Contents

Welcome to Painter 3. Fractal Design Painter® is a paint program that simulates natural-media tools and textures, gives your PC special image-editing capabilities, and makes complex compositing easy.

To get help with a topic, click the topic. For information on using help, press F1.

Getting Started

For help in getting started with Painter 3.0, click a topic.

Using Palettes, Drawers, and Tools

Painter starts the first time with four of its palettes showing: the Tools Palette, Controls Palette, Brushes Palette, and Art Materials Palette.

Painter has three more palettes: the Brush Controls Palette, the Advanced Controls Palette, and the Objects Palette.

You can open palettes by choosing their names from the Window menu or by using the key combinations shown on the Window menu.

See Also

Selecting Items
Taking Items Out of a Drawer
Using the Item Pop-up Menu
Locking Items
Arranging Palettes
Using Multi-level Palettes
Tearing Off Palettes

Selecting Items

To leave you more room for your work, Painter's palettes can be opened and closed by clicking on their icons.

Click the item's icon.

A red outline appears around the icon you selected. The palette expands, giving you more choices.

For example, when you click the Papers icon on the Art Materials Palette, the palette appears along with a drawer that has choices for different types of paper. You can close this palette by clicking its icon again.

See Also

Taking Items Out of a Drawer
Using the Item Pop-up Menu

Taking Items Out of a Drawer

If you don't see the item you want on the front of the drawer, take it out of the drawer.

1. Open the drawer by clicking anywhere on its pushbar. (A down arrow on the pushbar means the drawer can be opened.) You can click anywhere on the pushbar to open and close a drawer.

   The drawer opens showing the items inside with the name of the currently selected item in the pop-up at the bottom of the drawer. Items that are already on the front of the drawer are ghosted inside the drawer. When you put an item away, it goes back to the same location so that you can always find it easily. If you don't see the item you need, use the scroll bar to scroll to the items at the back of the drawer.

   In some drawers, you'll see a **Library** button.

2. Click the item you want to use.

   The item appears on the front of the drawer, outlined in red to show that it is selected. Painter automatically puts it into the place of the least recently used item. If you like, you can drag an item out of the drawer to a specific place on the drawerfront.

3. Click the pushbar to close the drawer.

See Also

Selecting Items
Using the Item Pop-up Menu

Using the Item Pop-up Menu

Another way to select an item from a drawer is to use the Item pop-up menu at the bottom of the drawer. The Item pop-up menu displays the name of the currently selected item.

1. Click the Item pop-up menu to display a list of all the items in the drawer.
2. Highlight the item you want, and let up on your mouse or stylus to confirm selection.

   The item's name appears on the pop-up, and its icon appears on the drawerfront outlined in red.

See Also

Selecting Items
Taking Items Out of a Drawer

Locking Items

Any drawerfront can become your customized tool set. You can arrange the items you need where you want them on the drawerfront and lock them into place.

When an item is locked, Painter will not put another item in its place, even when the locked item is the least recently used.

1. Drag each item out of the drawer to where you want it on the drawerfront.
2. For each item you want to lock, click its icon and hold it until a tiny green light goes on under the icon.

   When you let go, the light stays on to show that the item is locked.

An item stays locked unless you unlock it by holding down the icon again until the green light goes off. Painter lets you lock all but one item on any drawerfront. (One item must remain unlocked to allow a space for any new item you might select.)

Arranging Palettes

You probably won't work with all of Painter's palettes at the same time.

It's easy to hide a palette. Just click the close box in the upper left corner. You can display it again by choosing its name from the Window menu or using the key combination shown on the Window menu.

If you want to hide all the palettes, choose **Window: Hide Palettes** or press **Ctrl+H**. Choose **Window: Show Palettes** or press **Ctrl+H** again to redisplay all the palettes that were on the screen.

Once you have the palettes you want on the screen, you can drag them to any location that's convenient for your work. You can also stack them together to save space.

Painter saves your palette arrangement, including locked items, so that it appears the next time you start up.

See Also

Locking Items
Using Multi-level Palettes
Tearing Off Palettes

Using Multi-level Palettes

Many of Painter's palettes have additional controls that can be opened or hidden by clicking the grow box in the palette's upper-right corner.

For example, on the Art Materials: Colors Palette the Color Variability sliders can be hidden while the Color Wheel is still visible.

Tearing Off Palettes

There are times when you'll want to work with palettes that usually aren't available at the same time.

For example, you might want to work simultaneously with the Colors Palette and the Papers Palette. Normally choosing one from the Art Materials Palette replaces the other. But you can tear off as many palettes as you like.

1. Drag an icon off the main palette.

   The palette pops open as you drag it.

2. When you no longer need the palette, click the close box in the upper-left corner.

Creating a New Document

When you create a new document, you can use the settings Painter provides or change them.

1. Choose **File: New**.

   The New Picture dialog box appears.

2. Use the settings provided for width and height, resolution, and paper color, or change them, as necessary.

3. Click **OK**.

   A new, untitled document appears.

See Also

Setting Width and Height
Setting Resolution
Setting Paper Color
Understanding Image Size
Changing the Unit of Measure

Setting Width and Height

The dimensions you choose in the New Picture dialog box for your document depend largely on your final output device.

The width and height default settings of 640 x 480 pixels represent a standard screen resolution at 75 pixels per inch.

If you keep the width and height set to pixels, changing the number of pixels per inch will affect the document's dimensions (the width and height).

If you switch to inches or to another measuring system, changing the pixels per inch won't affect the dimensions.

See Also

Setting Resolution
Understanding Image Size
Changing the Unit of Measure

Setting Resolution

The dimensions and resolution you choose for your document in the New Picture dialog box depend largely on your final output device.

Resolution refers to the number of dots per inch (dpi) that make up an image. There are three kinds of resolution to think about when you enter a value in the Resolution text box:

The monitor's resolution, measured in pixels. Painter is preset to 75 pixels per inch. The resolution of your monitor may be different.

The document's resolution. You can assign the resolution when an image is scanned or when one is created in Painter.

