

Enterprise Guide and Mapping in SAS

Steve Graham

Basics

This document describes how to create a map to present results from within the SAS environment. Enterprise Guide for SAS provides a point and click interface to V8 SAS with transparent access to not only SAS data, but also other data types, without the need for importing or conversion. Data and results can still be exported to other application formats as well as the web. It provides windows to lead you through tasks to be performed if desired. Finally, it adds the ability to schedule tasks to be run at a later time.

To Start: Click on **Start → Programs → The SAS System → Enterprise Guide**

Many types of data can be inserted directly (without needing to convert or import the data) from the **Insert** menu → **Data**. The “Files of type” selection box can be changed to view several different file formats for use.

Database queries and joins are performed very simply with the Query Builder. To join tables and query fields with a database that is currently in your enterprise project, click on the **Tools** menu → **Query → Create from Active Data**. This will bring up the **Query Builder** window in which you can add the additional tables you want to join with the current data using the **Add Data** button. The tables you have specified will be listed under the **Tables** tab. Joining tables is performed in the **Tables** tab using the mouse to click and drag the relationship. The **Select and Sort** tab then can then be used to select a subset of fields in the tables to be included in the output.

Creating Maps

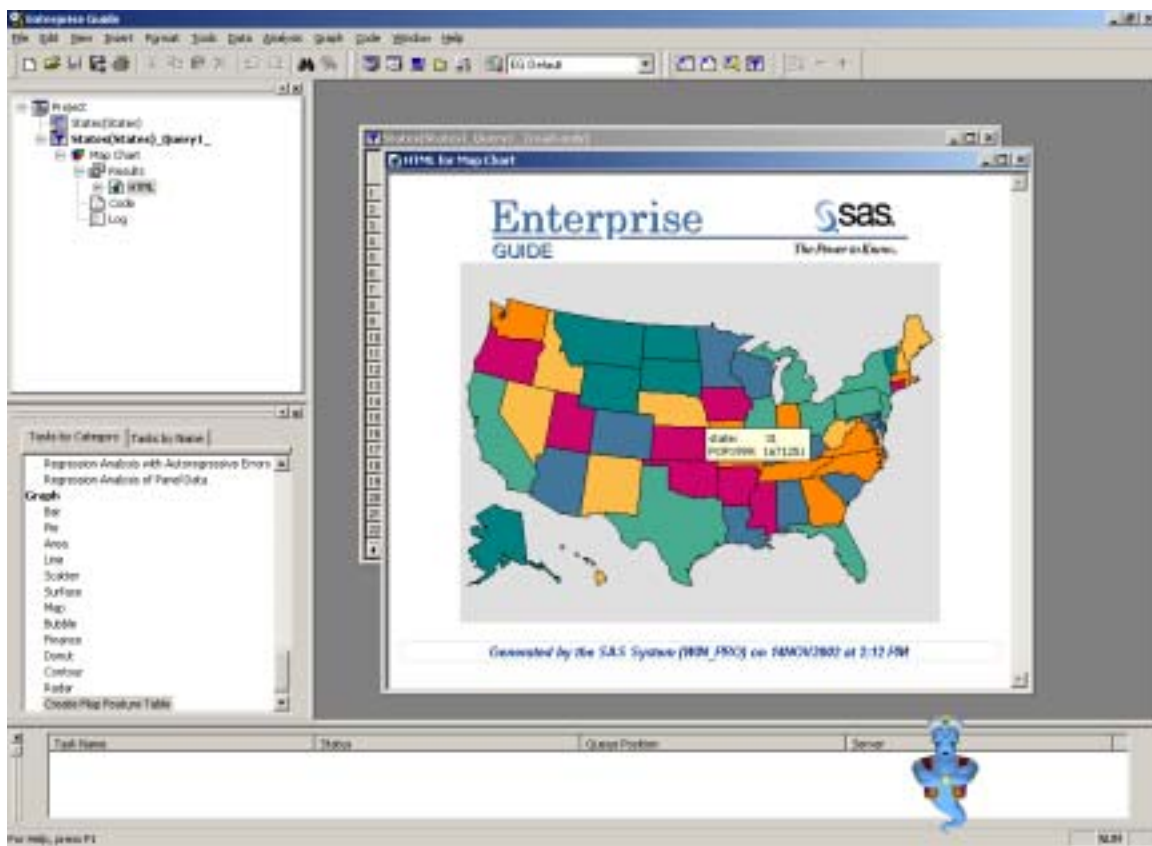
Right click on the Graph-->Map task under the "Tasks by Category" list to get help.

- 1) Add the data to be mapped.
- 2) You may need to create a map feature table if it does not already exist (create the `_MAP_GEOMETRY_` variable/column in the map data file). To do this: add the map data file for the area you are going to map. Then select the “Create Map Feature Table” task from the lists on the left. You must select an ID variable by dragging and dropping a variable from the left to the ID slot on the right. Other variables to keep are also selected here, as well as a few other options on the **Options** tab if desired. When **Finish** is clicked the new Feature table will be created with the `_MAP_GEOMETRY_` variable/column in it.
- 3) Join the data to be mapped and the map feature table:

Click on the **Tools** menu → **Query** → **Create from Active Data**. In the Query Builder window click the **Add Data** button. Navigate to the location of the map data files (default map installation path is “c:\Program Files\SAS Institute\SAS\V8\maps”), select the appropriate map file and click **OK**. If a manual join is necessary then drag and drop a join between fields in the tables. Once the relationship is established, right click on the diamond in the middle of the relationship link and select **Modify Join**. Select the box for “Join type” that includes all rows from the map file and click **OK**.

4) Click on the **Graph** menu and select **Map**. Select a map type: 2D Choropleth, Riser, or 3D. On the **Columns** tab drag “_MAP_GEOMETRY_” from the left to the “Map Geometry” slot on the right and drag the variable to map from the left to the “Column to chart” slot on the right. Modify the **Appearance** tab options as desired and click **Finish**.

The map display properties can be changed by right-clicking on the map and selecting the appropriate option. Map Chart level properties can also be changed by double-clicking on “Map Chart” in the left directory tree. This map can be saved/exported to an html format with rollover information if desired by clicking on the **File** menu and selecting **Save HTML As/Export**.



Penn State Resources

Enterprise Guide for SAS as well as The SAS System for Windows V8 is installed on the PCs in the Computer Lab in 806 Oswald. The agent at the bottom right, as well as the help menu and online help resources and tutorials are all locations for additional info.