



HyperXpress Tutorial Series

Lesson One: Using HyperXpress to print from your Windows Application

After proper installation of [HyperXpress](#) / [ProPress](#), you should find that a new printer was installed on your system (e.g., you will see a new printer in the list of available printers within your Windows applications). The new printer will be called either "HyperXpress Printer Interface" or "ProPress Printer Interface" depending upon which product was installed.

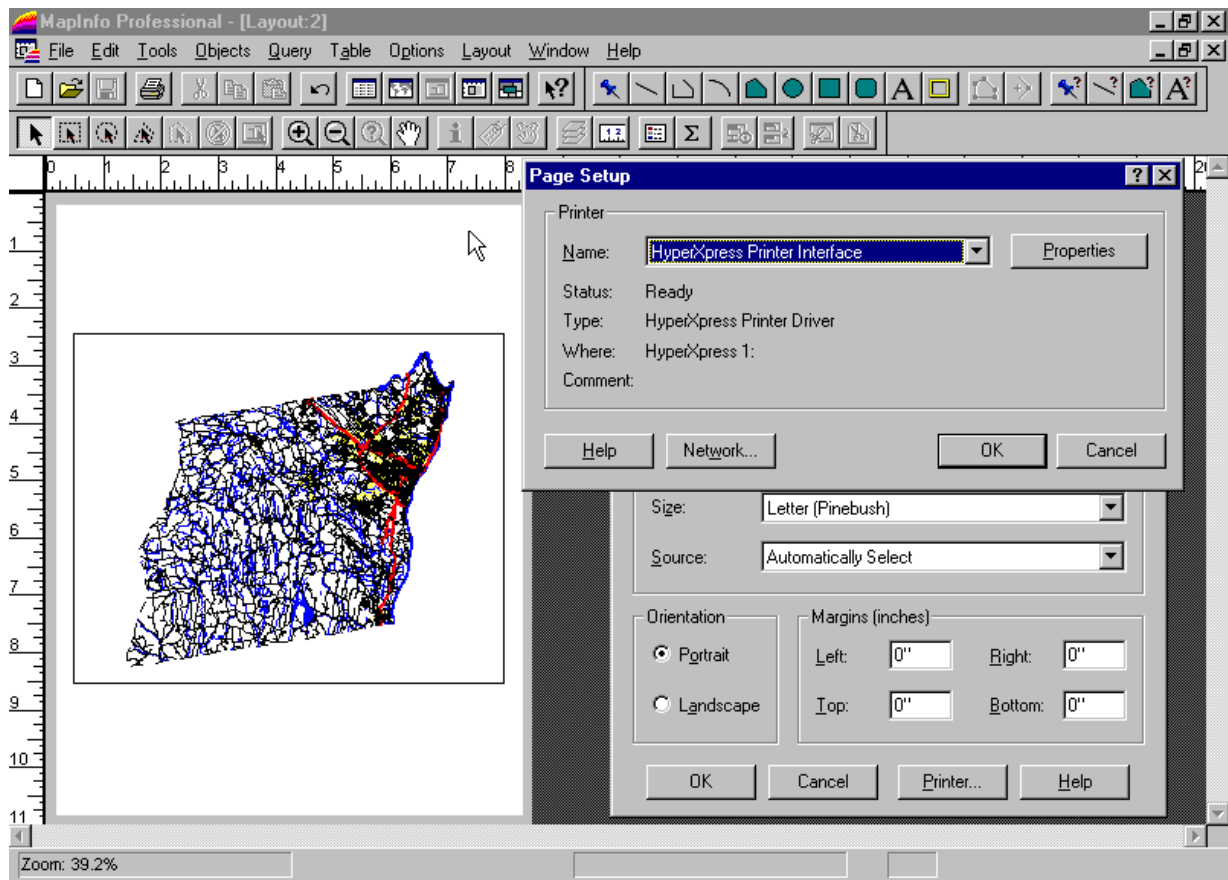
The basics of printing using HyperXpress can be described in these simple steps. Each step is presented in detail in the following pages with illustrations showing you what you should expect to see on your screen. The basic steps for printing with HyperXpress are:

1. Performing Page Setup in your Windows Application
2. Printing to the HyperXpress Printer Interface
3. Basic Settings on the HyperXpress Main GUI (Choosing your Windows Printer and other basic settings)
4. Using the Plot Layout features to adjust your plot.
5. The stages of HyperXpress Image Processing
6. HyperXpress Viewer
7. The Viewer's Print Dialog
8. Printing from the Viewer

Performing Page Setup in your Application

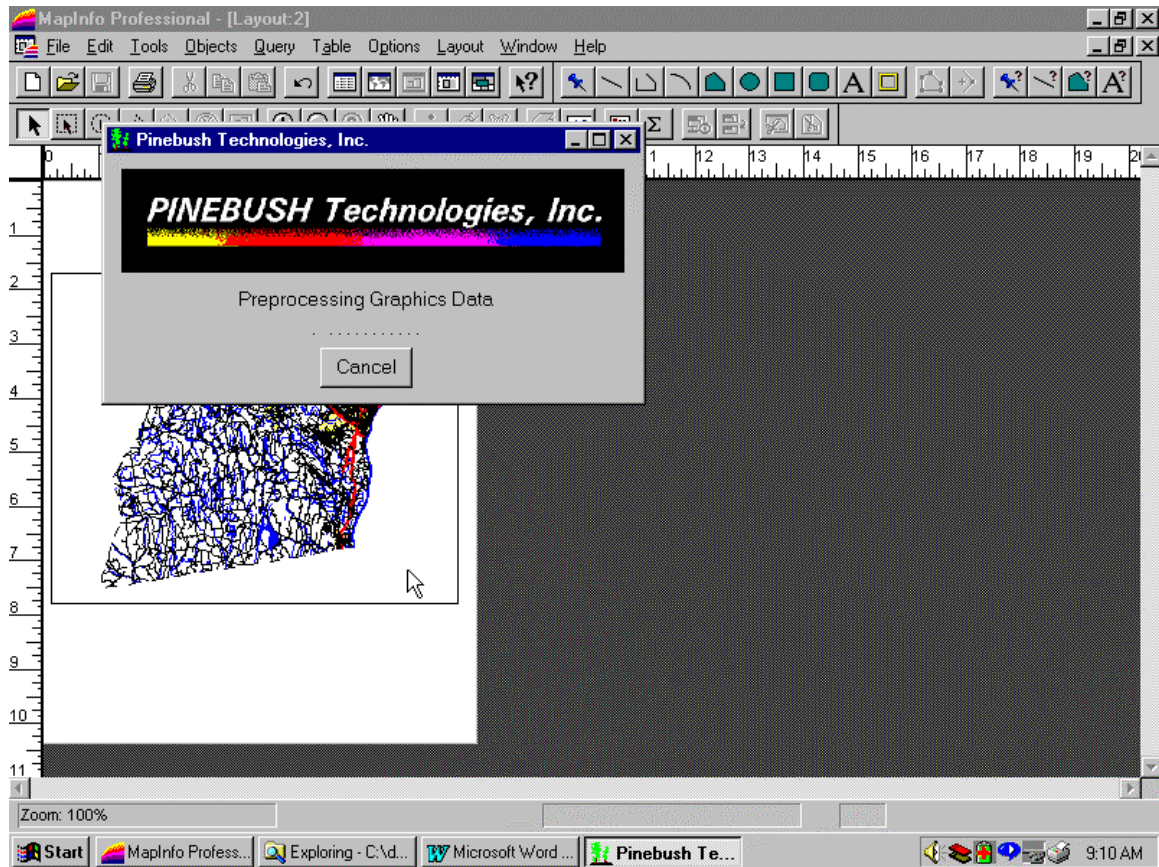
From within your application, you can use HyperXpress/ProPress like an ordinary printer. Perform the normal steps associated with page setup within your application, selecting such things as paper size, page orientation, etc. Below is an example using MapInfo where the “Page Setup” window for the HyperXpress Printer Interface is shown. The “Page Setup” window may look slightly different within different applications, but it should be similar. You can find this feature in almost any Windows application on the application’s “File” menu. There you should find an option called “Page Setup”.