The output device's resolution, measured in dpi, and, in the case of halftones, lines per inch (lpi). Output-device resolutions vary depending on the press and paper you're printing on. Generally, a photograph to be printed on glossy magazine stock will be output at a crisp 150 lpi, and at 85 lpi for more porous, and therefore more forgiving, newspaper stock.

In the New Picture dialog box, setting the document's pixels per inch is the same as setting its dpi. The default resolution setting of 75 pixels per inch means that your document's dpi will also be 75. When you work on that document, the image at 100% is the size it will be when it's output. On most printers, 75 dpi renders a coarse image, so you may want to choose a higher resolution value.

A good rule of thumb is to set your document's pixels per inch to twice the desired lpi. So when lpi is 150, the pixels per inch should be twice that, or 300; if the lpi is 85, the pixels per inch should be 170. It's a good idea to check with your service bureau if you have questions about output-device resolution.

If your monitor's resolution is 75 dpi, a 300-dpi Painter image will be displayed at four times its actual size. Each dot in the Painter image will occupy one pixel on your display. The display pixels are four times the size of your image's pixels. Put another way, at 300 pixels per inch, your document will be approximately a quarter of its on-screen size when printed.

See Also

Understanding Image Size
Changing the Unit of Measure

Understanding Image Size

Image size indicates how much RAM or combination of RAM and hard disk space the document requires. The saved size of the document is approximately one half of this number.

For instance, you will increase the dimensions and memory size of a document by increasing its dimensions when they are set to pixels. Increasing the number of pixels per inch at this point will affect the document's dimensions but will not affect its memory size.

When a document's dimensions are defined by inches or another measurement system, changing the dimensions or the pixels per inch will affect the memory size of the document.

See Also

Setting Width and Height
Setting Resolution
Changing the Unit of Measure

Changing the Unit of Measure

The unit of measurement in the New Picture dialog box is preset to pixels.

To change the unit of measure, choose the measuring system you want to use from the pop-up menu to the right of the numbers.

For height and width, you can choose from pixels, inches, centimeters, points, picas, and columns.

Columns are 2-inch columns, and you can indicate how many columns wide and tall you'd like your image area to be.

Resolution can be measured in pixels per inch or pixels per centimeter

See Also

Setting Width and Height
Setting Resolution
Understanding Image Size

Setting Paper Color

The New Picture dialog box lets you choose a background paper color for your image.

1. Click the rectangle above the words **Paper Color**.
   You see the standard Windows Color Picker.
2. Choose a color, and click **OK**.

See Also

Changing Paper Color

Selecting Brushes

Painter's painting, drawing, editing, and cloning tools are called brushes and are located on the Brushes Palette.

1. Click a brush on the drawerfront of the Brushes Palette. (Open the drawer to see more brushes.)

   A red highlight appears around the brush you selected and around the Brush icon on the Tools Palette. The name of the brush variant appears on a pop-up menu under the Brush icon, and brush controls appear on the Controls Palette.

2. If you need to, make changes on the Controls: Brush Palette to the Overlapping Rectangles, the Opacity slider, the Grain slider, and the Draw Style radio buttons.

3. If you like, choose a variant from the Variants pop-up menu.

See Also

Using Brushes

Selecting Colors

Because Painter offers drawing and painting tools that closely resemble their natural-media counterparts, you work with color in Painter using the HSV (Hue, Saturation, Value) color system even though your images are saved in the RGB (Red, Green, Blue) or CMYK (Cyan, Magenta, Yellow, Black) color models.

When you click the Colors icon on the Art Materials Palette, the Art Materials: Colors Palette appears.

1. Select the hue on the color ring.

   Clicking and dragging the circle on the color ring reveals, and letting go selects, the predominant hue in the triangle.

   Or you can select the predominant hue by clicking once anywhere on the ring.

2. Select a color on the triangle by dragging to the color you want or by clicking it.

   The triangle offers all the available colors within a predominant hue. The colors are organized by value and saturation. Values span the triangle from top to bottom, with the top of the triangle being the highest value, or white, the bottom the lowest value, or black. Saturation levels go from left to right.

   Dragging to the right gives the purest color within the predominant hue. Dragging to the left gives muddier or grayer colors.

   To easily select black, click anywhere in the triangle, drag down below the triangle, and let up on the mouse or stylus. To easily select white, drag up instead of down.

   The color you select appears on the front rectangle in the pair of Overlapping Rectangles.

Selecting a color on the Art Materials: Colors Palette is just the beginning of working with color in Painter. Painter offers a powerful range of color features, many of them new in Painter 3, from creating your own color sets to posterizing using color sets.

See Also

Alternative Color Palettes
Selecting Color with the Dropper
Selecting Two Colors
Printable Colors
Viewing Printable Colors
Displaying Images in Printable Colors
Video Legal Colors
Setting Color Variability
Using Color Sets
Annotating Colors

Alternative Color Palettes

Painter has two alternative color palettes.

One uses a horizontal bar instead of a wheel to select hue.

The other uses RGB sliders instead of graphical color selectors.

In the default libraries section of the General Preferences dialog box, you can choose the color palette you wish to use.

See Also

Default Libraries

Selecting Paper Textures

Painter provides a wide choice of paper textures, from the traditional canvas to the bizarre zebra stripes and caviar.

Many of Painter's brushes, such as Chalk and Charcoal, interact with paper grain. So by combining brushes and paper textures, you can create amazing effects.

When you paint or draw, Painter uses the currently selected paper texture for your stroke. This means that you can use a different texture with every stroke. You can also apply paper textures to the entire document or to a selected part of it.

1. Click the Papers icon on the drawerfront of the Art Materials Palette.

   The Papers Palette appears.

2. Click a paper texture or open the drawer to see more choices.

When you draw or paint with a paper-grain-sensitive brush, the brush stroke looks like you drew it on the kind of paper you selected.

See Also

Grain
Using Paper Textures

Drawing Freehand

With an open document and a selected brush, color, and, if you like, paper texture, you're ready to start drawing or painting. With Painter you can draw freehand or straight lines.

