected.
- **Override Key Error Log File** - This option is used to customize the location and name of the log file that captures key errors. Select the checkbox and then specify a location. This log file is created whether you decide to stop processing after a certain number of key errors occur or have processing continue regardless of the number of key errors that occur. The user logged

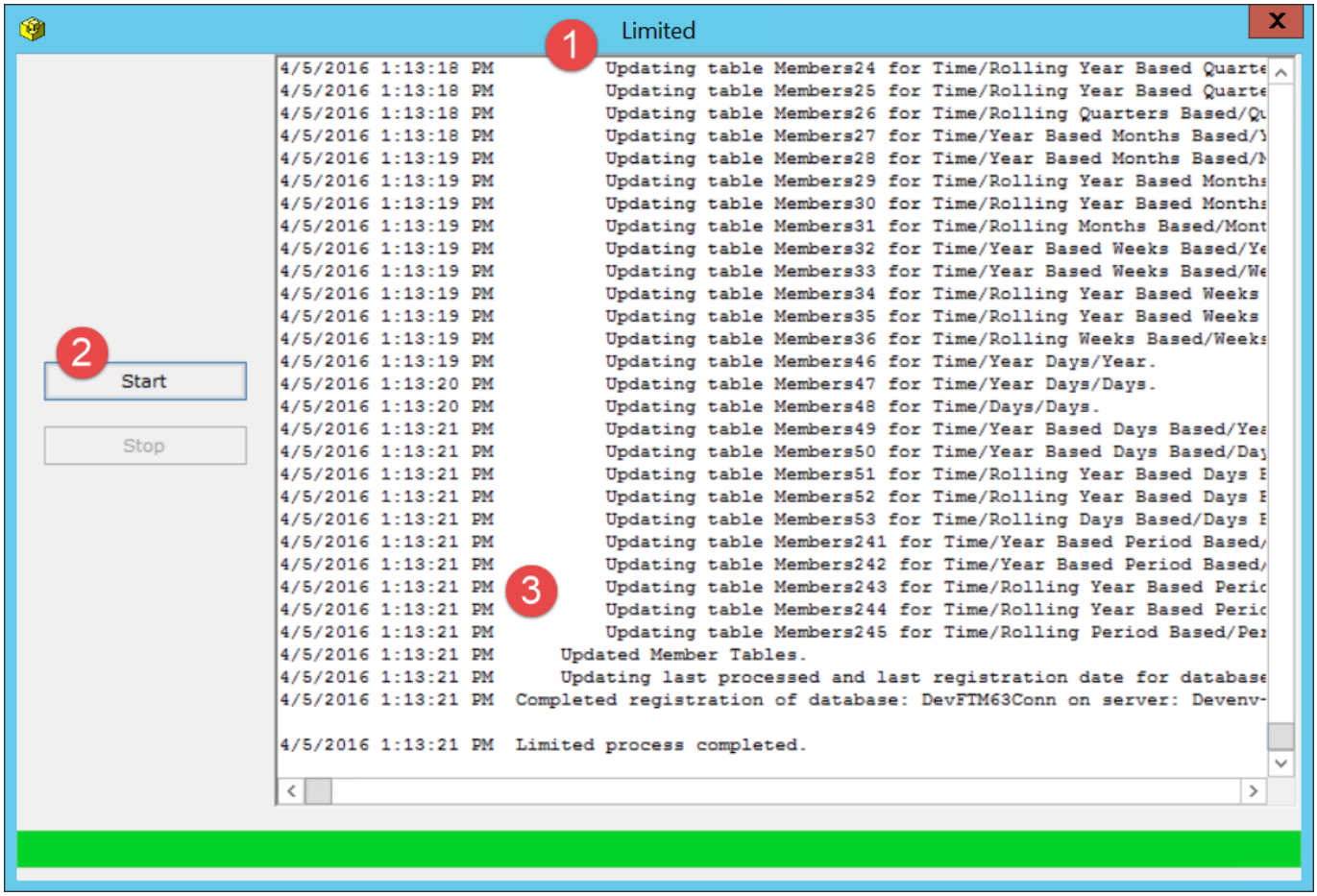
into this application and initiating processes needs to have read/write permissions to the specified location. The extension used for the specified file must be *.log.

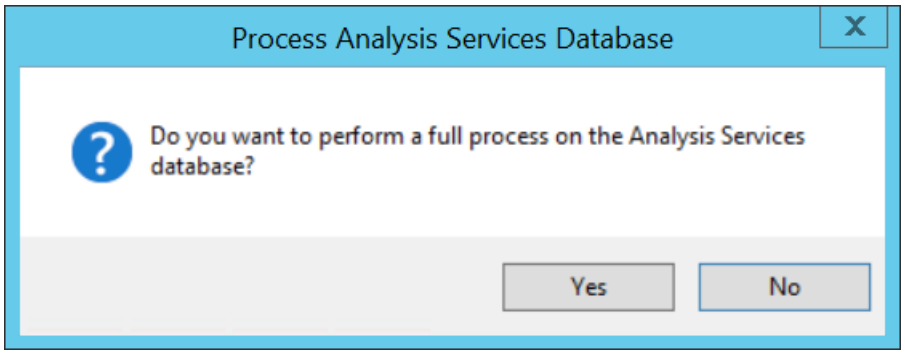
Batch Process Tab - The Batch Process parameter settings are used by default when Stratum.Connector for Viewer updates are processed in batch. A batch process is typically executed on a nightly basis in order to update the Analysis Services database and cube with the most recent data from Stratum.Server. The options include the ability to generate emails after each batch process. Emails are a means of notifying recipients that a process occurred. A log attached to the email can be reviewed for additional information, such as whether or not the process completed successfully. While setting up a batch process, you can optionally override these default settings – a list of relevant batch command parameters to use for that purpose is provided in the topic Batch Command Parameters for Silvon.Connector.exe



- **Process Type** - Use this list to define what type of process will be executed as part of the batch process.
- **Email Properties** - Four fields are provided to customize email properties. If you enter multiple email addresses in the From or To field, use commas or semi-colons to separate the addresses.
- **SMTP Server Name** - The value specified in this field indicates how Stratum.Connector for Viewer will deliver these emails. The field defaults to a “localhost” value. That means the email will be delivered using the SMTP configurations for the server where Stratum.Connector for Viewer resides. If you plan to use a different SMTP server, enter that server name in the SMTP Server Name field. Enter the server name in a format that will be recognized by your network. For example, the server name or IP address or in the format of server name.networkname.com.