When using HyperXpress, the most important setting is the page size (or sometimes called paper size). Often this setting is located right on the main Page Setup screen and often you need to click on the **properties** button to set it. Here you will need to pick a paper size (e.g., letter). This is even true for roll-fed, wide format plotters even when the actual paper loaded in the printer is larger than your data. This setting tells HyperXpress how much paper it is allowed to use.



Printing to the HyperXpress Printer Interface

When you have completed your page setup, you can print to HyperXpress/ProPress like an ordinary printer using the application's "Print" menu or printer icon on the toolbar (if it has one). After you begin the print from your application, a message box will briefly appear on your screen that has the Pinebush logo and a message that says "Preprocessing Graphics Data". During this portion, the application is generating a plot file that HyperXpress will process.



Basic Settings on the HyperXpress Main GUI

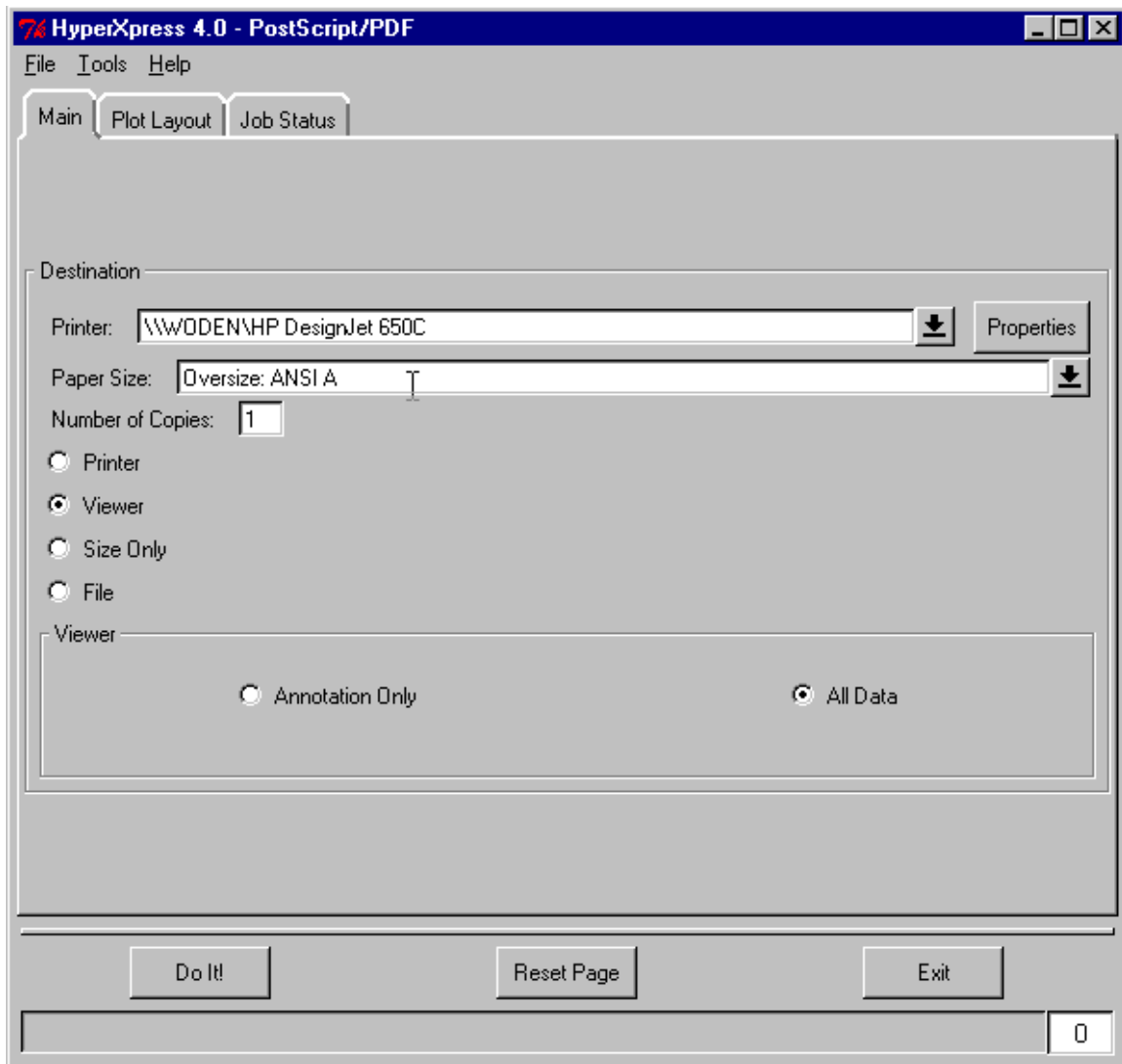
Now the HyperXpress/ProPress GUI (graphical user interface) will appear. HyperXpress is set up such that you only need to set a minimal number of options to complete the printing process. The only option absolutely necessary to select is the Destination Printer. This list will contain all of the printers that are normally available in your Windows environment.