1. Select a brush. Brush controls appear on the Controls Palette.
2. Click the **Freehand** radio button on the Controls Palette under Draw Style.
3. Position the stylus or mouse where you want to start painting.
4. Push down on the stylus or mouse and drag to make a stroke.

   With some brushes, you see a dotted line before the stroke appears. This dotted line appears when you use complex brushes, such as the Van Gogh brush and the Hairy Brush, that have to be precomputed, causing a delay in the stroke's appearance on the screen.

   These brushes work best when you apply them in short strokes. Wait until the stroke appears before you start another one. Otherwise, the second stroke will look like a cluster of Seurat-style dots or not appear at all.
5. When you're finished, let up on the stylus or release the mouse.

When you draw or paint, some qualities of your strokes will vary depending on whether you're using a pressure-sensitive stylus or a mouse. With a stylus, you can use pressure to get the most out of Painter's brushes. Painter provides a way for mouse users to create the same effects.

See Also

Stylus or Mouse
Drawing Straight LInes

Drawing Straight LInes

With an open document and a selected brush, color, and, if you like, paper texture, you're ready to start drawing or painting. With Painter you can draw freehand or straight lines.

1. Select a brush.

   The Brush controls appear on the Controls Palette.
2. Click the **Straight Line** radio button on the Controls: Brush Palette under Draw Style.
3. Click the stylus or mouse where you'd like your stroke to start.

   An origin point marker appears.
4. Click and hold where you want your stroke to finish.

   A thin line connects the two points. Before you let go, you can move the stylus or mouse around and place the finishing point exactly where you want it.

   Note: To constrain your line to a 45° or 90° angle, hold down the **Shift** key as you click your second point. Lines are automatically constrained to a grid if the grid is turned on.
5. When the finishing point is where you want it to be, let go.

   Painter fills in a straight line between the two points.
6. Continue to draw more lines in the same fashion, if you wish.
7. When you are done, press the **Enter** key if you want Painter to draw a line from where you left off to the origin point.

   If you don't want to connect the points, click the **Straight Line** button again**,** or click the **Freehand** button to return to freehand drawing.

When you draw or paint, some qualities of your strokes will vary depending on whether you're using a pressure-sensitive stylus or a mouse. With a stylus, you can use pressure to get the most out of Painter's brushes. Painter provides a way for mouse users to create the same effects.

See Also

Stylus or Mouse
Drawing Freehand

Saving New Documents

As in other programs, to name a document you choose **File: Save As...**.

1. Choose **File: Save As...**.
2. If you want to save your document in a different format, choose a format from the **Save As Type** pop-up menu.

   You can save in any of the formats Painter supports.
3. Type a name for your document, and click **OK** or press **Enter**.

Note: You can save space on your hard disk by compressing your files. Select the .RIF format and uncheck the box next to the word **Uncompressed**. .RIF is the only format that lets you compress files from Painter. This option is dimmed when you choose the other formats. .RIF also is the only format in which you can save floaters and keep them floating.

See Also

Saving in EPS

Saving in EPS

Painter's EPS files conform to the Desktop Color Separation format (EPS-DCS 5-file format).

Although Painter will save a file in EPS-DCS, it can't read EPS-DCS.

If you plan to save an image in EPS-DCS, it's a good idea to save it in another format first so you will have a copy that you can reopen in Painter.

When you save a file in EPS-DCS, you'll see the EPS Options dialog box. In this dialog box, you can set options for HEX (ASCII) picture data, dot gain, screen angle, clipping path selection, PostScript Setup settings, spot type, and saving PostScript data into the main file.

See Also

Hex (ASCII) Picture Data
Suppress Dot Gain
Suppress Screen Angles
Clipping Path Selection
Use PostScript Setup Settings
Spot Type
Save PostScript data into main file

Hex (ASCII) Picture Data

This option in the EPS Options dialog box is just another way of storing PostScript information.

Some programs, such as PageMaker, require that this option be checked.

The file sizes will be approximately twice as large when saved with this option.

Suppress Dot Gain

Painter provides controls for dot gain in its PostScript Setup dialog box.

You may, however, prefer to set dot gain in your page-layout program.

To disable Painter's dot gain adjustments, check the box next to Suppress Dot Gain in the EPS Options dialog box.

Suppress Screen Angles

Like dot gain, screen angle can be designated in Painter's PostScript Setup dialog box.

To disable Painter's screen angle adjustment, check the box next to Suppress Screen Angles in the EPS Options dialog box.

Clipping Path Selection

Painter lets you save an image as EPS-DCS using a selection as a clipping path.

If you have a selection in your image and you save the image as EPS-DCS with the Use Selection as Clipping Path box checked in the EPS Options dialog box, Painter saves only the part of the image inside the selection.

When the EPS-DCS file is placed in a page-layout program, only the part of the image inside the selection will be visible.

The Use Selection as Clipping Path checkbox is disabled when there is no active selection.

Use PostScript Setup Settings

Painter includes a file called PRINTER.STG, which is calibrated for an imagesetter at 133 lpi, standard screen angles, and a dot gain of 16%.

If you wish to override these settings and use your own settings in the PostScript Setup dialog box, click the box next to Use PostScript Setup settings in the EPS Options dialog box..

See Also

Using PostScript

Spot Type

The Spot Type pop-up menu in the EPS Options dialog box gives options for the shape of the dots that make up your halftone screen grid.

Most of the shapes in the pop-up menu, such as Dot, Line, and Ellipse, are self-explanatory.

The Custom setting lets you create your own spot shape using a PostScript command. You'll have to know the PostScript language to do this. In a text file, write the PostScript equivalent of the spot you want to design. For example, here's how to describe a shape that resembles a diamond:

180 mul sin exch 180 mul sin add 2 div

Next, name the text file CUSTOM.SCN and place it in your Painter directory. Now go back into Painter and choose **Custom** from the Spot Type pop-up menu. Painter will access this Custom Screen document and make your dots resemble diamonds. If you create a few PostScript spot shapes, each will have its own text file, and you'll use them one at a time, renaming each file CUSTOM.SCN so Painter can find it.

