Pre-Setup of Data & Maintaining Data
Stratum.Connector 7

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Getting Started

Introduction to Setting up and Maintaining Master File Data

The Master File commands in the Stratum.Server application create, load, and maintain Master File tables in the Stratum storage database for use with Stratum.Connector.

Master File information is not required for all dimension values in the Stratum.Planner product. That means in Stratum.Planner there may be instances when there is no corresponding Master File information for the dimension values in Stratum warehouse tables. On the other hand, Master File information is required for all dimension values for the sake of the Stratum.Connector product. Master File information is needed to process data into the Analysis Services format. Running the Master File commands ensures that Master File information exists for all dimension values by creating a set of tables to be used by Stratum.Connector with this information.

Run Commands Prior to Using this Application

The tasks for running Master File commands only need to be performed once and they need to be run **prior** to the first use of Stratum.Connector. See Run Master File Commands for instructions.

Note: You must be on the version of Stratum.Server recommended in the *Stratum.Viewer and Stratum.Connector Requirements*.

Running the Master File commands creates a set of MASTERxx and MASTxx tables for all dimension values in the Stratum Structure Codes. The xx in the MASTxx and MASTERxx table names represents the dimension number. For example, tables for Dimension 1 would be named MAST1 and MASTER1, and tables for Dimension 10 would be MAST10 and MASTER10.

- For each dimension, the MASTERxx tables store the dimension value information that exists for all years of data in all Structure Code tables of the Stratum storage database.
- The MASTxx tables are a result of joining information in the MASTERxx table with the Stratum Master Files tables (STCSMF10, STCSMF11, STCSMF35, and STCSMP12). The Stratum Master File tables contain any Master File information that exists, such as value, short description, long description, Previous Levels, and Pickup Fields information. If a dimension value in a MASTERxx table does not have a description in the Stratum Master File tables, then the value itself is used as the short and long descriptions in the MASTxx tables. If PickUp Field or Previous Levels are defined for a dimension but Master File information does not exist for a particular dimension value, then the default dimension value will be used in the MASTxx tables for the PickUp Field and Previous Level Values.

For example, a Region dimension may exist in a storage database, and the Stratum Master Files tables for it contain Region 1 through Region 4. If actual data exists only for Region 1, Region 2, and Region 3, then the MASTERxx tables will contain only Region 1, Region 2, and Region 3. The MASTxx tables will contain the short description, long description, Pickup Field (if defined for Region), and Previous Level information for Region 1, Region 2, and Region 3 as defined in the Stratum Master Files. By default, the command that sets up the MASTxx tables will not populate the tables with descriptions, Pickup Fields, and Previous Level information for Region 4 because actual data does not exist for that Region. However, the command can be set up to populate MASTxx tables with information for such Regions if the information is needed in a particular Stratum.Viewer and Stratum.Connector implementation.

Enable an OLAP Parameter/Switch to Maintain Master File Data

Enabling an OLAP parameter (for IBM i) or switch (for Windows) is required to maintain the MASTERxx tables during any nightly Stratum load or change set processes for the Stratum storage database. This parameter/switch maintains the MASTERxx tables during any nightly Stratum load, Net Change, or Change Sets processes for the Stratum storage database. If new or changed dimension value combinations exist in the Stratum storage database,

then MASTERxx tables will be created and populated or updated for those combinations accordingly.

- In an IBM i environment, set the Maintain OLAP Master parameter to **1** for the DALOAD (Load Process), DACHGSET (Apply Change Set), and DAGRPCHG (Apply Group Change Set) commands.
- In a Windows environment, set the /OLAP switch to **1** for the GISLSDRV (Load Process), GIACSDRV (Apply Change Set), and GIGRPCHG (Apply Group Change Set) commands.

See also Maintain OLAP Parameter for IBM i and Maintain OLAP Switch for Windows.

Task

Run Master File Commands and Enable OLAP Parameter/Switch

These tasks must be performed before you access Stratum.Connector 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 and processing its Analysis Services database.

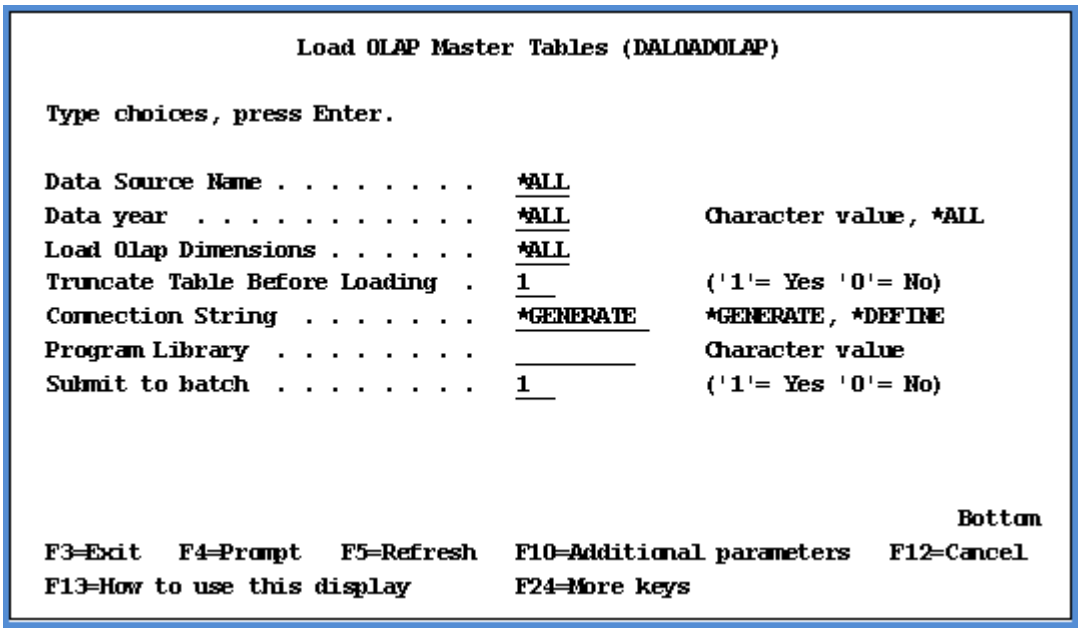
Commands for IBM i Implementations

Load OLAP Master Tables (DALOADOLAP) Command for IBM i

Running the DALOADOLAP command creates for each dimension a list of the distinct dimension values in all the Structure Code tables of the storage database. Then, a MASTERxx table will be created for each dimension and populated with the list of dimension values. These tables are used when the DACRTOMAST command is run to create the MASTxx tables.

