

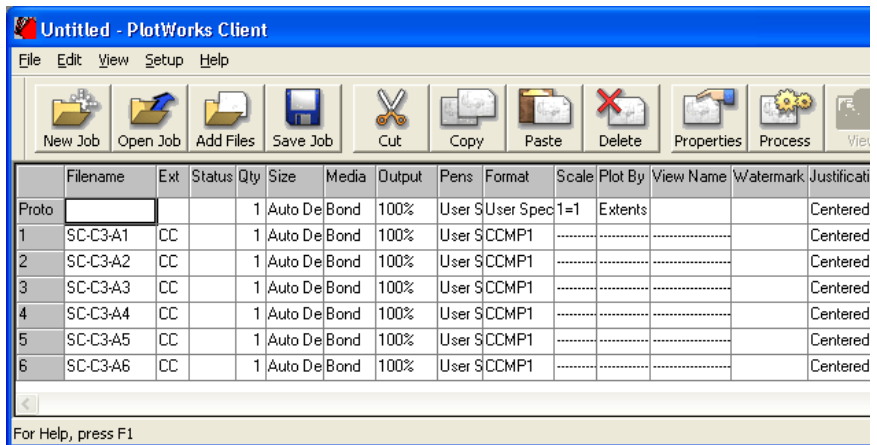
Chapter 4

The PlotWorks Client

The PlotWorks Client's main function is to collect files for printing, set printing parameters, create the print job ticket and send the file for printing. The PlotWorks Client can also:

- Create print jobs containing multiple format image files
- Sort files
- Choose which page to print from a multipage document
- Create and save pen sets
- Reduce and enlarge images
- Add watermarks, labels and overlays
- Add margins and justify the image on the medium
- Nest jobs
- Send jobs over a network, modem or disk
- Print digitally collated sets
- View images before printing
- Process files to check for errors before submitting
- Apply finishing options like folds, binding, hole punching etc.
- Add images to a job directly from a Twain device.

*Fig 4.1
The Plot-
Works Cli-
ent with
several im-
age files
listed.*



The PlotWorks Client Window

This section provides a brief description of the PlotWorks Client window components.

The Toolbar

The following buttons appear on the PlotWorks Client toolbar:



- **New Job:** Creates a new, blank job file.



- **Open Job:** Opens an existing job file.



- **Add Files:** Adds image files to the print job.



- **Save Job:** Saves the current job file.



- **Cut:** Removes the selected row from the grid placing it in temporary memory. From there, it can be pasted into a new position or in a different job file.



- **Copy:** Places a duplicate of the selected row in temporary memory. The duplicate can be pasted and edited apart from the original.



- **Paste:** Pastes the last row placed in temporary memory onto the grid.

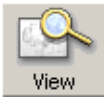


- **Delete:** Removes the selected row(s) from the grid.



- **Properties:** Displays or hides the Detail Property Sheet.

- **Process:** Processes selected images or all images in a job.



- **View:** Processes the selected image and displays it in the viewing application.



- **Output:** Is used to set up output options and to send entire jobs or selected files to a specified destination.

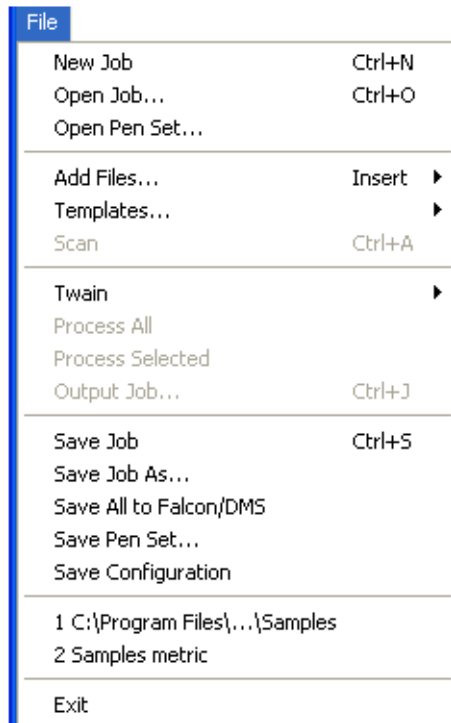


- **Scan:** Opens the optional Scanner Interface application.

The Menus

The File Menu

*Fig 4.2
The Plot-
Works Cli-
ent File
menu*



The **File** menu contains options for job tickets.

These include:

- **New Job:** Creates a new, blank job ticket. (Keyboard shortcut: Ctrl+N)
- **Open Job:** Opens an existing job ticket. (Keyboard shortcut: Ctrl+O)
- **Open Pen Set:** Applies an existing pen set to the selected image.
- **Add Files:** Adds images to the print job. You can add files from a directory on your network, or from an FTP directory. (Keyboard shortcut: Insert)
- **Templates:** Is used to save and open settings created for watermarks, margins and labels.
- **Scan:** Opens the Scanner Interface application if installed. (Keyboard shortcut: Ctrl+A)
- **Twain:** Adds images from a Twain scanner to a job ticket.
- **Process All:** Processes all images in a job.
- **Process Selected:** Processes the selected file(s) in the grid.
- **Output Job:** Is used to select output options and output the job. (Keyboard shortcut: Ctrl+J)
- **Save Job:** Saves the active job ticket. (Keyboard shortcut Ctrl+S)
- **Save Job As:** Saves the active job ticket under a selected new name. The original document will still exist under its original name. The new document displays in the active window.
- **Save Pen Set:** Saves the selected file's pen set, under a specified filename.
- **Save Configuration:** Saves job-wide settings to the configuration file, conf.plp.
- **1, 2, 3, 4 . . . etc.:** Opens the selected job ticket.
- **Exit:** Exits the PlotWorks Client, prompting you to save unsaved changes, if any.



The Edit Menu

The Edit menu contains options used to organize image files on the grid.

Fig 4.3
The Plot-
Works Cli-
ent Edit
menu

Edit	
Cut Row	Ctrl+X
Copy Row	Ctrl+C
Paste Row	Ctrl+V
Delete Row	Ctrl+Del
Copy Row To Prototype	
Copy Field	Ctrl+R
Copy Field Up	Ctrl+U
Copy Field Down	Ctrl+I
Sort by Column	Ctrl+M
Revision Highlighting	Ctrl+E

The following items are available under the **Edit** menu:

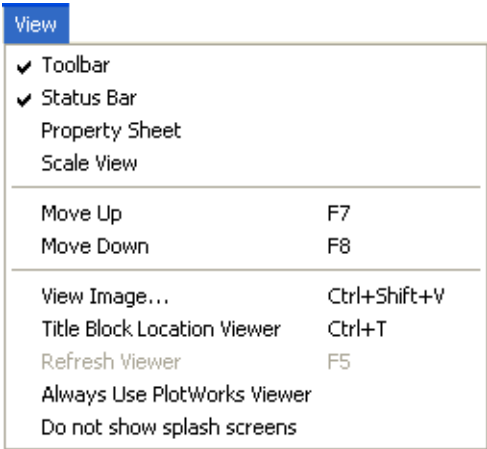
- **Cut Row:** Removes the selected row from the grid and places it in temporary memory. From there, it can be pasted into a new position in the same or different job ticket. (Ctrl+X)
- **Copy Row:** Places a duplicate of the selected row in temporary memory. (Ctrl+C)
- **Paste Row:** Lets you paste a row from temporary memory onto the job grid. (Ctrl+V)
- **Delete Row:** Deletes a row from the job ticket. *This does not delete the actual image file from your computer.*
- **Copy Row to Prototype:** Copies all image file parameters to the Prototype row.
- **Copy Field:** Copies the value of a selected field to other fields in the same column. This is useful when you want to change all values in a column efficiently. (Ctrl+R)
- **Copy Field Up:** Copies the value of the selected field to all fields above the selected field in the same column. (Ctrl+U)
- **Copy Field Down:** Copies the value of the selected field to fields below it in the same column. (Ctrl+I)
- **Sort by Column:** Sorts selected columns alphabetically. (Ctrl+M)

The View Menu

The View menu is used to change the appearance of the PlotWorks Client window, and for processing and viewing options.



Fig 4.4
The Plot-
Works Cli-
ent View
menu



The following items are available under the **View** menu

- **Toolbar:** Hides or shows the toolbar.
- **Status Bar:** Hides or shows the status bar.
- **Property Sheets:** Hide or shows the Detail Property Sheet.
- **Scale View:** Hides or shows an illustration depicting the original and output size of a selected image.
- **Move Up:** Moves the cursor up one row in the grid. (**F7**)
- **Move Down:** Moves the cursor down one row in the grid. (**F8**)
- **View Image:** Processes the selected image and displays it in the selected viewing application. (**Ctrl+Shift+V**)
- **Title Block Location Viewer:** Opens the Title Block Location dialog box when an image is selected in the job grid. .
- **Refresh Viewer:** Updates the Image Viewer window. (**F5**)
- **Always Use PlotWorks Viewer:** Forces the PlotWorks Image Viewer to open when you select **View Image**, regardless of the file format.



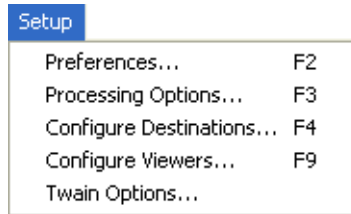
NOTE: Double-clicking on a file in the PlotWorks Client opens the Viewer with the selected image file displayed.

- **Do not show splash screens:** Select this option to disable the splash screens. Splash screens are the windows that appear briefly when PlotWorks applications are first launched. The splash screens are enabled by default. When disabled a check mark appears beside this option.

The Setup Menu

The **Setup** menu is used to configure the job ticket.

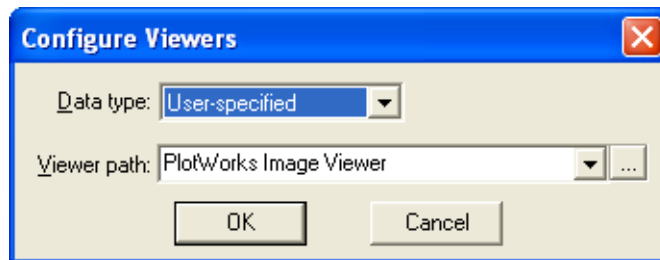
*Fig 4.5
The Plot-
Works Cli-
ent Setup
menu*



The following items are available under **Setup**

- **Preferences:** Is used to set job-wide preferences.
- **Processing Options:** Is used to set job processing options.
- **Configure Destinations:** Is used to set up output destinations.
- **Configure Viewers:** Is used to select third party image viewers. Selecting this menu item opens the Configure Viewers dialog box.

*Fig 4.6
The Con-
figure
Viewers
dialog box*



Select the file type from the Data Type drop down list and then select the viewer you would like to use for this file type from the Viewer path drop down list. The viewer must support the file format that you wish to display. If the Viewer you wish to use is not listed, click on the provided browse button and select the application file for the viewer you want.



*The “Always Use PlotWorks Viewer” setting in the **View** menu over rides choices made here.*

- **Twain Options:** Is used to access the Twain Scanning Options dialog box.

The Help Menu

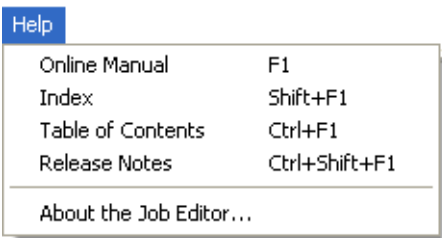
The **Help** menu provides access to online help files and program information.

The following options are available under **Help**:

- **Online Manual:** Opens the online manual at the PlotWorks Client chapter
- **Index:** Displays the help index file.
- **Table of Contents:** Displays the table of contents for the online manual

- **Release Notes:** Displays the latest PlotWorks information.
- **About:** Displays program version and copyright information.

Fig 4.7
The Plot-
Works Cli-
ent Help
menu



The Job Grid

When images are added to a job ticket, they are listed in the job grid and assigned the same parameters as the Prototype row, except for the file name and type. Each row of a job grid represents an image file and the parameters assigned to it.

Print parameters can be changed directly on the job grid. Simply click in the cell you want to edit. Either the cursor will flash, indicating that you can type in your changes, or the cell will change to display a drop down list that you can select from.

Fig 4.8
The Plot-
Works Cli-
ent Grid

	Filename	Ext	Status	Qty	Size	Media	Output	Pens	Format	Scale	Plot
Proto				1	AUTO	Bond	100%	USER	USER	-----	-----
1	plpmap	dwg		1	AUTO	Bond	100%	USER	ACAD		Exte
2	Scenario	dwg		1	AUTO	Bond	D SZ	USER	ACAD	1=19.44	Exte

The first row of the grid, **Proto**, lists a set of default parameters. Images added to a job are listed beneath the Proto row.

To move through the grid use the:

- Scroll bars
- Arrow keys on your keyboard
- Arrow keyboard equivalents: **F7** (up) and **F8** (down)
- **Page Up** and **Page Down** keys
- Click on the desired cell with the mouse

The Job Grid Columns

The columns of the grid display the assigned printing parameters for each job. Depending on the image format, some print parameters do not apply. Those cells display a line.

The following columns are available:

- **Filename:** The image file name, not including its three-character extension.
- **Ext:** The file extension.
- **Status:** The processing status of an image file is displayed automatically in the status column. The following processing statuses are used:
 - **O:** User selected **Ignore Warnings** or **Ignore All**
 - **W:** Processing warnings
 - **- :** The image was skipped during processing
 - **C:** The image was prechecked successfully. All needed information and reference files, etc., exist
 - **P:** The image was processed successfully
 - **F:** The file could not be processed or printed due to fatal errors.

Job tickets created with DOS PlotWorks, display the following statuses:

- **?:** The image was printed with warnings
 - **±:** The image was corrected with Error Free Printing
 - *****: The image was printed successfully
 - **Qty:** Stands for **Quantity**. Enter the number of copies to print, up to 99. Enter **X** or **0** for overlays and other files you do not want to print.
 - **Size:** Select the original image size. To enter a custom size, select **User Specified**, then enter the width, height, and origin values on the Specified Size tabbed dialog box. To auto detect the image size, select **Auto Detected**.
 - **Media:** Select a printing medium.
 - **Output:** Select a finished size for the print, or select a percentage of the original size. To enter a custom size, open the **Detail Property Sheet** and click on the **Output Setup** tab. In the field labeled **Output Size**, select **User Specified**, then enter the width, height, and origin values. To force the use of the closest standard media size, select **Auto Standard**.
 - **Pens:** This field always displays **User Specified**. To use a different pen set, use the Pens tabbed dialog box or import a previously defined pen set.
 - **Format:** The image file data format. The PlotWorks Client automatically detects this format when you use the **Add Files** option. PLP recommends that you do not change automatically detected format values.
 - **Scale:** This column is used only for AutoCAD or MicroStation files. Enter one of the following in this cell:
 - A valid AutoCAD scale (printed units = drawing units).
-

- A valid MicroStation scale (master units per inch) for MicroStation DGN files.
- **FIT**, for automatic scaling depending on the Specified Size. Refer to “Specified Size tabbed dialog box” on page 4-18 for more information.



Scaling to FIT cannot be used when the Specified Size is set to Auto Detected.

- **Plot by:** This column only applies to AutoCAD or MicroStation drawings and is used to select printing boundaries. The following boundaries are available:
 - **Extents:** Prints all drawn entities in the image file.
 - **Display:** Prints the last saved screen display of the image.
 - **Limits:** Prints a specified range of coordinates.
 - **View:** Prints a predefined view. MicroStation drawings are always printed based on a view.
 - **Layout:** This boundary can only be used with AutoCAD 2000 processing. It prints a predefined layout.
- **View Name:** Cells in this column are only available when **View** is selected in the Plot By field for AutoCAD or MicroStation drawings.

Allowable entries for Microstation files are:

- the saved view name
 - the special view names of **1** through **8** (representing the allowable MicroStation view window numbers);
 - a selection cell name in addition to a view name or number. For example: **topview CELL<linepa>** where *topview* is a name given to a view and *linepa* is a named cell.
 - **Watermark:** The watermark text is displayed in this field when a watermark is applied to the image. See “Watermarks tabbed dialog box” on page 4-34.
 - **Justification:** This field is used to justify the image on the media. See “Adding Margins” on page 4-39.
 - **Mirror:** Select whether or not to mirror the image.
 - **Label:** This field is used to enter label text. See “Adding a Label to the Printed Image” on page 4-43.
 - **Overlays:** This field displays the number of files selected as overlays. Up to ten images can be layered on an image.
-



*Overlay file(s) have to be added to the job ticket with a quantity of **X** or **0**. See “Overlays tabbed dialog box” on page 4-31.*

- **Title Block:** This option is used with GFI folding devices. Select either the location of the title block or **Don’t Care** from this drop down list.

To change a column width:

1. Place your cursor on the right-hand edge of the column heading. The cursor changes to a vertical bar crossed by a double-headed arrow.
2. Drag the cursor to the desired width.

Changing Print Parameters

To change prototype parameters:



Changes made to the Proto line affect all files you added thereafter. Changes do not affect files already added to a job ticket.

1. Either:
 - Edit the fields on the Prototype row of the grid or on the Detail Property Sheet.
 - Select a row on the grid that contains the desired print parameters. Then select **Copy to Prototype** from the File menu. The print parameters are copied to the Prototype row.
2. Click on the **File** menu
3. Select **Save Configuration**.

Editing Functions

The editing functions are useful for changing the order of image files and for copying multiple parameters at once.

To cut a row from the grid:



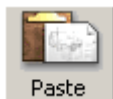
1. Select the row you want to cut by clicking on its row number. To select more than one row, hold down the **Shift** or **Ctrl** key while selecting.
2. Click **Cut** (or press **Ctrl+X**).

To copy a row on the grid:



1. Select the row you want to copy by clicking on its row number. To select more than one row, hold down the **Shift** or **Ctrl** key while selecting.
2. Click **Copy** (or press **Ctrl+C**).

To paste a row onto the grid:



1. Cut or copy the row you want to paste (see above).
2. Select the row above the spot where you want to paste.
3. Click **Paste** (or press **Ctrl+V**).

To delete a row from the grid:



1. Select the row that you want to delete by clicking on its row number. To select more than one row, hold down the **Shift** or **Ctrl** key while selecting.
2. Click **Delete**.

To copy a field to the entire column:

1. Select the field.
2. Open the **Edit** menu and select **Copy Field**. The value is copied to all images in the job including the Prototype row.

Change Image Filenames

You can change the name or extension of a file listed in the grid.



The PlotWorks Client supports duplicate filenames in a job as long as the files are the same.

To edit a file name:

1. Select (highlight) the filename or extension you wish to rename.
2. Type the desired filename or extension and press **Enter**.
3. You are prompted: “Rename <oldfile.ext> to <newfile.ext>?” Click **Yes**. The file is renamed in the job grid *as well as in the source directory*.

Saving a Job Ticket

Once you have created a job ticket, you can save it for future editing or print-on-demand.

**To save a job ticket:**

1. Click **Save Job**.

If you have not previously saved the file, you will be prompted to enter a filename and to select a location for your new job ticket. See below for instructions.

To save a job ticket under a new name:

1. Open the **File** menu and select **Save Job As**.
2. Type the new name of the file in the **Filename** field. You can use long filenames for your job tickets.



Long filenames are supported in all cases where the destination of the job output supports long filenames. Examples of where long filenames are not supported are when: outputting to a removable disk (in case the final destination cannot handle long filenames), outputting through DOS, or outputting to an older Novell network or server. Filenames are truncated when necessary.