Save PostScript data into main file

To save a printable preview of an EPS-DCS document, check Save PostScript data into main file in the EPS Options dialog box.

The two radio buttons under this checkbox tell Painter whether the preview data should be saved in black and white or color.

Opening Existing Documents

You can open existing files saved in any one of the formats Painter supports, except EPS.

So, for example, you can open documents from other graphics applications and use Painter to add brush strokes, tints, or paper textures to them.

Or you can clone these documents and recreate them in a different medium.

Note: Painter can read files created with other programs only when they are saved in the RGB color format. If you try to open a file that was saved in another color format, an alert dialog box tells you the file must be in RGB.

1. Choose **File: Open**.

   The Open dialog box appears. The right-hand side of the dialog box shows a thumbnail for every document that was saved in Painter. For every document, regardless of the program it was created in, Painter lists the file's dimensions, how much space it takes up in memory, and its file format. Clicking the **Browse** button brings up a dialog box that shows thumbnails, dimensions, and file types for all the documents in the open directory.

2. From the Open dialog box or the Browse dialog box, open the document by double-clicking the file name, selecting the file name and clicking **Open**, or selecting the file name and pressing **Enter**.

In Painter you can have more than one document open at a time. As elsewhere in the Windows environment, you make an inactive window active by clicking it.

Ending a Work Session

You close documents and exit Painter the way you do in other programs.

1. Choose **File: Close (Ctrl+W)** to close your document.

   If you have any unsaved changes, a dialog box asks if you want to save changes. Click **Yes** to save your changes or **No** to discard them.

2. Exit Painter by choosing **File: Exit (Ctrl+Q)**.

Technical Support

If you have technical questions about Painter and are a registered Painter user, you can contact us by phone from 8 A.M. to 5 P.M., Pacific Time, Monday through Friday, except on major U.S. holidays.

Call (408) 688-8800.

Have your serial number on hand. Youll find it on your registration card and on Installation disk 1.

Customizing Painter

You can customize Painter's default settings to suit your personal working style.

For help with customizing Painter, click a topic.

Setting Painter Preferences

Are you left- or right-handed? You can set up Painter to respond to your personal style.

The preferences you set become the default settings until you change them again.

Painter has five different preference dialog boxes: General, Brush Tracking, Interface, Plug-ins and Windows.

See Also

General Preferences
Setting Pressure Sensitivity
Customizing the Interface
Using Plug-Ins

General Preferences

To display the general Painter Preferences dialog box, choose **Edit: Preferences: General**.

In the General Preferences dialog box, you can set the following preferences:

Cursor Setup
Default Libraries
Default Disk
Pre-Feather
Cloning Preference
Disable automatic sync to disk
Draw zoomed-out views using area-averaging
Display warning when drawing outside selection

Cursor Setup

Use the General Preferences dialog box to determine the appearance of your cursor.

To choose whether the cursor will be a triangle or a single pixel, check the radio button next to **Drawing Cursor**.

To determine the direction the cursor will point (depending on your design and whether you're left- or right-handed), click the appropriate button in the circle above **Orientation**.

To select a cursor color that will contrast with your working area and will therefore be clearly visible, click the appropriate rectangle above **Color**.

Default Libraries

Use the General Preferences dialog box to determine default libraries.

Painter provides several libraries that contain many different brushes, paper grains, Paths, Floaters, and Color Sets, and you can create your own.

By typing a file name in the text box next to **Brushes, Paper Grains, Paths, Portfolio,** and **Color Set**, you can designate which files will appear in drawers when you open Painter.

You can also click the radio button next to Color Palette to indicate which of Painter's three types of color palettes you wish to be the default.

See Also

Alternative Color Palettes

Default Disk

Use the General Preferences dialog box to determine the default disk.

To select the disk volume that Painter will put its temporary file on and will virtualize to, choose the volume name from the Temp File Volume pop-up menu.

Pre-Feather

Use the Floating Selection pre-feather box on the General Preferences dialog box to determine how much you can feather a floater.

The default setting is 16 pixels, making this the maximum setting allowed for the Feather slider in the F. List Palette.

You can change this default to any number up to 50. The change takes effect the next time you launch Painter.

See Also

Feathering Edges

Cloning Preference

When you clone an image, Painter uses the color information from the original as you fill in your clone.

If you would like Painter to keep track of what part of the original you're cloning, check the box next to **Indicate clone source with cross hairs while cloning** on the General Preferences dialog box.

See Also

Cloning

Disable automatic sync to disk

If the image you are working on is too large to fit in your computer's available RAM, Painter virtualizes the image to your hard disk.

You should check this option on the General Preferences dialog box to make Painter run faster when files are virtualized.

Draw zoomed-out views using area-averaging

When looking at an image at less than 100% view, screen draw is faster if you leave this option on the General Preferences dialog box unchecked, and slower but more accurate if checked.

Display warning when drawing outside selection

Checking this box on the General Preferences dialog box enables the warning that appears when you draw outside a selection.

The warning will not appear if this box is unchecked.

Setting Pressure Sensitivity

When you draw with natural media, the amount of pressure you use with a tool determines how dense and how wide your strokes are.

Using a pressure-sensitive stylus with Painter gives you this same kind of flexibility. How much each of us bears down on a drawing or painting tool is different. In Painter, you can actually program the computer to react to your individual touch just by clicking and dragging in the Brush Tracking dialog box.

To display the Brush Tracking dialog box, choose **Edit: Preferences: Brush Tracking**.

To set how sensitive the stylus will be to your hand pressure and speed, move the stylus across the scratch pad area at a normal speed and with a normal amount of pressure.

Just as your signature varies, so will the way you work with the stylus at any given time, so you'll set up Brush Tracking each time you start Painter. When you exit Painter, the Brush Tracking sliders go back to their default settings.

