Chapter 1 Overview of the ODS Graphics Editor

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What Is the SAS/GRAPH ODS Graphics Editor?

The SAS/GRAPH ODS Graphics Editor is a complementary tool in the ODS graphics system. It is an interactive graphical application used to edit and annotate ODS graphics that are created by a wide variety of SAS procedures. You can save the results as an image for inclusion in a report or as an SGE file that you can edit in the future.

You can launch the editor from a SAS session. You can also download a stand-alone version of the ODS Graphics Editor that runs apart from SAS. When you edit a graph from the Results window in SAS, changes that you make do not affect the original graph in the Results window.

Why Use the ODS Graphics Editor?

Many SAS analytical procedures now produce graphical output automatically using the ODS Graphics system. These graphics are produced using predefined templates that are shipped with SAS. The templates define the structure of the graph, including the plots, titles, footnotes, legends, and other attributes of the graph. You can customize the output graphs by editing the predefined template. However, such customization requires detailed knowledge of the Template procedure and the graph template language (GTL).

You might want to make small changes to a graph without having to work with templates and GTL. For example, you might want to add, edit, or remove a title or a footnote. Or, you might want to change the size, shape, and color of graphical elements such as the markers and lines. The ODS Graphics Editor provides a graphical user interface for making these changes easily without knowing the details of templates and GTL. The ODS Graphics Editor enables you to edit the various elements in the output graph while keeping the underlying data unchanged. In addition, you can annotate a graph by inserting text, lines, arrows, images, and other items in a layer above the graph. You can save the results of your customization as an ODS Graphics Editor (SGE) file and make incremental changes to the file. You can also save the results as a Portable Network Graphics (PNG) image file for inclusion in other documents.

Key Features of the ODS Graphics Editor

Here are some of the tasks that you can perform with the ODS Graphics Editor:

- add, delete, or modify title and footnotes. You can add special symbols, superscripts, and subscripts to titles and footnotes.
- change the visual appearance of the entire graph by changing the applied style.
- resize the graph.
- change the appearance of individual plot elements such as markers and lines.
- show or hide data labels for selected data points in order to reduce clutter.
- · add annotation such as text, lines, circles, images, and markers.
- copy the resulting graph to the system clipboard.

Types of Files That Can Be Edited

You can edit the following types of files:

• ODS Graphics Editor (SGE) files. You can edit SGE files from the SAS Results window or by opening the SGE file in the editor.

In this file format, all of the graphical elements (titles, footnotes, and so on) are available for individual editing. In addition, you can add annotations on top of the graph.

- *Note:* If you are using SAS 9.2 Phase 1, you edit ODS graphics output (not SGE files) from the SAS Results window. When you edit a graph, the ODS Graphics Editor creates a file with the extension .sge, and then displays the file.
- Image files in PNG format.

In this file format, all of the graph elements, including annotations, are flattened into an image and cannot be edited. However, you can add new annotations on top of the image.

See Also

- "Methods Used to Edit ODS Graphs" on page 9
- "Creating Editable Graphics" on page 8
- "About SGE Files Generated on z/OS Systems" on page 10

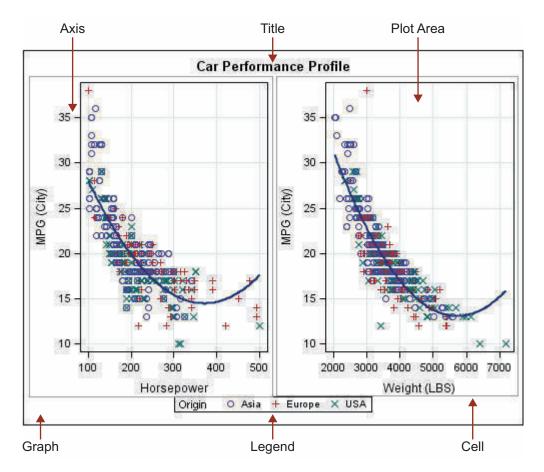
Components of a Graph

The ODS Graphics output is called a graph. In general, a graph is made of up of the following parts:

- titles and footnotes
- one or more cells that contain a composite of one or more plots
- legends, which can reside inside or outside the cell or plot

The following figure shows the different parts of a graph:

Figure 1.1 Components of a Graph



General Editing Concepts

You can edit and annotate graphs. Editing and annotating tasks differ from each other in the following ways:

• When you edit a graph, you edit elements of the graph such as the title, footnote, or legend. You can also change the visual characteristics of the plots, such as the colors of markers and lines. You can change the style applied to a graph, and you can resize the graph.

Some of these edits can cause the layout of the graph to change.

• When you annotate a graph, you add objects on top of the original graph. You can add text, lines, arrows, ovals, rectangles, images, and markers. Annotation objects are rendered in a separate layer on top of the graphical elements and do not cause any changes to the layout of the graph.

Annotation objects can be attached to graph data so that, if the graph is resized, the annotations move with the data. For more information, "Understanding Annotation Objects and Data" on page 45.

Use of Locale

The ODS Graphics Editor uses the system locale, but the graph itself uses the SAS locale. For example, if the axis label is present, the label is shown in the language that SAS uses.