## **TechGraf Version 1.0**

## **INTRODUCTION**

Scientists, engineers and other technically oriented people often find themselves dealing with large data sets, which must be analyzed graphically. Most commercial charting packages and spreadsheets are oriented towards business style bar and pie charts, and are rather cumbersome. Technical graphics packages are often very powerful, excelling at exotic three and four dimensional plots, but are sometimes hard to use, expensive, or slow. TechGraf complements these sorts of packages by doing an excellent job at the sort of graph used most in many technical disciplines: two dimensional xy and xyyy line and scatter plots. TechGraf allows you to take a quick look at your data, analyze it using curve fitting, interpolation, the Data Cursor, etc, and produce presentation quality plots of your data, all with a convenient, Windows standard interface.

## **INSTALLATION**

Run the Install.exe program from File Manager or from the File | Run menu of Program manager. Enter the source and destination paths. Install will create the destination directory, copy the files, create a Program Manager group, and register the TechType OLE server with your system registration database.

If you would rather install manually:

Copy the files "techgraf.exe", "techtype.exe" and all the documentation files to any subdirectory. Make an icon in Program Manager for techgraf.exe. Run techtype.exe once from the File|Run menu of Program or File Manager, which will register the OLE server, printing a message if successful, and then abort. TechType is the text handler for TechGraf, but can also be used with other OLE Client.

## **DOCUMENTATION**

The primary documentation for TechGraf is the on-line help file, techgraf.hlp. The following information may be helpful to get you started.

Currently, TechGraf will only read data from comma, space or tab deliminated text files. In contrast to many charting packages, TechGraf does not have an internal spreadsheet that you store your data in. TechGraf chart files (.tgr) only contain formatting and OLE data, and a pointer to your data file(s). Your data will be reread from the original source each time the chart file is opened. This allows you to change your data with a spreadsheet or custom program and your TechGraf charts will automatically update themselves to reflect the change, without having to be reread into TechGraf (there is also a Reread Data menu command).

Your first step upon starting TechGraf for the first time will be to open a data file using the Data Open Data File command (or the corresponding button), which will bring up the Format File Settings dialog. Select your Columns to plot (Column 0 is sequential from 0 to N, allowing single column data to be viewed), select OK, and you should have a plot of your data. From there, most of the menu commands should be self explanatory. Note that the Data Readout and Interpolate dialog boxes are modeless.

The mouse interface is object oriented. Each object (axis, plot, or OLE object) has a name and a rectangle. Left clicking on an object will select the object. Right clicking will bring up a menu or dialog box, allowing formatting of that object. Some objects can be moved or resized with the mouse after being selected. Double clicking on an OLE object will allow editing of the object

(actually the Primary Verb, which is not necessarily Edit).

Clicking and dragging with the mouse will define a rectangular area known as a focus rectangle. All objects completely contained within the focus rectangle will be selected. The focus rectangle also is used be many commands as initial limits or the bounding rectangle. The Data|Zoom command uses the focus rectangle to reset the axis limits to view the data contained in the focus more closely. If a focus rectangle is defined, the Data|Open Data File command will create new axes with lengths and positions corresponding to the focus rectangle. If no focus rectangle is defined, the Data|Open Data File will use the first axes created, allowing several data sets to be plotted on the same axes.

The results of interpolations and curve fits are written to the Output window. The text in the Output window can be copied to the clipboard, or saved to disk.

If the default sizes are too big or small to see comfortably on your display, you can change the viewing scale by selecting the View|View Scale command. The default view scale and other default behavior can be set with the Format|Defaults command.

Thank you for evaluating TechGraf. See the file "register.txt" for registration information.

Ronald B. Jones ronjones@xnet.com