3. In the **Save In** field, select a directory to save the file in. Always save the job ticket in the same directory as the source files that are in the job.
 4. Click **Save**.
-

When you use the **Save Job As** command, if the job was previously saved under a different name, the old job is still saved with its original name and the new job is active in the PlotWorks Client grid.

The Detail Property Sheet

The Detail Property Sheet is a set of nine tabbed dialog boxes used to enter and edit parameters for individual image files. The Main tabbed dialog box contains most of the basic parameters shown on the grid. The other tabbed dialog boxes are used to further customize printing parameters.

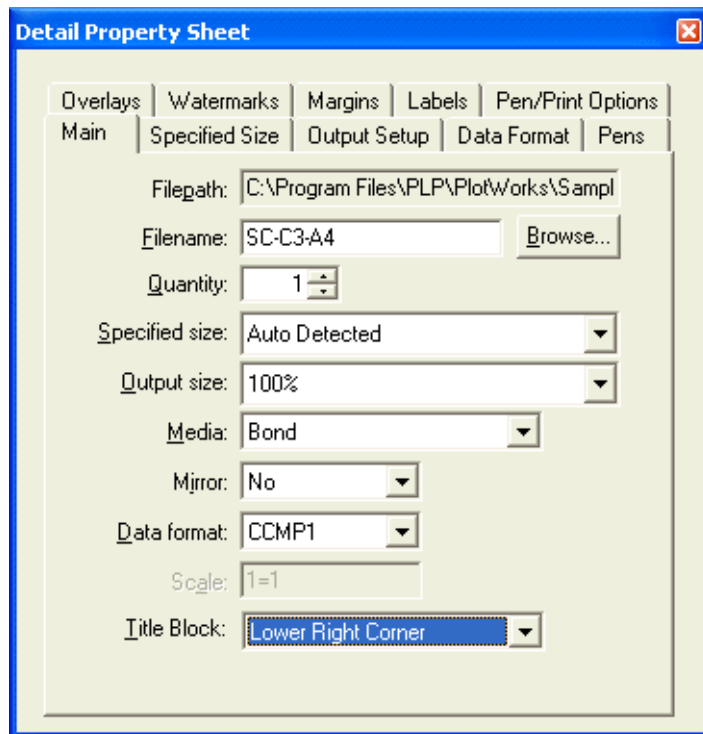


To view the Detail Property Sheet:

To display the **Detail Property Sheet** if it is not already displayed, either:

- Select **Property Sheet** from the **View** menu
- Click on the **Properties** button.

Fig 4.9
Main
tabbed dia-
log box



The Detail Property Sheet can be moved around your computer screen as needed. Simply click on its title bar and while holding the mouse button down drag the dialog box to a new location and then release the mouse.

Selecting parameters on the Detail Property Sheet:

1. Select an image on the grid by clicking on its row number.
2. Choose the tabbed dialog box you want by clicking on its tab.
3. Enter or edit the fields provided.

Main Tabbed Dialog Box

The Main tabbed dialog box of the Detail Property is used to define basic print parameters. It contains many of the fields shown on the job grid.

The Main tabbed dialog box contains the following fields and button:

- **Filepath:** The complete path to the file, e.g., C:\Program Files\PLP\Plotworks\SampleCC1.
- **Filename:** The name of a linked image file (not including its three-character extension).
- **Browse:** Is used to navigate and select a file files to replace the file currently selected on the job grid.
- **Quantity:** Enter the number of copies desired. Enter “X” or “0” for overlays and for files that you do not want to print.
- **Specified size:** Select the original image size. To enter a custom size, select **User Specified**, then enter the width, height, and origin values on the Specified Size tabbed dialog box (refer to Fig 4.12). To automatically detect the image size, select **Auto Detected**.
- **Output size:** Select a finished size for the print, or select a percentage of the original size. To enter a custom size, select **User Specified**, then enter the width, height, and origin values in the Output Setup tabbed dialog box (refer to Fig 4.14). To print on the next largest standard media size, select **Auto Standard**.
- **Media:** Select a printing medium from this drop down list. Choices include:
 - Bond
 - Vellum
 - Film
 - T-bond
 - Unspecified: Unused media type
 - Heavy Bond: This is equivalent to Repro Desk’s Bond 110g
 - Heavy T-Bond: This is equivalent to Repro Desk’s T-Bond 110g
 - Film 4.5mil: This is equivalent to Repro Desk’s Film 4.5mil

- Special Bond: This is equivalent to Repro Desk's *Bond
 - Special Heavy Bond: This is equivalent to Repro Desk's *Bond 110g
 - Special Vellum
 - Special Film
 - Special T-Bond
 - Premium Bond
 - Premium Vellum
 - HPH (High Pressure Heat) Vellum
 - Antistatic Film
 - Opaque Film
 - Clear Film
 - Contrast Film
 - Bond 80g
 - T-Bond 80g
 - Bond 90g/24lb
 - T-Bond 90g/24lb
 - Recycled Bond
 - Medium Blue Bond
 - Bright Blue Bond
 - Goldenrod Bond
 - Bright Yellow Bond
 - Green Bond
 - Orange Bond
 - Pink Bond
 - Gray Bond
 - Beige Bond
 - Fluorescent Yellow Bond
 - Fluorescent Green Bond
 - Fluorescent Orange Bond
 - Fluorescent Pink Bond
 - Glossy Presentation
 - Satin Presentation
-

- Special Media 1 through Special Media 10: These options are used for customer-defined media types:

The following media options are not actual media types, but are used to specify a particular roll, tray, or manual feed.

- Roll 1 through Roll 8
- Tray 1
- Tray 2
- Manual Feed: It is necessary to select this option to force manual feed.
- **Mirror:** Select whether or not to mirror the image.
- **Data format:** The actual image file format which is automatically detected when the file was added to the job grid. We recommend that you do not change this value.



For information on processing and printing TIFF files, see Appendix J - Tiff Helper.

- **Scale:**

For AutoCAD DWG files enter either:

- A valid AutoCAD scale (printed units = drawing units)
- FIT for automatic scaling, **R1** through **R5** for **SETVAR** values
- **DIMSCALE** to use the Dimension Entity Scaling for the drawing scale.

For MicroStation DGN files enter either:

- A valid MicroStation scale (master units per inch)
- FIT to automatically scale to the Specified Size.



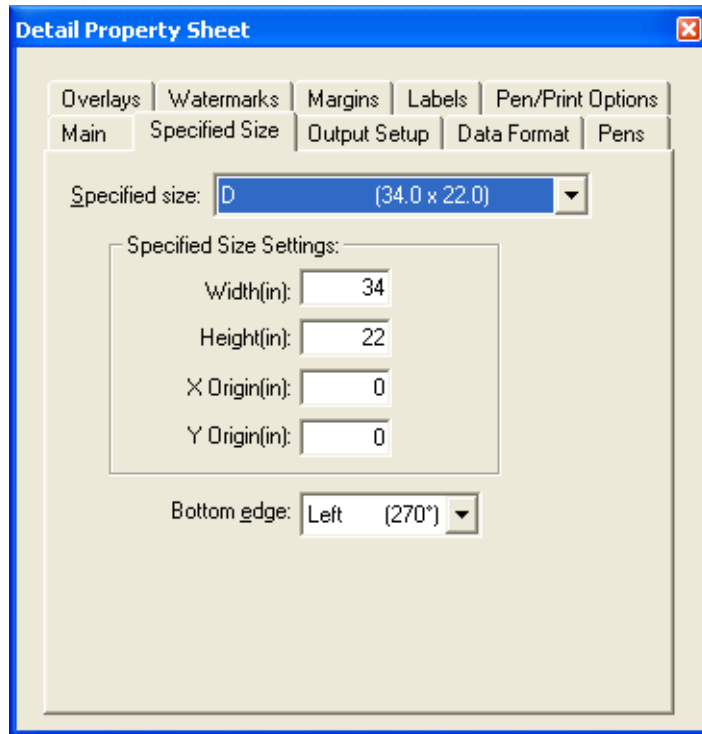
Scaling to FIT cannot be used when the Specified Size is set to Auto Detected.

- **Title Block:** Use this drop down list to specify where the title block is located on the selected image. If the location of the title block is irrelevant, select **Don't Care** from the drop down list. Selecting a title block location is necessary when folding.

Specified Size Tabbed Dialog Box

The Specified Size tabbed dialog box is used to define custom (User Specified) values for the Specified Size field. When **User Specified** is selected for the Specified Size on the grid or on the Main tabbed dialog box, you must define custom values here.

*Fig 4.10
Specified
Size
tabbed di-
alog box*



The Specified Size tabbed dialog box contains some or all of the following fields:

- **Specified Size:** When a size other than Auto Detected or **User Specified** is selected in this field, the following fields display in the Specified Size Settings box:
 - **Width:** If User Specified is selected in the Specified Size field, the selected file's width displays in this text box. If the width value is changed, Specified Size automatically changes to User Specified.
If the Specified Size field is set to User Specified, you must enter a value in the **Width** field.
 - **Height:** If User Specified is selected in the Specified Size field, the selected file's height displays in this text box. If the height value is changed, Specified Size automatically changes to User Specified.
If the Specified Size field is set to User Specified, you must enter a value in the **Height** field.

- **X Origin:** This field is used to specify a horizontal coordinate for the image origin. By default, this field is set to **0**. If you change the X Origin value, the Specified Size field changes to User Specified. This feature can be used, along with the Height and Width parameters to specify a portion of the original image.



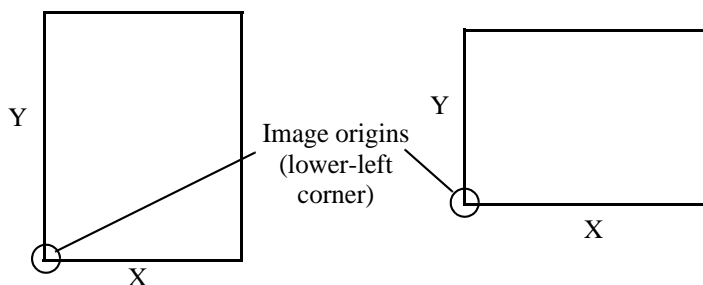
You can also use the PlotWorks Image Viewer to specify a portion of the document to print. The Specified Size data is then automatically updated.

- **Y Origin:** This field is used to specify a vertical coordinate for the image origin. By default, this field is set to **0**. If you change the Y Origin value, the Specified Size field changes to User Specified. This feature can be used, with the Height and Width parameters to specify a portion of the original image.



The default origin of an image is usually the lower left corner. However this can vary depending on the image format. For example, TIFF images consider the top left corner the origin. Therefore view the image in the Image Viewer to confirm the origin location.

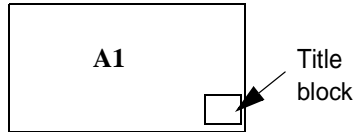
*Fig 4.11
The default
location of
the X and Y
origins*



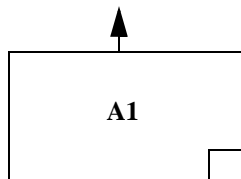
- **Bottom edge:** Is used to select which edge of an image, as seen in the Image Viewer, should be considered the bottom. The selected edge becomes the bottom edge when the image is printed. The bottom edge=top and bottom edge=bottom settings apply to landscape-oriented images, while the bottom edge=left and bottom edge=right settings apply to portrait-oriented images.

Fig 4.12
Bottom
Edge
Options

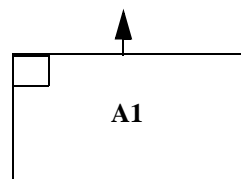
This represents the document as originally viewed in the Image Viewer



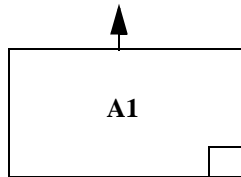
In the following diagrams the arrow indicates what side exits the printer first



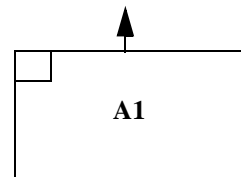
Bottom edge = Bottom



Bottom edge = Top



Bottom edge = Left



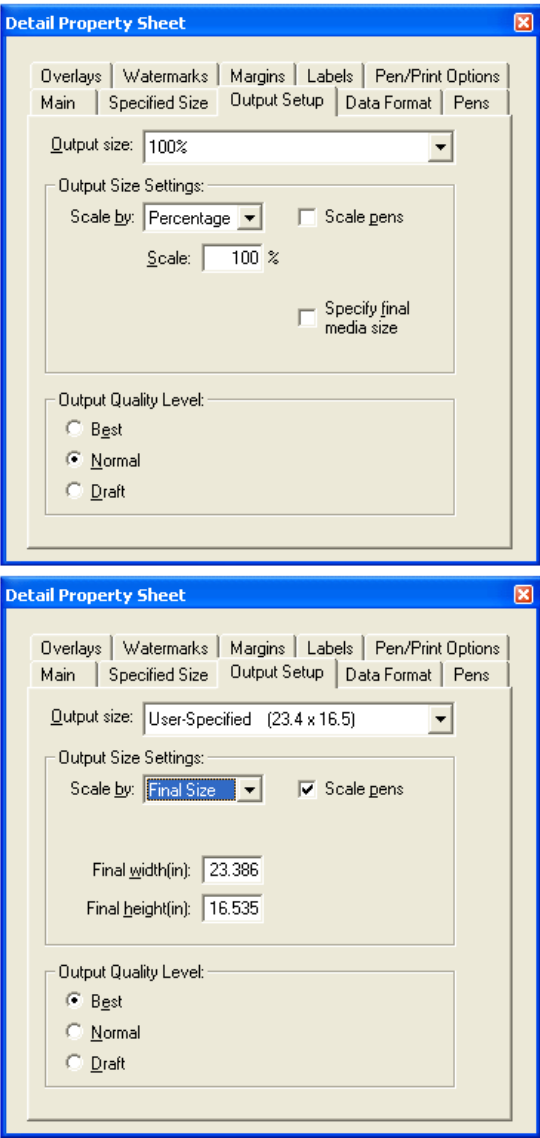
Bottom edge = Right

The Bottom edge option is useful when you plan to collate or fold scanned images and you want to make sure they all face the same direction. For example, the Bay folder requires the title block to enter the folder last in order to get a properly folded package. Other folders require the title block to enter the folder first.

The diagrams below illustrate how the printed document is orientated depending upon the value selected for Bottom edge. Note where the title box ends up in each diagram.

Output Setup Tabbed Dialog Box

Fig 4.13
Output
Setup
tabbed di-
alog box



Detail Property Sheet

Overlays | Watermarks | Margins | Labels | Pen/Print Options
Main | Specified Size | **Output Setup** | Data Format | Pens

Output size: 100%

Output Size Settings:

Scale by: Percentage ☐ Scale pens

Scale: 100 %

☐ Specify final media size

Output Quality Level:

☐ Best
☒ Normal
☐ Draft

Detail Property Sheet

Overlays | Watermarks | Margins | Labels | Pen/Print Options
Main | Specified Size | **Output Setup** | Data Format | Pens

Output size: User-Specified (23.4 x 16.5)

Output Size Settings:

Scale by: Final Size ☒ Scale pens

Final width(in): 23.386

Final height(in): 16.535

Output Quality Level:

☒ Best
☐ Normal
☐ Draft

The Output Setup tabbed dialog box is used to define custom or User Specified values for the Output Size field. The following options are selected here:

Output Size: From this drop list, select either one of the standard sizes or percentages offered. If you wish to specify a custom size, select User Specified and then enter values for **Final height** and **Final width**.

Scale by: Select whether to scale the selected image to a specific size (**Final Size**) or to a percentage of the original size (**Percentage**). Percentage values between 1 and 1000 are accepted.

If the Output Size field is set to a standard size (A, A1, B, C, etc.), the Scale By field is automatically set to **Final Size**.



*In addition to standard media sizes, you can select **Auto-Standard** to automatically print the image at 100% on the smallest standard sheet the complete image will fit on. Centering, margins, etc., will be implemented as normal for any given sheet size.*

If the Output Size field is set to a standard percentage (75%, 100%, etc.), the Scale By field is automatically set to **Percentage**.

If the Output Size field is set to **User Specified**, you must select either **Final Size** or **Percentage** in the Scale By field.



*For best results when printing PostScript files, use **Scale by Percentage** and set a **Scale** that is a multiple of 100 (100%, 200%, 400% for example). This not only produces the desired printout, but prevents moire (those unsightly crosshatched patterns that show up when printing some PostScript files).*

- **Scale:** is used to specify what percent to reduce or enlarge the original image when **Scale By** is set to **Percentage**.

If the Output Size field is set to a standard percentage (75%, 100%, etc.), the Scale field displays the correct value automatically.

If the Output Size field is set to User Specified, you must enter a percent value, between 1 and 1000, in the **Scale** field.

- **Specify final media size:** When **Scale by:** is set to **Percentage**, this check box is enabled. It is used to specify the media size the image should be printed on.

For example, if the specified size is **A**, and you scale the Output size by **200%**, but you want to print on a D-size sheet, specify the D size measurements for the width and height. Then the image will print at double an A-size, on a D-size sheet. This does not use up the whole sheet.

- **Final width:** Select the final, printed width of an image when the Scale By field is set to Final Size or percentage. If the Scale By field is set to Final Size, the image is scaled up to best fit the Final Width and Height.
If the Output Size field is set to a standard size (A, A1, B, C, etc.), then the Final Width field displays the correct width automatically. If you change the width, the Output Size setting changes to User Specified.
If the Output Size field is set to User Specified, you must enter a value in the **Final width** field.
- **Final height:** Select the final, printed height of an image when the Scale By field is set to **Final Size** or percentage. If the Scale By field is set to Final Size, the image is scaled to best fit the Final Width and Height.
If the Output Size field is set to a standard size (A, A1, B, C, etc.), then the Width field displays the correct width automatically. If you change the width, the Output Size field changes to User Specified.
If the Output Size field is set to User Specified, you must enter a value in the **Final height** field.
- **Scale Pens:** When this check box is selected, pens on vector images are scaled when the image is scaled.
- **Output Quality Levels:** Select either **Best**, **Normal**, or **Draft**. These refer to device-specific or driver-specific quality levels. These options are used with Windows and Generic Embedded Controller printers, or when processing PostScript or PDF files. The quality level is used to determine the rasterization resolution to use for PostScript or PDF files, unless the resolution is set manually. See “Data Format tabbed dialog box” below for more information.
Output quality is dependant on the printer. **Best** mode for a DesignJet printer is 600 dpi in Enhanced Graphics printing mode. **Best** on a laser printer may be 600 dpi without Enhanced Graphics mode.



If your printer does not support multiple output resolutions, use caution when changing this value — the scale of the printed image can be affected.

Data Format Tabbed Dialog Box

This tabbed dialog box contains file format information for the selected file. This information is automatically detected when the file is added to the job.

