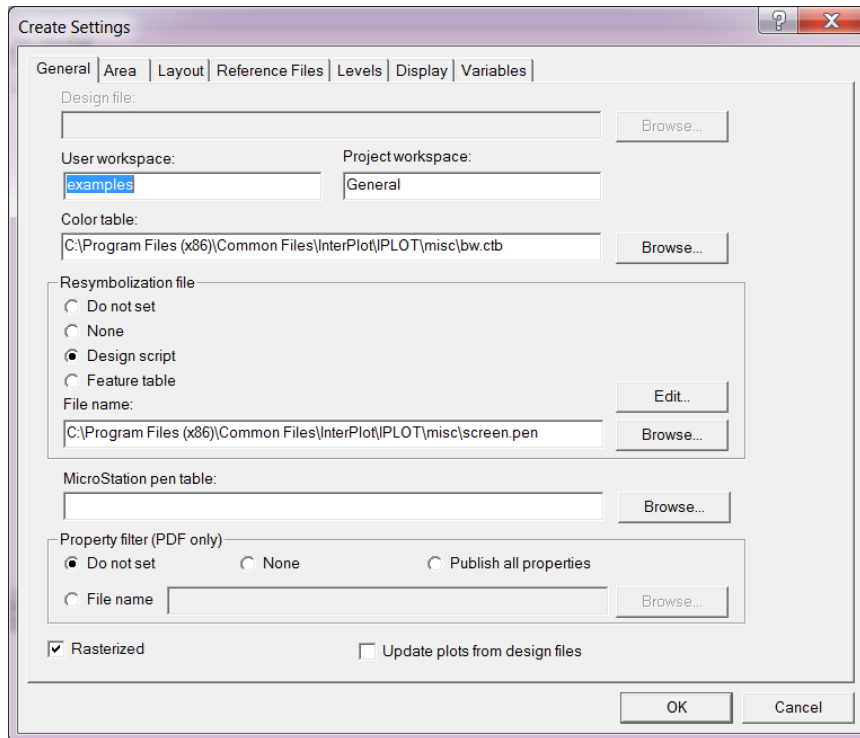


Moving to MicroStation Print Organizer

MicroStation SS3 allows Print and Print Organizer to attach IPLOT design scripts for plotting. This new feature opens the door for many InterPlot users to make the move to Print Organizer. While Print/Print Organizer does not accept IPLOT settings files directly, MicroStation Print Styles contain most of the same functionality as IPLOT settings files. This paper explains how to convert each section of an IPLOT binary settings file to a MicroStation Print Style. In the cases where no direct conversion applies, alternative solutions are given. The ASCII settings file qualifier equivalent is listed in parenthesis for each option.

IPLOT binary settings file – General tab

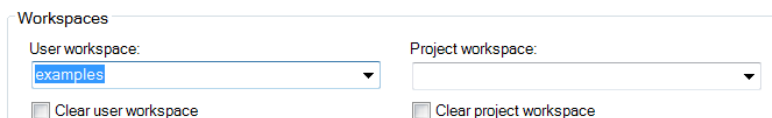


Design file (-design)

This IPLOT setting is not typically set in a settings file as the files are added manually to InterPlot Organizer.

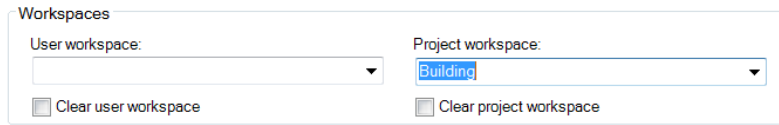
User workspace (-workspace_user)

This IPLOT setting specifies a user workspace name that IPLOT references to access MicroStation font and linestyle resource files. The user workspace is set on the Advanced tab of the Print Style in the Workspaces section (User workspace).



Project workspace (-workspace_project)

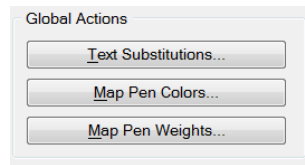
This IPLOT setting specifies a project workspace name that IPLOT references to access MicroStation font and linestyle resource files. The project workspace is set on the Advanced tab of the Print Style in the Workspaces section (Project workspace).



