



CHAPTER

5

SAS/MDDB Server Software in SAS OLAP and SAS HOLAP Solutions

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Overview

SAS/MDDB Server software has the ability to access and retrieve multidimensional data stored in a variety of formats on local or remote servers. One logical MDDB may be stored in many different formats and locations. Working with distributed multidimensional data requires two facilities that are part of SAS/MDDB Server software: the Distributed Multidimensional Metadata (DMM) facility and the Multidimensional Data Provider (MDP). The DMM enables you to define logical MDDBs. The MDP enables you to retrieve the distributed multidimensional data.

Setting Up Distributed Multidimensional Metadata

A Distributed Multidimensional Metadata (DMM) definition for a given application consists of a Data Group definition and, optionally, one or more Server definitions.

A *Data Group* definition describes a logical MDDB and consists of one or more *Data Source* definitions. Each Data Source definition points to the storage location of one or more subcubes or aggregation levels. Each subcube, or part of a subcube, may be in a different location or storage format. For example, a Data Group can consist of multiple MDDBs, SUMMARY procedure output tables, SAS views, and other data sources that can be located on both local and remote servers.

A *Server* definition is a logical view on a remote SAS session. It is defined by the required SAS/CONNECT software options, including host name and address and the supported communications protocol. Additionally, you can specify processing options including standard or compute server processing, the location of SAS code to submit immediately after establishing the connection, and other options. Server definitions are required only with non-local data sources.

There are three ways to set up a DMM definition:

- Using SAS/MDDB Server software: Issue the **MDMDDB** command on a SAS command line or command window, and follow the directions in the dialog boxes. Refer to the SAS/MDDB Server software online Help for more details on the available options.

- Using SAS/EIS software: From the SAS/EIS Metabase window, follow this selection path:

Edit

▶ Distributed Multidimensional Metadata

and follow the windows. Again, consult the online Help for assistance.

- Put the definitions in a text file and process the file with a metadata batch processing facility. For details, download the Microsoft Word file at

<http://www.sas.com/techsup/download/technote/ts596.doc>

Using the Multidimensional Data Provider

Using MDP in SAS/EIS Software

The Distributed Multidimensional Metadata utility enables you to create an EIS metabase registration from each Data Group. Use this facility to make your Data Groups known to SAS/EIS software. Add drill-path information to the metabase registration by adding the SAS/EIS HIERARCH table attribute. After this setup, you can use the registration just like any other SAS/EIS metabase registrations to build any of the following multidimensional EIS applications:

- Application Screen Builder
- 3D Business Charts
- Bubble Charts
- Maps
- Multidimensional Business Trends
- Multidimensional Charts
- Multidimensional Pie Charts
- Multidimensional Reports
- Organizational Charts.

Another way to use MDP with SAS/EIS software is to access a single remote MDDB from a SAS/EIS application by taking advantage of the MDP Remote Computing capabilities. MDP Remote Computing can have better performance than standard Remote Library Services processing for users with slow server connections or where the remote MDDB is not highly aggregated. Also, especially with large subtables, the MDP caching facility speeds up repeated access to data and reduces network traffic.

There is no need to define a Data Group and Server to use the MDP Remote Computing capabilities: simply add the COMPSRV attribute to the SAS/EIS metabase registration. Also, ensure that your remote connection is set up prior to running the SAS/EIS application, and define a libname on the remote session using the same name and path used in the metabase registration.

Using MDP with SAS/AF Software

You can retrieve data through MDP in an application developed with SAS/AF software and SAS Component Language (SCL). Remember that you must provide a model that tracks the dimensional and navigational information. Use SASHELP.MDDB.HOLAP_DP.CLASS for data retrieval through MDP.

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