The DALOADOLAP command typically needs to be run just once. It can be re-run, though, if you want to remove from the MASTERxx tables records that are no longer in the Stratum Master Files or Structure Code tables. Or, you can run it for just a subset of the storage database. For example, if new dimensions are added to the database after

you have already run this command for the entire database, then the command can be run again for only the new dimensions, years, and data sources. By also turning on the Maintain OLAP parameter of the DALOAD, DACHGSET (Apply Change Set), and DAGRPCHG (Apply Group Change Set) commands, the MASTERxx tables will be maintained during the nightly load process for the Stratum database.



Parameters

Parameter	Description and Choices
Data Source Name	Controls which data sources are used during the command execution. ***ALL** DALOADOLAP will process for all of the data sources. **Data Source Name** DALOADOLAP will load distinct dimension values for the specified data source. Example: DATASOURCE (DSDS)
Data Year	Controls which years of data will be processed during command execution. ***ALL** DALOADOLAP will process all years for the specified data source. **Year** DALOADOLAP will process only the given year for the specified data source. A single year can be specified. If several years worth of data need to be processed, run the command for each year and each time specify the particular year you need to process.
Load Olap Dimensions	Controls which dimensions are processed during DALOADOLAP. ***ALL** DALOADOLAP will process all dimensions. **Dimension Ids**

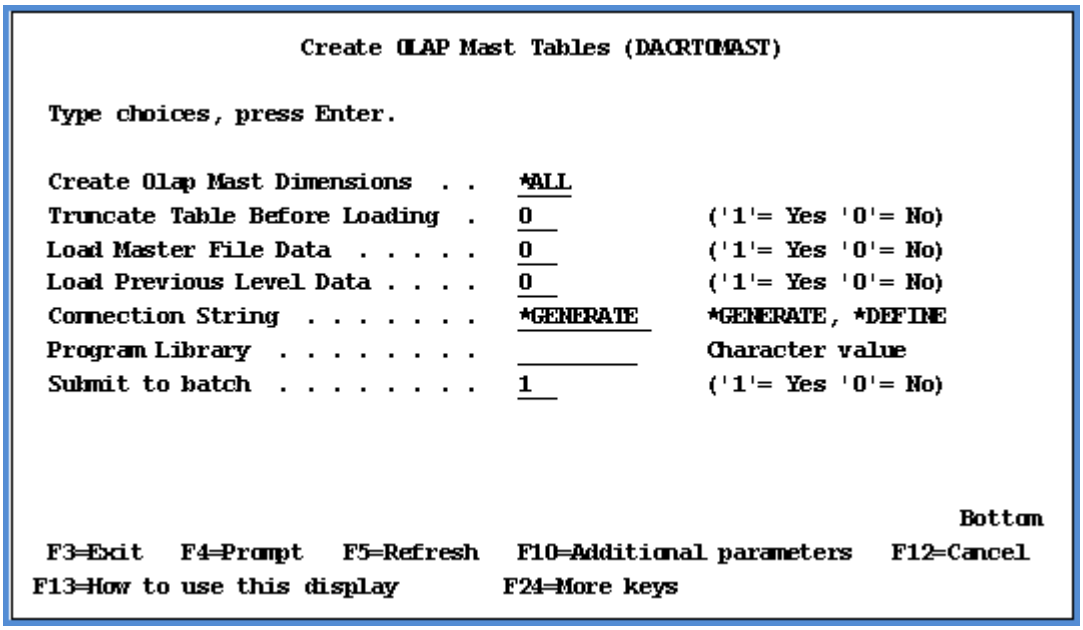
	DALOADOLAP will process the specified dimension. Enter the dimensions in a comma-delimited format. Example: 2,3.
Truncate Table Before Loading	Set the parameter to *1 (Yes)* if you want MASTERxx tables to be cleared before they are loaded with distinct dimension value information. For example, you may run DALOADOLAP for all data sources, years, and dimensions and then need to run the command again only for certain data sources, dimensions, and years specified. You can set this parameter to 1 to clear old information from the MASTERxx tables before the new information is loaded. Or, you can set the parameter to *0 (No)* if you prefer not to truncate (clear) tables. Then, distinct dimension values resulting from the subsequent command execution will be accumulated into the tables along with information from previous instances of executing the command.
Connection String	Defines how this command process connects to the Stratum storage database. Valid entries are: ***GENERATE** The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user. A local Relational Database Directory must be defined for the command to process. The library list must contain a Stratum database library name. ***DEFINE** The connection string will be defined from parameters. If *DEFINE is selected, these four *DEFINE parameters must be entered for the connection string: • DSN - Define the local Relational Database Directory Entry. Use "wrkrdbdire" to determine the local Relational Database Directory Entry. The directory entry must be a local location. • DBLIB - Stratum database name. • USERID - User ID. • PASSWORD - Password of the User ID.
Program Library	Indicates the Stratum server library name. The program library will be added to the library list prior to command processing.
Submit to batch	Determines how a command job will be submitted. Valid entries are: **1= Yes** Set the parameter to 1 if you want to submit the job to batch. **0 = No** Set the parameter to 0 if you want to run the job online.
Log File Name	Can be used to designate the Integrated File System full path name of a log file for the command run, if you choose to have a log file generated. Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Inform record count	Can be used to indicate the number of records to process between informational messages about processing. **Number** The number of records to process between informational messages. If the setting is too low, it will cause large log files and slower performance.
Chain Length Warning	A Chain Length Warning occurs when a command is forced to allocate extra memory at Data Summary Level (DSL) load time because the number of header records that are being loaded exceeds the number of estimated number headers. **Number** If the number of chains exceeds the number defined here, a warning message is printed. This message does not mean that the process will fail, only that it is not functioning at peak performance.
Debug	Determines whether or not Debug messages will be generated during command processing. The Debug messages include all SQL statements used and other miscellaneous messages needed to debug any problem that may occur during processing. Valid entries are: **1= Yes** Set the parameter to 1 if you want messages generated. **0 = No** Set the parameter to 0 if you do not want messages generated.