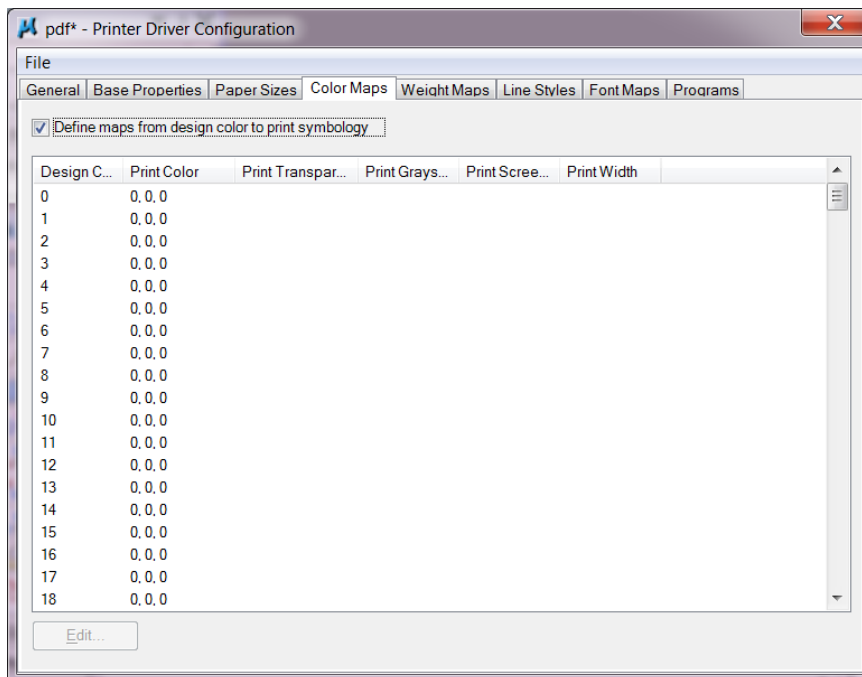
Color table (-color_table)

This IPLOT setting reads a color table saved on disk and applies it to the plot. Most common uses are to attach a BW color table or gray scale color table at plot time. Print styles do not allow the attachment of ancillary color tables. There are two options to achieve the same results in MicroStation printing.

1 – Use a pen table to assign the desired output colors in the Map Pen Colors section.



2 – Define the colors on the Color Maps tab of the pltcfg.



Resymbolization file (-design_script, -feature_table, -pen_table)

- The resymbolization section allows the attachment of an IPLOT design script/pen table or an IPLOT feature table. The IPLOT design script/pen table can be attached on the Main tab of the Print Style in the Resymbolization section at the bottom in the Design Script field. MicroStation printing does not support using IPLOT feature tables. The IPLOT feature table should be converted to an IPLOT

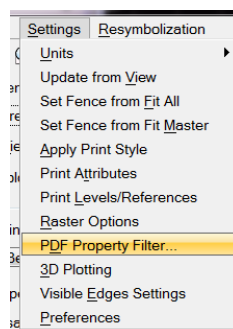
design script. To convert a feature table to an IPLOT design script, open the feature table in the feature table editor and save it as an IPLOT Design script.

MicroStation pen table (-ms_pen_table)

This IPLOT setting defines the MicroStation pen table to be used on the plot. In the Print Style, this setting can be specified on the Main tab in the Resymbolization section at the bottom in the Pen Table field.

Property filter (PDF only) (-property_filter)

This IPLOT setting enables you to enable/disable business information in a published PDF document. You can publish all, none, or a subset of the business information contained in a DGN file. Property filters cannot be defined in a Print Style. Property filters are defined under Settings – PDF Property Filter in the MicroStation Print dialog. Property filters only apply when using pdf.pltcfg.



Rasterized (-rasterized)