You may optionally change the plot's layout by using HyperXpress's layout feature described briefly on the next page. See the tutorial section on using the "Plot Layout" features for further advanced details.

When you select a printer, the "Paper Size" selection (directly under the printer selection) will automatically be set to the best fit paper size that matches the paper size you selected during the "Page Setup" within your application. It may turn out that the paper size name is not exactly the same (for example, if you set ANSI C in MapInfo, you may end up with ARCH C as your paper size). This is due to variations in paper margins for common form sizes on different printers.

The only other setting that is needed is to determine if you want to preview before you print or if you want to print directly to the printer with no further intervention. By default, HyperXpress is set to preview the job before printing. If you wish to change this, simply change the destination from "Viewer" to "Printer" on this main screen.

To continue the printing process, press the **Do It!** button.



HyperXpress Plot Layout

The Plot Layout tab is used primarily for specifying how a plot will appear on a piece of paper.

Plot Sizing Panel

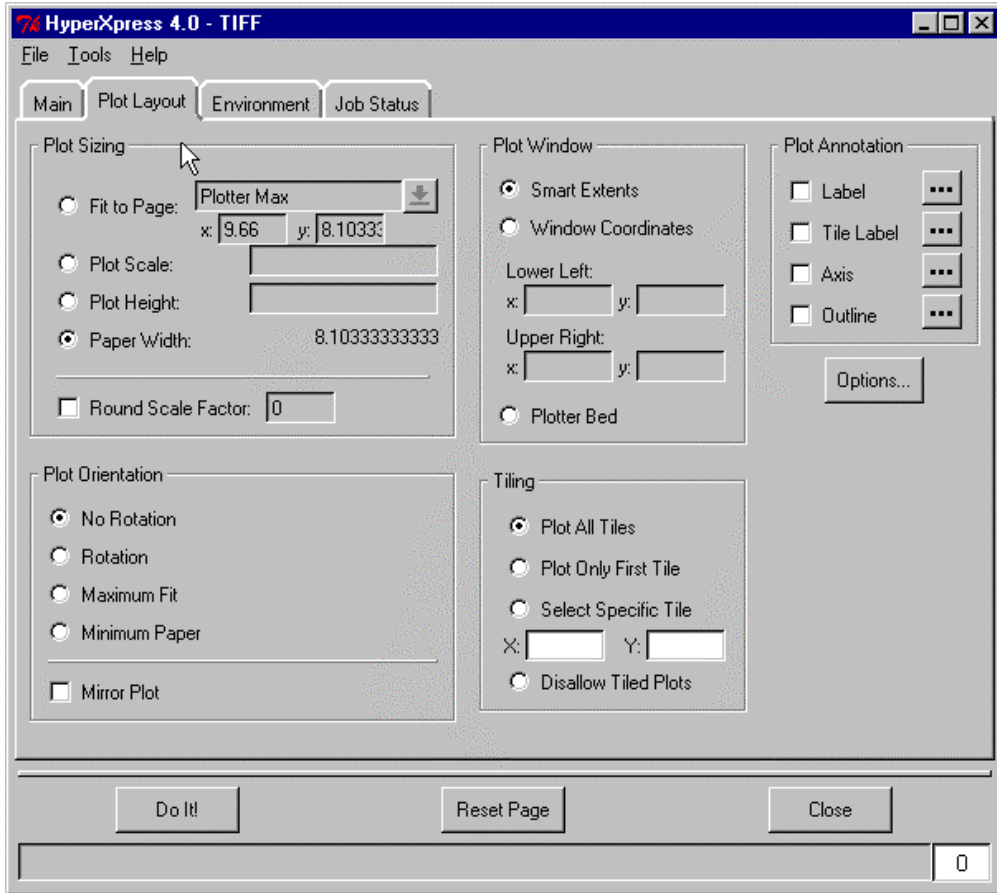
You can specify the size of the plot in two ways: By automatically scaling the image to a predetermined size (e.g., form size, paper width, etc.) or by stating a specific scale that is required. If the sizing option that you selected is larger than the paper size selected (during the Page Setup step), then the plot may need to be tiled. See the section below on tiling to determine the behavior that you desire.