Note: There may be times when you will want to draw with an especially light touch. You may find that if you press too lightly in the image area, no stroke appears. To fix this condition, go to the Brush Tracking dialog box and drag your stylus very lightly across the scratch pad area. The next time you drag in your image area, it takes less pressure to produce a stroke.

See Also

Stylus or Mouse

Customizing the Interface

Fractal Design has chosen colors and textures for Painter's interface that we think are aesthetically pleasing and very legible. However, you may want to experiment with your own interface colors and textures.

1. Choose **Edit: Preferences: Interface**.

   The Interface Preferences dialog box appears.

2. Use the Interface Preferences dialog box to customize the interface by changing the icon selection color, the shadows under palette icons, rectangular pillowing, background textures for palettes and drawers, and the background color of windows.

3. If you want to save your interface preferences, click the **Save** button in the bottom right of the Interface Preferences dialog box. A directory box appears asking you to name the interface. Give it a descriptive name and click **OK**.

4. To load a saved interface set, click the **Load** button. Choose the interface set from the directory box that appears and then click **OK** to load the interface set.

5. To return to Painter's default interface, click the **Restore Factory Defaults** button at the bottom of the palette and click **OK**.

   Painter reverts to the default interface.

See Also

Changing the Icon Selection Color
Changing Shadows under Palette Icons
Changing Rectangular Pillowing
Changing Background Textures
Using the Current Pattern as the Background Texture
Changing the Window Background Color

Changing the Icon Selection Color

Usually, when you select an icon, a red outline surrounds the icon to show that it is selected.

You can use the Interface Preferences dialog box to change the color of this outline.

1. Use the Colors Palette or Dropper Tool to choose the color you wish to use.
2. Click the **Use Current Color** button under Icon Selection Color in the Interface Preferences dialog box.

   The selection box changes to the currently selected color. Painter uses this color until you change it again.

See Also

Customizing the Interface

Changing Shadows under Palette Icons

You can use the Interface Preferences dialog box to change the shadows under palette icons.

1. Enter new values in the boxes under Rectangular Shadows on the Interface Preferences dialog box.

   The X-Offset moves the shadow horizontally and the Y-Offset moves the shadow vertically.

   Softness refers to the amount of feathering the shadowing has.

2. Click **OK**.

3. Watch an icon as its shadow changes, and repeat the procedure with different values if you aren't happy with the changes.

See Also

Customizing the Interface
Changing Rectangular Pillowing

Changing Rectangular Pillowing

Rectangular pillowing affects the shadows beneath sliders and rectangular items in palettes other than icons. You can change it in the Interface Preferences dialog box.

1. Enter new values in the boxes under Rectangular Pillowing in the Interface Preferences dialog box.

   The X-Offset moves the shadow horizontally and the Y-Offset moves the shadow vertically.

   Softness refers to the amount of feathering the shadowing has.

2. Click **OK**.

   Watch the palette shadows change and repeat the procedure with different values if you aren't happy with the changes.

See Also

Customizing the Interface
Changing Shadows under Palette Icons

Changing Background Textures

You can use the Interface Preferences dialog box to change the background textures for both palettes and drawer bottoms.

1. Choose the paper texture you wish to use.
2. Choose **Edit: Preferences: Interface**.
3. Make changes in the Interface Preferences dialog box under Palette Background Texture or Drawer Bottom Texture.

   Click grayscale to render the texture in grayscale.

   Click current colors to render the texture in the current colors.

Note: Painter uses the primary and secondary colors.

4. Click the **Use Current Texture** button.
5. Click **OK**.

   Your palette background texture changes.

To change the drawer bottom texture, follow the steps above, but use the buttons under Drawer Bottom Texture.

You can also use the current pattern as the palette background texture.

See Also

Customizing the Interface
Using the Current Pattern as the Background Texture
Changing the Window Background Color

Using the Current Pattern as the Background Texture

Another way to change the background textures for palettes and drawers is to use the current pattern.

1. Use the Rectangular Selection Tool to select an image or part of an image to capture as a pattern.
2. Choose **Tools: Patterns: Capture Pattern**.
3. Click the **Use Current Pattern** button.
4. Click **OK**.

   The palette or drawer bottom background texture changes to the current pattern.

See Also

Customizing the Interface
Changing Background Textures
Changing the Window Background Color

Changing the Window Background Color

You can use the Interface Preferences dialog box to change the window background color.

1. Using the Colors Palette or Dropper Tool, choose the color you wish to use.
2. Set Painter to full-screen mode by pressing **Ctrl+M**.

   The default background color is gray.
3. Click the **Use Current Color** button under Window Background Color in the Interface Preferences dialog box.

   The background fills with the current color.

See Also

Customizing the Interface
Using Full-Screen Mode
Changing Background Textures
Using the Current Pattern as the Background Texture

Using Plug-Ins

Plug-ins are software programs that work with Painter and other applications to drive scanners and printers, support additional file formats, and provide new special-effects filters.

The first time you start Painter, a dialog box appears asking you to select a third-party plug-in. Find and double-click a plug-in to tell Painter where all the plug-ins are on your hard disk.

Because Painter will look only in one directory for plug-ins, all of the plug-ins you want to use with Painter should be kept in one directory.

If you move your plug-ins, or for any other reason want to relink them to Painter, choose **Edit: Preferences: Plug-ins.** The Plug-ins dialog box will appear. Your selection will take effect the next time you start Painter.

Painter provides two commands on the File menu, **Acquire** and **Export**, for opening and exporting images by way of plug-ins used with some scanners, film recorders, and color printers.

See Also

Accessing Third-Party Plug-Ins

Using Full-Screen Mode

Painter allows you to display your image window without scroll bars.

To turn full-screen mode on and off:

Press **Ctrl+M** to turn on full-screen mode.

Your image is centered on the screen without scroll bars.

Press **Ctrl+M** again to return to its previous state.

All Painter features (except the information button on the scroll bar) work when in the full-screen mode.

You can position the image window anywhere on-screen by holding down the spacebar and clicking and dragging with your mouse or stylus.