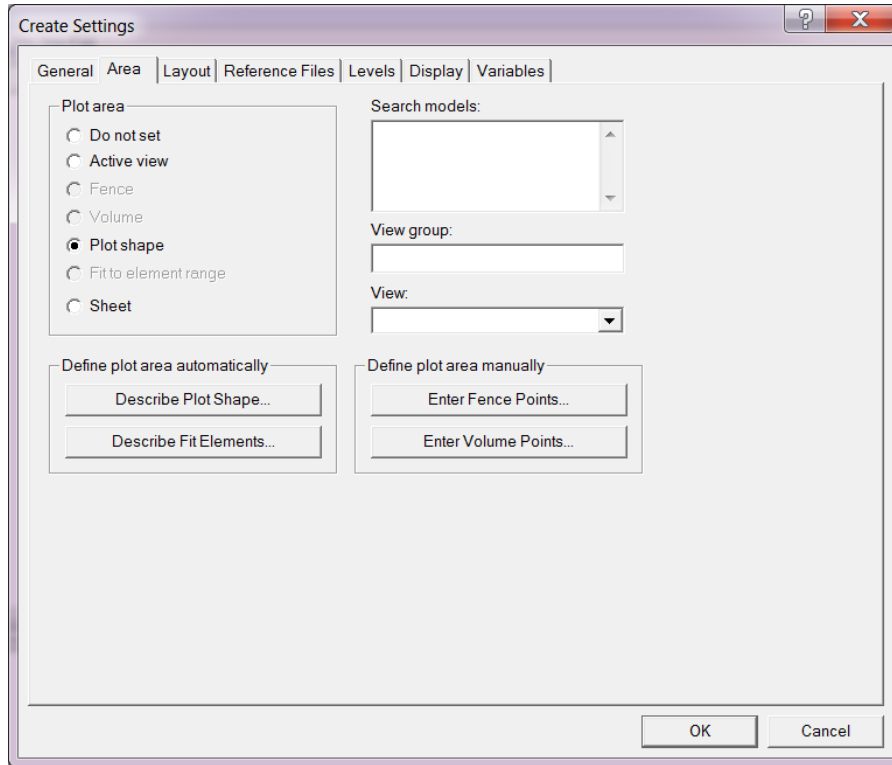
The IPLOT setting rasterized indicates that you want the plot to be rasterized on the client using MicroStation's graphics engine. All vectors will be converted to raster data. This option is useful for plotting a rendered view or a view that contains transparency. The rasterized setting is defined on the Main tab of the Print Style in the Area section.

Update plots from design files (-update)

The IPLOT setting “Update plots from design files” updates the plots design file state information such as global origin, view settings, display settings, level settings, reference file settings, etc. The “Update from design file” setting is located in the Advanced tab of the Print Style at the bottom.

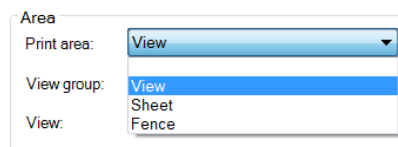
- Update from design file
- Update print definition name

IPLOT binary settings file – Area tab



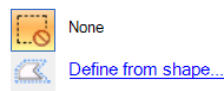
Plot Area (-plot_area)

This IPLOT setting specifies the plot area by active view, plot shape or sheet. The view and sheet can be specified by selecting the Print area list in the Area section on the Main tab in the Print Style.



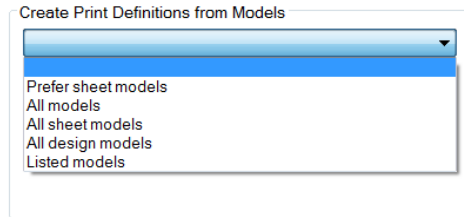
The plot shape can be defined in the Print Style on the Fence tab under the Fence creation methods.

Fence creation methods:



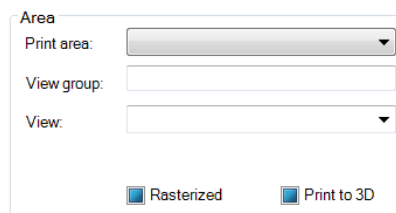
Search models (-model)

This IPLOT setting identifies the design or sheet model that should be used for the plot area when Sheet is selected. In the Print Style, the model can be specified on the Fence tab in the “Create Print Definitions from Models” section. To list a specific model, select “Listed models” and enter the model name.



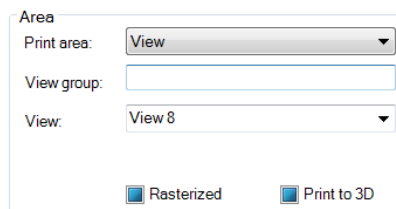
View group (-viewgroup)

This IPLOT setting identifies the view group to be used as the plot area. You can specify the viewgroup in the Print Style on the Main tab in the Area section.