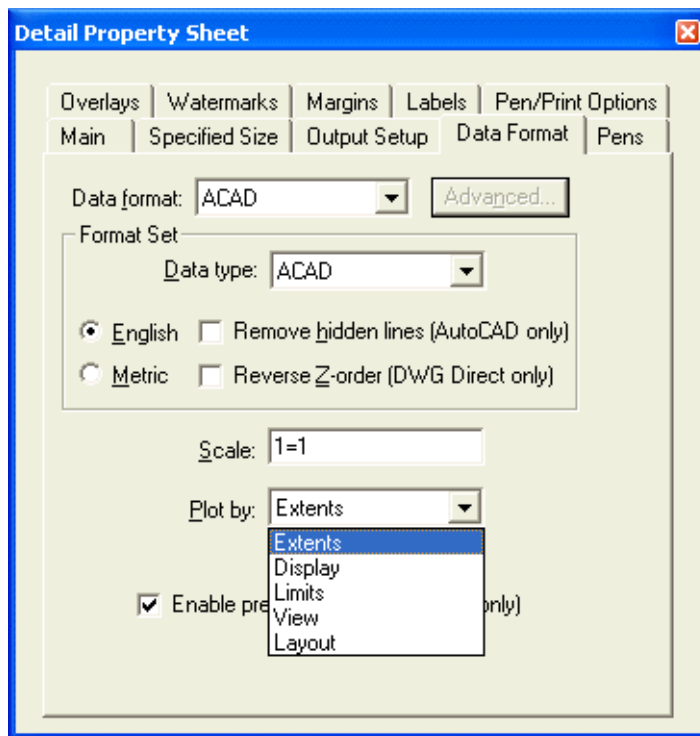
Available data formats are:

- AutoCAD files (DWG, DXF, ACADM)
- HP-GL, HP-G/L2,
- Generic Embedded Controller

- CalComp files (906/907)
- TIFF and TIFF 5.5.1 (Subset of TIFF)
- CALS (Type 1)
- PostScript (Levels 1, 2, 3)
- CGM, DGN
- VRF (vector format only)
- PDF
- BMP, DCX, JPG, XIF, PCX, PGF, DXF
- VIC
- HPRTL
- DWF
- User Specified

The fields available depend on the Data Format detected.

Fig 4.14
ACAD
Data
Format
tabbed di-
alog box



*Changing autodetected data can cause serious printing errors! We recommend that you **not** change the Data Format or Data Type settings on this tabbed dialog box .*

One or more of the following fields are used on the Data Format tabbed dialog box:

- **Data format:** Displays the detected file format
- **Data type:** Used to select the actual type of data being used.
- **Origin** (HP-GL only): Displays the origin (0, 0) of the HP-GL image: Center or Lower Left.
- **Resolution:** The print resolution of the image.

For vector formats this refers to the coordinate resolution.

For Postscript, DWF, and PDF files, this option is only available when the “Base resolution on output size and quality check box” is not selected.

- **Sync code** (CalComp files only): The sync code notifies the printer that a print job is coming. Either one or two sync codes can be sent.
- **End of message** (CalComp files only): Notifies the printer that the end of the CalComp image has been sent.
- **Checksum** (CalComp files only): Verifies the integrity of the CalComp image.
- **Enable Precheck Pass** (AutoCAD files only): If this check box is selected, then PlotWorks performs the precheck pass done by DWG Direct, which looks for XREFs, ATTACHMENTS and FONTS.
- **Print page range:** For use with PostScript, TIFF, PDF, BMP, DCX, JPG, HP-GL/2, XIF, and PCX files. Allows you to specify which pages to print in multipage documents.

Select from two options, **All** or **Pages**. If **All** is selected, all pages are printed. If **Pages** is selected, specify a range in the form “xxx-yyy” (1-5, for example), or print only specific pages (1,3, 5-9, for example). If the page range is invalid, PlotWorks corrects it based on a valid range.

- **Base resolution on output size and quality:** This option is selected by default to automatically determine the resolution for PostScript and PDF files. When selected, output quality is changed using the Output Quality Level option from the Output Setup tabbed dialog box.

If the output is still not right, set the resolution manually by unchecking this option and entering a resolution in the Resolution text box.

- **Automatically add showpage:** This option is selected by default for PostScript files. When selected the “showpage” command is either detected, or added automatically. Leave this box checked unless you get extra blank pages when printing, in which case uncheck it.

AutoCAD file options:

The Data Format sheet contains the following special options for AutoCAD files:

- **English or metric** (ACAD/ACADM only): If the data type is ACAD, measurements are in **English**. If the data type is ACADM, **Metric** is selected.



Ensure the measurement units selected in the PlotWorks Client match the ACAD drawing units.

- **Remove hidden lines:** This option is used during AutoCAD processing to remove lines behind other planes when 3-dimensional rendering.
- **Reverse Z order:** This option is only available with DWG Direct processing. Normally, PlotWorks prints the main AutoCAD image first, and any XREF files second. As a result, the XREFs are layered on top of the main image. When the **Reverse Z order** option is selected, the XREF files are printed *first*, making them appear as though they are underneath the main image.



AutoCAD actually processes the XREFs as they occur in the DWG file. So your output using this option can still vary from those generated directly by AutoCAD.

- **Scale:** If an ACAD scale is selected from the Main tabbed dialog box or on the grid, that number displays here. You can also set the ACAD scale here and it will then display on the Main tabbed dialog box and on the grid.
 - **Plot by:** Select this option to print the AutoCAD image by Extents, Display, Limits, View, or Layout. If View is selected, the View name field displays:
 - **View name:** (AutoCAD) If **Plot by View** is selected, you can enter the name of the view to be printed. If **Plot by Layout** is selected, enter the name of the layout to be printed.
 - **View name:** (DGN) Prints an area defined in MicroStation under a specified view name. If you select this Plot By option, you must enter the correct view name in the View Name field in the PlotWorks Client. Allowable entries are:
 - the saved view name in Microstation;
 - the special view names of **1** through **8** (representing the allowable MicroStation view window numbers);
 - a selection cell name in addition to a view name or number. For example: **topview CELL<linepa>** where *topview* is a name given to a view and *linepa* is a named cell.
-



When printing DGN files, you can also specify a cell or shape specifications to restrict the view. For example, in the view name field: **TOPSIDE CELL<PLOTME>** would plot the view 'Topside' and further restrict the view to just the cell selection(s) called 'Plotme' within that view. To plot based upon shape(s), the following options are available: **TOPSIDE SHAPE<level, color, style, weight>**. If one of the settings is not used, you must enter '-1' as the value: **TOPSIDE SHAPE<-1,255,-1,0>**.

- **Advanced** button (DGN files only): This button brings up the DGN Advanced Options dialog box which lets you determine which DGN design elements are processed. For an explanation of each option, refer to your MicroStation manual. Grayed out options are not available. The check boxes for each entry on the new dialog box can have three values:
 - **Blank**: Turn off these design element types and do not process them.
 - **Black check**: Turn on these design elements and process them.
 - **Gray check** (default): Use the setting for these design elements as originally saved in the design file view being processed.



Plot by cell or Plot by shape normally allows you to specify the same cell multiple times on the same page, creating a “multi-page” printout.

- **Added RTL Raster Resolution**: This drop down list appears if an HP-GL/2 file is detected. In this case select a print resolution. Choices are:
 - Auto
 - 300 DPI
 - 400 DPI
 - 600 DPI
- **Use drawings page size**: This option appears if an HP-GL/2 file is detected. Select this check box to use the page size specified in the drawing.

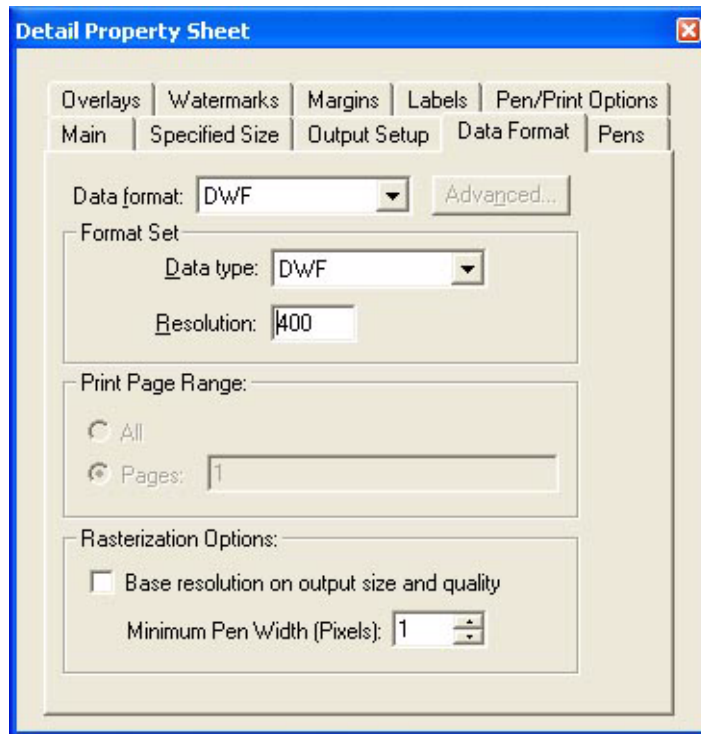
DWF file options:

The following options display when DWF is selected for Data format:

- **Data type**: Used to select the actual type of data being used.
- **Resolution**: The print resolution of the image. This option is only available when the “Base resolution on output size and quality check box” is not selected.
- **Print page range**: These fields display the current sheet number and the number of sheets in the DWF file. These values cannot be changed.

- **Base resolution on output size and quality:** When selected, the output quality specified in the Output Setup tabbed dialog box is used.
If the output is still not right, set the resolution manually by unchecking this option and entering a resolution in the Resolution text box.
- **Minimum Pen Width (Pixels):** Select a minimum pen width in pixels. Increase the value in this text box if lines are not printing or are printing too light. When this value is changed, it is necessary to reprocess DWF files in the job grid.

*Fig 4.15
DWF Data
Format
tabbed di-
alog box*



Pens tabbed dialog box

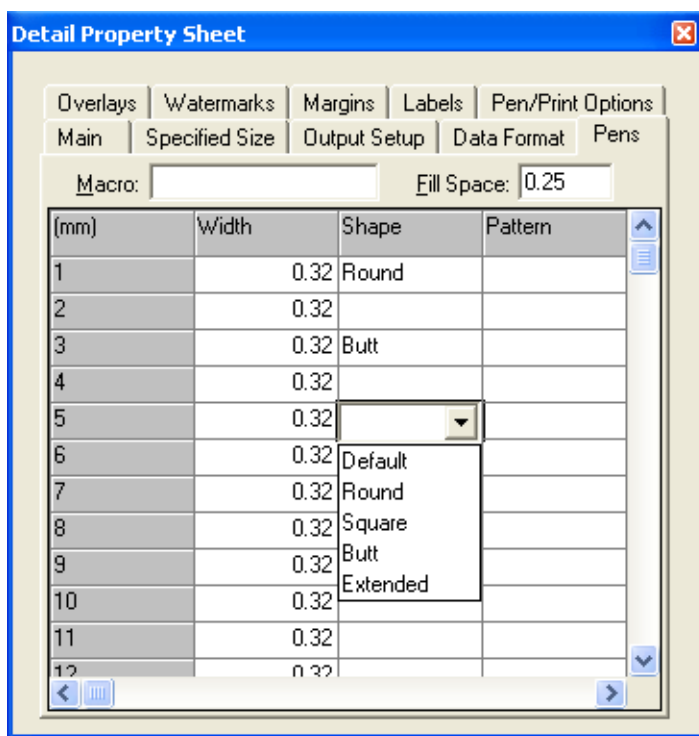
The Pens tabbed dialog box is used to define custom (User Specified) pen sets.

The Pens tabbed dialog box contains the following fields:

- **Macro:** This text box is used to enter a pen macro value. Pen macros control the color model used when a drawing is rasterized. There are three pen color models currently available:

- **Black and White:** All colors (including white) are printed as black lines. Screens from 0% to 100% or patterns can be applied to any pen.
- **Gray:** All colors are converted to the appropriate intensity and screened (greens are lightest, blues are darkest). Screens or patterns can still be applied. A screen will modify the intensity created from a selected color.
- **Black and Red** (Xerox MAX 200 and 8180 only): The red component of each color is separated along the red plane and a screen of the appropriate percentage is applied. Other colors are converted on the black plane and the appropriate gray intensity and screen is applied.

Fig 4.16
Pens
tabbed di-
alog box



The following pen macros are available:

Macro	Effect
*	Turns off sharpening for raster blocks and files.
~	<p>Resamples all monochrome TIFF files. Reapplies patterns when scaling. Using this option may cause some thin lines in a line drawing to become dim or even disappear when the drawing is reduced in size. Using this option may prevent a TIFF from being used as a RED overlay on top of a main file printed in monochrome on the MAX 200.</p> <p>Resampling all monochrome TIFF files dramatically increases computer processing requirements. This results in slower printing. Slower computers or those containing less memory may freeze if this option is selected.</p>
A	Flattens all color pixels to solid black. Use this macro with color line drawing to print all lines solid black. Also when anchor points in the title block text are banded or when white lines appear in solid black text. Do not use this macro with photos as it will create solid black blocks.
B	<p>Forces all pens to black resulting in a black and white monochrome print.</p> <p>This is similar to the Repro Desk option “No flatten all vector pens to solid black.”</p> <p>Forces monochrome output for vectors for DWF files. The rendering type in PlotWorks is used to dither the grayscale and color images to monochrome.</p>
C	Use color definitions from the HP-GL/2 file instead of the pen set. This allows the drawing to get pen colors from the plot file.
E	Fills pen strokes with patterns defined in the HP-GL/2 file instead of the pattern defined in the pen set. Drawing will use pen screens and patterns from the plot file.
F	Enables the drawing to get fill screen and pattern information from the plot file. Polygons are then filled with patterns defined in the HP-GL/2 file instead of the pattern defined in the pen set.

- G** Prints the grayscale representation of colors in HP-GL/2 files. Sets all vector pens to grayscale. When used with Repro Desk jobs, pen colors are mapped to a shaded halftone when Color is set to “No.” Forces grayscale output from DWF files. The rendering type in PlotWorks is used to dither the image to monochrome.
- H** Prints the entire image using the highlight color, if available. This is red on the XES MAX 200 or 8180. On the MAX 200 all vector pens and raster data will be printed red.
- I** Inverts the entire output sheet, including all overlays, watermarks, labels, and nested images. Inverts Generic Embedded Controller or RTL embedded data in HP-GL/2 files. Use this macro when the attached raster in a file is inverted (black is printing as white, etc.) or if the embedded raster file appears reversed. Selecting this macro has the same effect as selecting the "Negative" checkbox in Reprodesk pen sets.
- J** Forces the use of the HP-GL/2 Plot Size ((PS) command) instead of the drawing's extents as specified by actual marks drawn on the page.
- K** This macro is provided so that PlotWorks can emulate Reprodesk/Apprentice HP-GL/2 support. In particular, to ensure that:
- the Plot Size (PS) command landscape orientation imitates Reprodesk behavior
 - Winding fill is used as the default polygon fill type for HP-GL/2 files.
 - if a color is not defined in the HP-GL/2 file but the 'P' or 'C' pen macro is used, PlotWorks uses the color specified in the pen set.
-

- M** Enables printing in multiple colors on the XES MAX 200, 8180, Windows Color, and Generic Embedded Color Controller printers. This macro is necessary to print red components and full color. Note the following:
- Color printing on Windows and Generic Embedded Controller printers is only possible when printing HP-GL/2 files using embedded pen values and the P macro which extracts color data from the internal file definitions.
 - Other vector file formats must have the pen definitions specified in the Pens tabbed dialog box.
 - Raster files can be printed entirely in red on the MAX 200 or 8180 by setting pen 1 to color 6 in the PlotWorks Client.
 - Forces color output from the DWF Tool Kit.
 - To print red and black representations of all colors with the Xerox MAX 200 or 8180, use the W, P, and M macros.
- N** Ensures RTL raster data is not scaled to provide the same results as selecting the "Do NOT Scale RTL Raster Data" option in Reprodesk/Apprentice.
- P** Prints embedded patterns, types and specified opacity in HP-GL/2 files. Provides the same functionality as specifying the macro combination of CFETV
- Q** Forces NOT using the RTL palette for monochrome raster blocks. The pen 0 and 1 in the RTL palette is instead used to determine the color of 0 and 1 pixels.
This macro is provided for Reprodesk/Apprentice support as in Reprodesk, pen 1 is always set to black.
- T** Forces using merge control and transparency data from the HP-GL2 file instead of from the pen set. The pen type and/or effect is taken from the plot file.
- V** Allows the drawing to manipulate line ends (round, butt, square) from the file. The line end selection is taken from the HP-GL/2 file not the pen set. This macro is not supported by Repro Desk.
- W** Forces using pen widths defined in the HP-GL/2 or plot file instead of from the pen set. Prints embedded pen widths in HP-GL/2 files
-

- X** Flattens all vector pens to a solid color on each color plane (black, black and red, or CMY). This provides the same result as when the "Map pen colors to a shaded halftone" check box is not checked in Reprodesk/Apprentice. Specify this macro when you don't want to map pen colors to a shaded halftone when Color is set to "Yes" in Reprodesk.
- Y** This macro is provided for Reprodesk/Apprentice support to ignore the fill type specified in the HP-GL/2 file and instead to use the alternate (even/odd) fill.

The following macros control what type of dither or diffusion patterns are used for vector images. Printers that have good small dot printing characteristics will use the diffused dot dither by default.

Macro	Effect
D	Use error diffusion dithering for vector parts of drawing. Forces order dot dither patterns to diffused dot dither patterns on the XEROX WIDE FORMAT 8830.
O	Forces ordered dot dither patterns. This macro overrides random dot dither patterns on the 8855, 8180 and KIP 3620. On Reprodesk jobs this macro ensures that vector areas in the drawing are rasterized using an ordered (pattern) dither.

The following macros control what type of dither or diffusion patterns are used for raster images. For raster images, Error diffusion is the default.

Macro	Effect
R	Forces diffused dithering.
Z	Forces progressive pattern dithering.



When printing with embedded patterns, the output can differ depending on the printer used. This is because different devices have different resolutions. For example, a user-defined pattern created for the 650C at 300 dpi could end up condensed, reduced in size, on a 400 dpi printer.

The following two macros control image rotation, which is useful for forcing

prints into a particular orientation for folding

Macro	Effect
S	Prints the short end first (portrait orientation).
L	Forces the a selected image to print landscape or long edge first.

Pen macros can be combined. For example, entering **WP** would enable printing both embedded pen widths and patterns.

Because the pen macro list is so extensive, PlotWorks now provides a more intuitive way to select pen macros from the Pen/Print Options tabbed dialog box. For more information see page 4-36.



We recommend using the minimum pen width (found in the drawing) for Fill Space values.

- **Pen Grid:** There are several columns in the pen grid. The first cell in the first column displays the measurement unit that measurements should be provided in. The rest of this column lists all the pens in numerical order. The rows represent properties for each pen. The following pen properties are provided in the pen columns:
 - **Width:** Enter a pen width for each pen in this column. The default values are
 - 13 if pen units are set to Mils
 - 5 pixels if pen units are set to 400dpi
 - .32 if pen units are set to Millimeters.
 - **Shape:** The Pen Shape field is used to select the line or vector end shape for HP-GL/2 files. This option is primarily for wide lines, where the end shape is readily apparent. The following choices are available:



Round: This is the default value equivalent to the HP-GL/2 *Round* LA option.



Square: This is equivalent to the HP-GL/2 *Extended* LA option.



Butt: This is equivalent to the HP-GL/2 *Butt* LA option.



Extended butt : This is equivalent to the HP-GL/2 *Square* LA option.



The ‘HP-GL/2 internal LA command is ignored unless the ‘W’ pen macro is specified. If the ‘W’ pen macro is not specified, the line end shape is taken from the Pen Grid, not the HP-GL/2 file. If shape values are not entered in the Pen Grid and the W Pen Macro is not specified, the following warning displays: “Pen #1 used but not defined.” In this case all lines default to the Round pen shape.

- **Pattern:** Enter a pattern number or a percent value (from 1 to 100%) to print diffused or ordered dot halftone patterns. If using a percentage, be sure to include a percent sign (%). Diffused dot patterns are not supported by all printing devices.

Pattern numbers are arbitrary. Refer to the Pen and Pattern sheet provided on the PlotWorks CD-ROM.