Create OLAP Master Tables (DACRTOMAST) Command for IBM i

Running the DACRTOMAST command on the storage database creates and populates the MASTxx tables based on information in the MASTERxx tables. You can run the command for all dimensions, years, and data sources or for a subset of data from the storage database. For example, if new dimensions are added to the database after you have already run this command for the entire database, then the command can be run again for only the new dimensions, years, and data sources. You can then work with the new data in Stratum.Connector. When setting up the nightly Stratum load program, also place this command at the end of the program using the parameters described below so the MASTxx tables will be maintained.

During the command processing, the MASTERxx tables are reviewed along with the Stratum Master File tables (STCSMF10, STCSMF11, STCSMF35, and STCSMP12). Short description, long description, additional field (Pickup Field), and other Master File information from the Stratum Master File tables will be added to the MASTxx tables for the dimension values in the MASTERxx tables. If a dimension value in a MASTERxx table does not have a description in the Stratum Master File tables, then the value itself is used as the short and long descriptions in the MASTxx tables. If Pickup Fields or Previous Levels are defined for a Dimension but Master File information does not exist for a particular dimension value, then the default Dimension Value will be used in the MASTxx tables for the Pickup Field and Previous Level Values.



Parameters

Parameter	Description and Choices
Create Olap Mast Dimensions	Controls which dimensions are processed during DACRTOMAST. ***ALL** DACRTOMAST will process all dimensions. **Dimension Ids** DACRTOMAST will process the specified dimension. Enter the dimensions in a comma-delimited format. Example: 2,3.
Truncate Table Before Loading	Set the parameter to *1 (Yes)* if you want MASTxx tables to be cleared before they are loaded with Master File information. Use this option if you truncate the Stratum Master File tables before each load and you have either one or both of the LOAD Master File Data or Load Previous Level Data parameters set to 1.

Load Master File Data	Set the parameter to *1 (Yes)* to load records from the Stratum Master File tables into the MASTxx tables for dimension values regardless of whether or not actual data exists for them in the Structure Code tables. This parameter ensures that Master File data exists for all dimension value combinations regardless of whether or not actual data exists for them in Structure Code tables of the Stratum database.
Load Previous Level Data	Set the parameter to *1 (Yes)* to load all Previous Level Master File data into the MASTxx tables regardless of whether or not actual data exists for them in Structure Code tables of the Stratum storage database.
Connection String	Defines how this command process connects to the Stratum storage database. Valid entries are: ***GENERATE** The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user. A local Relational Database Directory must be defined for the command to process. The library list must contain a Stratum database library name. ***DEFINE** The connection string will be defined from parameters. If *DEFINE is selected, these four *DEFINE parameters must be entered for the connection string: • DSN - Define the local Relational Database Directory Entry. Use "wrkrdbdire" to determine the local Relational Database Directory Entry. The directory entry must be a local location. • DBLIB - Stratum database name. • USERID - User ID. • PASSWORD - Password of the User ID.
Program Library	Indicates the Stratum server library name. The program library will be added to the library list prior to command processing.
Submit to batch	Determines how a command job will be submitted. Valid entries are: **1= Yes** Set the parameter to 1 if you want to submit the job to batch. **0 = No** Set the parameter to 0 if you want to run the job online.
Log File Name	Can be used to designate the Integrated File System full path name of a log file for the command run, if you choose to have a log file generated. Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.
Inform record count	Can be used to indicate the number of records to process between informational messages about processing. **Number** The number of records to process between informational messages. If the setting is too low, it will cause large log files and slower performance.

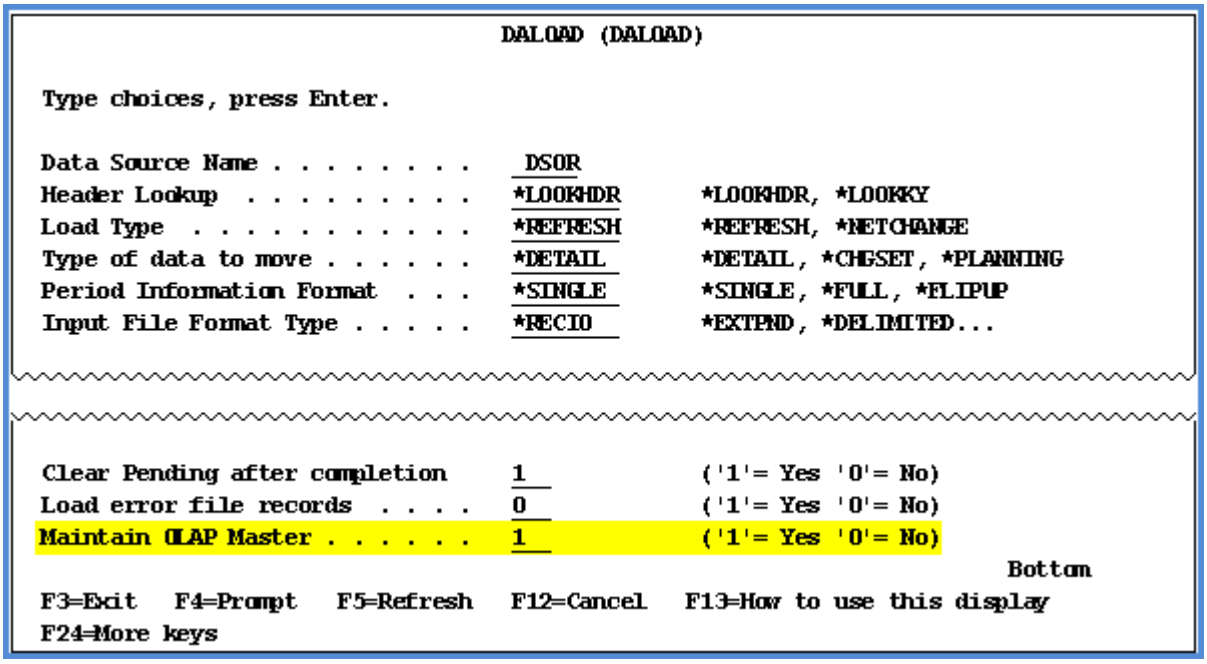
Chain Length Warning	A Chain Length Warning occurs when a command is forced to allocate extra memory at Data Summary Level (DSL) load time because the number of header records that are being loaded exceeds the number of estimated number headers. **Number** If the number of chains exceeds the number defined here, a warning message is printed. This message does not mean that the process will fail, only that it is not functioning at peak performance.
Debug	Determines whether or not Debug messages will be generated during command processing. The Debug messages include all SQL statements used and other miscellaneous messages needed to debug any problem that may occur during processing. Valid entries are: **1= Yes** Set the parameter to 1 if you want messages generated. **0 = No** Set the parameter to 0 if you do not want messages generated.