Processing Windows



1	**Title Bar** - The type of process that you selected from the main window displays in the title bar -- either Full, Limited, Post, Standard, or Diagnostic process.
2	**Start / Stop -** Start initiates the process. Use the Stop button to cancel a process. When you start a Full process, you will be asked to confirm that you want to proceed with it.  Confirmation messages will not display when you start other types of processes. A Diagnostic, Limited, Post, or Standard process will begin as soon as you click Start in their processing windows.
3	**Log Information** - The main area of this window displays general information about the process. Information logged includes general information such as the application version and names of the Analysis Services database, Stratum.Server database, and their servers. For a Full, Limited, Post, or Standard process, additional information displays in the window – that detailed information includes

	the date and time when each line item for the process was started and completed and line items regarding the overall successful completion or errors in the process. Typically log information does not appear in this window until the process has completed. Thus, another option for viewing log information during processing is to open log files from the Log folder in the application directory.

Advanced Concepts

Batch Command Parameters for Silvon.Connector.exe

A Full, Standard, Post, Limited, or Diagnostic process can be initiated using the right click menu of the Analysis Services database in the Stratum.Connector for Viewer application. Any of those process types also can be initiated by including the Stratum.Connector for Viewer application file* as part of a batch command. A Trickle process can only be initiated that way. The batch command can be run a variety of ways including through scheduled tasks set up in third-party scheduling tools or SSIS Scripts.

***Note:** The application file is an executable file named Silvon.Connector.exe. It resides in the main folder of the application directory to which Stratum.Connector for Viewer was originally installed.

Batch Command Parameters for Silvon.Connector.exe

Keep in mind these requirements when using the parameters:

- Specify the main parameters in the order of /batch /ProcessType: /ProcessBy:.
- A space must be used between each parameter.
- Remember to use a colon (:) after the names of all parameter types below other than the /batch command parameter.
- If any values for your parameters contain spaces, you will need to enclose the parameter and its values in double quotes. For example, “/MailBody: Here is the Connector log for the most recent Limited process”.
- If you use the /MailTo parameter and specify multiple email addresses, use semi-colons to separate the addresses.

Main Parameter	Purpose	Required?
/batch	Tells Analysis Services to run the Stratum.Connector.exe in batch.	Yes
/ProcessType:*ProcessTypeEnum*	Specifies the type of process that the batch process will run. Valid values for ProcessTypeEnum are: 0 – Full 1 – Standard 2 – Post 3 – Diagnostic 4 – Limited 5 – Trickle	Yes

/ProcessBy:*MeasureGroupId*	This parameter only pertains to a process type 5 – Trickle process. It is the ID of the measure group(s) to be processed.	Yes - The MeasureGroupId is required for process type 5 – Trickle process. Use semi-colons (;) as a separator to process more than one MeasureGroupId. For example, /ProcessBy:1;4;8, will process all years for measure groups 1,4, and 8.
/ProcessBy:*MeasureGroupId(YearValue)*	This additional YearValue option only pertains to process type 5 – Trickle process and implementations with Enterprise Edition of Analysis Services. YearValue represents the year(s) of the measure group to be processed.	No - If you have the Enterprise Edition of Analysis Services, you can optionally specify what year(s) (YearValue) will be processed for the identified measure group. Use commas (,) as separators to specify multiple years. For example, /ProcessBy:1(2016,2017);4(2016,2017);22 will process years 2016 and 2017 for measure group 1, years 2016 and 2017 for measure group 4, and all years for measure group 22. All years will be processed if you do not use the (YearValue) part of the parameter.
Optional Parameters	**Purpose**	**Required?**
Parameters for overriding properties specified in the Batch Process tab of the Parameters window of Stratum.Connector for Viewer. • /MailFrom:*FromEmailAddress* • /MailTo:*ToEmailAddress* • /MailSubject:*EmailSubjectText* • /MailBody:*EmailBodyText* • /MailSmtpServer:*SmtpServer*	The parameters control the email that is sent after each batch process. The email notifies recipients that a process occurred and includes the process log file.	No - By default, email properties will be controlled by settings in the Batch Process tab of the Parameter Settings window in Stratum.Connector for Viewer. Only use these parameters if you want to override the settings in that window. If you use the /MailTo: parameter and specify multiple email addresses, use semi-colons to separate the addresses. If any values for the Mail parameters contain spaces, you will need to enclose the parameter and its values in double quotes. For example: “/MailSubject: Full Nightly Process”

/LogVerbosity:*LogVerbosityEnum*	Controls the level of detail for the information written to the processing log. 0 – Minimal 1 – Normal 2 – Diagnostic Setting 2 – Diagnostic is recommended.	No - By default, this log file setting is controlled by a setting in the General tab of the Parameter Settings window of Stratum.Connector for Viewer. Only use this parameter if you want to override the setting in that window.

Example Parameter Combinations

Your batch command will need to reference the path to and name of the Silvon.Connector.exe file. For example, C:\Program Files\Silvon Software\Stratum Connector for Viewer\Silvon.Connector.exe\.

Example	Description
C:\Program Files\Silvon Software\Stratum Connector for Viewer\Silvon.Connector.exe **/batch /ProcessType:4**	Runs a Limited process.
C:\Program Files\Silvon Software\Stratum Connector for Viewer\Silvon.Connector.exe **/batch /ProcessType:5 /ProcessBy:1**	Runs a Trickle process for all years for measure group 1.
C:\Program Files\Silvon Software\Stratum Connector for Viewer\Silvon.Connector.exe **/batch /ProcessType:5 /ProcessBy:3(2016);5(2015,2016)**	Runs a Trickle process for year 2016 of measure group 3 and years 2015 and 2016 of measure group 5. **Note:** Specifying a specific year is only supported if you are running Enterprise Edition of Analysis Services.

Create Hierarchies from Attribute Relationships

1. Right-click the Dimensions node  , and select Edit to open the Dimension Selection window.
2. Expand ⊞ the nodes for the dimension, hierarchy, and then for the level to which the desired attribute relationship belongs.
3. Click the attribute relationship.
4. At the bottom of the window, click the Create Hierarchy option.
5. Enter a name in the Hierarchy Name field.
6. Save  the changes and close  the window.
7. If you are setting up the database for the first time, continue with any remaining steps for setting up the application -- see Quick Start - Initial Setup of Application and Data . If you are editing the database, see When to use a Full, Limited, Post, Standard, or Trickle Process to determine what type of database process to run after making your changes.

Edit Properties for Calculated Members

1. Right-click the Calculated Members node  , and select Edit to open the Calculated Member Selection window.

2. Click a calculated member, and use the fields at the bottom of the window to edit its name, description, or format string.

3. Save  the changes and close  the window.

4. When you are done with all edits to the database, see When to use a Full, Limited, Post, Standard, or Trickle Process to determine what type of database process to run after making your changes.