- **Type:** Specify a line type here. Click in this column to display the drop down list. The following choices are available:
 - **Opaque:** This choice makes the line appear to be “on top” of any intersecting lines. An opaque line will hide any line beneath it at the point where the two cross. If more than one opaque line intersects, the last line drawn will be on top.
 - **Transparent:** This is the default setting. This choice makes a line appear transparent when it intersects other lines. Black lines cannot be transparent.
- **Color:** Enter a color number between **1** and **255**. This column applies to color printers only.



Once you have specified a pen set you can save it for future use. For more information see page: 4-58.

Pen/Print Options Tabbed Dialog Box

The Pen/Print Options Tabbed dialog box provides an intuitive method of selecting pen and print options. Some options that are available here can also be selected from the job grid or from the Pens tabbed dialog box.

Using the Pens/Print Options Tabbed Dialog Box

Many options selected in this dialog box can be selected by specifying a macro. So if you know what macro you need, simply enter it in the **Macro** text box.

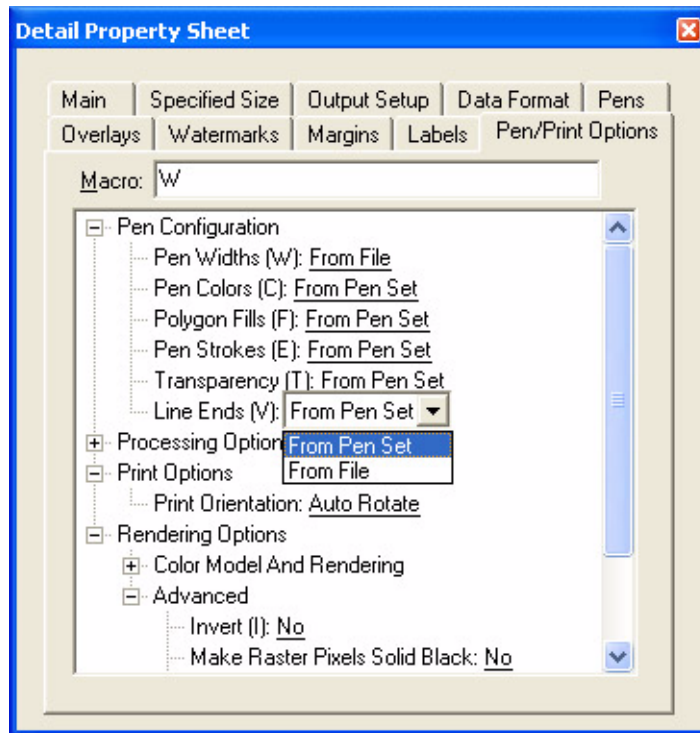
Options available from this dialog box are also set up in a select box that is organized in a tree view. Clicking on a plus (+) sign will expand that category of options. Clicking on the minus (-) sign will collapse that category of options. Clicking on an underlined item displays either a drop down list or a check box that you can select options from by double clicking.

You can make these same selections using key board shortcuts:

- Right arrow: Expands a category
- Left arrow: Collapses a category
- Arrow up: Moves you up the list
- Arrow down: Moves you down the list
- Space bar: Selects or deselects a check box
- ALT + Arrow down: Expands a drop down list
- Enter: selects an option

When an option is selected from the tree view, its corresponding macro displays in the Macro text box.

Fig 4.17
Pen/Print
Options
tabbed di-
alog box



Options Available from the Pens/Print Options Tabbed Dialog Box

The options available from this dialog box are divided into four main categories. These are: **Pen Configurations**, **Processing Options**, **Print Options**, and **Rendering Options**.

Pen Configurations

These Pen Configuration options are provided so that you can choose to apply pen options specified in the HPGL2 file or from the pen set. The following pen configuration options are available:

- **Pen Widths:**
 - **From File:** Select this option to use pen widths defined in the HPGL2 file. This is the same as selecting the **W macro**.
 - **From Pen Set:** Select this option to use the pen widths specified in the pen set.
 - **Pen Colors:**
 - **From File:** Select this option to use pen colors defined in the HPGL2 file. This is the same as selecting the **C macro**.
 - **From Pen Set:** Select this option to use the pen colors specified in the pen set.
 - **Polygon Fills:**
 - **From File:** Select this option to fill polygons with patterns defined in the HPGL2 file. This is the same as selecting the **F macro**.
 - **From Pen Set:** Select this option to fill polygons with patterns specified in the pen set.
 - **Pen Strokes:**
 - **From File:** Select this option to fill pen strokes with patterns defined in the HPGL2 file. This is the same as selecting the **E macro**.
 - **From Pen Set:** Select this option to fill pen strokes with patterns specified in the pen set.
 - **Transparency:**
 - **From File:** Select this option to use merge control and transparency data defined in the HPGL2 file. This is the same as selecting the **T macro**.
 - **From Pen Set:** Select this option to use the Transparent or Opaque option as specified in the pen set.
 - **Line Ends:**
-

- **From File:** Select this option to use the line ends defined in the HPGL2 file. This is the same as selecting the **V macro**.
- **From Pen Set:** Select this option to use the line ends specified in the pen set.

Processing Options

The following processing options are available:

- **HPGL2 Plot Size:**
 - **From File:** Select this option to use the page size specified in the drawing. This is the same as selecting the **Use drawings Page Size** check box. This is the same as selecting the **J macro**.
 - **Extents:** Select this option to use the image extents.
 - **Repro Desk Emulation:**
 - **Yes:** Select this option if you want your print output to match Repro Desk print output. This is the same as selecting the **K macro**. When **Yes** is selected:
 - HPGL2 files are not rotated when the plot size is set as portrait
 - Winding fill is used for all polygon fills instead of the type specified in the HPGL2 file.
 - If a color is not defined in the HPGL2 file and the 'P' or 'C' pen macro is used, the color specified in the pen set is applied.
 - **No:** Select this option if you do not want your print output to match Repro Desk print output.
 - **Alternate VIC Merge Control**
 - **Yes:** Different versions of VIC files merge transparency differently. This option is provided to resolve this issue. Select **Yes** if your VIC file is not printing as expected. This is the same as selecting the **^ macro**.
 - **No:** Select this option if your VIC files are printing just fine.
 - **Scale RTL Raster Blocks:** This option is provided to match a function available in Repro Desk.
 - **Yes:** Repro Desk compensates for differences in resolution by sometimes scaling RTL images. Select **Yes** if a printed image from a Repro Desk job does not seem to be properly rendered. This is the same as selecting the **N macro**.
 - **No:** Select this option if your files are printing just fine.
-

- **Use RTL Pallet for Monochrome:** This option is provided to print monochrome raster blocks the same way that Repro Desk does.
 - **Yes:** Select this option to use the RTL palette to determine the color of Pens 0 and 1. This is the same as selecting the **Q macro**.
 - **No:** Select this option to set pen 1 as black as is done in Repro Desk.
- **Error-Free Plotting:** When a specified size is selected for printing and the extents of the drawing are over or under such that the image will be clipped, PlotWorks compensates if the amount that will be clipped is within the amount specified in the Size Tolerance Sheet (see page 4-72). However this causes problems with some jobs that are imported from Repro Desk.
 - **Yes:** Select this option if your Repro Desk jobs are printing just fine. This is the same as selecting the **% macro**.
 - **No:** Select this option if an image from a Repro Desk job disappears off the page or is clipped.
- **Process PS/PDF/DWF files in Color:** Select **Yes** if your printer is capable in printing in more than one color. This is the same as selecting the **M macro**.

Print Options: The only print option available here is **Print Orientation**. Select from one of the following:

- **Auto Rotate:** Select this option to rotate the image such that the least amount of media is used.
- **Long Edge:** Select this option to print the image oriented landscape or long edge first. This is the same as specifying the **L macro**.
- **Short Edge:** Select this option to print the image oriented portrait or short edge first. This is the same as specifying the **S macro**.

Rendering Options: Rendering Options are subdivided into **Color Model and Rendering Options** and **Advanced** options.

Color Model and Rendering Options:

- **Color Model:** Select what color model to use from the following options:
 - **Printer Default:** Select this option to print in gray scale on black and white printers and color on color printers.
 - **Grayscale:** Select this option to print all vector pens and HP-GL/2 files in grayscale. When used with Repro Desk jobs, pen colors are mapped to a shaded halftone when Color is set to “No”. This is the same as selecting the **G Pen Macro**.

- **All Black:** Select this option to print all pens as black resulting in a black and white monochrome print. This is similar to the Repro Desk option “No flatten all vector pens to solid black.” This is the same as selecting the **B Pen Macro**.
 - **Print Image in Highlight Color:** Select **Yes** if your printer can print in a different color (such as the MAX 200) and you want to print in two colors. This is the same as selecting the **H Pen Macro**
 - **Allow Color if Available:** Select **Yes** if your printer can print in color. This is the same as selecting the **M Pen Macro**
 - **Vector Rendering:** The following options are available here:
 - **Printer Default:** Uses the rendering method selected in the Printer Interface.
 - **Diffused:** When Diffused is selected, dots are placed to approximate source pixels . The amount of "error" in the approximation is balanced with adjoining source pixels to better approximate the source image.

This option is ideal when printing a continuous gradient from black to white or printing line drawings.

This type of dithering is applied when the Repro Desk option “Use Error Diffusion for Gray or Color RTL images” check box is selected.

This option provides the same functionality as specifying the **R macro**.
 - **Ordered:** When Ordered is selected, dots are placed in a regular pattern to approximate the source pixel. A lighter source pixel is mapped to a pattern containing fewer pixels, while a dense pattern is applied for dark pixels. This is the default option for color and RTL printers. This option is ideal:
 - When printing in color
 - When printing drawings that contain fills
 - When printing photos.
 - When printing using the Océ 9800 series of printers.
 - When you want print output to resemble output from the Océ 9800 printers
 - This option provides the same functionality as specifying the **Z macro**.
 - **Reduce Coverage:** This option is mainly used with the 8845 printer. This is the same as selecting the **U macro**.
 - **Raster Rendering:** The following options are available here:
-

- **Printer Default:** Uses the rendering method selected in the Printer Interface.
- **Diffused:** When Diffused is selected, dots are placed to approximate source pixels. The amount of "error" in the approximation is balanced with adjoining source pixels to better approximate the source image.

This option is ideal when printing a continuous gradient from black to white or printing line drawings.

This type of dithering is applied when the Repro Desk option "Use Error Diffusion for Gray or Color RTL images" check box is selected.

This option provides the same functionality as specifying the **R macro**.

- **Ordered:** When Ordered is selected, dots are placed in a regular pattern to approximate the source pixel. A lighter source pixel is mapped to a pattern containing fewer pixels, while a dense pattern is applied for dark pixels. This is the default option for color and RTL printers. Ordered Dither is also automatically applied when a Repro Desk job is imported into PlotWorks and the "Use Error Diffusion for Gray or Color RTL images" check box is not selected in Repro Desk. This option is ideal:
 - When printing in color
 - When printing drawings that contain fills
 - When printing photos.
 - For printing output similar to Repro Desk raster output when the Repro Desk option "Use Error Diffusion for Gray or Color RTL images" check box is not selected. In this case select Ordered Dither from the Raster Imaging tabbed dialog box.
 - When printing using the Océ 9800 series of printers.
 - When you want print output to resemble output from the Océ 9800 printers
 - This option provides the same functionality as specifying the **Z macro**.
- **Ordered Pattern Set:** Options are:
 - **Printer Default:** Select this option to use the default Pattern Set used by the Printer Interface.
 - **Normal:** Select this option to use the 64 Gray Level Order Dither Pattern Set
 - **High-Res:** Select this option to use the 256 Gray Level Order Dither Patterns.

Advanced Options: Options are:

- **Invert:** Select **Yes** to print image colors inverted. This is the same as selecting the **I macro**.
- **Make Raster Pixels Solid Black:** Select **Yes** to print raster pixels solid black. This is the same as selecting the **A macro**.
- **Force Pens Solid on all Planes:** Select **Yes** to print all vector pens a solid color in each color plane, black, black and red, or CMY. This produces the same effect as when "Map pen colors to a shaded halftone" is not selected in Repro Desk. This is the same as selecting the **X macro**.
- **Force Even/Odd Polygon Fill:** Select **Yes** to use alternate or even/odd fills instead of the fill type specified in the HPGL2 file. This option is provided for Repro Desk support. This is the same as selecting the **Y macro**.
- **Resample All Monochrome TIFF:** Select **Yes** if you are printing:
 - Monochrome TIFF files, aerial photos, gray scale images, or scanned images and you want to improve print quality.
 - A portion of a monochrome TIFF file or a scanned image.
 - A monochrome TIFF file or a scanned image that is resized.

This is the same as selecting the ~ **Macro**.



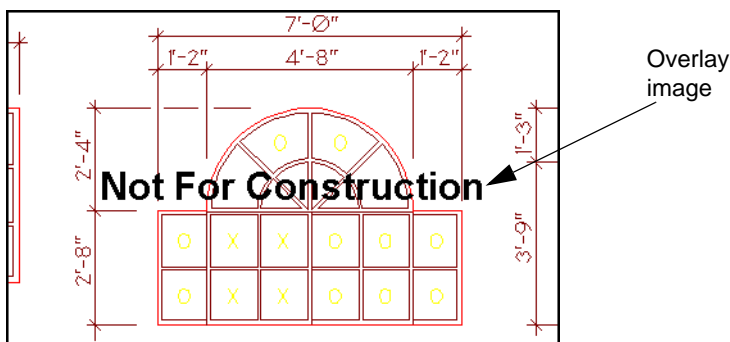
Resampling all monochrome TIFF files dramatically increases computer processing requirements. This results in slower printing. Slower computers or those containing less memory may freeze if this option is selected.

- **Sharpen Raster Blocks:** Select **Yes** to print raster images crisper when scaling.

Overlays Tabbed Dialog Box

This tabbed dialog box is used to apply and position overlays. Typical overlays include placing a title block, logo, or an approval stamp over an image. You can layer up to ten images on top of a base print.

Fig 4.18
Sample
image with
an overlay



Overlaying Images

For best results when applying overlays, make the overlays relative to the main image. Then if the base image is mirrored, enlarged or reduced the overlay is adjusted accordingly.

Making overlays relative to the main image:

1. From the **Setup** menu, click **Preferences**.
2. Click the **Finishing Options** tab.
3. Select the **Make overlays relative to main image** check box.

Overlays and base files must reside in the same directory.

Printing images with overlays:



1. Add your base and overlay images to the job ticket using the **Add Files** button.

If you want to use a file as an overlay and print the file individually, you must add that file to the job grid twice.



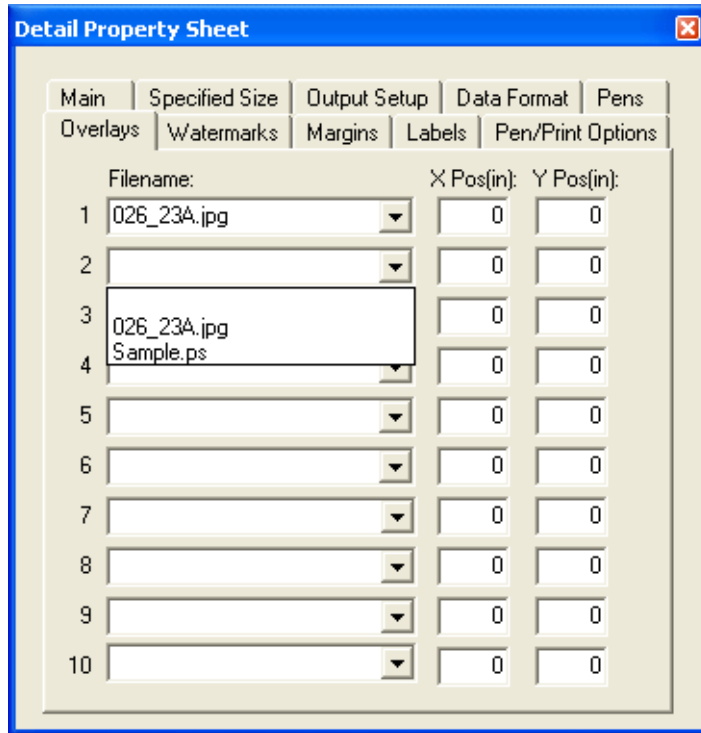
PlotWorks supports the Windows “drag-and-drop” method of adding files. Simply drag the image files from the Windows Explorer window and drop them onto the PlotWorks Client grid.

2. Set the quantity to **X** or **0** in the **Qty** (quantity) cell for each image that will be used as an overlay.
 3. Select the base image by clicking on its row number on the grid.
 4. Enter a quantity of **1** or more for the base image.
-



5. Click on the **Properties** button from the PlotWorks Client tool bar to open the Detail Property Sheet.
6. Click on the **Overlays** tab.

*Fig 4.19
The Over-
lays
tabbed di-
alog box
displaying
the second
filename
drop down
list*



7. You can overlay up to 10 files on the base image. Click on the first **Filename** drop down list and select the first file to use as an overlay. If you want to overlay a second file select it from the second **Filename** drop down list and so on.



If the file you wish to use as an overlay does not display in the drop down list, ensure it is listed in the job grid and that it is assigned a Quantity of X

8. Position the overlay by entering an X and Y offset in the provided text boxes. Drawings are overlaid, by default, on the lower left corners.
 - **X Pos:** Enter the X coordinate for the origin of the overlay image (horizontal).

- **Y Pos:** Enter the Y coordinate for the origin of the overlay image (vertical).

For an example of X and Y coordinates, please see the diagram “The default location of the X and Y origins” on page 4-20.

- Repeat steps 7 and 8 for the next file to use as an overlay by selecting it from the second **Filename** drop down list and assigning it an X and Y coordinate. Repeat as necessary.

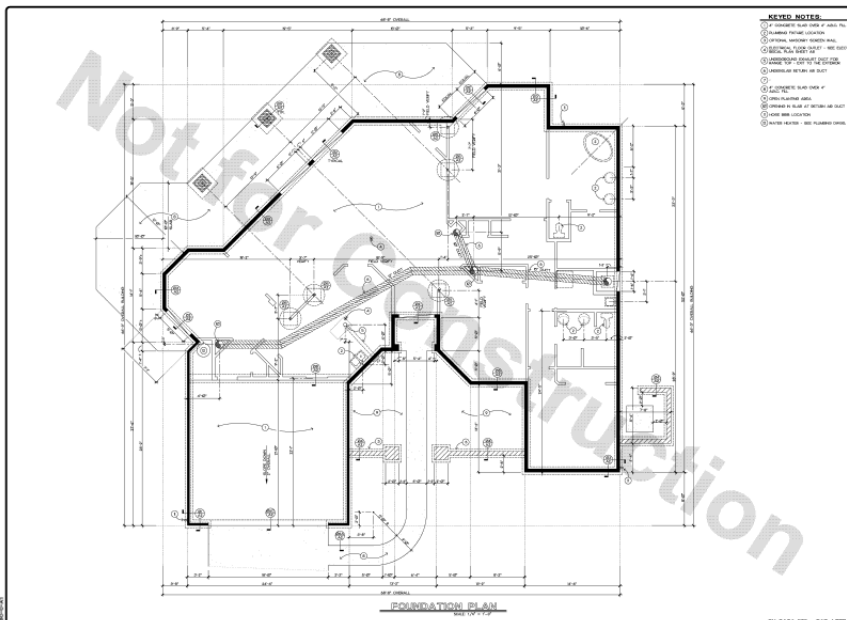


- Save the job ticket and output the job to the printer. The overlay image(s) will print on the main image file.

Watermarks Tabbed Dialog Box

A watermark is usually a light line of text printed under the main file. A watermark is usually text such as *Preliminary*, *Not for Construction*, or a name. Below is an example of a watermark.