Note that the default settings should provide you the output as you defined in the “Page Setup” step within your Windows application. The scale is set to 1.0 and the tiling option is set to only print the first tile. If you find that your images are slightly clipped, then you may want to select the “Fit to Page” option set to “Plotter Max”. This will adjust the scale slightly so the image will always fit on the paper size selected.

Tiling Panel

HyperXpress is capable of tiling your image onto multiple sheets of paper. If the data sizing is larger than the paper size selected, you will need to determine the appropriate way for HyperXpress to behave with regard to tiling. These settings are located in the “Tiling” panel. There are four options:

Plot all Tiles	Image will scaled to the specified size and if necessary tiled onto multiple pieces of paper.
Plot only first tile	Image will be scaled (like the above option) but only the first tile will be printed. In essence, the plot will be clipped to the first page.
Select Specific Tile	Image will be scale, but user selects which tile to print.
Disallow Tiled Plot	If tiling is required, HyperXpress will abort.



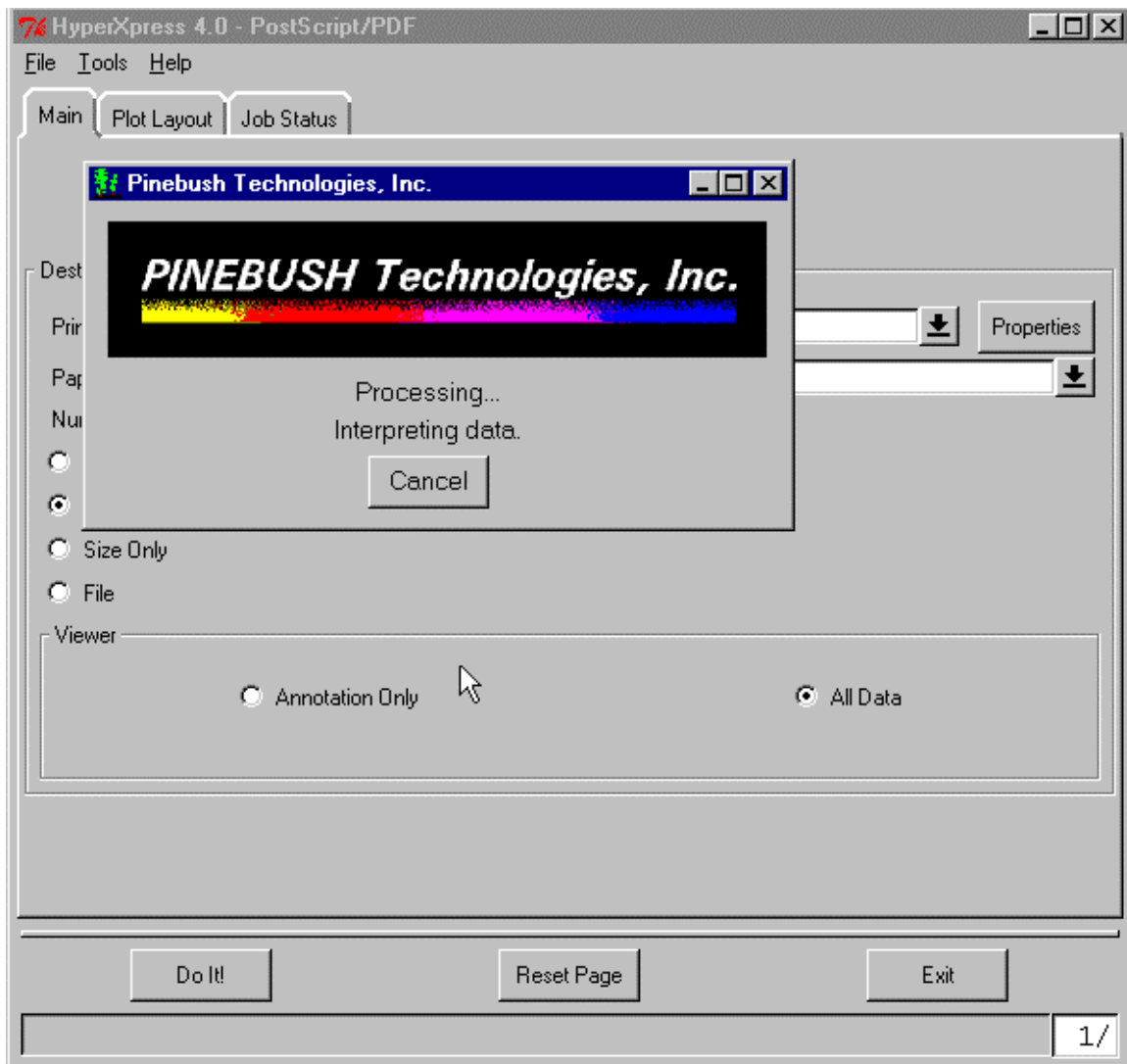
The Stages of HyperXpress Image Processing

After the “Do It!” button is pressed, a message dialog appears with the Pinebush logo. It indicates three phases of a job in progress:

- Initializing: Reading the data to determine it’s size
- Interpreting Data: Reading the data and analyzing it’s contents
- Rendering: Creating the ripped image for your printer/viewer

These phases are what is referred to as the “RIP” (Raster Image Processing) process. The RIP process is generally the most time consuming and resource intensive portion of printing. It is this process that usually takes your printer a long time to complete (or often will fail) if your printer is incapable of handling the complexity and/or size of your print job. By doing the ripping process on your computer, you free up the printer from having to perform this task and generally reduce the total printing time and enormously increase the likelihood of producing a correct plot.