Maintain OLAP Parameter for IBM i

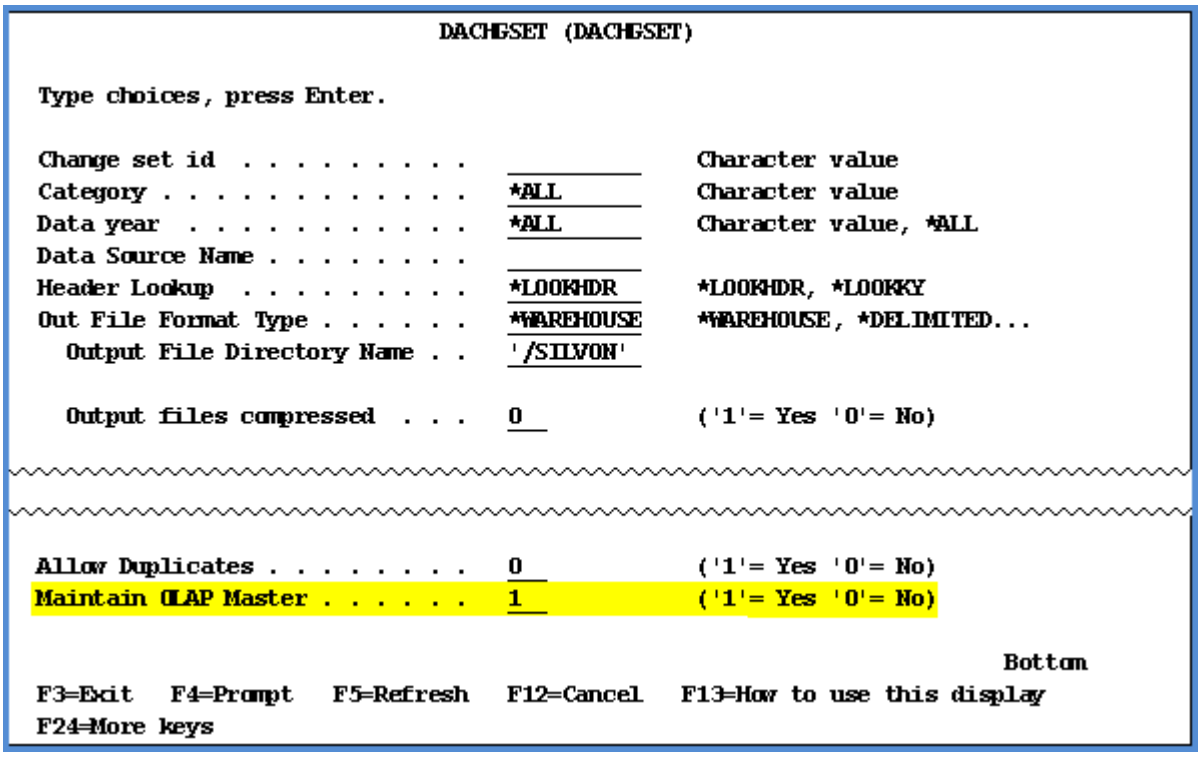
Turning on the Maintain OLAP Master parameter of the DALOAD (Load Process), DACHGSET (Apply Change Set), and DAGRPCHG (Apply Group Change Set) commands maintains the MASTERxx tables during any nightly Stratum load or change set processes for the Stratum storage database. If new or changed dimension value combinations exist in the Stratum storage database, MASTERxx tables will be created and populated or updated for those combinations accordingly.

Set the Maintain OLAP Master parameter to **1** to turn it on.