Edit Properties for Dimensions, Hierarchies, Levels, & Attribute Relationships

1. Right-click the Dimensions node  , and select Edit to open the Dimension Selection window.

2. Navigate to the object in the window -- expand ⊞ the nodes for the applicable dimension, hierarchy, and/or level.

3. Click the object, and use the fields at the bottom of the window to edit its properties. You can edit:

   - Names and descriptions of dimensions, hierarchies, and levels.
   - Names of attribute relationships.

Note: See also Create Hierarchies from Attribute Relationships.

4. Save  the changes and close  the window.

5. When you are done with all edits to the database, see When to use a Full, Limited, Post, Standard, or Trickle Process to determine what type of database process to run after making your changes.

Edit Properties for Measures in Measure Groups

1. Right-click the Measure Groups node  , and select Edit to open the Measure Group Selection window.

2. Navigate to the measure in the window -- expand ⊞ the node for its measure group and expand the Measures node within that group.

3. Click the measure, and use the fields at the bottom of the window to edit its name, description, or format string.

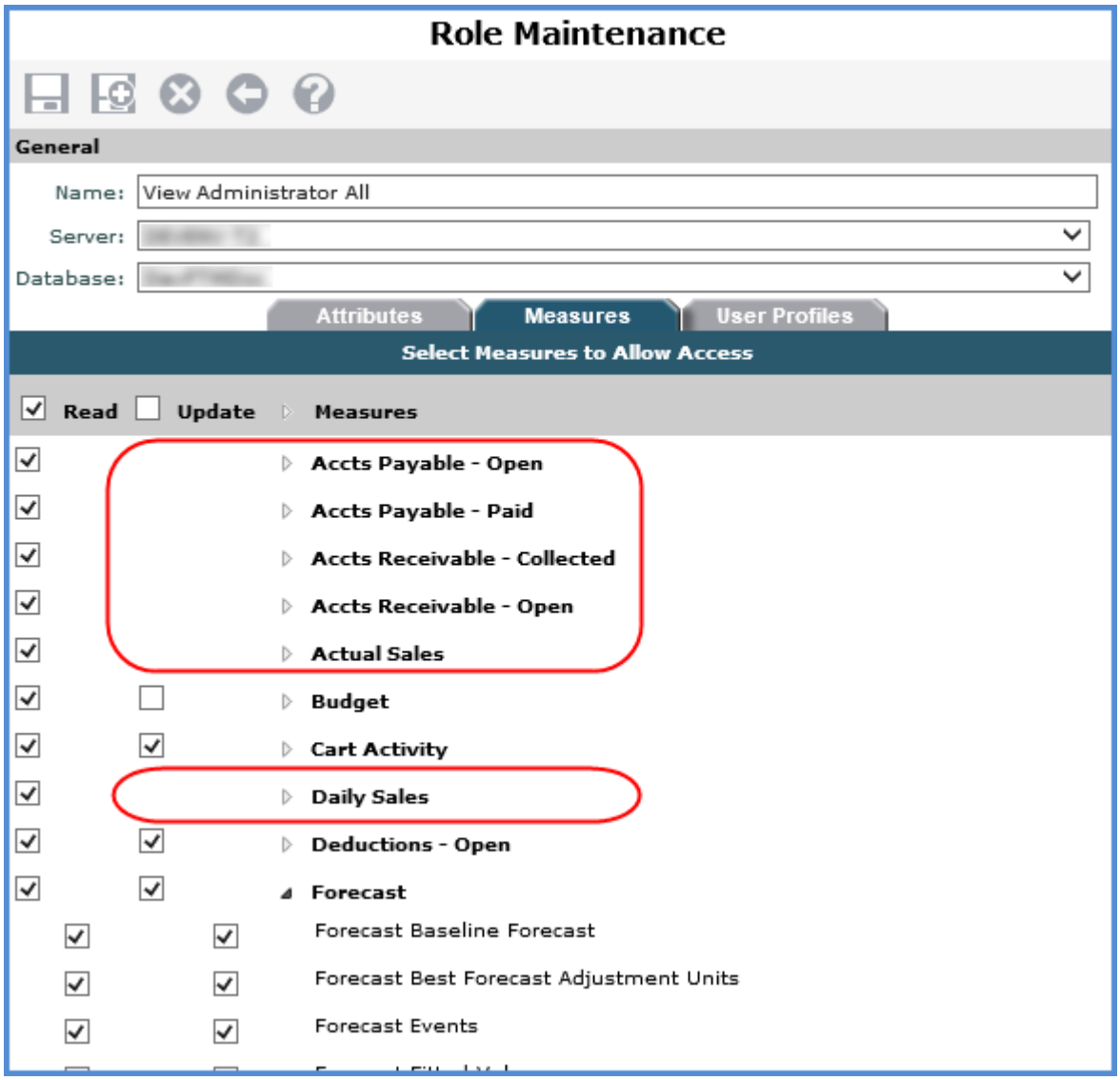
4. Save  the changes and close  the window.