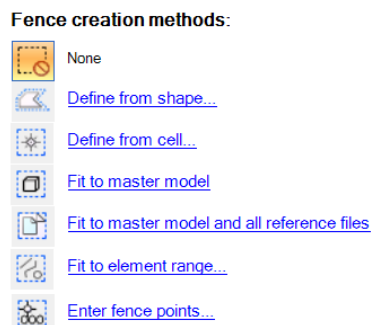
View (-view)

This IPLOT setting specifies the view number (1-8) or saved view to be used as the plot area. In the Print Style, the view can be set on the Main tab under the Area section.



Define plot area automatically (-area, -area_cellnames, -area_colors, -area_files, -area_levels, -area_styles, -area_types, -area_viewgroups, -area_weights,)

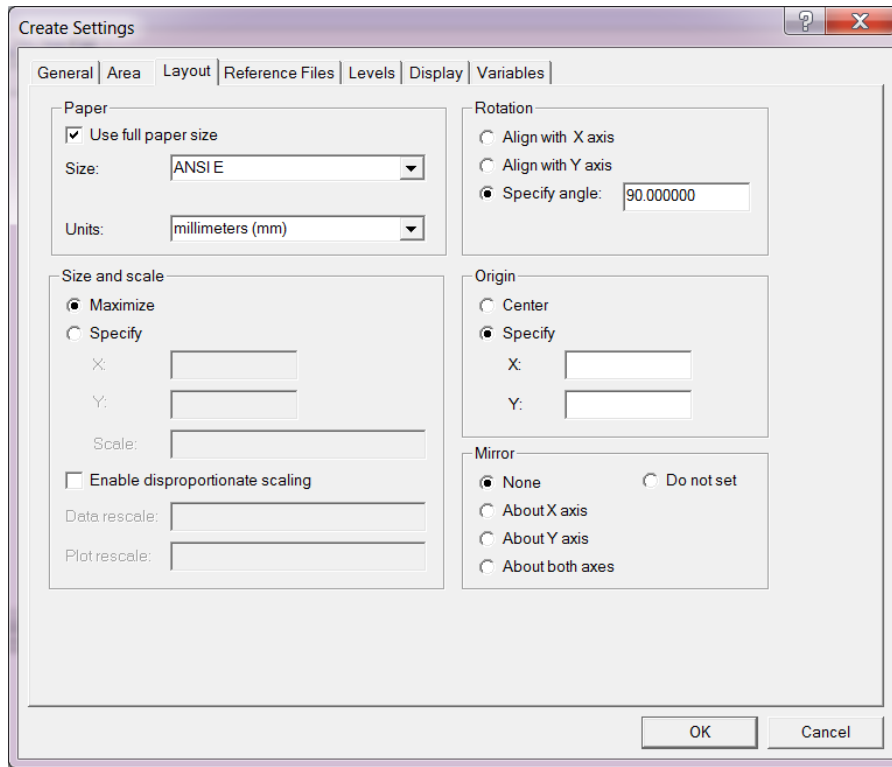
This IPLOT setting identifies the specific shape or group of elements to be used for the plot area. In the Print Style, you can specify the shape or group of elements on the Fence tab under the Fence creation methods. Select Define from shape to specify a shape for the plot area. Select Define from cell or any of the Fit... options to specify the group of elements.



Define plot area manually (-fence, -volume)

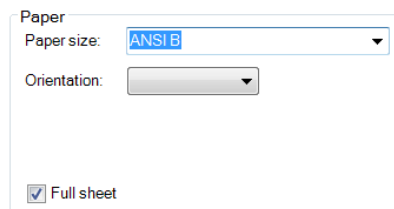
- This IPLOT setting allows the user to specify fence (X,Y) or volume (X,Y,Z) coordinates identifying the plot area. In the Print Style, select Enter fence points... under the Fence creation methods on the Fence tab to specify the plot area in fence points. MicroStation printing does not have a volume concept therefore volume cannot be defined in the Print Style. Use one of the other ways of defining a plot area such as one of the “fit” options.

IPLOT binary settings file – Layout tab

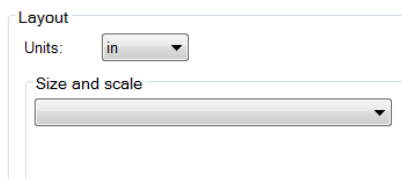


Paper_(-full_sheet, -units, -paper_size)

This IPLOT setting specifies the form (paper size) and units you want to use for the plot. In the Print Style, set the paper size in the Main tab under the Paper section. You can also define if you want to use full paper size (Full sheet).