You can also rotate the page in full-screen mode.

See Also

Image Size Information
Rotating an Image

Activating the Grid Overlay

Painter has a grid layer to help guide your brush strokes.

To activate the grid choose **Canvas: View Grid**, or click the grid icon on the right side of your image window.

Your image now has a non-printing grid.

When you paint or draw with the grid turned on, you'll see your brush strokes at 50% opacity.

When you turn off the grid, the strokes will be at 100% opacity.

See Also

Editing the Grid Overlay

Editing the Grid Overlay

You can set up the grid to suit your working style by choosing **Canvas: Grid Options...**. Tab between the following fields to reach them quickly.

Choose a command from the **Grid Type** pop-up menu to determine whether your grid will be rectangular, have just vertical or horizontal lines, or be made up of small dots.

Horizontal Spacing determines the amount of space between horizontal lines. The unit of measure can be pixels, inches, centimeters, points, picas, columns, or percent.

Vertical Spacing determines the amount of space between vertical lines. Uses the same unit of measure as Horizontal Spacing.

Line Thickness sets the width of grid lines, using the same unit of measure as Horizontal Spacing and Vertical Spacing.

Click the **Grid Color** color square to change the color of the grid lines. Choose a color in the color picker, then click **OK** or press **Enter**. The default color is a light blue.

Click the **Background** color square to change the grid's background color. Choose a color in the color picker, then click **OK** or press **Enter**. The default color is white.

Click the **Transparent Background** option if you want the grid to be transparent so that your image will appear at 100% opacity.

See Also

Activating the Grid Overlay

Image Size Information

To find out how big your current image is and how well it fits on the printer bed of the printer that is selected in the Print Setup, click and hold on the **i** (the international symbol for information) in the bottom left-hand corner of your image window.

The window shows how your image fits on the page size and orientation that are designated in the Printer Setup dialog box, in addition to graying out your non-printing area around the edge of the page.

If you change your image's resolution or dimensions by choosing **Canvas: Resize...**, you can use the **i** window to see how the changes affect the way the image fits on the page.

See Also

Resizing an Image
Resizing Your Canvas

Windows Options

Selecting **Edit: Preferences: Windows** displays memory and printing options.

Physical Memory Options. For best performance, choose **Maximum Memory for Painter** and run Painter with no other programs running in the background. Choosing **Half Memory for Painter** will allow Painter to run more efficiently with other Windows applications running at the same time.

Printing Options. **Free Memory for Printing** will increase printing speed by writing the active image to disk and increasing the amount of memory available for the print manager and the printer driver.

No Print Banding disables print banding for devices that support it. Disabling print banding may help some PostScript printers, but will hurt the peformance of some bitmap printers, such as the Hewlett-Packard PaintJet. Most dot matrix printers will be faster with **No Print Banding** left unchecked in the dialog box. If you experience problems printing in landscape orientation, you may have to turn off banding by checking the radio button in the dialog box.

Display Option. If your video display driver is set to 32,000 colors, you may experience some color irregularities on your screen when using Painter. Checking **No Device Dependent Bitmaps** will correct this problem with most 32,000-color video displays. If you are not using 32,000 colors, this checkbox will have no effect on your system.

Using Brushes

Painter's brushes have been set up for you to act like the real-life media they're named after.

For information about Painter's brushes, click a topic.

Qualities of Brushes

Painter gives new meaning to the word "painting." When describing digital-image editing in the past, painting referred to adding color to pixels, using smooth or jagged strokes. Painting in Painter, however, means creating strokes that resemble those made by oils, watercolors, and airbrushes. You can even apply paint in the styles of the artists Vincent Van Gogh and Georges Seurat.

To understand the behavior of individual brushes, you need to understand a few basic qualities of brushes. For example, sometimes the variant you choose determines what paper you select and how you set the Grain slider and Opacity slider on the Controls: Brush Palette.

See Also

Cover or Buildup
Opacity
Grain
Stylus or Mouse
Aliased, Anti-aliased, and Semi-anti-aliased

Cover or Buildup

In Painter, brush strokes either hide underlying brush strokes or darken them toward black, depending on how the tool operates traditionally.

So Painter's Chalk strokes hide or cover what's beneath them, while those done with Felt Pens build on underlying strokes, making them darker.

Cover or buildup is part of what is called a brush's method.

One thing to keep in mind when working with buildup tools is that when strokes muddy up to black, you won't be able to add a light stroke to a dark one. If you try, you'll see the stroke get darker or not change at all, depending on how dark the underlying line is. You can do one of two things to get a light stroke on a dark buildup stroke. Either pick an Eraser and erase, or use a cover brush, like the Chalk, to cover the underlying strokes.

See Also

Changing Methods

Opacity

The Opacity slider on the Controls: Brush Palette changes the hiding or buildup power of brush strokes.

Increasing opacity by moving the slider to the right makes cover brushes more opaque, and buildup brushes muddy up toward black more quickly. Decreasing opacity has the opposite effect.

Here's an example of using the Opacity slider. The fact that buildup strokes get darker as you layer them comes in handy when you're shading---drag over an area once for highlights, repeat strokes for dark shadows. As you work with a buildup brush---Waxy Crayons, for example---you may find that strokes turn black too quickly to suit your illustration. Use the Opacity slider to remedy this. Move it to the left to make strokes stay lighter longer.

See Also

Cover or Buildup

Grain

Many of Painter's tools, like Chalk and Charcoal, interact with paper grain.

Like cover and buildup, grain is part of a brush's method.

The Grain slider on the Controls: Brush Palette determines how much paper grain shows through a brush stroke. For brushes that interact with paper grain, the Grain slider controls how much color penetrates into the paper.

Moving the Grain slider to the right intensifies penetration into paper grain, making the color seem darker and letting less paper grain show through. Moving the slider to the left reduces the stroke's intensity, revealing more paper grain.