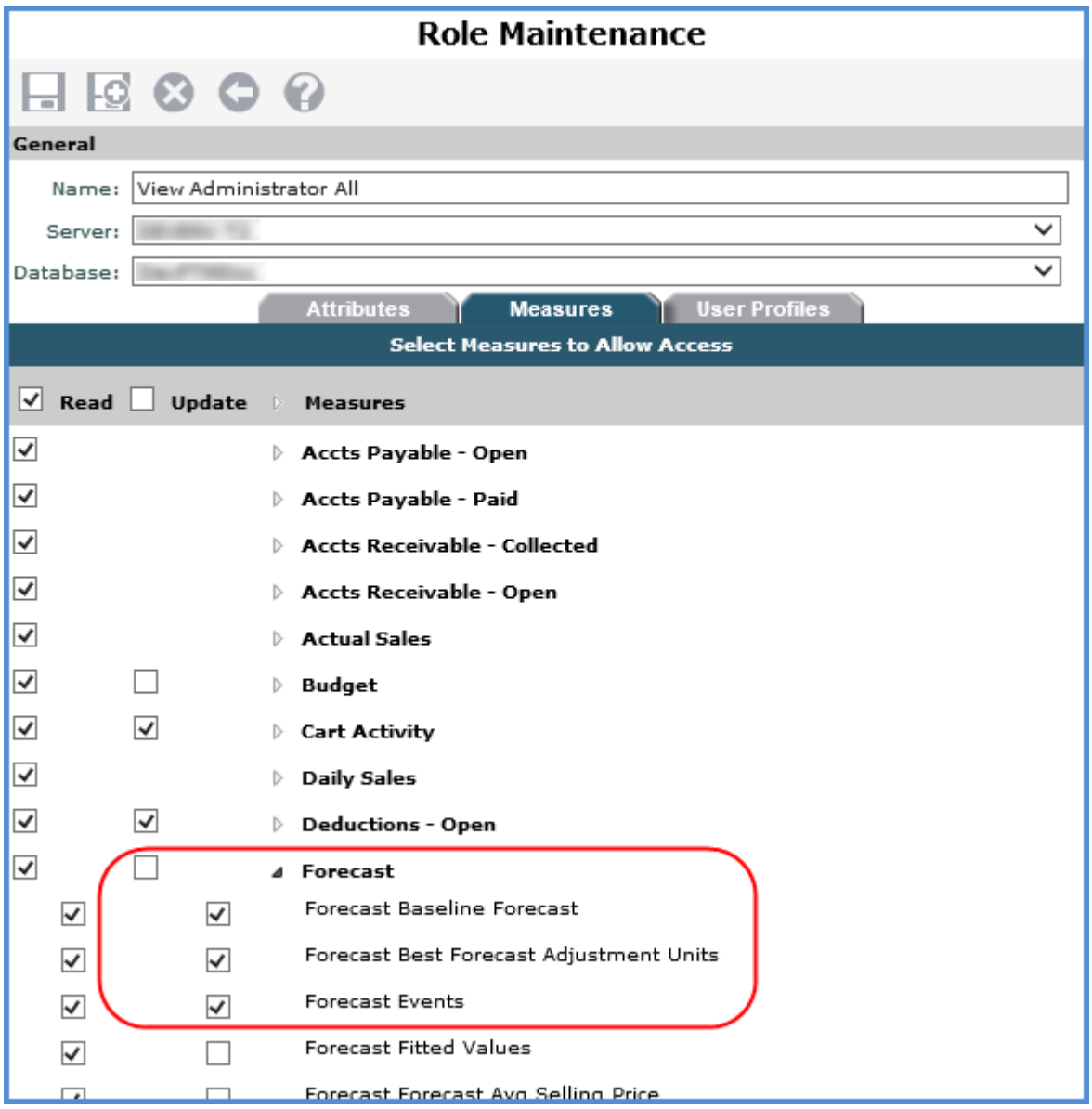
5. When you are done with all edits to the database, see When to use a Full, Limited, Post, Standard, or Trickle Process to determine what type of database process to run after making your changes.

Impact of Update Enabled Setting on Roles and Planning in Stratum.Viewer

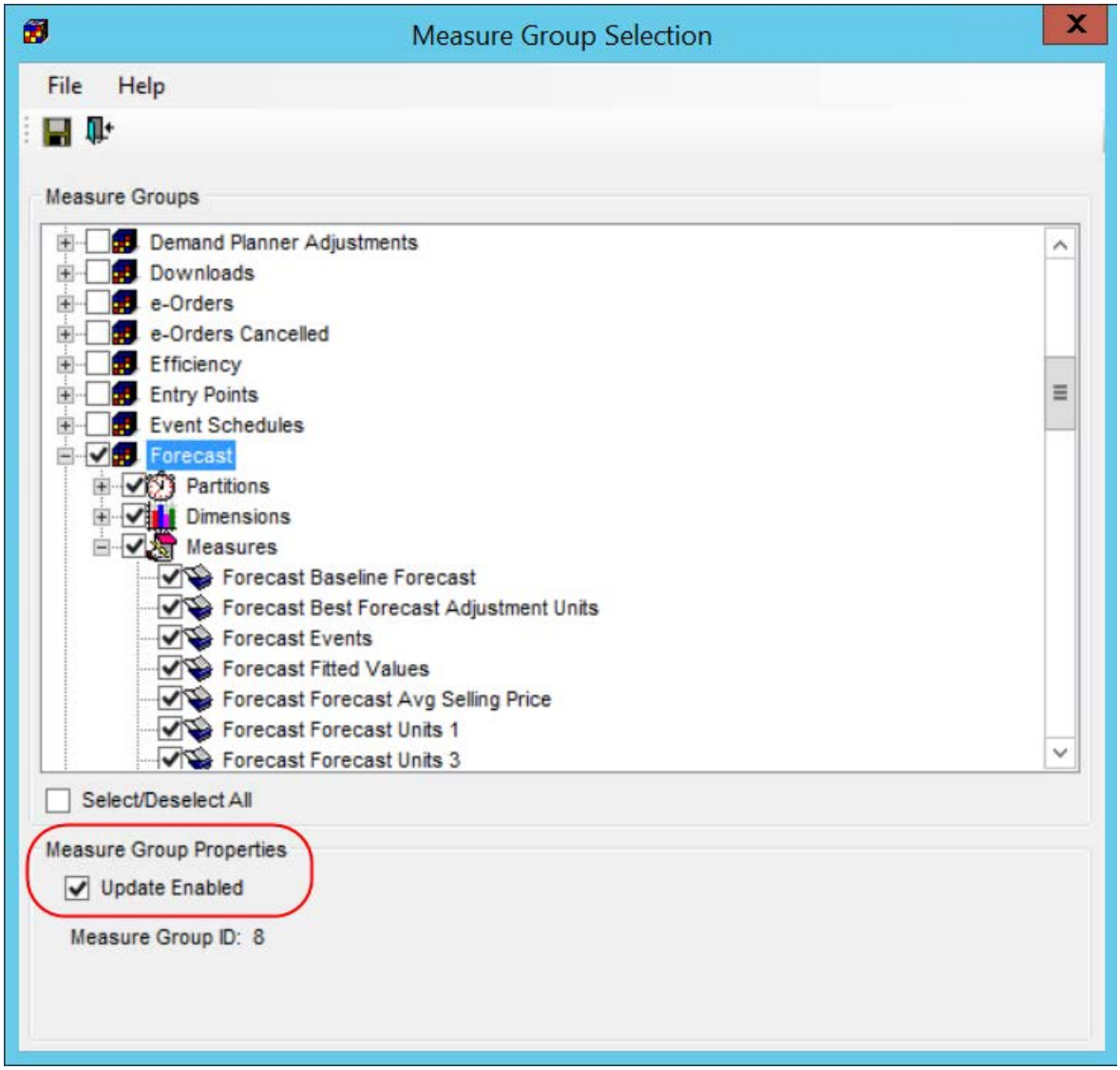
The Update Enabled setting in Stratum.Connector for Viewer influences role settings in Stratum.Viewer related to planning functionality. Administrators can only give users Update access to measures for planning purposes if the measure group for the measures in Stratum.Connector for Viewer are Updated Enabled.