The units are set in the Layout section on the Main tab in the Print Style.



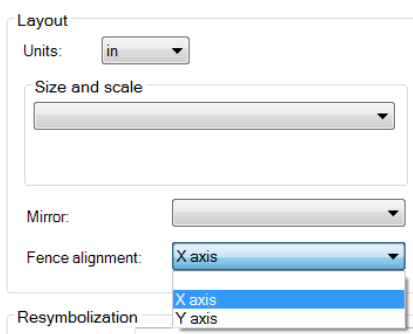
Rotation (-align_x, -align_y, -rotation)

The IPLOT setting rotation allows the user to specify the plot rotation of the data. In the Print Style, set the rotation in the Layout section of the Main section.



Layout
Units: in Rotation: 90

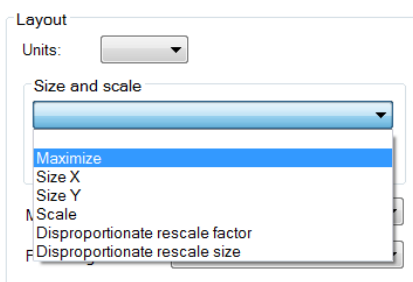
The IPLOT settings align_x and align_y calculate the rotation angle that aligns the longest side of the plot area with the printer's X axis / Y axis respectively. In the Print Style, the fence alignment can be specified in the Layout section on the Main tab under "Fence alignment".



Layout
Units: in
Size and scale
Mirror:
Fence alignment: X axis
Resymbolization: X axis, Y axis

Size and scale (-data_rescale, -maximize, -plot_rescale, -scale, -xsize, -ysize, -ysize)

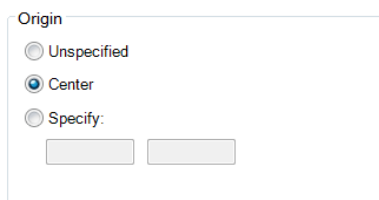
The IPLOT settings in the Size and Scale section of the IPLOT settings file specify whether to maximize the plot, the x/y size, and disproportionate scaling. In the Print Style, specify these settings under Size and scale in the Layout section of the Main tab.



Layout
Units:
Size and scale
Maximize
Size X
Size Y
Scale
Disproportionate rescale factor
Disproportionate rescale size

Origin (-center, -origin)

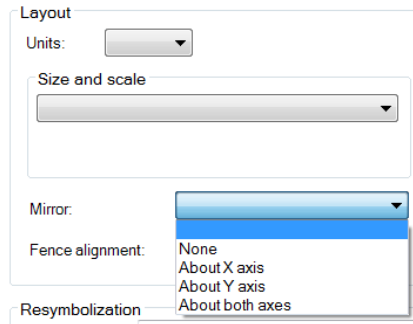
The IPLOT setting origin specifies the plot origin with respect to the paper extents and/or printable area. The IPLOT setting center sets the plot origin to values that center the plot with the plotter's imaging area. In the Print Style, the origin settings can be specified in the Origin section on the Main tab.



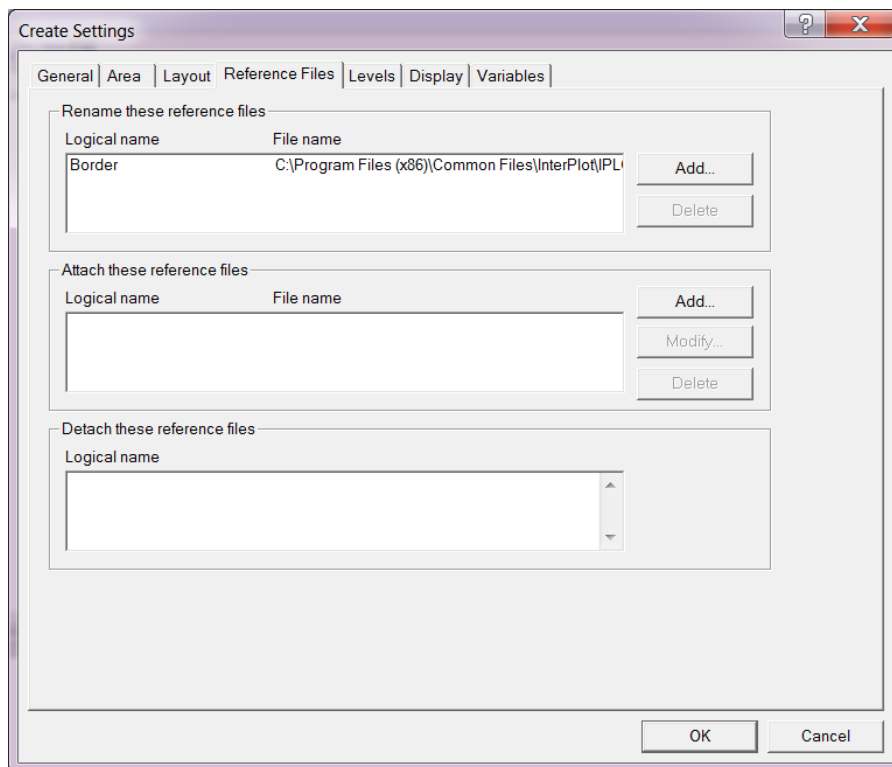
Origin
 Unspecified
 Center
 Specify:
[] []