*Fig 4.20
Sample
image with
a water-
mark*



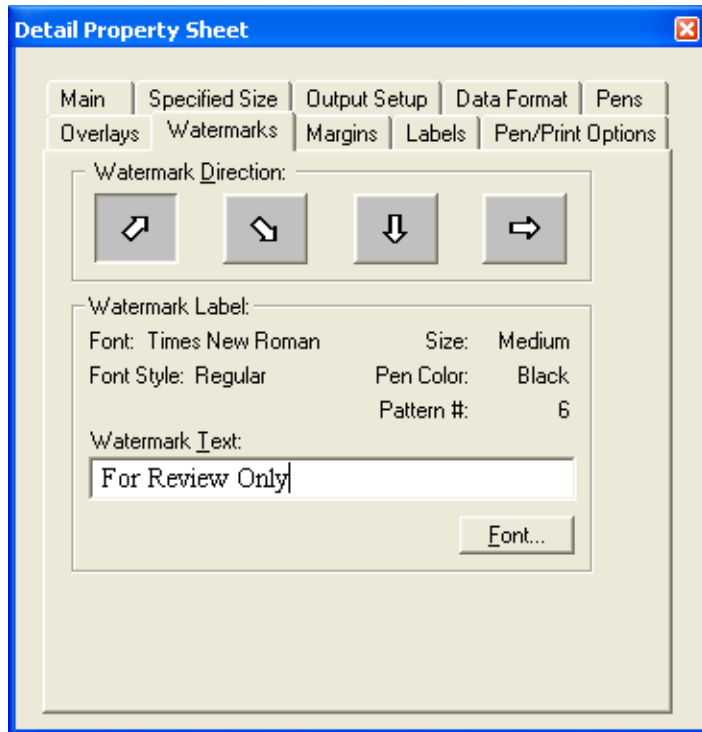
You can select the font, pattern number or percentage, and the position of the watermark.

To create a watermark:

- Select a file in the job grid that you want to add the watermark to.

2. Click the **Watermarks** tab on the Detail Property Sheet.

*Fig 4.21
The Water-
marks
tabbed di-
alog box*



3. Select the desired **Watermark Direction** by selecting one of the buttons provided. These buttons determine the direction the watermark prints across the page:



Lower left to upper right



Upper left to lower right



Top to bottom

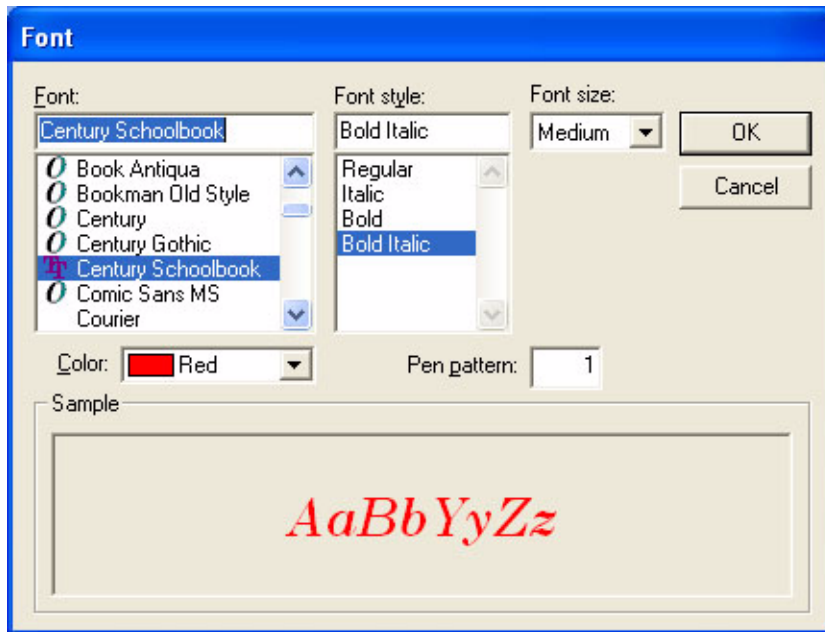


Left to right

Watermarks are always scaled to fit the page centered in the direction selected

4. Enter up to 80 alphanumeric characters, to make up the watermark, in the **Watermark Text** box. Special characters like ASCII characters entered from the numeric keypad or CR/LF are not supported.
5. Click the **Font...** button to display the Font dialog box.

*Fig 4.22
The Font
dialog box*



PlotWorks currently supports Windows system fonts only. Other True Type fonts are not supported at this time.

6. Select a font, style, and size for the watermark. Ensure that the selected font is available on the PlotWorks Server or the desired output may not be achieved.
7. Next select a pen color if you are printing to a color printer. Otherwise the default pen color (black) is used.

8. Select a pen pattern by entering a pattern number or percentage. If specifying a percentage include the percent symbol (%). Refer to the Pen and Pattern charts provided on the PlotWorks CD-ROM to select a pattern.



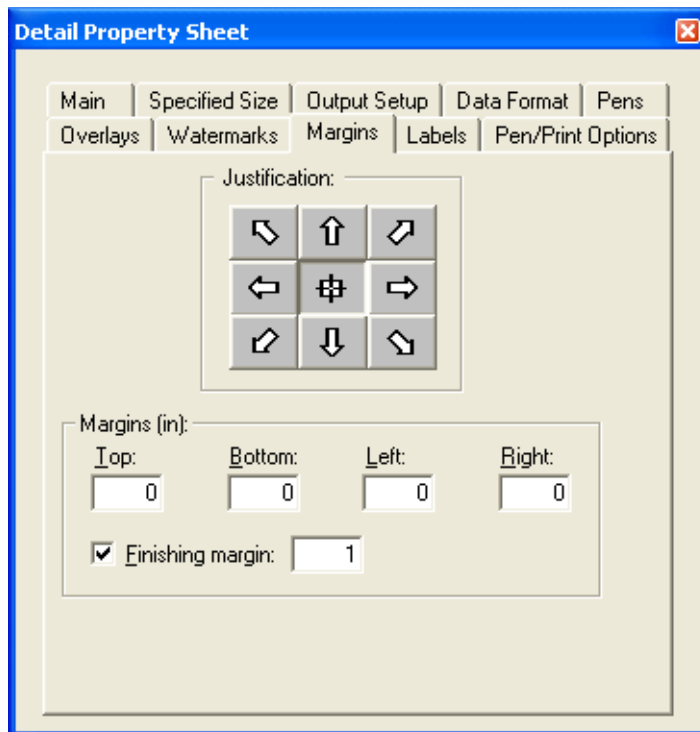
To print a watermark or label in red on HPGL/2, HPGL-RTL, PDF or PostScript files it is necessary to apply the "M" Pen Macro. For more information see page 4-29

9. Click **OK** to return to the Watermarks tabbed dialog box .

The text specified for the watermark displays in the watermark column of the job grid. You can save the watermark for future use. For more information see page 4-58.

Margins Tabbed Dialog Box

*Fig 4.23
The
Margins
tabbed di-
alog box*



The Margins tabbed dialog box is used to apply and adjust margins and position the image file on the medium.

Setting Margins and Justifications

1. Click on the **Margins** tab on the Detail Property Sheet.
2. **Justification:** Select the desired justification for the printed image by clicking on the appropriate button. Choices are:



Upper left



Top center



Upper right



Center left



Center



Center right



Lower left



Bottom center



Lower right



***Top** refers to the top of the actual image and the leading edge of the printed image.*

3. Margins are measured in the selected units (inches, centimeters, or millimeters). Add a **Top**, **Bottom**, **Left** or **Right** margin by entering the desired margin width in the provided text boxes.
4. Select the **Finishing margin** check box to add a finishing margin (for binding) on the left side of the medium. This activates the **Finishing margin** text box. Enter the desired width for the finishing margin. This width is added to the extent of the image plus any edge margins set.

Once margin specifications are selected, they can be saved for future use. For more information see page 4-58.

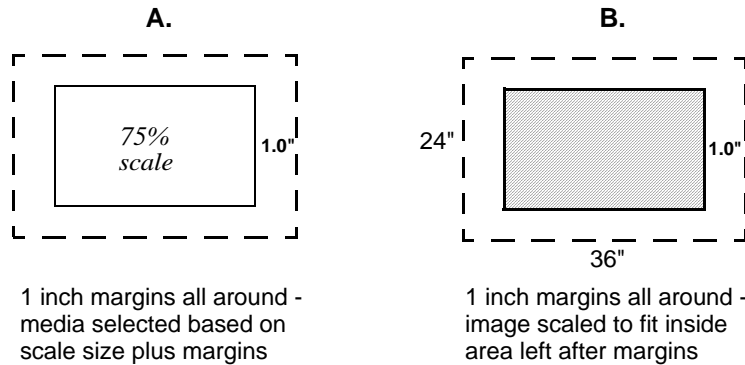
Margins and scaling

The final media size is affected when applying margins depending on the scaling type selected.

- **Percent scaling:** If scaling to a percentage, the image itself will be the exact percent scale specified and the margins are added to it. If scaling to 75%, with 1" margins selected all around, the final print size will be the image shrunk to 75% of its original size and will have an inch margin all the way around.

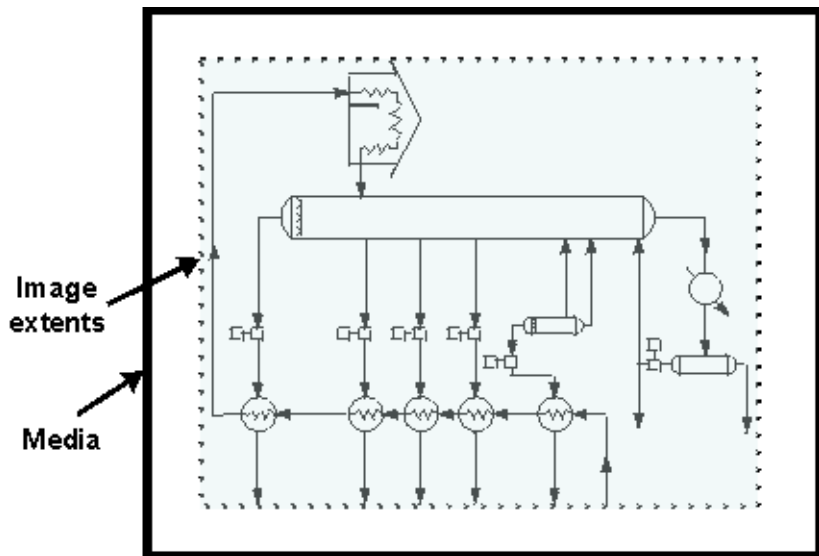
- **Final size scaling:** If scaling to a final size, the image is scaled down to a size that equals the final size minus any margins. For example, if scaling to a final size of 36 x 24 with 1" margins, the image extents will be 34 x 22, printed on 36 x 24 media. Margins are subtracted from the actual final media size and the image prints on the remaining media, thus reducing the final "image size."

Fig 4.24
(A) Scale
to Percent
(B) Scale
to Final
Size



Examples of different margin settings

Fig 4.25
Image
printed
with no
margin
specified



The outlined blue rectangle in the image above, represents the image extent. Note how the image is centered on the media.

Setting margins increases the width and length of the image.

Fig 4.26
Illustration of a image printed with a .5 margin set on all sides.

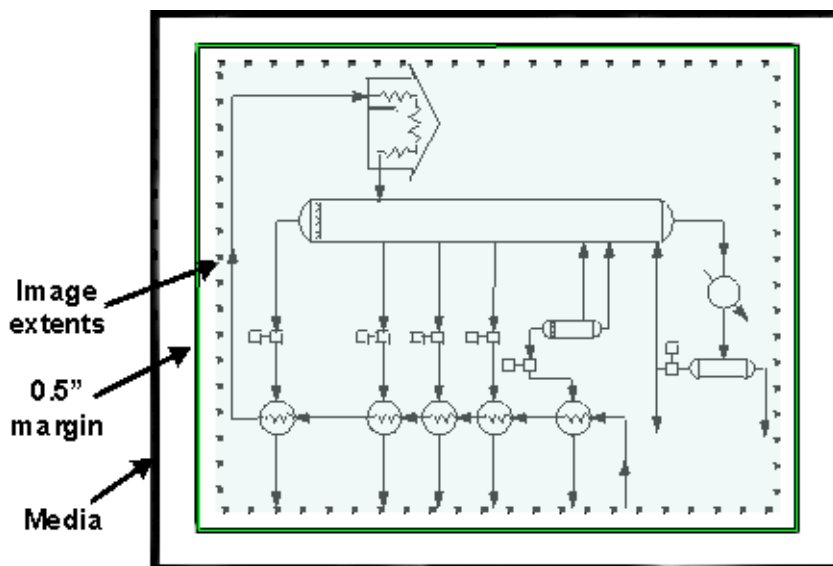
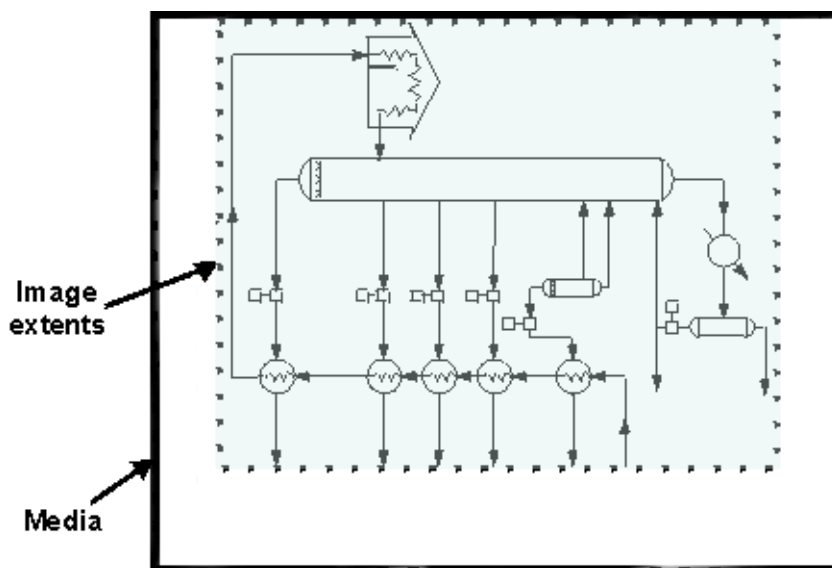
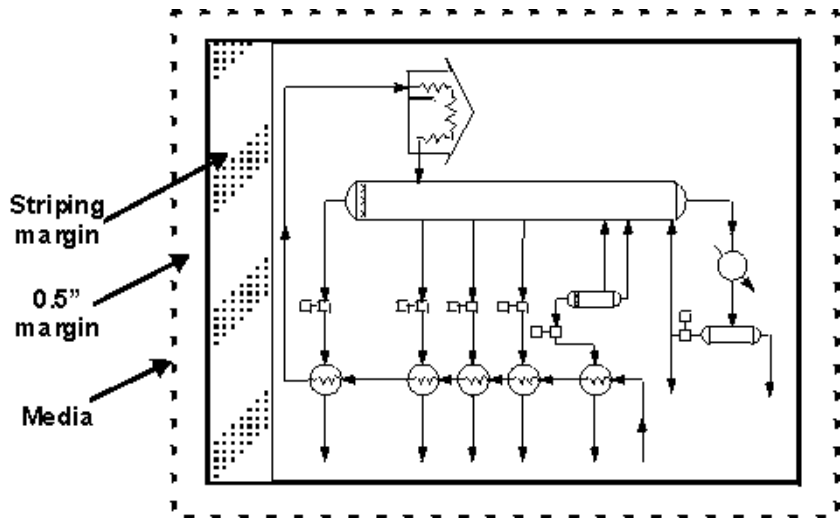


Fig 4.27
Image printed with top-center justification. The image is centered horizontally, but is positioned at the top of the page.



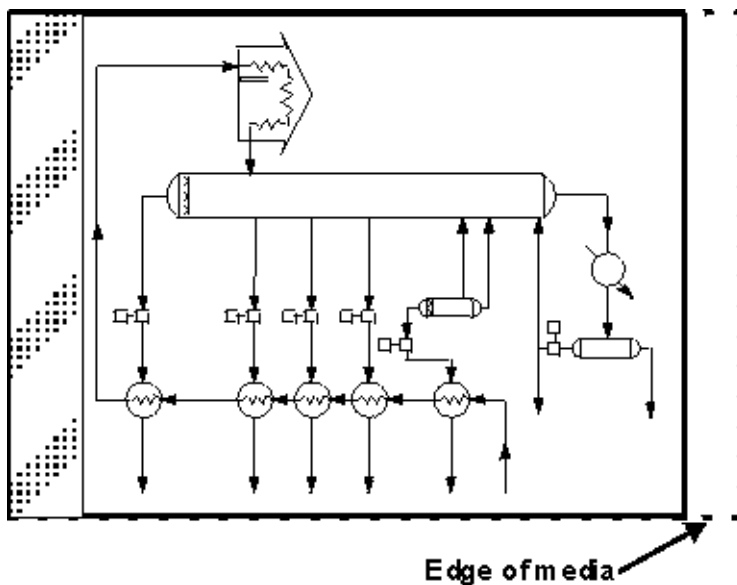
.This example below shows how a finishing margin is applied to the left side of the image. Notice that the width of the finishing margin is added to the overall image size.

Fig 4.28
Image with
margins
set to .5
and finish-
ing mar-
gin set
to 1.0 .



Notice that the image below, which is upper-right justified, is cropped. The .5" margins plus the 1.0" finishing margin, in addition to the justification, cause the image to be larger than the actual medium. Change the Output Size or Specified Size, or select larger media. and try again.

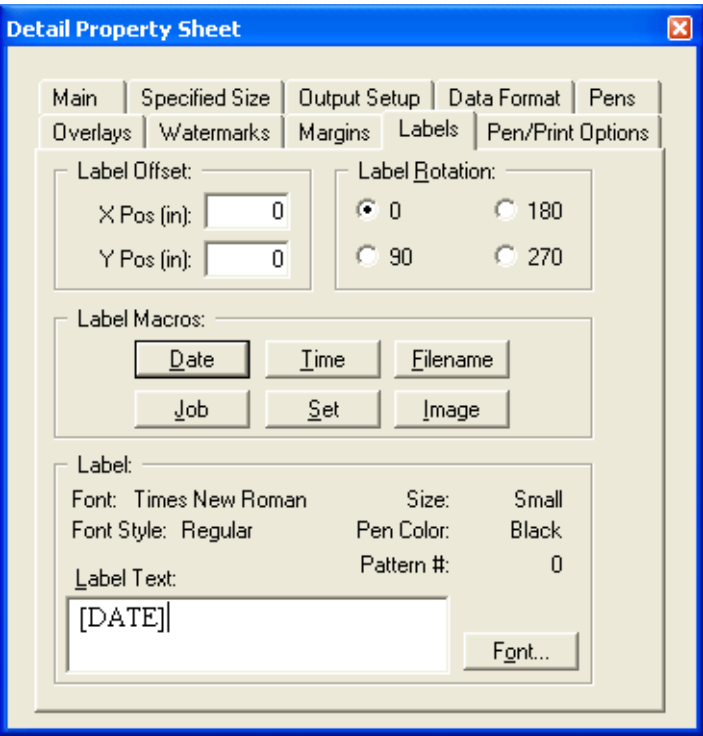
*Fig 4.29
Image with
margins,
finishing
margin,
and justifi-
cation ap-
plied on
medium
that is too
small.*



Margins and justification are only applied if the Specified Size, which includes the image extents, plus margins, plus the finishing margin is smaller than the final Output Size (the actual medium) selected.