The next image shows an example of the Role Maintenance window in Stratum.Viewer. The circled measure groups (Categories) do not have Update checkboxes because they were not Update Enabled in Stratum.Connector for Viewer. Stratum.Viewer users cannot be given Update access to measures in any of those groups. The remaining measure groups, including Budget and Forecast, have Update checkboxes because they were Update Enabled in Stratum.Connector. By default, the Update checkboxes for those measure groups will be de-selected in the Role Maintenance window for all roles. Stratum.Viewer security administrators can give Update access to any measures in those groups by selecting their Update checkboxes. The second image shows a role that has been given Update access to a few Forecast measures.

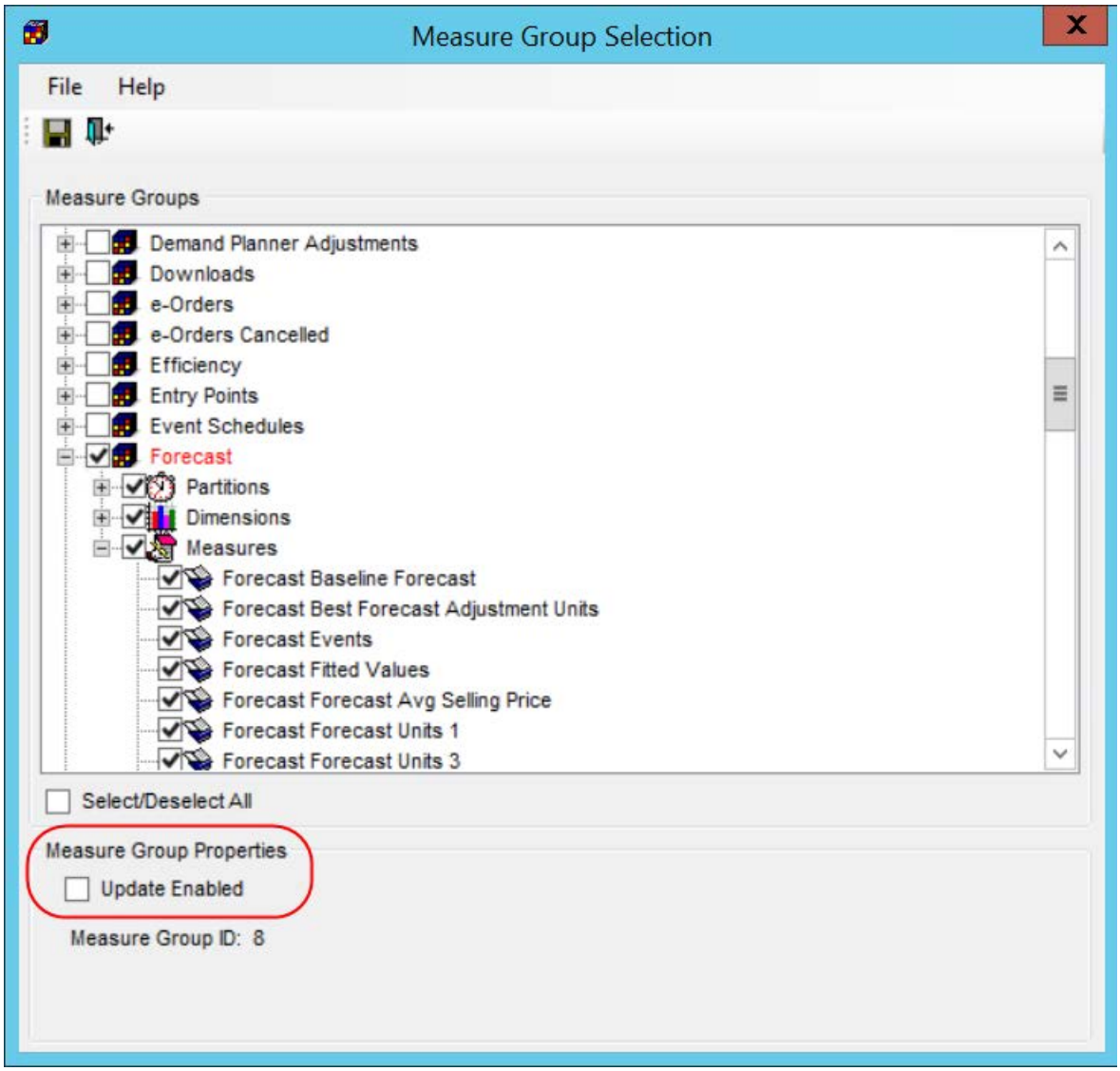



Role Maintenance
General
Name:
View Administrator All
Server:
Database:
Attributes
Measures
User Profiles
Select Measures to Allow Access
Read
Update
Measures
Accts Payable - Open
Accts Payable - Paid
Accts Receivable - Collected
Accts Receivable - Open
Actual Sales
Budget
Cart Activity
Daily Sales
Deductions - Open
Forecast
Forecast Baseline Forecast
Forecast Best Forecast Adjustment Units
Forecast Events
Forecast Fitted Values
Forecast Forecast Avg Selling Price