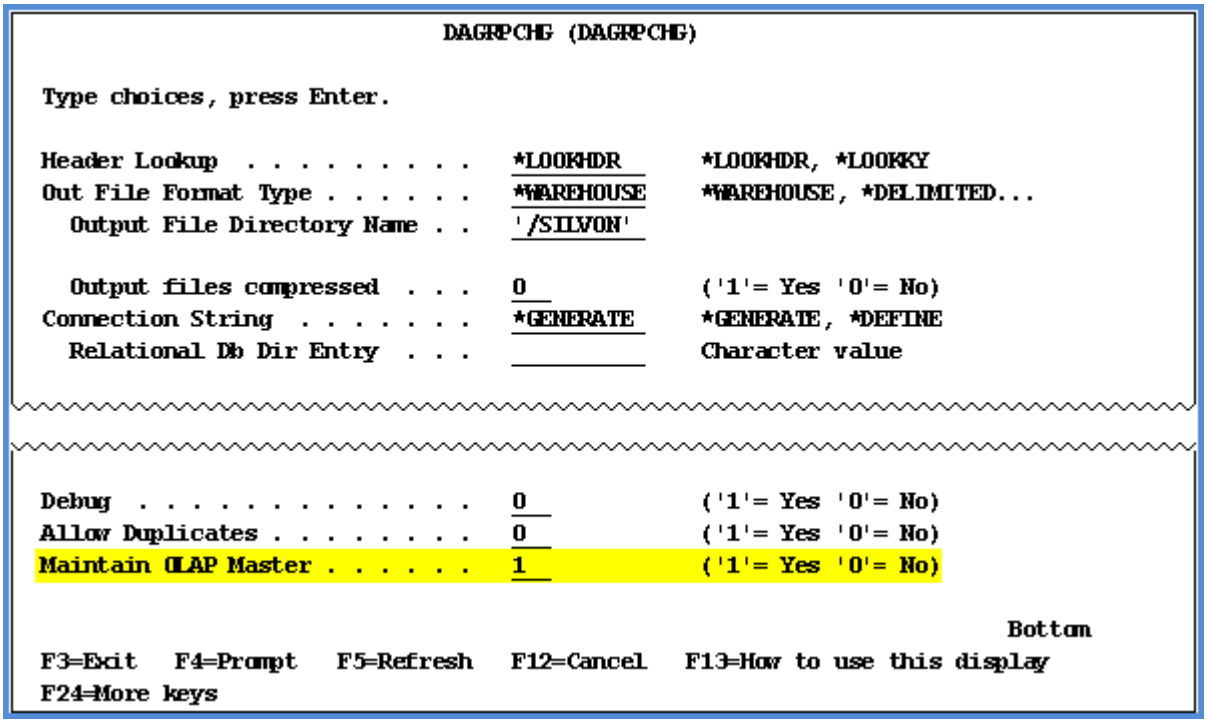
DALOAD (Load Data) Command



DACHGSET (Apply Change Set) Command



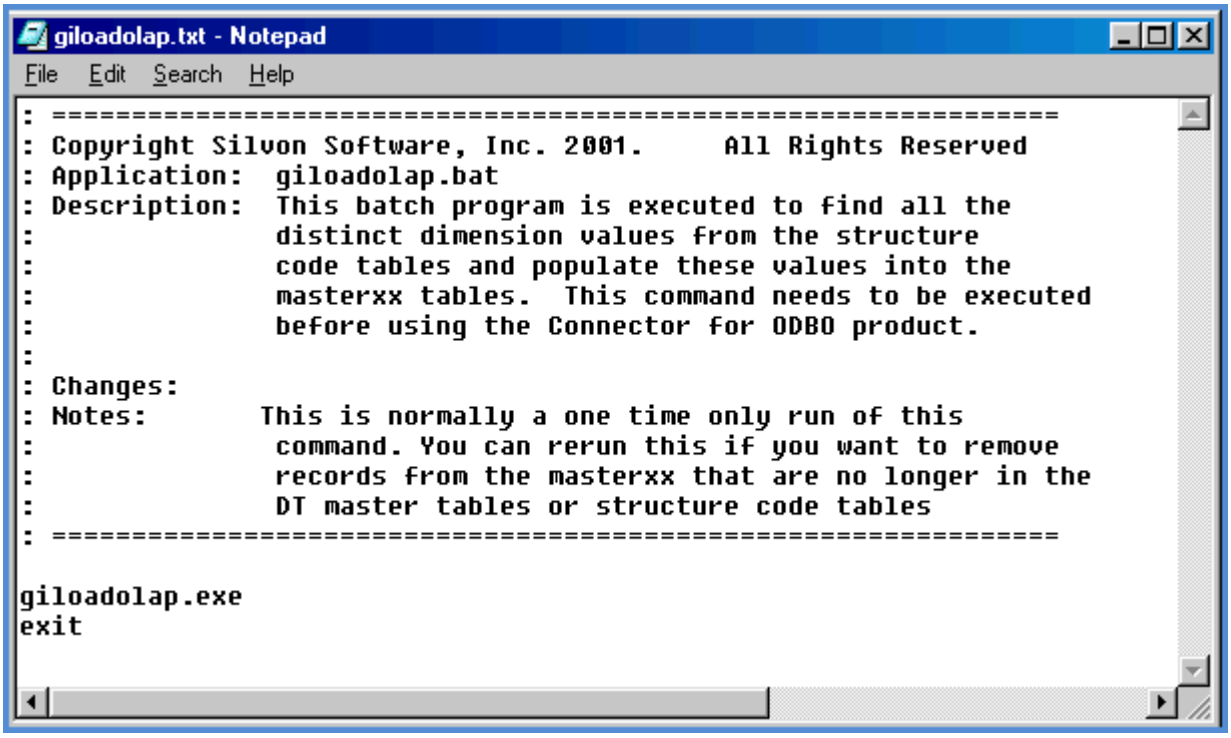
DAGRPCHG (Apply Group Change Set) Command



Load OLAP Master Tables (GILOADOLAP) Command for Windows

Running the GILOADOLAP command creates for each dimension a list of the distinct dimension values in all the Structure Code tables of the Stratum storage database. Then, a MASTERxx table will be created for each dimension and populated with the list of Dimension Values. These tables are used when the GICRTOMAST command is run to create the MASTxx tables.

The GILOADOLAP command typically needs to be run just once. It can be run again, though, if you want to remove from the MASTERxx tables records that are no longer in the Stratum Master Files or Structure Code tables. Or, you can run it for just a subset of the storage database. For example, if new dimensions are added to the database after you have already run this command for the entire database, then the command can be run again for only the new dimensions, years, and data sources. By also turning on the Maintain OLAP switch of the GISLSDRV, GIACSDRV (Apply Change Set), and GIGRPCHG (Apply Group Change Set) commands, the MASTERxx tables will be maintained during the nightly load process for the Stratum storage database.



Switches

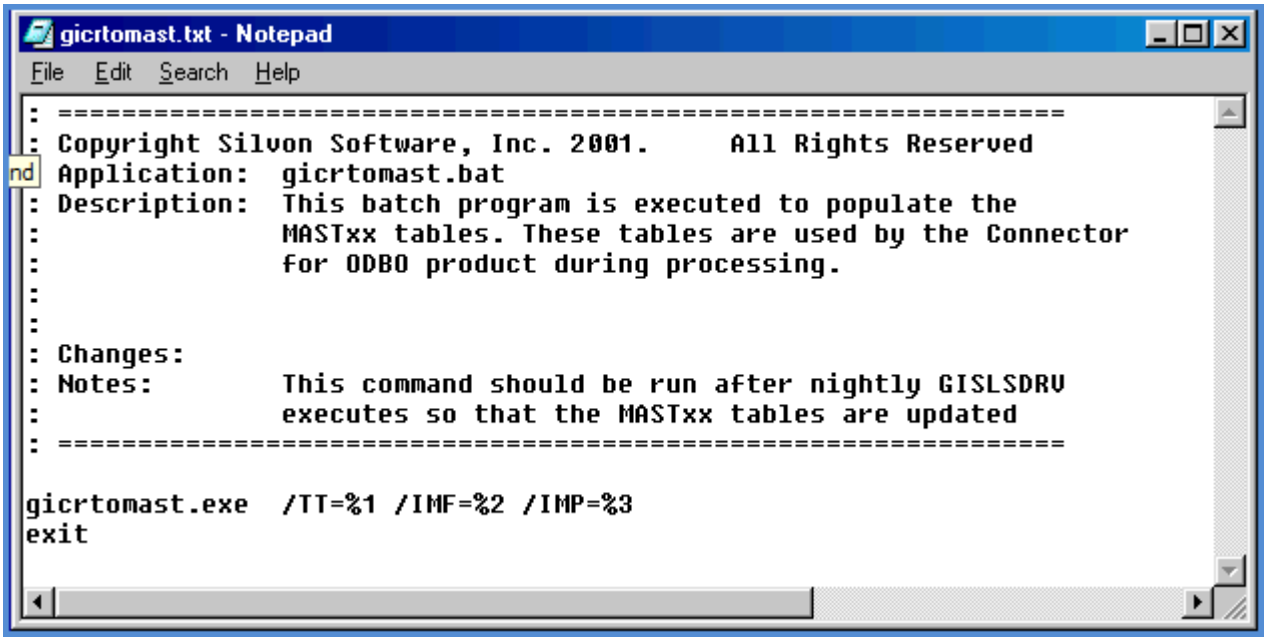
Switch	Description and Choices
/DATASRC=Data Source Name	Controls which data sources are used during the command execution. ***ALL** GILOADOLAP will process for all of the data sources. This is the default setting. **Data Source Name** GILOADOLAP will load distinct dimension values for the specified data source.

