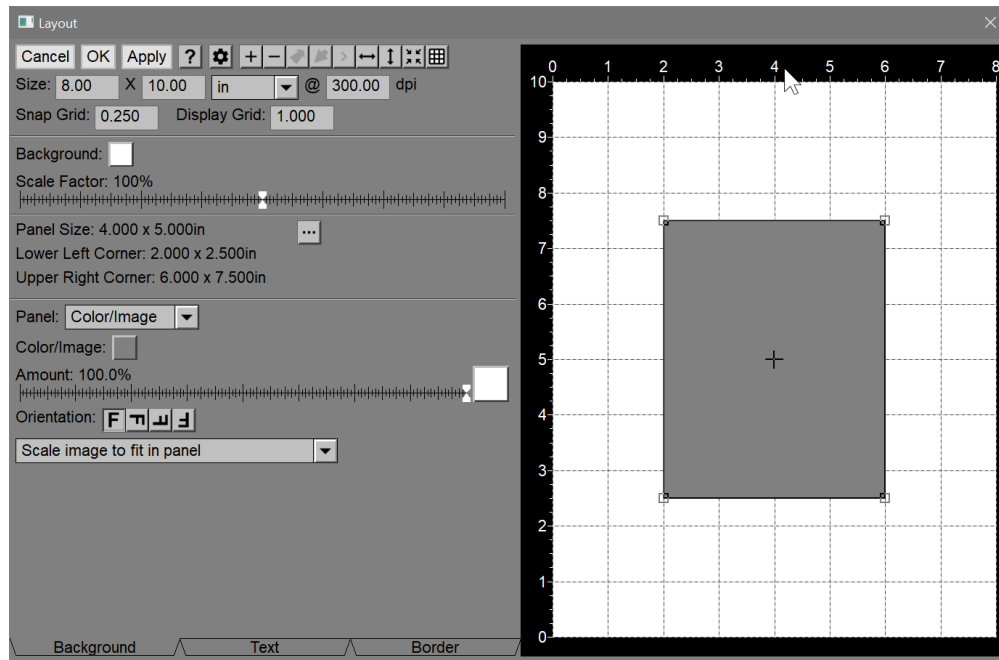# Layout

This transformation is used to create an image that consists of a background page of a specified size overlaid with one or more panels. The background may be a solid color or tiled with (covered with multiple copies of) an image. Each panel may contain solid colors or images, and/or text and can be placed anywhere on the background with any size or transparency. Panels are like layers -- you can control the order in which they are applied to control how they overlap.

This transformation provides a convenient way to create various page layouts for printing, slide shows, or presentations. And, layouts can be saved as templates and used again later to create a consistent set of compound images.

Various controls are displayed down the left side of the dialog box; the right-hand side is used to display a preview of the final layout. This preview also has a ruler displayed in the current units along its top and left edges. The layout preview is automatically updated as you change the layout settings. The Layout dialog box can be resized to make this preview either larger or smaller.

By default, the initial layout contains no panels. To add a panel, click the + button on the tool bar. This creates a new panel and select it. Whenever you select a panel, additional controls are displayed that let you edit its properties.

Clicking on a panel in the layout preview causes it to become the current panel. The current panel is highlighted by a rectangular outline with small squares displayed at the corners and a cross in its center. You can reposition or resize a panel by clicking and dragging its interior, corners, or sides. Clicking on a part of the preview where there is no panel deselects all panels and hides the panel property controls. You can also select a panel by clicking the Select Next Panel button in the tool bar until you get to the one you want. This can be useful if you want to select a panel covered by other panels.

The location and size of the selected panel is displayed in the dialog box. If you wish, you can set panel size and location by clicking the Edit button next to the location and size readouts. This pops up a dialog box you can use to enter the desired size and position.

Tool Bar

The layout tool bar at the top of the dialog box lets you perform a variety of operations:

➕ Add a new panel

Clicking this button adds a new panel to the current layout identical to the current panel, but offset slightly. If no panel is selected, a gray, blank panel is added in the center of the layout. In addition, the panel property controls are displayed to let you edit the panel's appearance.

➖ Remove the current panel

Clicking on this icon deletes the current panel (if any) and removes it entirely from the layout.

◆ Move panel back one layer

Clicking this button sends the current panel one level lower in the panel stacking order. This means that it can be partially or totally covered by another panel that sits on top of it.

◤ Move panel forward one layer

Clicking this button raises the current panel one level higher in the panel stacking order. This means that it can partially or totally cover other panels that are below it.

▹ Select next panel

Clicking this button selects the next higher panel in the stacking order. If the current panel is the topmost level, then the bottom panel is selected.