Mirror (-mirror)

The IPLOT setting mirror produces a mirror image of the plot along the plotter's X or Y axis or both. In the Print Style, the mirror settings can be found in the Layout section on the Main tab.



IPLOT binary settings file – Reference Files tab



Rename these reference files (-ref_filename)

This is an IPLOT setting that allows the user to change the filename of the reference file in an IPARM file. Currently there is no similar feature available in Print Styles.

Attach these reference files (-attach_ref)

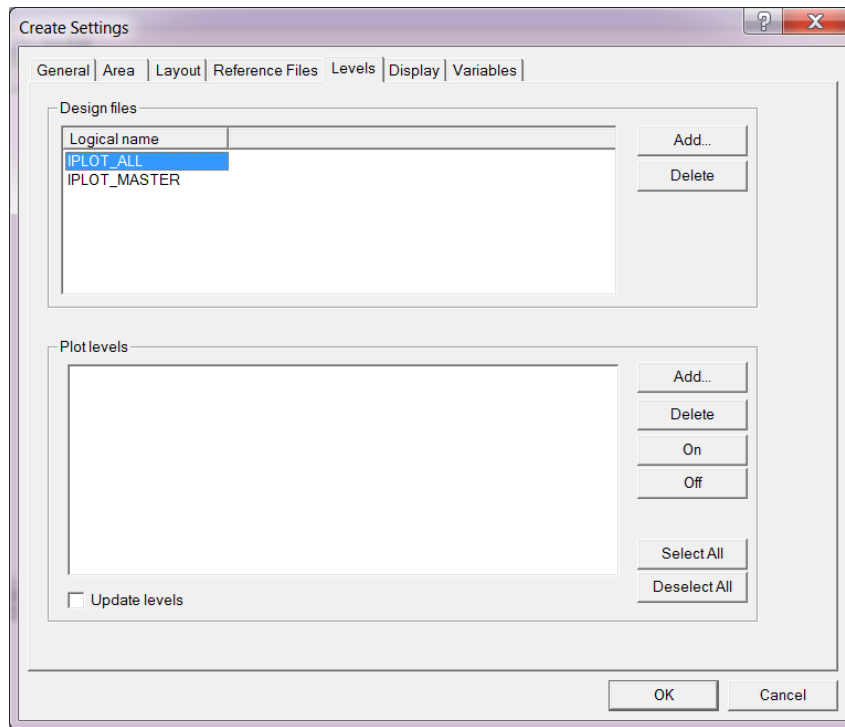
This is an IPLOT setting that allows the user to attach a reference file to the IPARM file. Currently there is no similar feature available in Print Styles.

Detach these reference files (-detach_ref)

This is an IPLOT setting that allows the user to detach a reference file to the IPARM file. Currently there is no similar feature available in Print Styles.

You can use the new reference overrides in MicroStation SS3 to specify which references are on or off at plot-time.