See Also

Changing Methods

Stylus or Mouse

In general, your pressure on a stylus interacts with the qualities of a brush to determine the appearance of the brush stroke. So, for example, a cover brush stroke appears more opaque when you press heavily, and when you press lightly, it seems lighter. The same is true for paper grain. If a brush interacts with paper grain, pressing lightly reveals more paper grain and pressing heavily shows less.

If you're using a mouse, you can get the same effects by adjusting the Opacity slider and Grain slider on the Controls: Brush Palette. For example, moving the Opacity or Grain slider to the left can give the same results as pressing lightly on a stylus, and moving the Opacity or Grain slider to the right can produce the same effect as pressing heavily.

You can also use the Advanced Controls: Expression (Sliders) Palette to determine how the mouse influences brush strokes.

See Also

Cover or Buildup
Opacity
Grain
Determining Expression
Setting Pressure Sensitivity

Aliased, Anti-aliased, and Semi-anti-aliased

A feature of bitmapped paint programs like Painter is the smoothness of the transition between individual components of an image.

If the letter A appears in a composition, and its edges blend smoothly with the background, the A is said to be anti-aliased.

In Painter there are three levels of anti-aliasing: smooth, anti-aliased strokes; aliased, or hard-edged, jagged strokes that show stair steps on their edges; and semi-anti-aliased lines that are somewhere in between.

Brush

Here's where your oil painting and acrylic brushes reside.

Some of the Brush variants, like Loaded Oils variant, give the effect of real bristles, complete with the striations made by individual bristles. Using these variants with **Apply Surface Texture** in the Effects:Surface Control menu gives you some great oil- or acrylic-like brush strokes.

Some of Painter 3's new bristle brushes introduce even more realistic brush qualities. For example, the variant called Brushy not only makes realistic bristle striations but runs out of paint toward the end of a stroke and picks up and smears existing paint. The new Loaded Oils variant makes it easier than ever to paint with multiple colors.

All of the brush variants cover or hide underlying brush strokes. Moving the Opacity slider on the Controls: Brush Palette to the right makes brush strokes more opaque. Moving it to the left makes them more transparent.

See Also

Hairy Brush
Graduated Brush
Cover Brush
Penetration Brush
Oil Paint
Camel Hair Brush
Rough Out
Big Rough Out
Huge Rough Out
Digital Sumi
Loaded Oils
Small Loaded Oils
Big Loaded Oils
Big Wet Oils
Brushy
Fine Brush
Sable Chisel Tip Water
Coarse Hairs
Smaller Wash Brush
Ultrafine Wash Brush
Qualities of Brushes

Hairy Brush

The Hairy Brush simulates strokes made by a bristle brush, showing semi-anti-aliased brush hair lines.

The Hairy Brush interacts with paper grain and is pressure sensitive in terms of opacity.

Its stroke width is determined by how hard you press on your stylus. To base stroke width on the direction you drag the mouse, change settings on the Advanced Controls: Expression (Sliders) Palette.

The Hairy Brush can paint multicolor strokes.

Because the Hairy Brush is a complex brush, a dotted line appears when you first make a stroke.

You can customize the Hairy Brush dramatically by opening up space between bristles and adding bristles to the stroke.

See Also

Qualities of Brushes
Determining Expression
Selecting Two Colors
Drawing Freehand
Customizing Bristle Brushes

Graduated Brush

The Graduated Brush interacts with paper grain, and its stroke width is determined by how hard you press on your stylus.

Ideal for shading, it paints semi-anti-aliased brush strokes that contain one or two colors, depending on how hard you press on the stylus.

The Graduated Brush gets its color cues from the Overlapping Rectangles on the Art Materials: Colors Palette.

To get a multicolored brush stroke with the mouse, change settings on the Advanced Controls: Expression (Sliders) Palette. For instance, you can base color on the direction you drag the mouse.

See Also

Qualities of Brushes
Selecting Two Colors
Determining Expression

Cover Brush

The Cover Brush produces brush strokes that have soft, anti-aliased edges.

It does not interact with paper grain.

Stroke width and opacity are determined by how hard you press on your stylus. Pressing harder with a stylus makes brush strokes more opaque; pressing more lightly makes them more transparent.

Change settings on the Advanced Controls: Expression (Sliders) Palette to get a similar effect with the mouse.

See Also

Qualities of Brushes
Determining Expression

Penetration Brush

This brush has hard, aliased edges. Its strokes look like acrylics when you apply surface texture to them using the Effects menu.

The Penetration Brush reacts to paper grain. Pressing lightly with a stylus allows more paper texture to show through; pressing heavily reveals less.

Adjust the Grain slider on the Controls: Brush Palette for similar effects with the mouse.

See Also

Qualities of Brushes

Oil Paint

Gives you brush strokes that have hard, aliased edges.

Oil Paint strokes interact with paper grain, and stroke width and opacity are determined by how heavily you press with your stylus.

To get similar effects with a mouse, adjust the Grain slider and the Opacity slider on the Controls: Brush Palette.

You can also change settings on the Advanced Controls: Expression (Sliders) Palette to base grain and opacity on the direction you drag the mouse.

See Also

Qualities of Brushes
Determining Expression

Camel Hair Brush

Gives soft, anti-aliased strokes.

Dragging quickly with the stylus or the mouse makes each bristle more narrow; dragging slowly widens each bristle.

Pressing harder with a stylus makes brush strokes more opaque; pressing more lightly makes them more transparent.

Adjust the Opacity slider on the Controls: Brush Palette to get the same effect with a mouse.

Or base opacity on the direction you drag the mouse by changing settings on the Advanced Controls: Expression (Sliders) Palette.

See Also

Qualities of Brushes
Determining Expression

Rough Out

Acts like a fast, dry brush and is ideal for roughing out ideas.

The faster you drag your stylus, the thinner the lines; the slower you go, the thicker they will appear.

The Rough Out brush is paper-grain sensitive. Pressing lightly with a stylus reveals more paper grain; pressing heavily reveals less.

Adjust the Grain slider on the Controls: Brush Palette to get the same effect with a mouse.

See Also

Qualities of Brushes

Big Rough Out
A wider version of Rough Out.