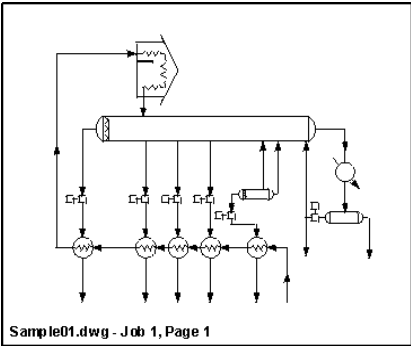
Labels Tabbed Dialog Box

Fig 4.30
The
Labels
tabbed di-
alog box

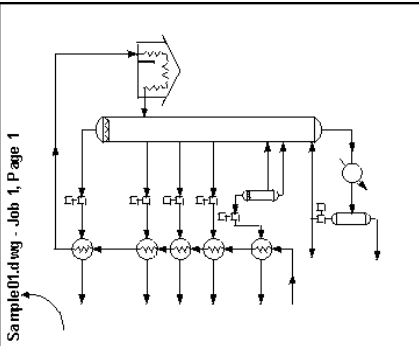


This tabbed dialog box is used to create and apply a single line text label. You can select the label font, style size, and position. You can also select a pen and pattern for the label.

Fig 4.31
Label
samples



Default label is applied to the lower-left edge of media.



Rotation is applied relative to the lower left corner of the label.

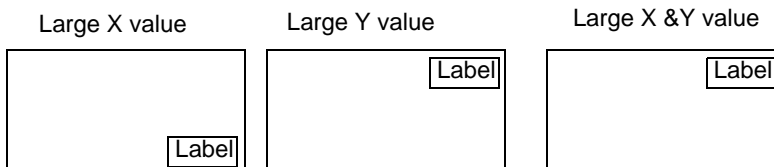
To create a label:

1. Click on the **Labels** tab of the Detail Property Sheet.
2. To offset the label from its starting point, the lower-left edge of the medium, enter the desired offset amount in the **X Pos** and **Y Pos** fields.
 - **X Pos:** X' refers to the horizontal axis. Entering a positive number shifts the X position to the right while a negative one shifts the X position to the left.
 - **Y Pos:** Y' refers to the vertical axis. A positive number here shifts the Y position up, a negative number shifts it down



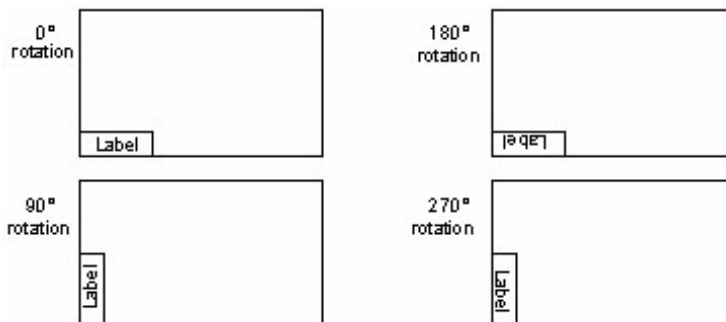
'Entering a number larger than the actual medium size causes the label to snap to the edge of the medium. This is an easy way to offset the label to the opposite side of the medium. See example below.'

*Fig 4.32
Label lo-
cation*



3. Label rotation is applied so that the label is never cut off. Select the desired degree of rotation relative to the lower-left corner of the label by clicking on one of the **Label Rotation** radio buttons. Choices are: 0, 90, 180, and 270.

*Fig 4.33
Label rota-
tion*



4. Enter content for the label by either entering text in the **Labels text** box or use the **Label macros**.
 - **Label macros:** These are predefined macros that are used to enter commonly used information for labels. These macros can be combined

with other label macros or any other text specified. The following label macros are available:

- **Date:** Adds the current date in month/day/year format.
- **Time:** Adds the current time in hour/minute/second format
- **Filename:** Adds the file name.
- **Job:** Adds the job name
- **Set:** Adds the number of print sets requested
- **Image:** Adds the image number as per the job grid. This is useful for troubleshooting purposes.

Click a Label macro button to enter the selected macro. The macro name, enclosed in square brackets (**[Date]**), will display in the **Label text** box. as shown on the screen shot on page 4-55.

- **Label text:** Enter up to 255 text characters for the label in this text box. If a label macro was also selected, it will appear in this text box as well. You can enter text of your choice before, or after each macro. This label data will appear in a single line when printed.
5. The **Label** group box displays the font style, type, size, color and pattern currently selected. To change any of these options, click on the **Font** button to open the Font dialog box.
- Select a font, style, and size for the label. Ensure that the selected font is available on the computer and is a Windows system font. Other True Type fonts are not supported.
 - Next select a pen color if printing to a color printer. Otherwise the default pen color (black) is used.



HPGL/2, HPGL-RTL, PDF and PostScript files will not print Watermarks or Labels in red unless the "M" Pen Macro is specified.

- Select a pen pattern by entering a pattern number or percentage. If specifying a percentage include the percent symbol (%). Refer to the Pen and Pattern charts provided on the PlotWorks CD-ROM to select a pattern.
6. Click **OK** to return to the Labels tabbed dialog box.

You can save configured labels for future use. For more information see page 4-58

Saving and applying options selected from the Detail Property Sheet

Saving and applying a Pen Set

You can save the pen sets you create in the PlotWorks Client for later use in the same job ticket or in other job tickets.

To create and save a pen set:

1. Select the image from which you want to save the pen set, or open the **Pens** tabbed dialog box and create the desired pen set.
2. Open the **File** menu and select **Save Pen Set**.
3. Enter a name for the pen set. The PlotWorks Client automatically adds a .PEN filename extension.
4. Select a directory in which to save your pen set and click on **Save**.



See also: "The Detail Property Sheet" on page 4-16.

Open an Existing Pen Set

You can create and save your own reusable pen sets in the PlotWorks Client or Client. Once saved, pen sets are available for reuse in the same or other job tickets.

To apply a pen set to an image in a job ticket:

1. Select the image to which you want to apply the pen set. The PlotWorks Client does not allow multiple selections for this command, but by applying it to the prototype you can cause all files added thereafter to take on that pen set.
2. Open the **File** menu and select **Open Pen Set**.
3. Select the appropriate pen set.
4. Click **Open**. The selected pen set replaces the existing pen values.

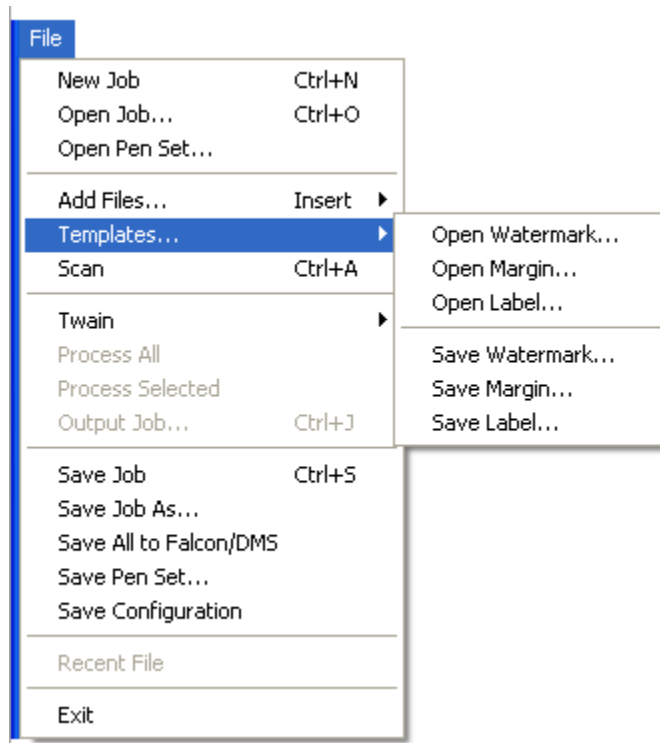
Saving and applying watermark, margin and label settings

Saving a watermark, margin or label setting

Once you have specified a watermark, margin or label from the Detailed Property Sheet, you can save the watermark, margin or label to use again. To do so:

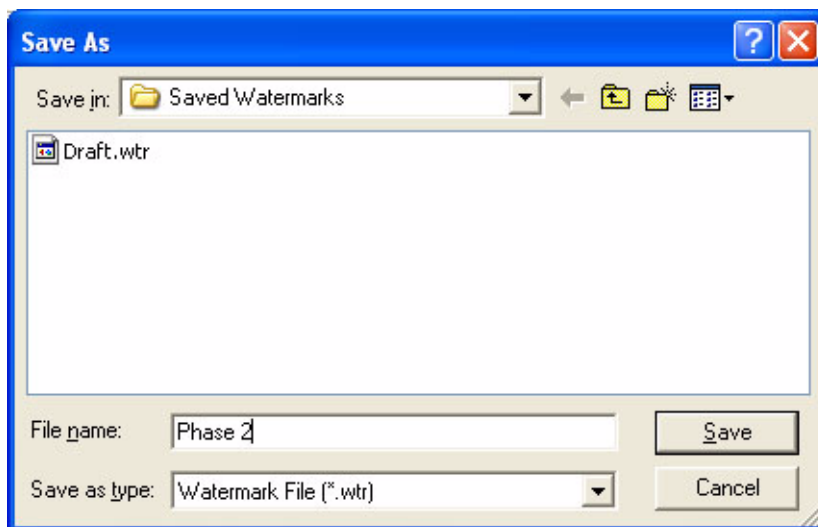
1. Click on the **File** menu
-

Fig 4.34
The
Templates
menu
options



2. Select **Templates...**
3. Click on either **Save Watermark**, **Save Margin**, or **Save Label** depending on what you are saving. The Save As dialog box opens.
4. From the **Save in** drop down list, select the directory you wish to save the configuration in.
5. Type a name for the configuration in the **File name** text box.
6. Click on the **Save** button.

*Fig 4.35
The
Save As di-
alog box
when sav-
ing a wa-
termark*



Applying a Saved Watermark, Margin or Label

Once a watermark, margin or label is saved, you can apply it to any image. To do so:

1. Select the image you want to apply the configuration to from the job grid.
2. Click on the **File** menu
3. Click on **Templates...**
4. Select **Open Watermark, Open Margin, or Open Label**. The Open dialog box opens.
5. From the **Look in** drop down list, select the directory the configuration is saved in.
6. Double click on the saved configuration. The watermark, margin or label is applied to the selected file.

The Scale View

The Scale View is a diagram available from the **View** menu.

Fig 4.36
Scale View



This window provides a visual representation of several printing parameters including:

- **Size:** A “before and after” comparison of specified size and output size.
- **Scale:** The percent of reduction or enlargement between the Specified and Output size.
- **Media type:** The color of the Output Size representation reflects the media type selected. Gray represents vellum, white represents bond, blue represents film, green represents T-bond, and red represents none.
- **Quantity:** The Output Size diagram shows the number of copies requested, up to three. If the quantity is greater than three, the bottom copy shown on the diagram is outlined with a dotted line.
- **Mirroring:** When the mirroring option is selected, the word “MIRROR” or the letters “MR” appear on the Specified Size diagram. The same letters appear reversed on the Output Size diagram.

The Scale View can be positioned anywhere on the desktop. Click and hold the mouse on the title bar of the Scale View window and drag it to the desired location. To close the Scale View, either select it again from the **View** menu or click on the square box in the upper-right corner of the Scale View window

Setting Preferences

The Preferences dialog box is used to set job-wide preferences and record administrative data for the job ticket.

To set preferences:

1. Open the **Setup** menu and select **Preferences**.
2. Select a tab window by clicking on its tab.
3. Edit the fields as desired.
4. Click **OK**. If you wish to save this particular configuration for later use, select **Save Configuration** from the **File** menu. The information is saved to your configuration file (conf.plp) and used as the default for later job tickets that you create.

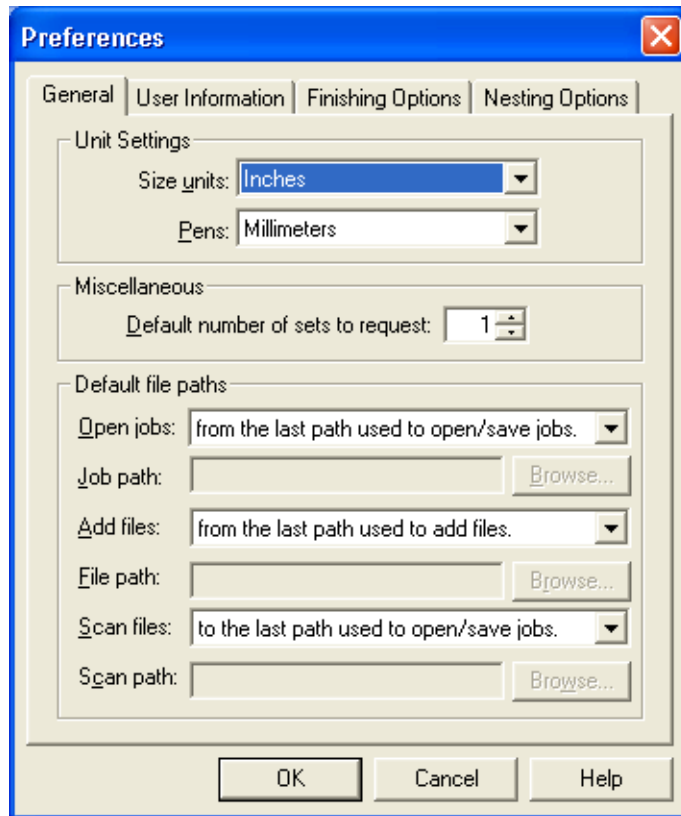
The Preferences dialog box contains the General, User Information, Finishing Options, and Nesting Options tab windows. These are described on the following pages.

General Preferences tabbed dialog box

The General Preferences tabbed dialog box contains the following options:

- **Size units:** Select the units of measure for use.
- **Pens:** Select the units of measure for pen values.
- **Default number of sets to request:** Enter the default number of sets to request when you output a job. This number can also be set in the Output Job dialog box.
- **Default file paths group box:** Options here specify the default directory for common functions
 - **Open jobs:** From this drop down list select a default directory to open jobs from. Choices available are:
 - **from the specified job path;** Selecting this option activates the **Browse** button below it. Click this button to browse and select a default directory to open jobs from.
 - **from last path used to open/save jobs;** When this option is selected, the last directory used to open jobs from or save jobs too is opened.
 - **from the last path used to add files;**
 - **from the current working directory.**

*Fig 4.37
General
tab of the
Preferences
tabbed
dialog box*



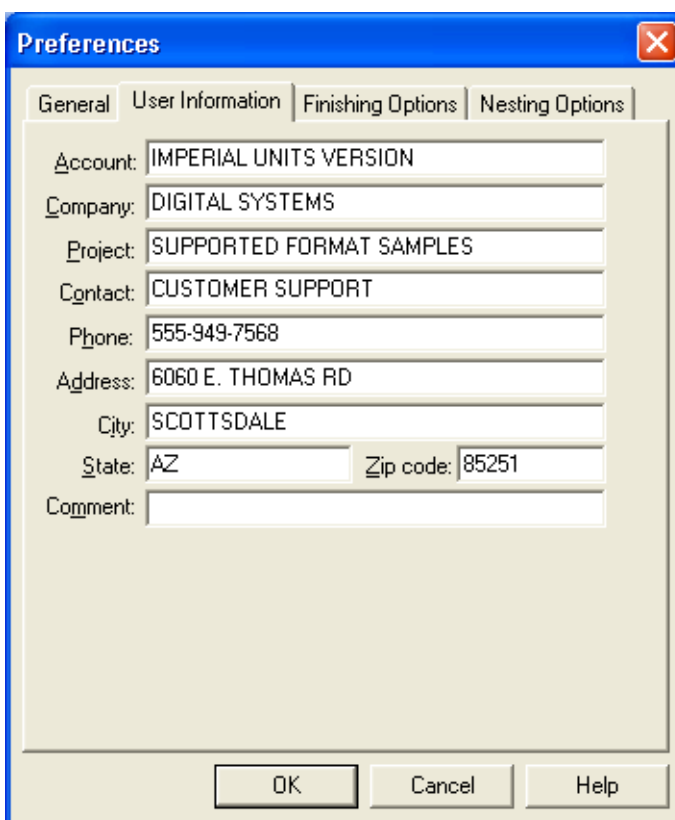
- **Add Files:** Use this drop down list to select a default directory to add files from. Choices available are:
 - **from the specified job path;** Selecting this option activates the **Browse** button below it. Click this button to browse and select a default directory to add files from
 - **from last path used to open/save jobs;**
 - **from the last path used to add files;**
 - **from the current working directory.**
- **Scan Files:** This drop down list is used to select a directory to place scanned image files into when the Scanner Interface is opened from the PlotWorks Client. Choices available are:

- **to specified scan path;** Selecting this option activates the **Browse** button below it. Click this button to browse and select a directory to place scanned files too.
- **to the last path used to open/save jobs;**
- **to the last path used to add files;**
- **to the current working directory.**

User Information Tabbed Dialog Box

The User Information tabbed dialog box is used to specify administrative information that can be used for job tracking and accounting with the Advanced Reporting Utility (ARU). For more information on the ARU, see Chapter 10. This information is also included in job information (.INF) files, which are used to send additional information and instructions along with your print job. For further information on .INF files, see “Send a Special Instruction File” on page 4-67.

Fig 4.38
User
Information
tab of the
Preferences
dialog
box



The image shows a 'Preferences' dialog box with four tabs: 'General', 'User Information', 'Finishing Options', and 'Nesting Options'. The 'User Information' tab is selected. It contains several text input fields for user and company details. At the bottom are 'OK', 'Cancel', and 'Help' buttons.

Field	Value
Account:	IMPERIAL UNITS VERSION
Company:	DIGITAL SYSTEMS
Project:	SUPPORTED FORMAT SAMPLES
Contact:	CUSTOMER SUPPORT
Phone:	555-949-7568
Address:	6060 E. THOMAS RD
City:	SCOTTSDALE
State:	AZ
Zip code:	85251
Comment:	

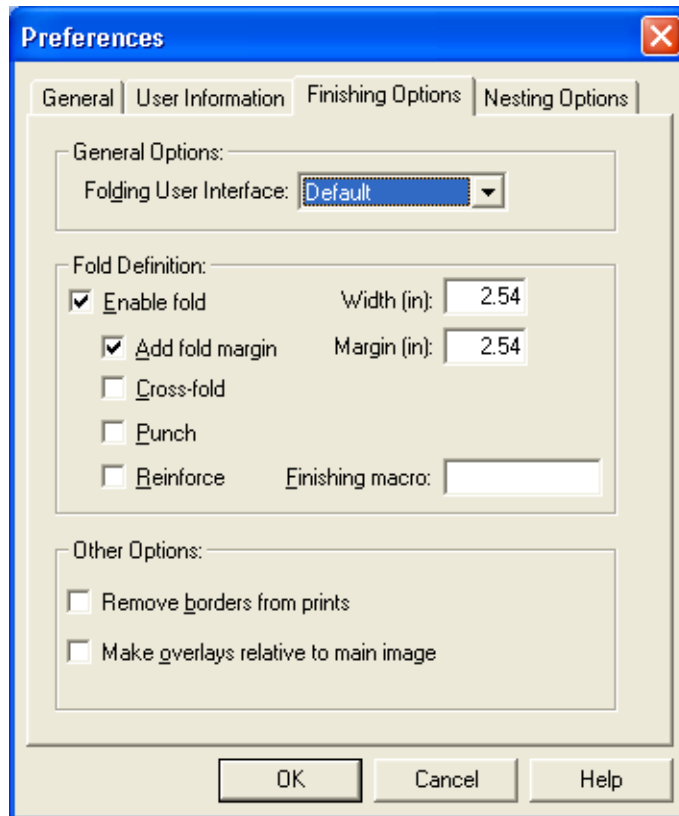
All fields are limited to 405 characters.