	Example: /DATASRC=DSDS.
/YEAR=Data Year	Controls which years of data will be processed during command execution. ***ALL** GILOADOLAP will process all years for the specified data source. **Year** GILOADOLAP will process only the given year for the specified data source. A single year can be specified. If several years worth of data need to be processed, run the command for each year and each time specify the particular year you need to process.
/DIM=Load Olap Dimensions	Controls which dimensions are processed during GILOADOLAP. ***ALL** GILOADOLAP will process all dimensions. **Dimension Ids** GILOADOLAP will process the specified dimension. Enter the dimensions in a comma-delimited format. Example: 2,3.
/TT=Truncate Table Before Loading	Set the parameter to 1 (Yes) if you want MASTERxx tables to be cleared before they are loaded with distinct dimension value information. For example, you may run GILOADOLAP for all data sources, years, and dimensions and then need to run the command again only for certain data sources, dimensions, and years specified. You can set this parameter to 1 to clear old information from the MASTERxx tables before the new information is loaded. Or, you can set the parameter to 0 (No) if you prefer not to truncate (clear) tables. Then, distinct dimension values resulting from the subsequent command execution will be accumulated into the tables along with information from previous instances of executing the command.

Create OLAP Master Tables (GICRTOMAST) Command for Windows

Running the GICRTOMAST command on the Stratum storage database to create and populate the MASTxx tables based on information in the MASTERxx tables. You can run the command for all dimensions, years, and data sources or for a subset of data from the storage database. For example, if new dimensions are added to the database after you have already run this command for the entire database, then the command can be run again for only the new dimensions, years, and data sources. You can then work with the new data in Stratum.Connector. When setting up the nightly Stratum load program, also place this command at the end of the program using the parameters described below so the MASTxx tables will be maintained.

During the command processing, the MASTERxx tables are reviewed along with the Stratum Master File tables (STCSMF10, STCSMF11, STCSMF35, and STCSMP12). Short description, long description, additional field (Pickup Field), and other Master File information from the Stratum Master File tables will be added to the MASTxx tables for the dimension values in the MASTERxx tables. If a dimension value in a MASTERxx table does not have a description in the Stratum Master File tables, then the value itself is used as the short and long descriptions in the MASTxx tables. If Pickup Fields or Previous Levels are defined for a Dimension but Master File information does not exist for a particular dimension value, then the default dimension value will be used in the MASTxx tables for the PickUp Field and Previous Level Values.



Switches

For more information about the GICRTOMAST command, use the /? = Report switch. Using "/?" with any Stratum Windows command generates a report about the command. The report will include a brief description of the command, program requirements, standard requirements, and other options that can be used for the command.

Switch	Description and Choices
/DIM=Create Olap Mast Dimensions	Controls which dimensions are processed during GICRTOMAST. ***ALL** GICRTOMAST will process all dimensions. **Dimension Ids** GICRTOMAST will process the specified dimension. Enter the dimensions in a comma-delimited format. Example: 2,3.
/TT = Truncate Table Before Loading	Set the switch to 1 (Yes) if you want MASTxx tables to be cleared before they are loaded with Master File information. Use this option if you truncate the Stratum Master File tables before each load and you have either one or both of the LOAD Master File Data or Load Previous Level Data parameters set to 1.
/IMF = Load Master File Data	Set the switch to 1 (Yes) to load records from the Stratum Master File tables into the MASTxx tables for Dimension Values regardless of whether or not actual data exists for them in the Structure Code tables. This parameter ensures that Master File data exists for all Dimension Value combinations regardless of whether or not actual data exists for them in Structure Code tables of the Stratum storage database.
/IMP = Load Previous Level Data	Set the switch to 1 (Yes) to load all Previous Level Master File data into the MASTxx tables regardless of whether or not actual data exists for them in Structure Code tables of the Stratum storage database.