↔ Center current panel horizontally

Clicking this button causes the current panel to be horizontally centered on the background.
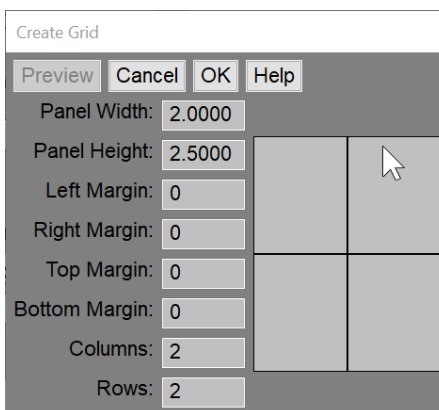
↕ Center current panel vertically

Clicking this button causes the current panel to be vertically centered on the background.

⊠ Shrink rectangle to fit image

Clicking this button causes the current panel to be reduced in size to match the dimensions of the image it contains.

⊞ Create a grid of panels within the current panel

Clicking this button displays the **Create Grid** dialog box. This dialog box lets you create a grid layout of sub-panels within the current panel (or within the background image if no panel is currently selected).

Create Grid	
Preview Cancel OK Help	
Panel Width: 2.0000	
Panel Height: 2.5000	
Left Margin: 0	
Right Margin: 0	
Top Margin: 0	
Bottom Margin: 0	
Columns: 2	
Rows: 2	

A preview of the panels that will be created is displayed to the right of the controls. Click the **Preview** button as necessary to update the preview area.

Width, Height, and Resolution

These controls are used to set the resolution and size of the background image onto which the panels will be placed. You can specify the background size in pixels, in, mm, or cm.

If you modify the Resolution setting while the units are set to pixels, then the image size in pixels will remain unchanged and the image size in in/mm/cm will be adjusted accordingly. If the units are set to in/mm/cm, then changing the Resolution setting will keep the physical dimensions of the image the same and adjust the image size in pixels accordingly.

Snap Grid

This setting lets you specify a grid interval to which all panels will be aligned when you drag them. To disable this feature, set it to zero. Using a snap grid makes it easy to precisely position and align panels on the background without having to enter the coordinates manually.

Display Grid

This setting lets you specify a grid which is displayed over the layout as an aid in positioning panels. To disable this feature, set it to zero. The grid is in to the current units – for example if units are inches, setting Display Grid to 1.0 draws a grid line every inch.

Background and Background Scale

This control lets you select how the background is colored. You can either select a solid color for the background or an image that will be tiled (repeated both horizontally and vertically as necessary) to cover the entire background.
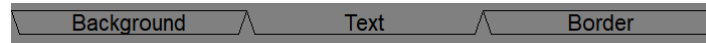
The background scale slider is used only when an image is selected for tiling the background. In this case, adjusting the scale slider lets you vary the frequency of the tiling pattern by making the tiled image larger or smaller.

Size and Location Readouts

In the next section of the Layout dialog box, the size and location of the current panel are displayed; if there are no panels or if the background is selected, the size of the background is displayed instead.
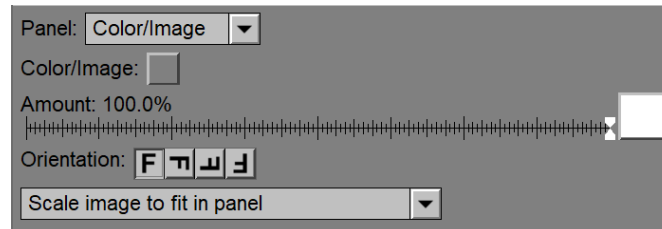
Panel Property Controls

The following controls are displayed only when a panel is selected. If you select a different panel, the controls are updated to reflect the properties of the new panel. Panel properties are divided into three categories represented the three tabs at the bottom: Background, Text and Border.

Background	Text	Border

Background Tab

The background controls let you specify if the panel background is transparent, a solid color, or an image. If the background is an image, you can control its transparency, orientation and proportions.

Panel

This control lets you select whether you want a transparent background or if you want the background to be a solid color or image.

Color/Image

This control lets you select the background solid color or image, assuming you have not selected a transparent background (in which case these settings are ignored).

If you select an image, then a cropping rectangle is displayed over the input image. You can resize and reposition this rectangle by clicking and dragging its vertices, edges, or interior. Only the region outlined by the cropping rectangle will be applied to the panel.

Amount

This Amount control lets you select the transparency of the panel. You can either select an overall transparency or you can specify an amount mask to vary the transparency for different parts of the panel. If you selected a background image, the amount mask must have the same dimensions as the image; if you selected a solid background color, the amount mask can be any size.

Orientation Tool Bar

This tool bar lets you change the orientation of the panel's background image and text by rotating them in 90 degree increments. Simply click on the corresponding arrow icon to rotate the text and image accordingly.

Proportions

This control lets you specify how images are placed within panels:

Scale and Crop Image to Fit Panel

If you select this option, the proportions of the cropping rectangle of the image are locked to those of its panel, thus guaranteeing that the panel is completely filled. If the image proportions differ from the panel proportions, however, part of the image will be cropped. Use this option if the size and proportions of the panel are more important than how the image is cropped.

Scale Image to Fit in Panel

If you select this option, you can adjust the cropping rectangle of the image freely since the proportions of the image and panel are independent. In this case, the image is scaled to fit the full width or height of the panel but may not fit the panel perfectly. Use this option if you the image is cropped is more important than the size and proportions of the panel.