IPLLOT binary settings file – Levels tab

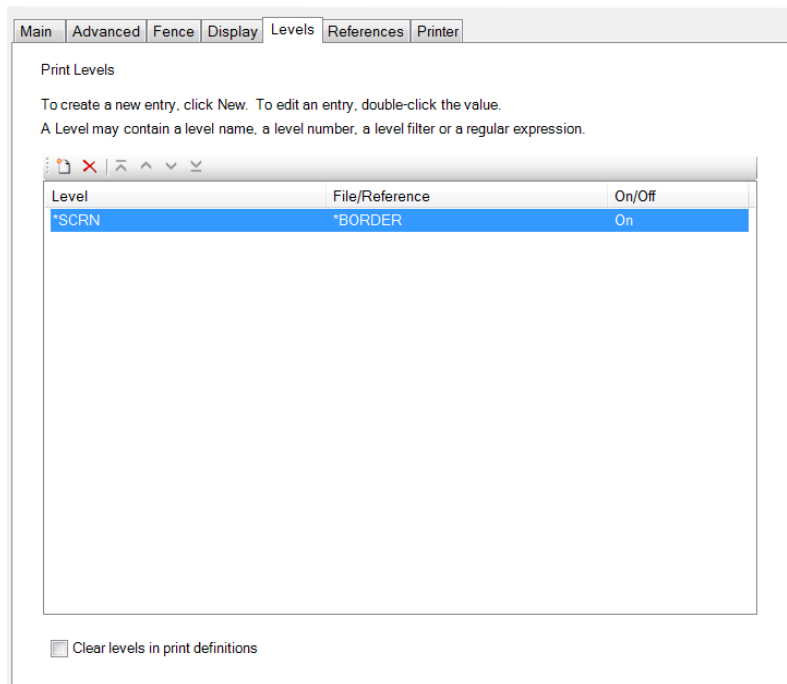


Design files

This IPLLOT setting allows the user to specify which file (master or reference file) contains the level.

Plot levels (-levels)

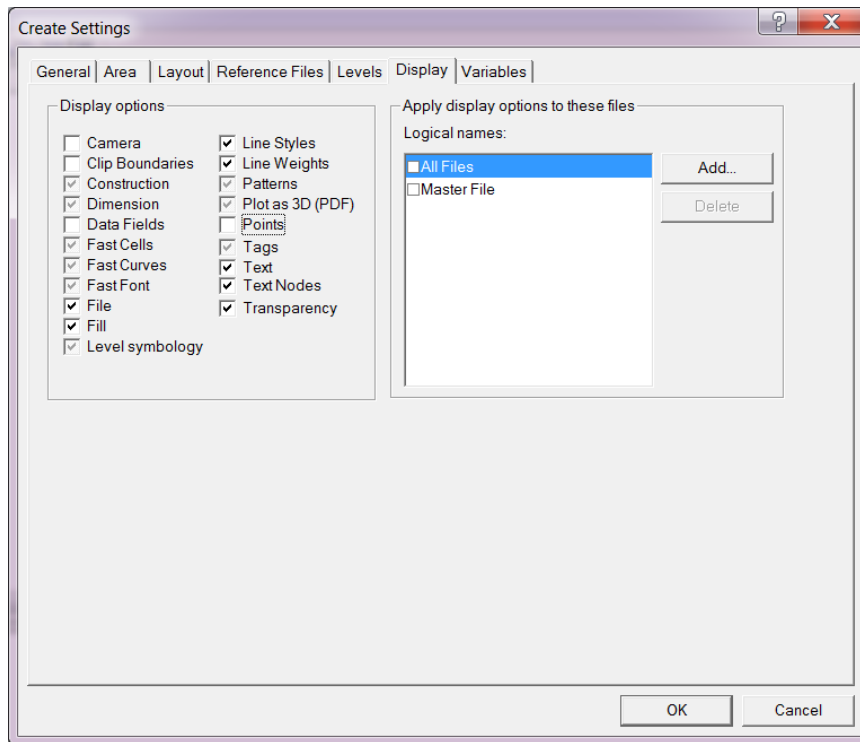
You can add specific levels in the IPLLOT settings file and specify whether the level should plot (on) or not plot (off). A similar feature exists in the Print Style on the Levels tab. This allows you to specify levels in the master or specific reference files that you want to ensure are on or off at plot time.



Update levels (-update_levels)

- This IPLOT setting allows the user to update the level settings in the IPARM with the current levels from the master file and all associated reference files. Because print definitions do not store the detailed level table information like IPLOT does, there is no need to update the level settings. Therefore, there is no similar feature available in Print Styles.