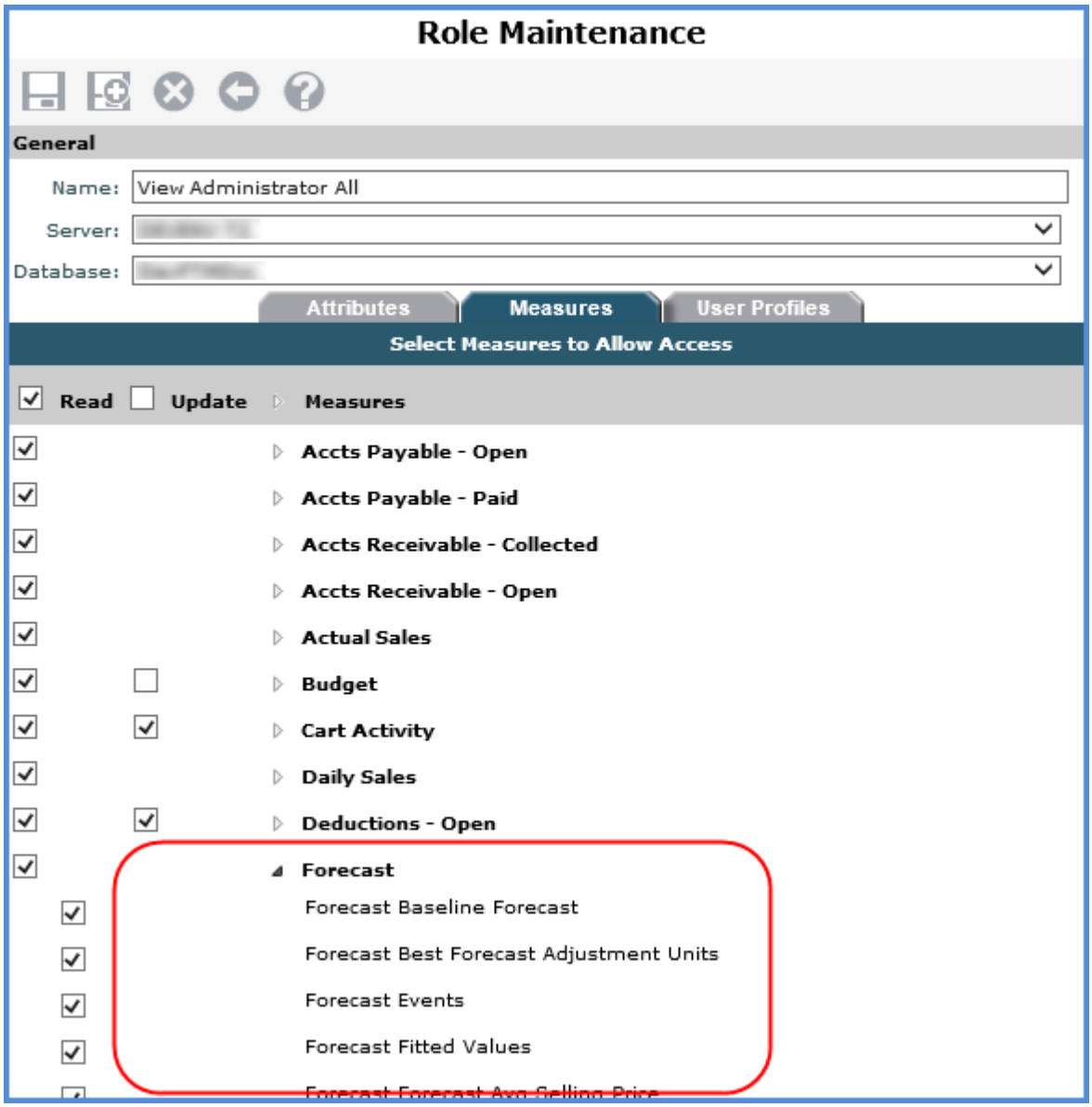
Here is the Measure Group Selection window in Stratum.Connector for Viewer that corresponds to the previous images. This window is where the Update Enabled property is controlled. Notice the Update Enabled checkbox is selected for Forecast. The same thing was done for Budget, Cart Activity, and Deductions.



Changing the Update Enabled setting will change the Update checkboxes in the Stratum.Viewer Role Maintenance window. Here is the Measure Group selection window after Update Enabled was de-selected for Forecast.



After that change was saved and the Analysis Services database was processed, the Update checkboxes for Forecast were removed for all roles in Stratum.Viewer and no users will be able to update Forecast measures.



Run Master File Commands and Enable OLAP Parameter/Switch

These tasks must be performed before you access Stratum.Connector for Viewer for the first time and process its Analysis Services cube and database.

1. Run the LOADOLAP Master File command to create a MASTERxx table for all dimension values.

    - For IBM i storage servers, run the DALOADOLAP command.
    - For Windows storage servers, run the GILOADOLAP command.

2. Run the CRTOMAST Master File command to create and populate the MASTxx tables.

    - For IBM i storage servers, run the DACRTOMAST command.
    - For Windows storage servers, run the GICRTOMAST command.

3. Add the CRTOMAST Master File command to the end of the nightly load program for Stratum to maintain the MASTxx tables.

4. Turn on the OLAP parameter/switch to maintain the MASTERxx tables during any nightly Stratum database load or change set process.

    - For IBM i storage servers, set the Maintain OLAP Master parameter for the DALOAD, DACHGSET, and DAGRPCHG commands to 1.
    - For Windows storage servers, set the /OLAP switch for the GISLSDRV, GIACSDRV, and GIGRPCHG commands to 1.

Once you have completed these steps, you can proceed with the set up of Stratum.Connector for Viewer and processing its Analysis Services database. See Quick Start - Initial Setup of Application and Data.

When to Use a Full, Limited, Post, Standard, or Trickle Process

This table shows examples of when to use the types of processes that are available in Stratum.Connector for Viewer: Full, Limited, Post, Standard, or Trickle.

Planning functionality in Stratum.Viewer needs to be considered when initiating a process. A Full process* of the Analysis Services database by Stratum.Connector for Viewer will clear all planning writeback partitions and writeback tables.

***Note:** If a Standard process detects any meta data changes made in Stratum.Connector for Viewer, it will automatically execute a Full process.

Type of Process:	Use this Type When:
Full	• You are processing the Analysis Services database for the first time. • Changes that impact Stratum meta data have been made in Stratum.Connector for Viewer or Stratum.Administration such as adding or removing dimensions and measures. • Your Stratum.Connector for Viewer and Stratum.Viewer applications have been upgraded. After upgrades, a Full process should be executed to make sure all aspects of the upgrade have been implemented. **Note:** During a Full process, Stratum.Viewer users cannot run views and should not use Stratum.Viewer administrative functions.
Limited	• You need to refresh the Stratum.Connector for Viewer Analysis Services cube with changed Stratum warehouse and master file data with minimal interruptions to users. • No changes that impact Stratum meta data have been made in Stratum.Connector for Viewer or Stratum.Administration such as adding or removing dimensions and measures. If there are changes, the Limited process will not run and a separate Full process must be run. **Note:** During a Limited process, users can continue running views, editing views, and using other features and windows in Stratum.Viewer. Users will not be locked out during the process unless they have roles that use dynamic user lists or migrated Stratum.Planner user lists to secure a dimension that has changed master file data.
Post	• You have calculated members that have been changed, added, or removed (de-selected) in Stratum.Connector for Viewer. • You have set up dynamic user lists with the “Batch Process” property enabled in Stratum.Viewer. • You have new or updated Stratum.Planner user lists that need to be imported into Stratum.Viewer. **Note:** During a Post process, Stratum.Viewer users cannot run views and should not use Stratum.Viewer administrative functions.
Standard	• You need to refresh the Stratum.Connector for Viewer Analysis Services cube with changed Stratum warehouse and master file data. • No changes that impact Stratum meta data have been made in Stratum.Connector for Viewer or Stratum.Administration such as adding or removing dimensions and measures. If there are changes, a Standard process will automatically run a Full process. **Note:** During a Standard process, Stratum.Viewer users cannot run views and should not use Stratum.Viewer administrative functions. A Standard process is typically done at a time when users won’t be using Stratum.Viewer – for example, the process is done as part of a nightly, regularly scheduled update of all your Stratum data.