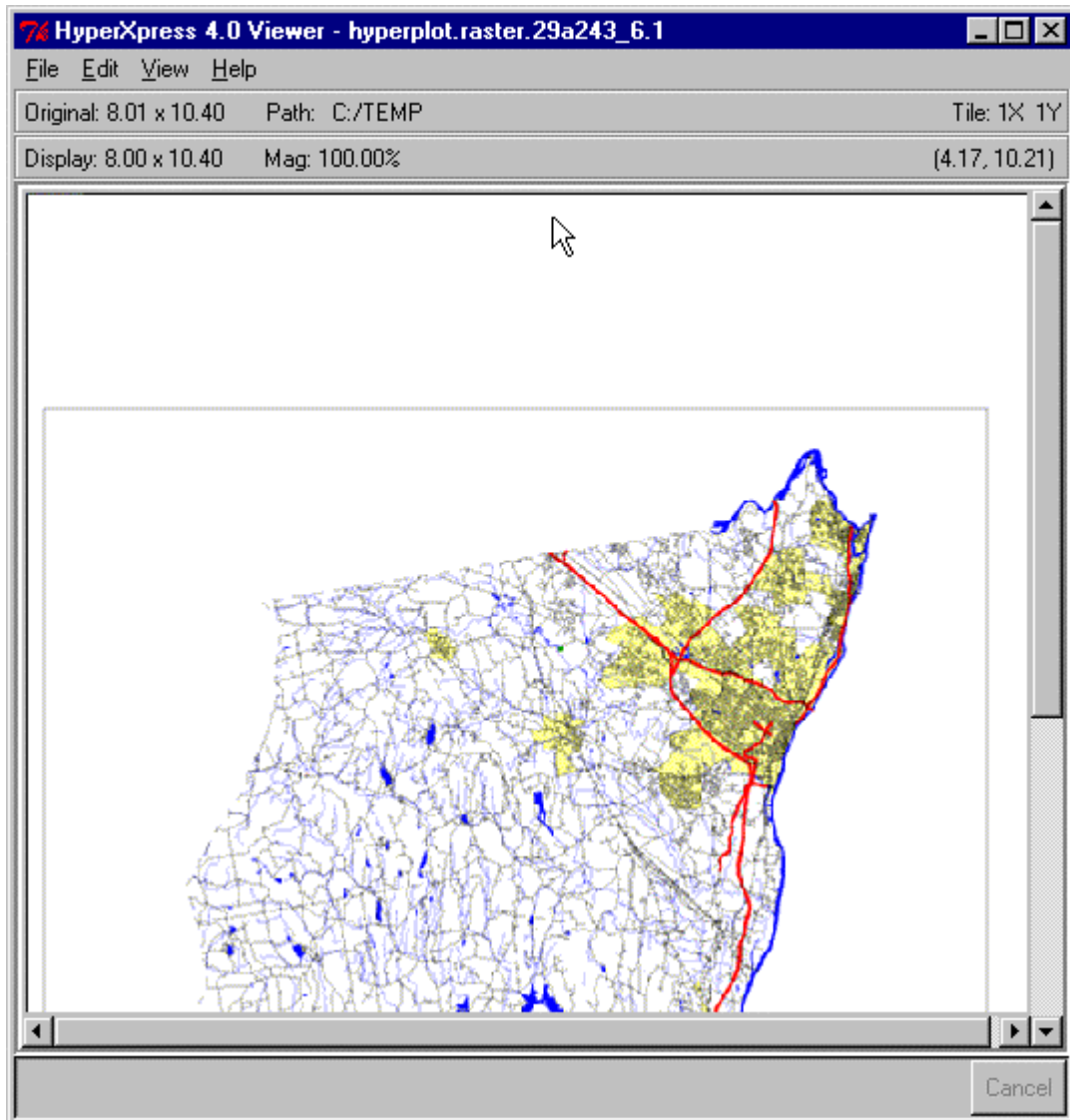
The dialog that appears contains a **Cancel** button that can be used at any time to cancel the job in progress.