The Company, Project, Contact, and Comment fields are used when the job is output directly to a Job Queue to identify the job origination and provide additional information. The Company and Project information is displayed in the Job Queue's **Description** field. The Contact information shows up in the Job Queue's **Submitted by** field, after the computer name and user name (for the above example: \\computer\user: Customer Support).

The computer name and user name can also be used by the Job Processor and Printer Interface to send processing error information and/or print confirmation if those options are enabled.

Finishing Options

Fig 4.39
Finishing
Options
tab



The Finishing Options tabbed dialog box is used to set folding and finishing parameters, to remove borders from images and reverse printing orders. See *Chapter 11 - Folder Information*, for more information.

The Finishing Options tabbed dialog box contains the following fields:

- **Folding User Interface:** Use this drop-down list to select device specific folding options. Choices are:
 - **Default:** Select this option if you are not running a MAX 200 NACO or EO or a GFI folding device.
 - **MAX 200 NACO**
 - **MAX 200 EO.**
 - **GFI Folder**

Depending on what item is selected here, this tab window changes to display folder specific options. *Chapter 11 - Folder Information*, provides more information on folders.

- **Enable fold:** Select this box to enable a folder. Be sure the folder you are using is supported. You must select this box to enable other folding options.
- **Width:** Enter the fold width for the first fold in this text box. The measurement units specified on the General preferences sheet is used.
- **Add fold margin:** Select this check box to enable a fold margin and to enable the Punch and Reinforce options.
- **Margin:** Enter the desired fold margin width in the measurement units selected from the General Preferences sheet.
- **Cross-fold:** Select this check box to enable cross folding.
- **Punch:** Select this check box to enable hole punching. Select the **Add fold margin** check box to enable this option.
- **Reinforce:** Select this check box to add reinforcing strips to the margin. Select the **Add fold margin** check box to enable this option.
- **Tab:** This feature is currently unavailable.
- **Finishing macro:** Finishing macros are used to simplify sending special commands to the printer and/or folder. Additional information on folders and macros is provided in Chapter 11.
- **Remove borders from prints:** Select this check box to remove trim line borders from prints.



The Reverse Standard Print Order option is generally used with printers that output sheets facedown. In this case, the first image listed in the job ticket winds up at the end of the set. If you reverse the print order, the first image listed in the job ticket ends up at the beginning of the set.

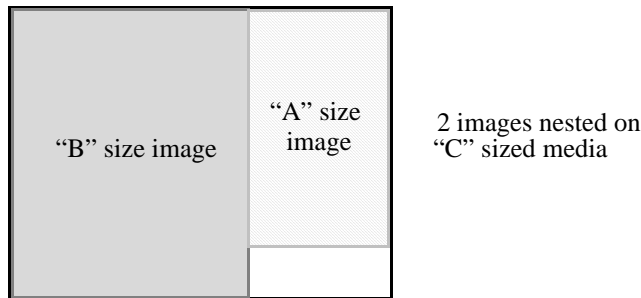
- **Make overlays relative to main image:** Select this check box to scale or rotate overlays in relation to the main image.

Nesting Options Tab

Nesting enables printing several images on one piece of medium to prevent media waste. For example, if D-size media is loaded, you can nest two C-size images so that they print side by side on D-size media.

The PlotWorks Client select the medium that it can print most drawings on by default. If more than one media available allows the same number of drawings, the PlotWorks Client uses the one that wastes the least media.

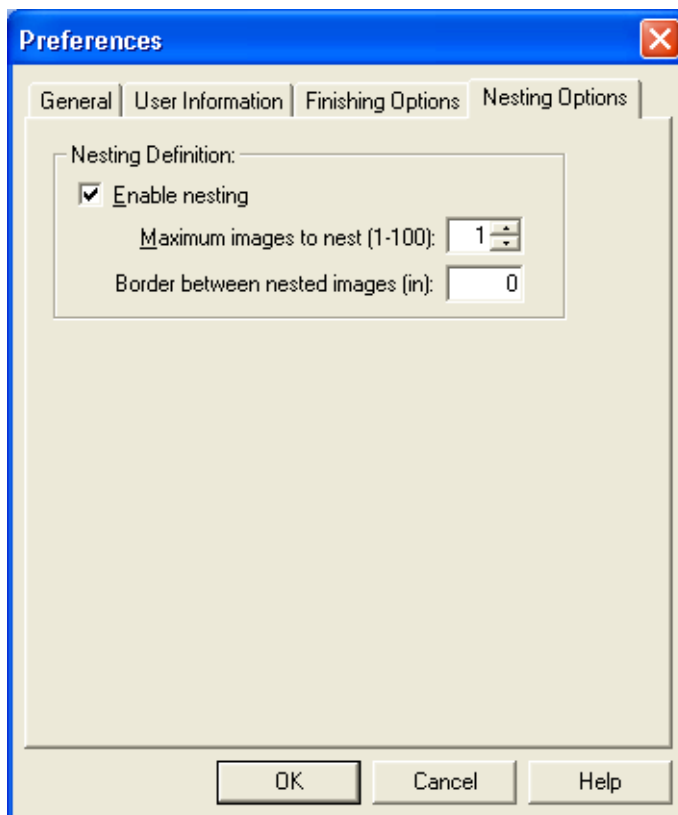
Fig 4.40
Example of
a nested
print job



To nest images:

1. Open the **Setup** menu.
 2. Select **Preferences**.
 3. Click on the **Nesting Options** tab.
 4. Select **Enable nesting**.
 5. Enter the **Maximum images to nest** (up to 100). This specifies when to start a new nested job. The default *maximum* nest length is 36 inches.
 6. In the **Border between nested images** field, enter the amount of margin space you want between nested images.
 7. Click **OK**.
-

Fig 4.41
The
Nesting
Options
tabbed di-
alog box



About Nesting

Only drawings in the same job and set can be nested together. This keeps different jobs and sets separate.

All drawings in each nest are oriented the same way, depending on what allows more drawings and saves media. Drawings are placed across the width of the roll until no more fit (we call this “one stack”). Then the position of the next stack starts just below the previous one.

By default, the PlotWorks Client will use the media entry allowing the most drawings. This does not always use the least media, however. For instance, if three 18"x12" drawings are printing on a 24" roll there will be an empty space of 18"x12" because the drawings do not nest evenly.

On a color printer, it is possible to have both color and black and white drawings in a job. It can be disadvantageous to nest these because the color prints take more time and use more memory.

Media Override on Nested Jobs

Use media override and the Printer Interface (at the service bureau or print server) re-nests the drawings to the best fit on the selected medium. The Printer Interface selects the paper size based on the first image in a group to be nested. If the first image is smaller than the following ones, clipping can occur.

Processing Options

The Processing Options tabbed dialog box is used to select how to process AutoCAD files, deal with processing errors, and what to do with files after processing.

To set processing options:

1. Click on the **Setup** menu
2. Select **Processing Options**.
3. Click on the appropriate tab.
4. Edit the fields as desired.
5. Click **OK**. The information is saved and used as the default for future job tickets.

The Processing Options dialog box contains the Processing, Size Tolerances, and AutoCAD/DWG Direct Setup tabbed dialog boxes. These are described below:

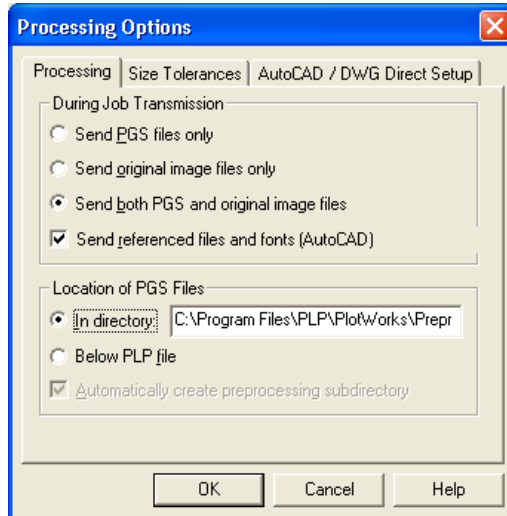
Processing tabbed dialog box

The PlotWorks Client saves processed images in a special file format called Performance Graphics Standard (PGS). Options selected from the Processing tabbed dialog box determines what to do with the PGS files when a job is outputted.



Do not store archived files in the same directory as a PGS file! The PlotWorks Client deletes files in the directory where PGS files are created. If files are stored in the same directory as a PGS file, if one of those files is added to the PlotWorks Client, when the PlotWorks Client is next closed all files in that folder, except for the PGS files, are deleted.

*Fig 4.42
Processing
tabbed di-
alog box*



The following options are available from the Processing tabbed dialog box:

- **Send PGS files only:** When this option is selected, the PlotWorks Client sends only the processed files to the output destination. The original image files are not sent.
- **Send original image files only:** When this option is selected, the PlotWorks Client sends only the original image files to the output destination. The processed files are not sent. The Job Processor must be open and started to process these jobs.
- **Send both PGS and original image files:** When this option is selected, the PlotWorks Client sends both the processed files and the original image files to the output destination.



*Files transferred via FTP do not maintain their current date and time stamps. Therefore, **Send original image files only** or **Send PGS files only** are the only options available when FTP is the selected destination.*

- **In directory:** Select this radio button to specify an existing directory to put processed files in. Please note that if this option is selected, no files should be stored in the same directory where the processing takes place as all files in this folder are deleted when the PlotWorks Client is closed.

- **Below PLP file:** Puts the processed files in a subdirectory within the directory containing the job ticket. This selection assumes that a directory called Preproc already exists in this location. If you do not have a Preproc directory, select the **Automatically create preprocessing subdirectory** option to have the PlotWorks Client create it for you.
- **Automatically create preprocessing subdirectory:** When this option is selected, the PlotWorks Client creates a Preproc subdirectory within the directory containing your job ticket when the images are processed.

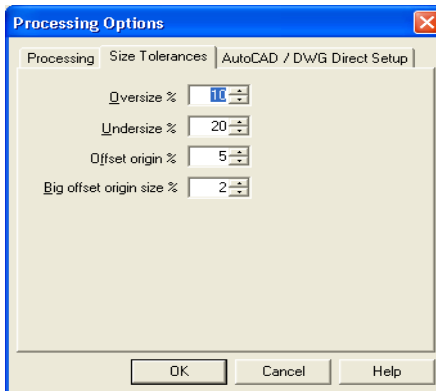
Size Tolerances Sheet

This sheet lets you specify a range of error within which Error Free Printing (EFP) corrects size and origin problems automatically on images submitted with an incorrect specified size. If a discrepancy exceeds the allowable range, the PlotWorks Client warns the operator that attention is required before printing.



*If you submit an image using **Auto Detected** for the Specified size, the Size tolerances are not used.*

Fig 4.43
*Size
 Tolerances
 sheet*



The following fields appear on the Size Tolerances sheet:

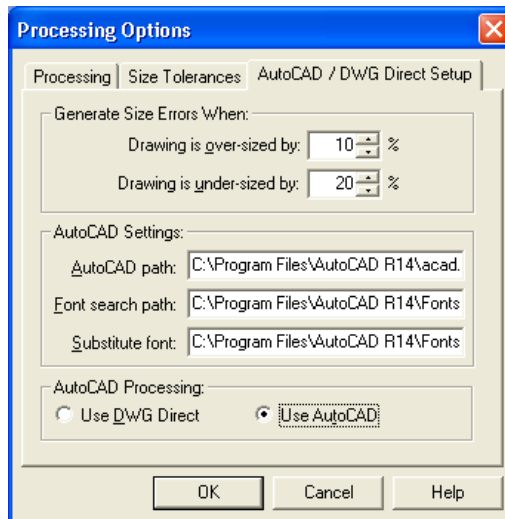
- **Oversize %:** The allowable percentage that the ACTUAL size can be greater than the SPECIFIED size.
- **Undersize %:** The allowable percentage that the ACTUAL size can be less than the SPECIFIED size.
- **Offset origin %:** The allowable percentage that the ACTUAL origin can be offset while the size is within over/under size limits.

- **Big offset origin size %:** Compensates for printing specifications that are both offset origin and slightly over or undersized. As long as an image is within this amount of the specified size (over or under), then it will be printed regardless of how far off-origin it might be.

AutoCAD/DWG Direct Setup Sheet

The AutoCAD/DWG Direct Setup sheet tells the PlotWorks Client how to do AutoCAD file processing. If you are not printing AutoCAD images, skip this part. For more information on processing AutoCAD files, please see **Processing AutoCAD Jobs** in Appendix H.

*Fig 4.44
AutoCAD/
DWG
Direct
Setup
sheet*



The following fields appear on the AutoCAD / DWG Direct Setup sheet:

- **Drawing is over-sized by percentage:** Enter an allowable error range for the specified print size. If an error is within this range, the PlotWorks Client corrects it automatically and continues processing the AutoCAD file. When an error exceeds this range, the PlotWorks Client requests operator attention.
- **Drawing is under-sized by percentage:** Enter an allowable error range for the specified print size. If an error is within the acceptable range, the PlotWorks Client corrects it automatically and continues processing the AutoCAD file. When an error exceeds this range, the PlotWorks Client requests operator attention.
- **AutoCAD path:** Enter the full path and filename of your AutoCAD executable.

- **Font search path:** Enter the full path/name of the directory that contains the AutoCAD font (.SHX) files used in the job.
 - **Substitute font:** Enter the path/name of the substitute font to be used when a specified font is not available.
 - **Use DWG Direct:** Select this if you want to use DWG Direct to process AutoCAD files.
 - **Use AutoCAD:** Select this to use AutoCAD to process AutoCAD files. You must have AutoCAD installed and properly configured to use AutoCAD.
-

Process Image Files

All images in a job ticket must be processed before they are printed. Processing converts the images to PlotWorks' proprietary file format, Performance Graphics Standard (PGS). During processing, the Error Free Printing function checks for inconsistencies between actual image data and specified printing parameters (unless set to Auto Detected or User Specified) and either corrects them automatically or requests operator intervention.

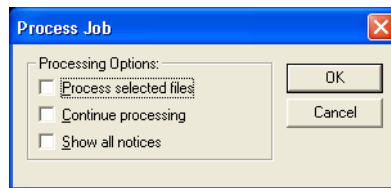
When you view an image, the PlotWorks Client automatically processes it, if needed, before opening the PlotWorks Image Viewer (if an external viewer is being used, no processing is done).

You can process individual images, groups of images, or an entire job by selecting the Process button

The Process Job dialog box

When the Process button is selected the Process Job dialog box opens.

Fig 4.45 The Process Job dialog box



The following options are available here:

- **Process selected files:** Select this check box to process only the files already selected in the job grid. This option is only available if a file is selected in the job grid. When this option is not available all files listed in the job grid are processed when the OK button is clicked. If this check box is not available and you wish to only process selected files, click the Cancel button, select the files to process and click on the Process button again.
 - **Continue processing:** Select this option to automatically process required files as necessary.
 - **Show all notices:** Select this option to display all processing notices. We recommend only using this option for trouble shooting purposes.
 - **OK:** Click this button to start processing. The PlotWorks Client processes the files and displays any warning or error messages that occur. If an error occurs, a warning dialog box may appear and you will need to select one of the following options:
-

- **Print Anyway:** This option continues processing a job that has been partially processed and ignores warnings that have already been okayed.
 - **Skip Image:** This option tells PlotWorks to skip the image that contains the error or warning and continue with the next image in the job.
 - **Halt Processing:** This option cancels the processing of all images in the job and returns you to the PlotWorks Client screen.
 - **Ignore all:** This option processes the entire job and ignores (automatically accepts) all Error Free Printing notices.
 - **Cancel:** Select this option to close the Process dialog box without processing any files.
-

Viewing Image Files

You can view any image file listed in the job grid. Before you attempt to do so it is necessary to ensure you have selected what image viewer to use.

You can choose to use the PlotWorks Image Viewer for all image types by selecting **Always use PlotWorks Viewer** from the **View** menu. (See page 4-6.) Or you can choose a different image viewing software product for each type of image file by using the options provided in the Configure Viewers dialog box. See page 4-7.

The PlotWorks Image Viewer

The PlotWorks Image Viewer lets you view the files in your print jobs and make adjustments to the prints. You can access the Image Viewer from within the Client or PlotWorks Client. The PlotWorks Image Viewer lets you:

- Zoom in and out.
- Show or hide individual pens (display only).
- Adjust the origin of the image.
- Adjust the output size.

More information on using the PlotWorks Image Viewer is provided in Chapter 4B of this User Guide.

The Windows XP Viewer

The Windows XP Viewer can also be used to view images from the PlotWorks Client. When using this viewer to view TIFF images, do not rotate or change the image. This is because the XP Viewer will then automatically save the image in a format that PlotWorks does not support. To resolve this problem it will be necessary to open the image in a third party application like Adobe PhotoShop and then save the file, using no compression.

Viewing an image

To view an image listed in the job grid do one of the following:



- Double click on the image number in the job grid
 - Select an image and then click on the **View** button
 - Select an image and then click on the **View** menu and select **View image**.
-

Configure an Output Destination

If you are sending jobs over a local network or modem, or to a Queue directory from the Print Server, you must specify your destination and transmission mode.

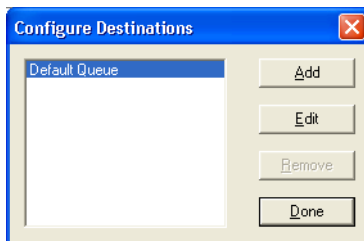
If you are sending your job to a disk, you do not need to configure a destination.

Configuring Multiple Destinations

PlotWorks supports multiple destinations. This makes it much easier to manage multiple Network Polling directories and multiple Job Queues. Configure the different destinations and then select it from the **Send to:** drop-down list when you are ready to output the job.

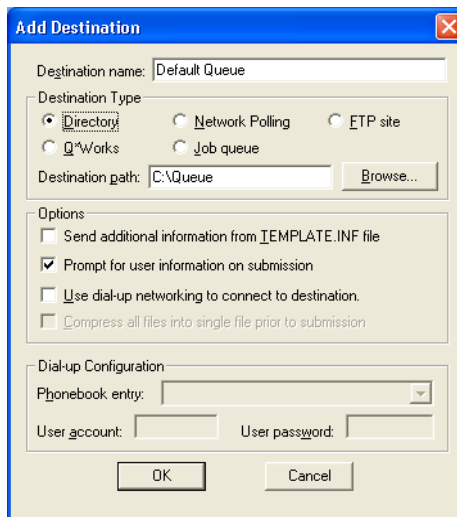
1. Open the **Setup** menu and select **Configure Destinations**. The Configure Destinations dialog box displays.

*Fig 4.46
Configure
Destination dia-
log box*



2. Click **Add** to display the Add Destination dialog box.

*Fig 4.47
Add Des-
tination
dialog box*



3. Enter a descriptive name in the **Destination name** field. This name appears as a selection in the Output Job dialog box.
4. Select one of the **Destination Type** radio buttons depending on what type of output destination you are setting up. Information on each Destination Type follows.
5. In the **Destination Path** field, specify a destination directory using the **Browse** button, or by typing in the UNC path (\\Computer\Shared Folder\Folder).
6. From the Options group box, select options by clicking in the appropriate check box. Options available are:
 - **Send Additional Information from TEMPLATE.INF file:** Select this option if you wish to send information contained in the Template. INF file with the job ticket. The Template.INF is required if selecting this option
 - **Prompt for user information on submission:** This check box is selected by default. User Information is automatically included in the .INF file. Selecting this option generates the User Information dialog box when the job is submitted for printing. This allows you to make final changes to the user information if required.
 - **Use dial-up networking to connect to destination:** Select this option if you wish to use Dial-up Networking and RAS/Dial-up Networking is installed and configured correctly. This activates the fields in the Dial-up Configuration group box. Select the destination phonebook entry, and enter your account and password in the appropriate fields. Appendix G contains more information on this subject.