IPLOT binary settings file – Display tab



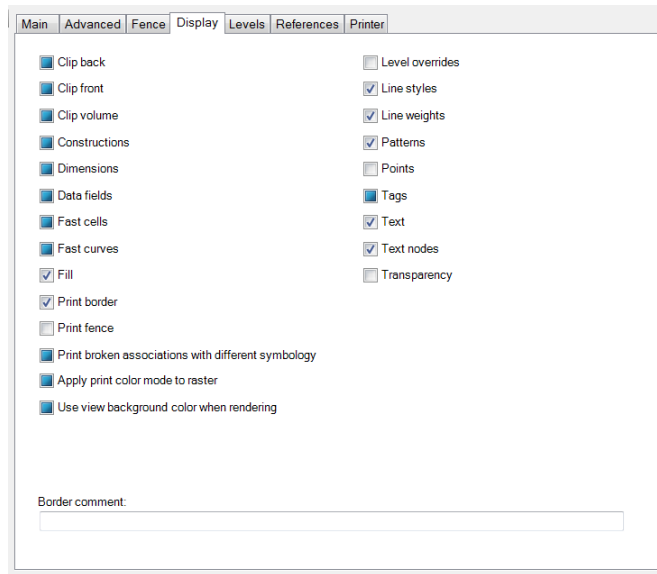
Display options (-display, -nodisplay, -fast, -nofast)

This IPLOT display setting allows you to plot classes of elements or element attributes in specified files. The -nodisplay variable disables the plotting of those classes of elements or attributes. The -fast keyword selects the "fast" representation of the designated elements in specified files. The -nofast keyword selects the "slow" (normal) representation.

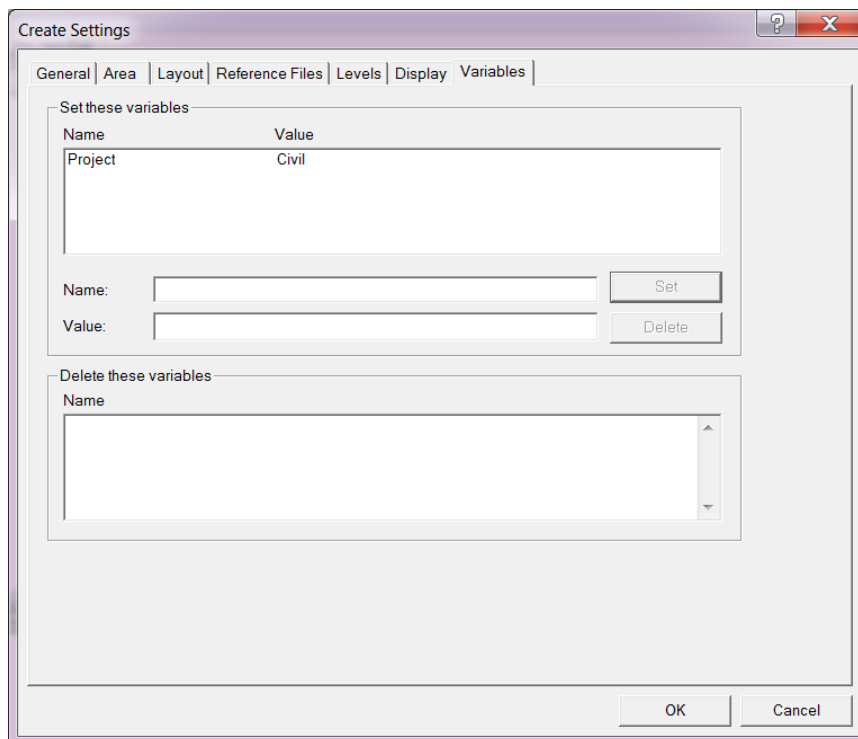
Apply display options to these files

This IPLOT setting allowed the user to specify which file (master or reference file) in which to apply the display settings.

In the Print Style, the Display tab allows the user to set the display/fast settings for the plot. A blue square means the setting will come from the design file. A check mark means the setting is enabled. A blank square means the setting is disabled.



IPLLOT binary settings file – Variables tab



Set these variables (-environment)

The IPLLOT setting stores environment variable names or names and values in the IPARM file. The Submit command transfers these names and values to the plot processing stage. If you are using accounting, these names and values are also stored there.

Delete these variables (-noenvironment)

This IPLLOT setting removes one or more environment variable definitions from the IPARM file.

The InterPlot features that use custom environment variables--mainly InterPlot Server accounting, and custom columns/sorting--are not yet present in Print Organizer, so custom environment variables are not a feature of Print organizer yet and not available in Print Styles.