If you want to eliminate any empty space in the panel around the image, use the ⬚ button in the Layout dialog tool bar to shrink the panel to fit the image proportions to eliminate any excess.

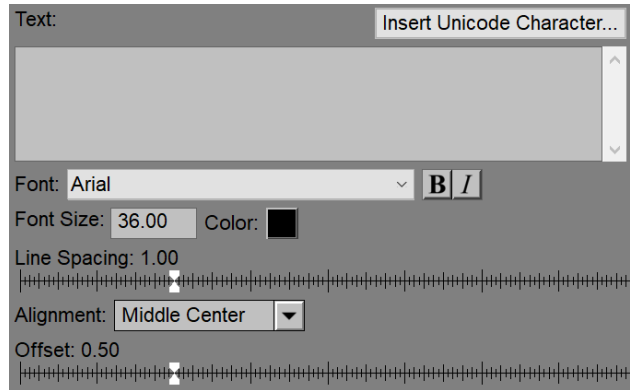**Panel Size Matches Image Dimensions**

If you select this option, the panel size is locked to the physical dimensions of the image. Use this setting when you have already set the size of your images and simply want to arrange them over the layout background.

Panel Size Matches Image Size in Pixels

If you select this option, the panel size is locked to the size of the image in pixels. This means the image is copied 1:1 to the layout background without resampling. Use this setting when you want to arrange images on a background without any resizing.

Text Tab

The text controls let you place text in a layer over the panel background.
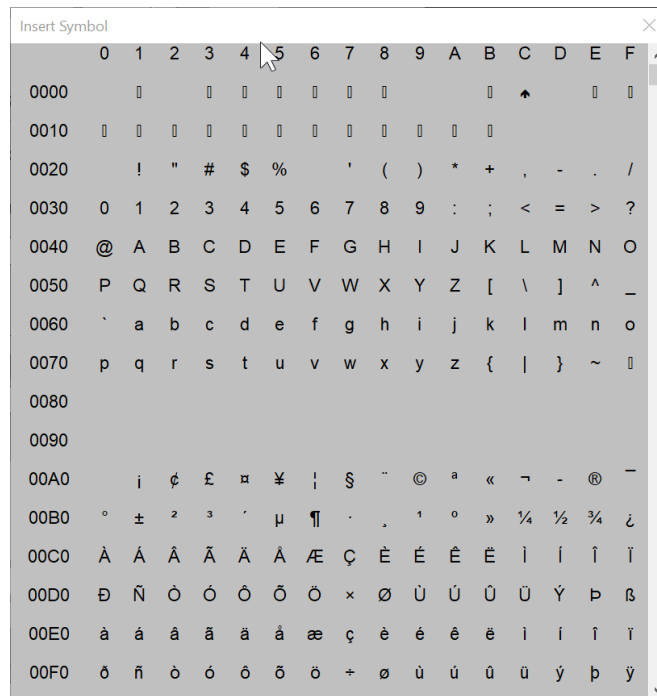

Text

This multi-line edit control lets you enter one or more lines of text displayed over the panel background (if any). The orientation of the text is controlled by the **Orientation** tool bar (see above).

The easiest way to transfer large amounts of text from a document or other program is to copy the text to the clipboard and then paste it into the **Text** control. To paste into an edit control, simply click on the control and then press Ctrl-V. The clipboard text will replace all highlighted text at the caret location.

The alignment of text within the panel is controlled by the **Alignment** control (see below). To position text freely in a layout, place the it in a separate panel with a transparent background. You can then drag the text to any desired position.

To insert special characters into your text, click the **Insert Unicode Character…** button which brings up a dialog box that lets you select and insert arbitrary Unicode characters from the current font:

Scroll down to the character you want and click on it to insert it at the current location in the text field. Close the dialog box when you are done. Unicode is the current standard for encoding characters in a font. It supports roughly 65,000 different characters including those used in different languages and many mathematical and other specialized symbols.

Font/Bold/Italic

This control lets you select which font the text will be displayed in. You can choose from any of the fonts installed on your computer. You can also select any combination of bold or italic

Font Size/Color

These settings let you select a font size (in points – there are 72 points/inch or change the text color.

Line Spacing

This setting controls how tightly multiple lines of text and spaced together. It has no effect on single-line text.
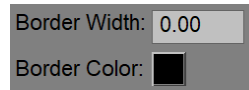
Alignment

This control sets the justification and alignment of text within the panel rectangle. You can select any of the nine possible options to align the text with a corner or side of the panel or its center.

Offset

This slider controls the distance between the text and the alignment point you have selected. If **Alignment** is set to **Middle Center**, this setting is ignored.

Border Tab

The border controls let you place a border around the panel. Note that the border is drawn outside the panel so it is not reflected in the panel size or location.

Border Width:	0.00
Border Color:	■

Border Width

This lets you set the width of a rectangular border drawn around the panel. To remove the border, set the border width to zero

Border Color

This control sets the color of the border, if any.