If the client is running on Windows 95 or 98, the client must notify the service bureau or the PlotWorks hub administrator if the network logon user name changes. This name must be changed at the receiving server as well before jobs can be sent.



If RAS is not installed, this field is disabled. RAS (Remote Access Service) is the Windows NT version of Dial-up Networking (Windows 95). RAS/Dial-up Networking must be installed (from your Windows NT or Windows 95 CD) and configured in the Windows operating systems for both the client (for sending) and server, or hub (for receiving). Refer to Appendix G “Configuring RAS to Output PlotWorks Job Files” or check with your Network Administrator for instructions.

- **Compress all files into single file prior to submission:** Selecting this option compresses all files in the job grid and the PLP file into a single **PWC file**. This speeds up the file transfer process when submitting from the Job Client to a Network Polling Mode 2 or 3 directory. This option is only available when Network Poling is selected for destination type.



***PWC files** are compressed files that contain image files as well as the PLP file that make up a job. These files are created when **Compress all files into single file** is selected in the PlotWorks Client or Client. If the PlotWorks DOS version is used, the files are compressed into a **PWJ file**.*

7. Click **OK**.

Destination Types

The PlotWorks Client takes different actions when outputting depending on the destination type selected. The following destination types are available:

- **Directory:** This option is used mainly for archiving files or sending them via RAS to a specified directory location. Subdirectories are not created. Therefore, if two files with the same name are submitted, one will overwrite the other. This option is not used for Network Polling directories as it does not support PGS files. Selecting this option disables the 'Compress all files into single file prior to submission' check box
- **Network Polling:** This option sends your job to a target directory used by the Network Polling program or the DOS-based NetQuery program. When you send jobs to this destination, the PlotWorks Client automatically creates a numbered subdirectory for your files within the polling directory. This selection is recommended for service bureau environments because it prevents remote users from directly accessing the Queue. This option should be used when submitting PGS files.
- **Job Queue:** This option sends your job directly to a Job Queue. When you send jobs to this destination, the PlotWorks Client automatically creates a job directory for your files within the Queue directory. This selection is recommended for in-house industrial/architectural/engineering environments.
- **FTP:** This option lets you send your job to a polled directory on an FTP server. FTP uses the connection-oriented services of TCP to transfer text and/or binary files between a local host running TCP/IP and a host configured with an FTP server program. See “Installing FTP” on page G-531 for information on installing FTP service on the host server and client workstation, if necessary.



See also: “Output Jobs” on page 4-70.

To set up a local area network destination:

1. Open the **Setup** menu and select **Configure Destinations**. The Configure Destinations dialog box displays.
2. Click **Add** to display the Add Destination dialog box (see Fig. 4.38).
3. Enter a descriptive name in the **Destination name** field. This name appears as a selection in the Output Job dialog box.
4. In the **Destination path** field, either enter the path and directory to which the files will be sent, or use the **Browse** button. Be sure the network destination is accessible from the PC you are configuring before choosing this path.
5. Select a **Destination type** (see *Destination Types* above for more information).
6. Select **Send additional information from Template.INF** file if needed (Template.INF is required if selecting this option).
7. The **Prompt for User Information on submission** check box is checked by default. User Information is automatically included in the .INF file. When this box is selected, the User Information dialog box is generated when the file is submitted for printing. This allows you to make any final changes to the User Information before submission.
8. Click **OK**.

To set up a local Queue directory destination:

1. Open the **Setup** menu and select **Configure Destinations**. The following dialog box displays.
2. Click **Add** to display the Add Destination dialog box (see Fig 4.38).
3. Enter a descriptive name in the **Destination Name** field.
4. In the **Destination Path** field, either enter the path and directory to the Job Queue where the files will be sent, or use the **Browse** button. Be sure the network destination is accessible from the PC you are configuring before choosing this path.



A queue must exist before choosing it as a *Queue* destination. See “Create a New Job Queue” on page 3-82.

5. Select **Job Queue** in the Destination Type field.
 6. Select **Send additional information from Template.INF** file if needed (Template.INF is required if selecting this option).
-

7. The **Prompt for User Information on submission** check box is checked by default. User Information is automatically included in the .INF file. When this box is selected, the User Information dialog box is generated when the file is submitted for printing. This allows you to make any final changes to the User Information before submission.
8. Click **OK**.

Setting Up an FTP Destination

File Transfer Protocol (FTP) allows you to transfer one or more files between the local client and remote host fast. It can handle larger files than e-mail and uses the Internet as its means of connection.

Use this destination type when the remote host requests that you transfer your files using FTP. See “Installing FTP” on page G-531 if you need help installing and configuring FTP on your workstation or setting up an FTP server.

In order to send job tickets from a client site using FTP, the client (PlotWorks Client or PlotWorks Client) must have:

- TCP/IP installed on the end user’s computer
- A user account on the FTP server

To set up the client site, you need to know:

- The account name and password of the end user (who will be sending files)
- The host computer’s IP address. Then, in order to use a computer name, the LMHOSTS file must be configured on the client computer (see “Create an LMHOSTS File” on page G-526).
- Windows 95/98 or Windows NT 4.0 Workstation — check to make sure that TCP/IP is configured on your computer (see “Verify Current Configuration” on page G-501 or page G-10).

Configuring PlotWorks to output jobs using FTP:

1. Open the **Setup** menu and select **Configure Destinations**. The Configure Destinations dialog box displays.
 2. Click **Add** to display the Add Destination dialog box (see Fig 4.38).
 3. Enter a descriptive name in the **Destination name** field (optional). This name will appear as a selection in the Output Job dialog box.
 4. Click on the **FTP** radio button to select it as the **Destination type**.
 5. In the **Destination path**, first enter your **User Account name**. Then a colon (:), your **Account Password**, an @ sign, and finally the **IP Address** of the remote Print Server, i.e., **username:password@IP Address**.
-

Example: If the destination is using LAN, WAN or Dial-Up Networking, this information is required:

- FTP Username: **PlotWorks**
- FTP Password: **smith**
- Host's IP Address: **131.107.2.2** (or computer name, if an LMHOSTS file has been configured)

therefore you would enter in the Destination path:

PlotWorks:smith@131.107.2.2

Example: If the destination is using a proxy, the destination path will contain:

- Remote-Username: **PlotWorks**
- Host-Site: **Xerox**
- Remote-Password: **smith**
- Proxy Name or IP address (a name is usually used): **printserver**

Therefore, you would enter in the Destination path:

PlotWorks@Xerox:smith@printserver (see Fig 4.49).

6. Select the box that says **Use dial-up networking to connect to destination.**



If RAS is not installed, this field is disabled. RAS/Dial-up Networking must be installed (from your Windows NT, 95, or 98 CD) and configured in the Windows operating system for both the client (for sending) and the server, or hub (for receiving). Refer to Appendix G: "Configuring RAS to Output PlotWorks Job Files," for more information.

7. Select the destination phonebook entry, and enter your account name and password in the appropriate fields.
8. Select **Send additional information from Template.INF** file if needed (Template.INF is required if selecting this option).
9. The **Prompt for User Information on submission** check box is checked by default. User Information is automatically included in the .INF file. When this box is selected, the User Information dialog box is generated when the file is submitted for printing. This allows you to make any final changes to the User Information before submission.
10. Click **OK** to save the configuration and close the dialog box.

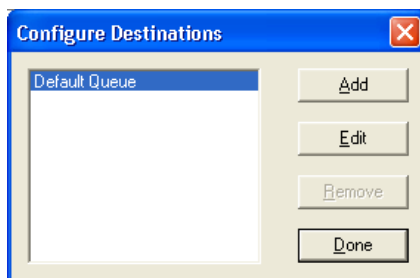


When you are ready to send a job using FTP, click **Output Job** and select the FTP site as the destination (if it is not already selected). See "Output to FTP" on page 4-72 for more information.

Edit an existing Output Destination

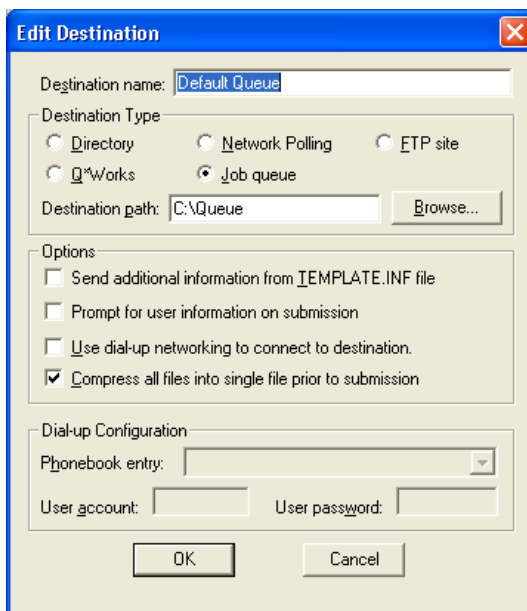
1. Open the **Setup** menu and select **Configure Destinations**. The Configure Destinations dialog box displays.
2. Click on the destination you wish to edit. This makes the Edit button available.

*Fig 4.48
Configure
Destination dia-
log box*



3. Click **Edit**. This displays the Edit Destination dialog box.

*Fig 4.49 The Edit
Destination dia-
log box*



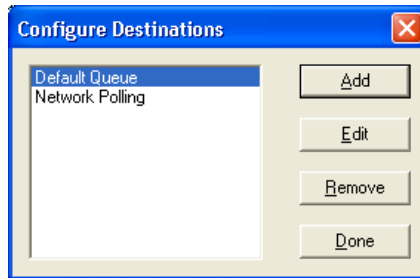
4. This dialog box contains the same options as the Add Destinations dialog box. Simply make the edits you desire and then press on the **OK** button

Delete an existing Output Destination

You may only delete a destination if you have more than one destination configured and listed in the Configure Destinations dialog box.

1. Open the **Setup** menu and select **Configure Destinations**. The Configure Destinations dialog box displays.
2. Click on the destination you wish to delete. This makes the Delete button available.

*Fig 4.50
Configure
Destination dia-
log box*



3. Click **Remove**. This displays a dialog box confirming that you wish to remove the destination.
4. Click **Yes** the destination is removed.

Sending Print Jobs

Send a Special Instruction File

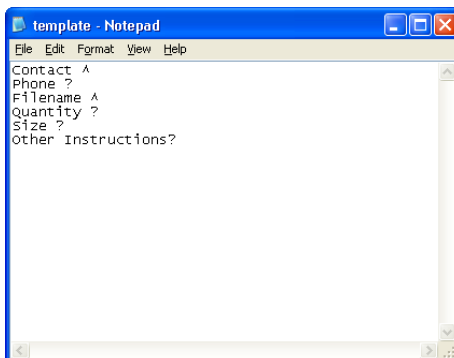
You can specify within the PlotWorks Client that you would like to send a job information (.INF) file with your job. This option requires that the TEMPLATE.INF file reside in your PlotWorks program directory, or in the directory from which you last added a file (the current directory). PlotWorks searches the current directory first.

A TEMPLATE.INF file is a customizable form that lets you attach additional information and instructions to your print job. The TEMPLATE.INF file is particularly useful in a service bureau setting, where many customers with different requirements are submitting jobs.

To create a TEMPLATE.INF file:

1. Open Notepad (click the Windows **Start** button, select **Programs**, then select **Accessories**).
2. Enter the questions that you want the .INF file to ask. End each sentence with either a ? or ^.
 - ? Makes an optional question in the TEMPLATE.INF dialog box (you can click **Next** or **OK** without filling in the field).
 - ^Makes a mandatory question in the TEMPLATE.INF dialog box (the **Next** and **OK** buttons remain grayed out until an answer is entered in the field).
3. Save the file as **TEMPLATE.INF** in the directory in which the PlotWorks Client or hub version of PlotWorks is installed. The default path is usually C:\Program Files\PLP\PlotWorks. For the Client, the default path is C:\Program Files\PLP\PlotWorks Client.

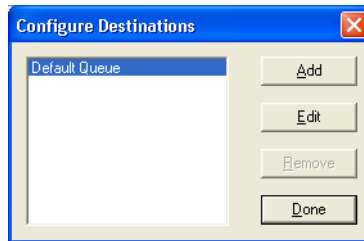
*Fig 4.51
Sample
Template
.INF file*



To send a TEMPLATE.INF file:

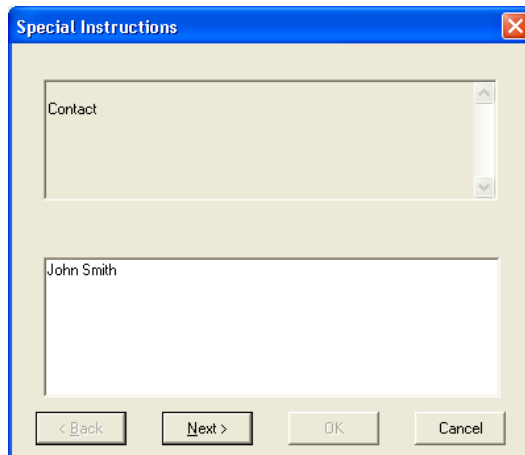
1. Open the **Setup** menu and select **Configure Destinations**. The following dialog box displays.

*Fig 4.52
Configure
Destination
dialog box*



2. Click **Add** to display the Add Destination dialog box (see Fig 4.38).
3. Select **Send additional information from Template.INF**.
4. Click **OK**.
5. When you select **Output** to send your print job to a disk, network or modem, the TEMPLATE.INF file displays as the Special Instruction dialog box, shown below:

*Fig 4.53
Special
Instruction
dialog box*



The questions are listed on the top half of the window.

Type your responses in the bottom half.

6. Click **Next** to proceed through the questions, or **Back** to return to the previous question. If the TEMPLATE.INF file requires you to answer a particular question, you cannot select **Next** or **OK** until you have entered a response.
7. When you have answered the last question, click **OK**. The job information file will be created and submitted with the job.

Job Information

If a job information file was submitted with a job, you can view this file from the PlotWorks Job Queue in the Job Information log. Jobs with Special Instructions attached display a blue and white “i” icon in the Job Queue.

To view the job information file:

- Double-click on the blue and white “i” icon, or:
 1. In the Job Queue, click the right mouse button on the job to display the Job menu.
 2. Select **View**. A second menu displays.
 3. Select **Job Information**.
 4. When you are finished viewing the information file, click **Exit** under the file menu.

See also: *Send a Special Instruction File* on page “Send a Special Instruction File” on page 4-67.



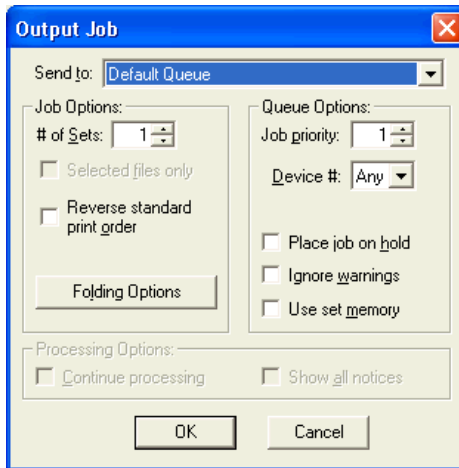
Shortcut: Select the job you want to view and click the **Job Information** button.

Output Jobs

The **Output Job** command lets you send your job ticket, image files, and information file (if any) to a Job Queue for processing and printing. You can send a job over a network, modem, or disk, or directly to the Job Queue.

Before you output a job, be sure that you have configured your output destination properly. (Refer to “Configure an Output Destination” on page 4-58.)

Fig 4.54
Output
Job dialog
box



To output a job:

1. Click on the **Output** button.
2. Make your desired selections in the Output Job dialog box (shown above). The following options are available:
 - **Send to:** Select a destination for the job.

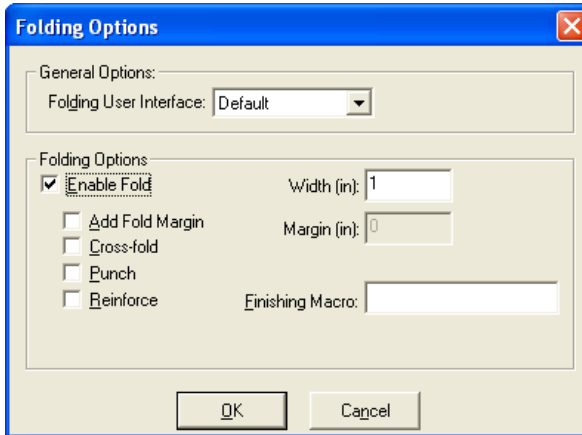


If files are sent using RAS/Dial-up Networking, the connection is made automatically by the PlotWorks Client. If the modem is being used by another program, the connection will fail.

- **# of sets:** Enter the number of sets you wish to print.
- **Selected files only:** Select this box to print only the files.
- **Reverse standard print order:** Select this box to reverse the order in which the software prints your sheets.

- **Folding Options:** Click this to generate the Folding Options dialog box to configure folding margins, cross-folds, etc., before outputting your files. The folding functionality controlled through the **Folding Options** dialog box is exactly like that found in the **Preferences/Finishing Options** tab window. More information on these options are provided on 4-65.

Fig 4.55
Folding
Options di-
alog box



- **Continue processing:** Select this option to tell PlotWorks not to display warning messages which have already been displayed for an image and okayed by the user.
- **Show all notices:** Select this option to tell PlotWorks to show all warnings, even if they have been okayed.



The Processing options are available only when you have chosen to send PGS files.

- **Job priority:** Enter a number between 1 and 10, with 10 being the highest priority. This value determines the order in which jobs are printed.
- **Device #:** Select the printer's device number. This number is defined in the Printer Interface program, in the Printing Configuration dialog box under the **Setup** menu. If there is only one printer, or you do not care which printer is used, select **Any**.
- **Place job on hold:** Select this to send the job to the Queue with a Hold priority. The job will not print until you change its priority in the Queue.

- **Ignore warnings:** Select this to print the job regardless of processing warnings. Warnings are ignored only by the Job Processor. If the PlotWorks Client processes the files, all warnings will display, unless you choose “Continue Processing” and have already processed or viewed the file and okayed the warnings.
 - **Use set memory:** (Xerox MAX 200 and 8180, Océ 9800) Set memory allows the job request to be sent to the set memory of a printer instead of sending each set over again. In some cases, this function speeds up the printing process.
3. Click **OK** to send your job.

Output to FTP

FTP uses the connection-oriented services of TCP to transfer text and/or binary files between a local host running TCP/IP and a host configured with an FTP server program.

1. Make sure you have configured FTP as the destination. “Configure an Output Destination” on page 4-58.



*When outputting jobs to FTP, be sure to select **Send original image files only** or **Send PGS files only** on the Processing Options sheet. This is due to the fact that the date/time stamp on files is not maintained when sending via an FTP connection.*



2. In the PlotWorks Client grid, select the file or files you wish to send.
3. Click the **Output** button or select **Output Job** from the **File** menu. The Output Job dialog box appears.
4. Select the FTP destination and other desired options and click **OK**.
A connection is made between your computer and the remote server, using the FTP protocol and RAS/Dial-up Networking as needed, to connect to the remote machine.
5. The Transfer Job progress box displays the progress after each file is transferred. The destination progress bar indicates when the job is done. Once your files have transferred, the connection disconnects.



The transfer of your files is taking place over a phone modem so it is only as fast as the modem speed. Therefore, the larger the file the longer it will take.