Trickle	• You have a specific set of data that needs to be updated during the course of your business day and need to do so with minimal disruption to Stratum.Viewer users. • No changes that impact Stratum meta data have been made in Stratum.Connector for Viewer or Stratum.Administration such as adding or removing dimensions and measures. If there are changes, the Trickle process will not run and a separate Full process must be run.

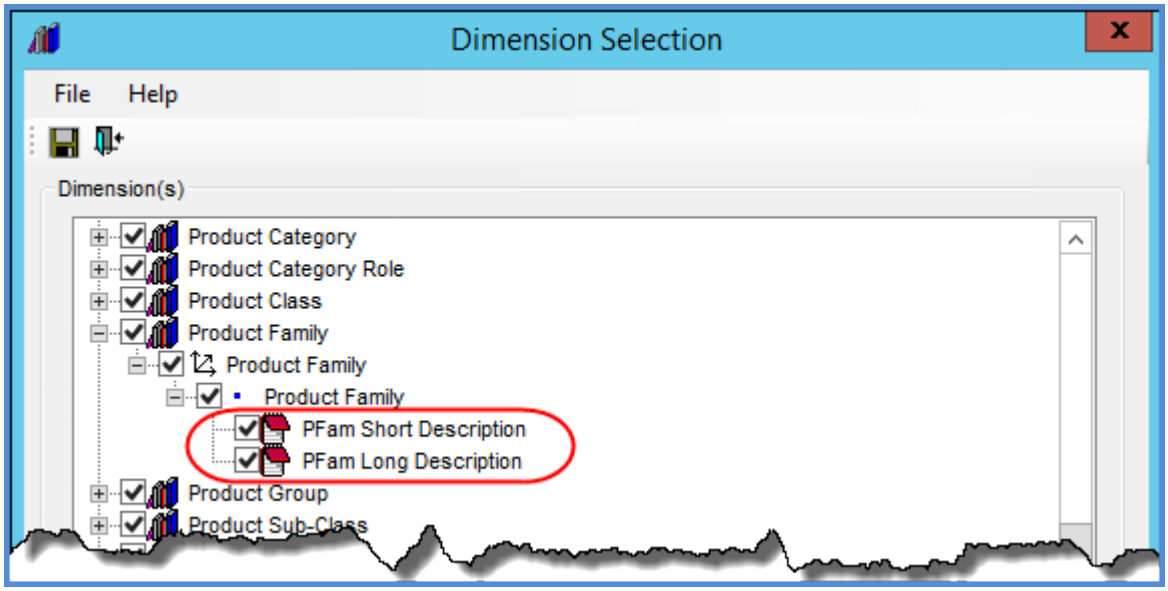
Definitions

Attribute Relationship

Attribute relationships provide supplementary, descriptive information about levels. For example, a Customer level may have members (Customers) with attribute relationships such as address, contact person, long description, phone number, and region. You can see attribute relationships in the Dimension Selection window. The following example shows two attribute relationships for the Product Family level (▪).

Attribute relationships selected for your Analysis Services cube can be used in Stratum.Viewer several ways, such as displayed on rows and columns of views, used for filtering purposes, and used to build user list expressions. They are also used as display columns and for searching purposes in the Select and Advanced Select Members windows within Stratum.Viewer.

The Pickup Fields from your Stratum.Server database become the attribute relationships available for selection in Stratum.Connector for Viewer.



Calculated Member

Calculated members are measures derived from other measures. They represent calculations between pieces of data or groups of data. The calculation can include additions, subtractions, multiplications, divisions, and so forth. An example is an Actual Sales Calc Values Discount Amount calculated member that uses measures from the Actual Sales measure group in its calculation. Calculated members behave the same as measures in Stratum.Viewer. Stratum.Administration calculated category values (from the Stratum.Server database) become calculated members available for selection in your Stratum.Connector for Viewer environment.

Cube

A cube represents logical groupings of Stratum.Server data for use with Stratum.Viewer. These groups are made up of partitions, dimensions, and measures based on Stratum.Server Structure Code definitions.

Cubes contain the Stratum data in Analysis Services-compliant format for use by Stratum.Viewer. The data is used for Stratum.Viewer roles, user lists, measure items, and views.

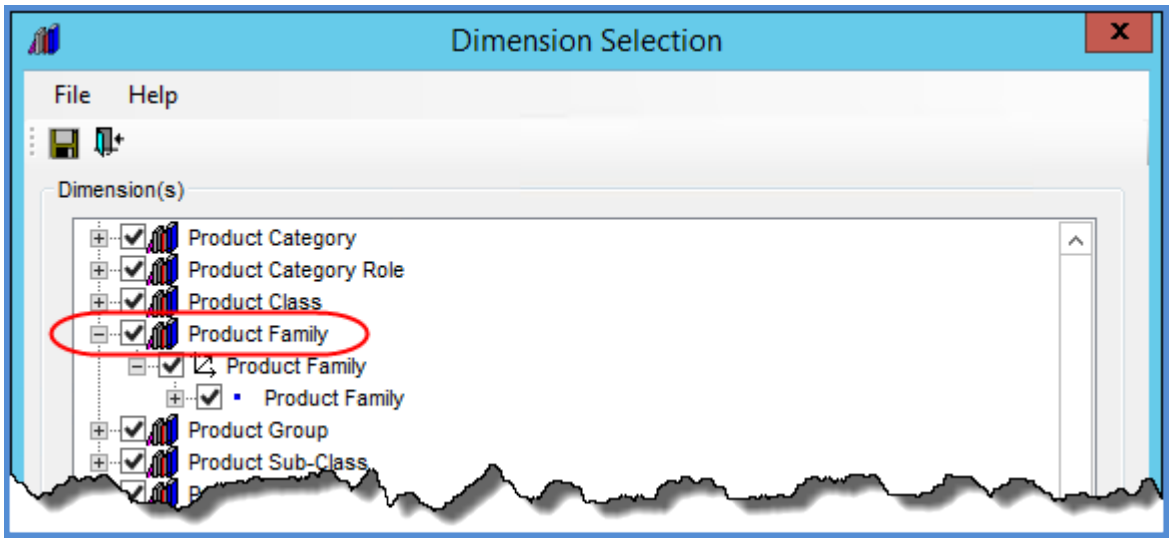
Database

The database for Stratum.Connector for Viewer is an Analysis Services database that stores Analysis Services-compliant meta data and Master File data. The cube in the database defines sets of data that act as sources of data for defining roles, building user lists, and building views in Stratum.Viewer.