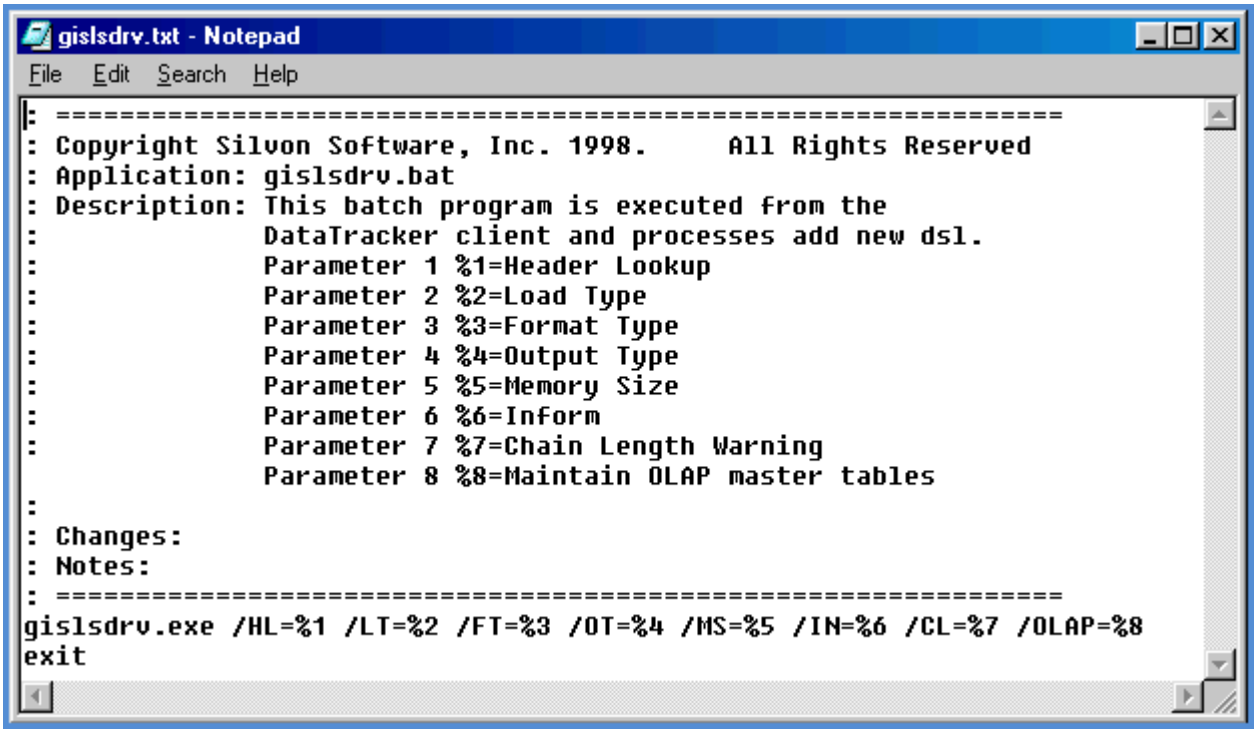
Maintain OLAP Switch for Windows

Turning on the /OLAP switch of the GISLSDRV (Load Process), GIACSDRV (Apply Change Set), and GIGRPCHG (Apply Group Change Set) commands maintains the MASTERxx tables during any nightly Stratum load or change set processes for the Stratum storage database. If new or changed dimension value combinations exist in the Stratum storage database, MASTERxx tables will be created and populated or updated for those combinations accordingly.

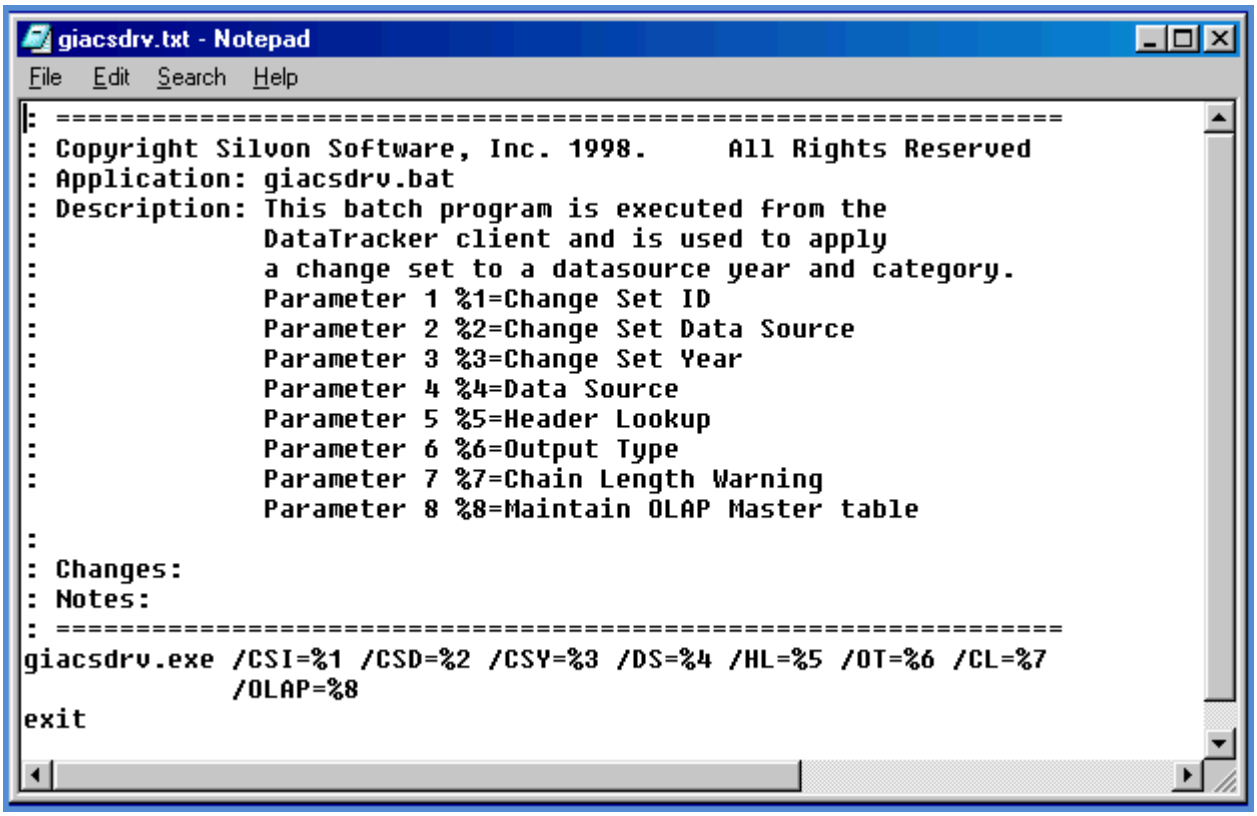
Set the /OLAP switch to **1** to turn it on.

For more information about these commands, use the /? = Report switch. Using "/?" with any Stratum Windows command generates a report about the command. The report will include a brief description of the command, program requirements, standard requirements, and other options that can be used for the command.