HyperXpress Viewer

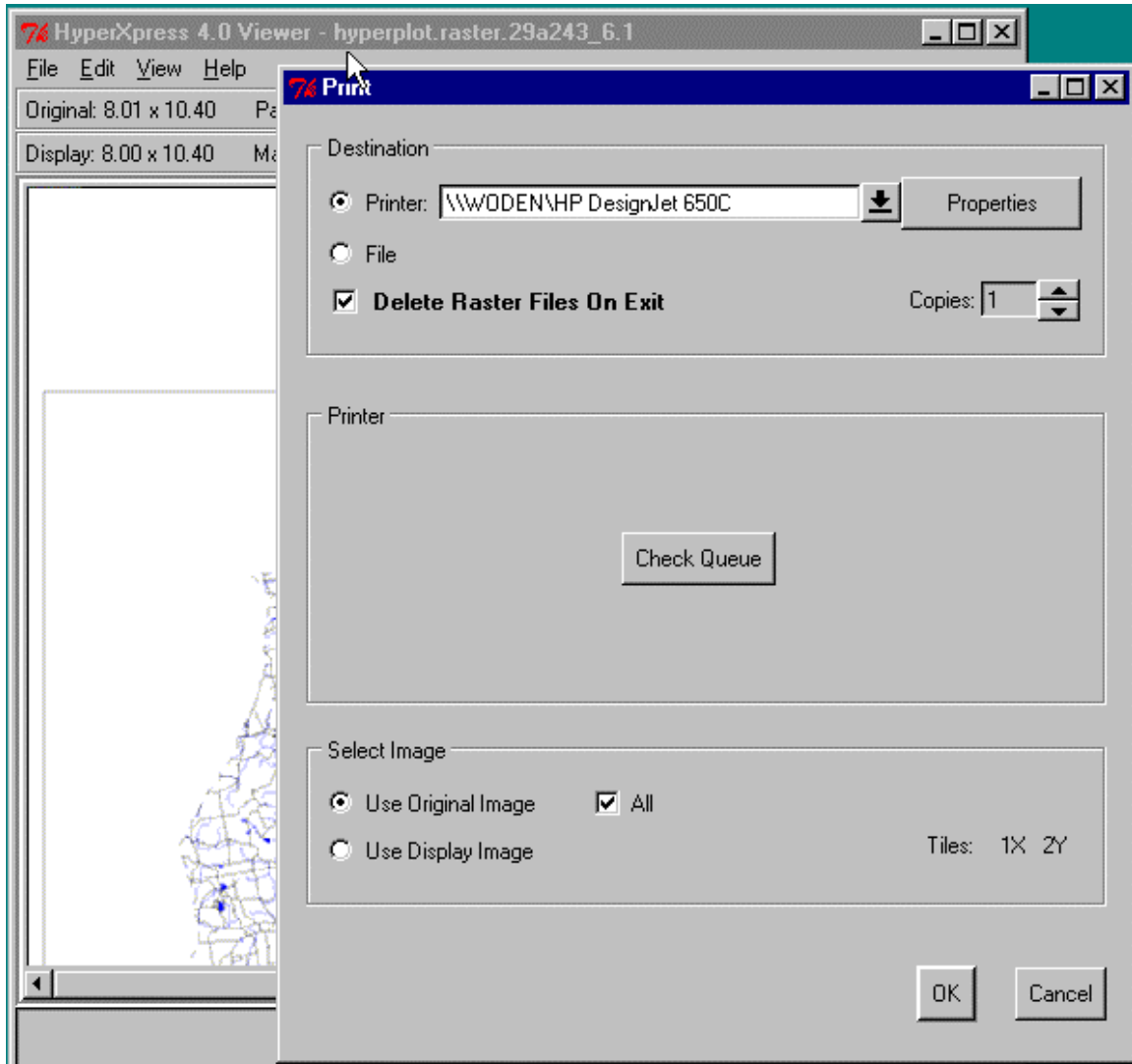
After the final stage of “Rendering” is completed, the Viewer screen will appear if you selected “Viewer” as your print destination. This can be used to do a final check on your print job prior to actually putting the image on paper. This is a good way to use HyperXpress to help you save time and money by only making plots that are correct.

You can use the viewer to accomplish a number of last minute adjustments to your plot to help ensure that you get the plot that you want without any unneeded waste. With the viewer, you can crop, rotate, flip, mirror and resize your plot. You can also use it to print a small size draft of the image without the need to re-rip the plot. For additional information on using the viewer and it's full set of features, please refer to the tutorial section on the viewer.



The Viewer's Print Dialog

If you have decided that the plot that you have generated is correct, it is likely that it is now time to put your image on paper. You may also save the ripped image to a file and print it at a later time. For additional information on advanced viewer features, please refer to the tutorial section on using the viewer. The viewer's print dialog provides a number of options. In the simplest case where you just want to print what you have created, you can do so by clicking on the **OK** button.



Printing from the Viewer

Because the ripping process is completed by this stage, the printing of the image will be very fast. There will be a brief period where HyperXpress will process the image and place it into the print queue. Once the job is through the queue and has arrived at the printer, the printer should begin to print very quickly afterward.

Just in case something goes wrong, as is often the case with printing (paper jams, out of ink, etc.), you may choose to leave the viewer open until your completed plot is in hand. By doing so, you can easily re-send the job without the need to re-rip or repeat any of the other previous steps.