Dimension

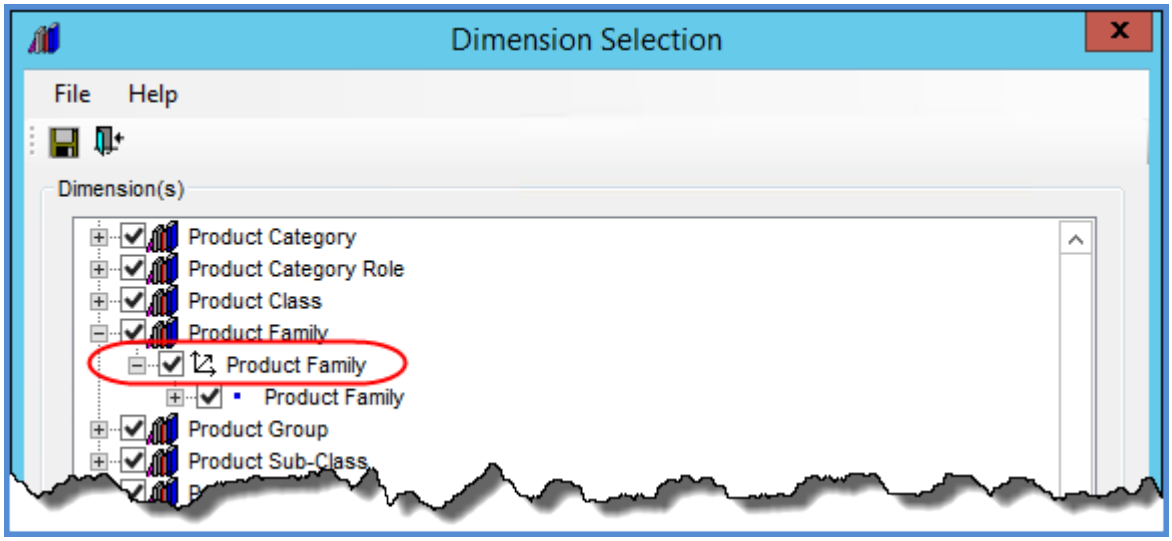
There is a 3-part Analysis Services structure of information within Stratum.Connector for Viewer that includes dimensions, hierarchies, and levels. Dimensions contain at least one hierarchy, which in turn contain at least one level, which in turn contain members. You can see an example of this structure in the Dimension Selection window.

The following example shows a Product Family dimension ( ) with a Product Family hierarchy ( ) and level ( ). Stratum.Connector for Viewer takes care of translating dimensions from your Stratum.Server database into the 3-part, Analysis Services structure of Dimension.Hierarchy.Level.



Hierarchy

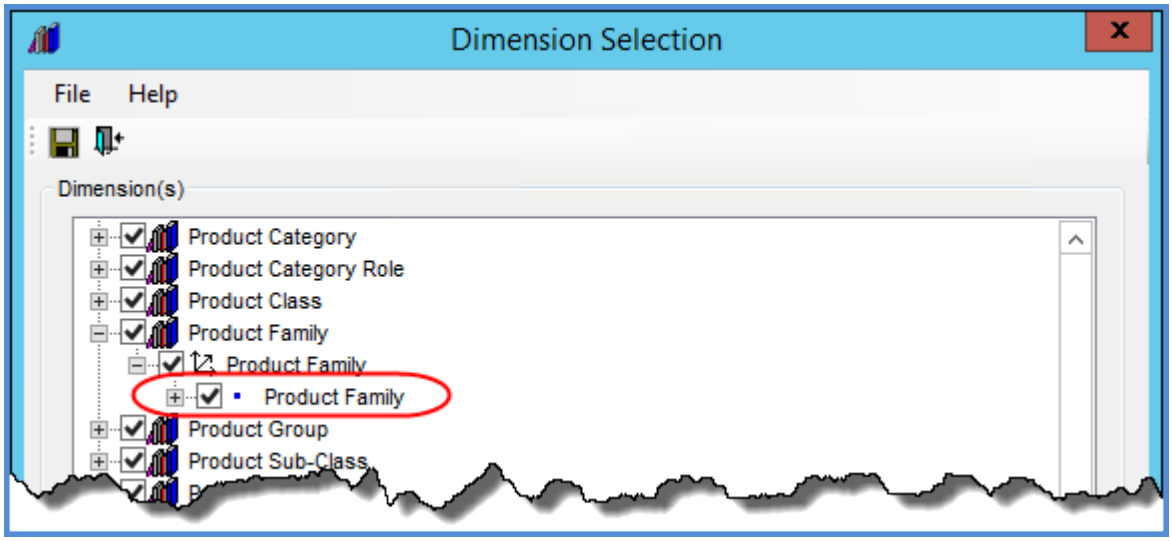
There is a 3-part Analysis Services structure of information within Stratum.Connector for Viewer that includes dimensions, hierarchies, and levels. Hierarchies belong to dimensions and contain at least one level, which in turn contain members. You can see an example of this structure in the Dimension Selection window. The following example shows a Product Family hierarchy ( ) and level ( ). The hierarchy belongs to the Product Family dimension ( ).



Level

There is a 3-part Analysis Services structure of information within Stratum.Connector for Viewer that includes dimensions, hierarchies, and levels. Levels belong to hierarchies and contain members. You can see an example of this structure in the Dimension Selection window. The following example shows a Product Family level ( ), which belongs to a Product Family hierarchy ( ) from the Product Family dimension ( ). When the level is used in Stratum.Viewer views, you will see level members such as Frozen Juice, Frozen Fruit, Fresh Beef, and Fresh Pork. Levels selected for your Analysis Services cube can be used in Stratum.Viewer several ways, such as displayed on rows and columns of views, used for filtering purposes, and used to build user list expressions.

Stratum.Connector for Viewer takes care of translating dimensions from your Stratum.Server database into the 3-part, Analysis Services structure of Dimension.Hierarchy.Level.



Measure

Measures are the basic units of data for your dimensions, hierarchies, and levels. Stratum.Connector for Viewer organizes measures into measure groups based on their Stratum.Server Structure Code.

Measures selected for your Analysis Services cube can be used in Stratum.Viewer to create and insert measure items into your views.

Measure Group

Stratum.Connector for Viewer organizes Stratum.Server data into measure groups. A measure group is made up of partitions (years), dimensions, and measures based on Stratum.Server Structure Code definitions. Examples of measure groups are Accounts Payable - Open, Actual Sales, Budget, Daily Sales, Forecast, Inventory, and Open Orders.

Partition

A partition is created for each year of data for a measure group. The number of partitions is determined by the years of data that exist in the Stratum.Server database associated with the Structure Code.