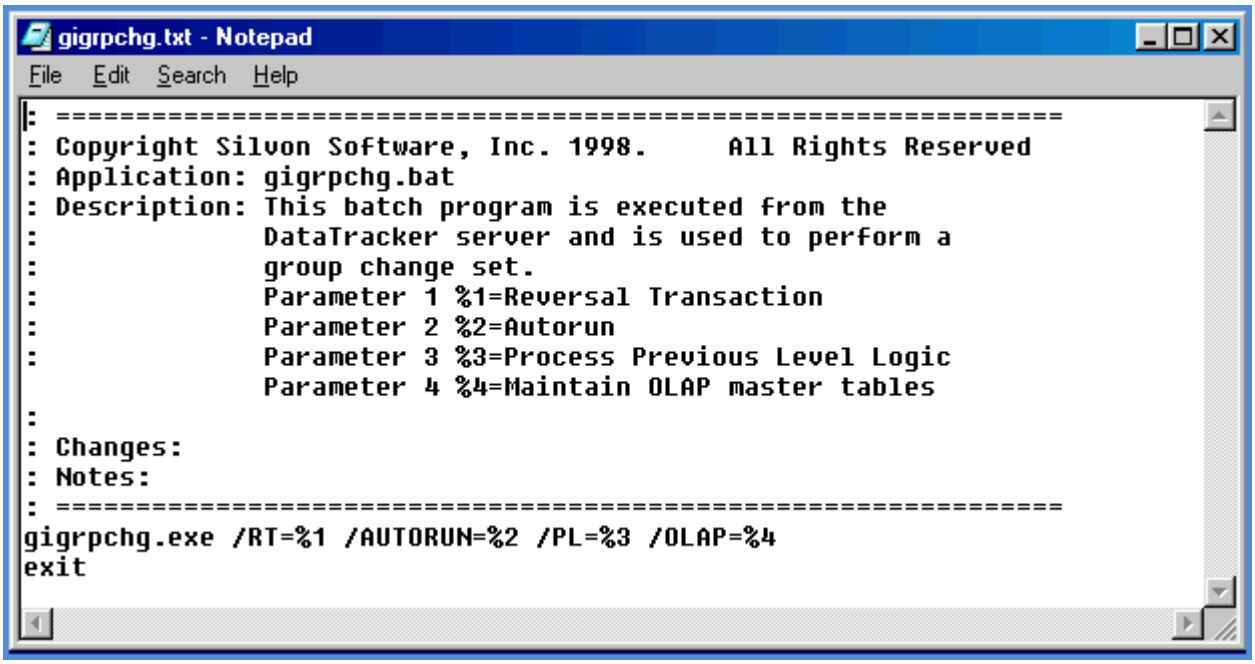
GISLSDRV (Load Process) Command



GIACSDRV (Apply Change Set) Command



GIGRPCHG (Apply Group Change Set) Command



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.

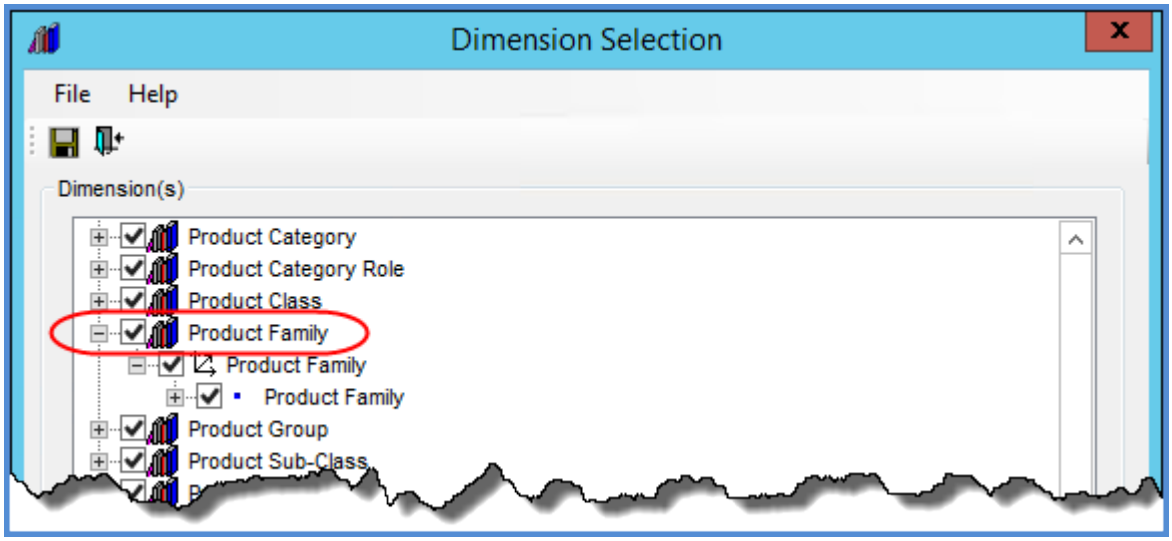
Cubes contain the Stratum data in Analysis Services-compliant format for use by Stratum.Viewer. The data is used for Stratum.Viewer roles, user lists, measure items, and views.

Database

The database for Stratum.Connector 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.

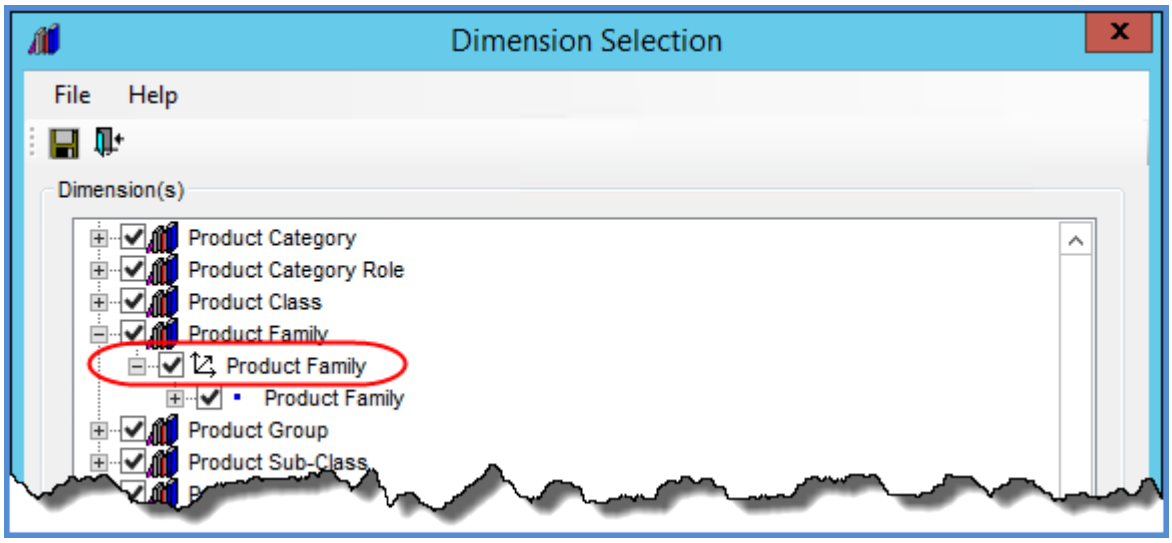
Dimension

There is a 3-part Analysis Services structure of information within Stratum.Connector 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 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 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 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 takes care of translating dimensions from your Stratum.Server database into the 3-part, Analysis Services structure of Dimension.Hierarchy.Level.