See Also
Rough Out

Huge Rough Out
An even wider version of Rough Out.

See Also
Rough Out

Digital Sumi

This Brush variant is a multiple-bristle brush made up of single-pixel bristles.

Pressure affects width.

See Also

Qualities of Brushes
Customizing Bristle Brushes

Loaded Oils
Simulates the look of a traditional loaded brush, a brush dipped in more than one color.

Small Loaded Oils
A narrower version of Loaded Oils.

See Also
Loaded Oils

Big Loaded Oils
A wider version of Loaded Oils.

See Also
Loaded Oils

Big Wet Oils
A wide loaded brush that mixes with the color underneath it.

Brushy

A multibristle brush that runs out of paint toward the end of a stroke and picks up colors it's dragged through.

See Also

Qualities of Brushes

Fine Brush

A very fine-hair brush that changes scale quickly based on pressure.

See Also

Qualities of Brushes
Determining Expression

Sable Chisel Tip Water
A fine-hair brush that uses water to smear colors in an image.

Coarse Hairs

Produces a stroke with a small number of coarse hairs that change scale quickly based on pressure.

See Also

Qualities of Brushes
Determining Expression
Customizing Bristle Brushes

Smaller Wash Brush

A multitude of fine, closely spaced bristles that use the current color and mix and smear it with colors in an image.

See Also

Qualities of Brushes
Customizing Bristle Brushes

Ultrafine Wash Brush

Similar to the Smaller Wash Brush but with a larger bundle of finer bristles.

See Also

Qualities of Brushes
Smaller Wash Brush

Artists

You can paint in the style of Vincent Van Gogh, where your brush strokes are multishaded, or in the style of Georges Seurat, where multiple dots combine to form an image, by choosing a variant of the Artists brush.

With all the Artists variants, dragging the mouse or stylus quickly produces narrower strokes, dragging slowly gives you wider strokes.

See Also

Van Gogh
Seurat
Impressionist
Auto Van Gogh
Flemish Rub
Piano Keys
Qualities of Brushes
Determining Expression

Van Gogh

One of the qualities that made Vincent Van Gogh's style of painting unique was his use of multicolored brush strokes.

The Van Gogh brush can recreate this painting style with multicolored, anti-aliased brush strokes that hide underlying strokes.

Use shorter strokes with this brush.

After you make a stroke, a dotted line appears while Painter computes the stroke.

See Also

Qualities of Brushes

Seurat

Georges Seurat painted in the pointillist style, a neo-Impressionist technique of using clusters of dots to represent people, objects, and landscapes.

The Seurat brush automatically creates multicolored, anti-aliased dot clusters for you.

When you paint with the Seurat brush, you'll see the area fill with dots. To add more dots, drag over the same area more times.

Regulate dot size on the Brush Controls: Size Palette. Move the Size slider to the right to make the dots bigger.

See Also

Qualities of Brushes
Changing Brush Size

Impressionist

This brush recreates the style of the Impressionists, painting with dabs of color.

The direction you drag your mouse or stylus determines the angle of the brush stroke.

To try this brush, follow these steps to create an Impressionist version of a sun:

1. Select the Impressionist variant of the Artists brush.
2. Select a clear yellow on the Art Materials: Colors Palette.
3. In the image window, drag in a circular motion several times.

   You now have an Impressionist sun.

You can also use the Impressionist variant to push around existing paint in an image by moving the Opacity slider to the left.

See Also

Qualities of Brushes

Auto Van Gogh

This variant works in concert with the **Effects: Esoterica: Auto Van Gogh** command and gives you results similar to the Impressionist variant, but it gets there in a different way.

With Auto Van Gogh, the direction of the individual brush dabs is determined by the light and dark areas of the clone source.

See Also

Using Auto Van Gogh

Flemish Rub

Creates an effect similar to the Impressionist and Auto Van Gogh variants.

The difference is that the Flemish Rub variant smears existing color instead of applying new color.

Use this variant to apply an impressionistic effect to an existing image.

See Also

Impressionist
Auto Van Gogh

Piano Keys

This brush creates a colorful ribbon-like effect that follows the direction of your stroke.

Piano Keys uses a closely spaced, thin, captured rectangular tip to produce the effect.

An interesting variation is to use this brush as a Cloner by clicking **Use Clone Color** on the Art Materials: Colors Palette.

See Also

Using Clone Color

Liquid

We like to talk about Painter's brushes being like natural media. At first glance, the Liquid variants might not seem to be at all lifelike. However, when you use them to create oil-painting effects, you'll see that these brushes look very much like paint applied with a palette knife. With the Opacity slider on the Controls: Brush Palette turned down to 0%, the Liquid brushes act as if they were distorting an image floating on a liquid surface.

These variants use drip methods, so they smear more than they paint. Drag these brushes slowly. The more you push your mouse or stylus, the more the paint smears.

With the Liquid variants you can either apply new paint or smear around an existing image, including photographs. To push existing paint around, move the Opacity slider all the way to the left, shutting off the color. To smear with color, move the Opacity slider to the right. Using a stylus, the amount of pressure you use affects how much paint gets smeared. Pressing heavily spreads more paint; pressing lightly smears less paint. Use the Advanced Controls: Expression (Sliders) Palette to set up similar results for the mouse.

Stylus pressure affects paper sensitivity differently for the drip methods than for other methods. More paper texture is visible when you press more heavily, and less paper texture is apparent when you press lightly. The Grain slider controls the strength of distortion a Liquid brush exerts on an image as it is stroked across its surface.

See Also

Distorto
Smeary Bristles
Total Oil Brush
Smeary Mover
Coarse Smeary Mover
Coarse Smeary Bristles
Coarse Distorto
Thick Oil
Tiny Smudge
Editing
Special Effects
Cloning
Qualities of Brushes

Distorto

Moves paint around without adding color.

Dragging the stylus or mouse quickly produces a thinner stroke; dragging slowly gives a wider one.

See Also

Qualities of Brushes

Smeary Bristles

Smears the selected color into your image.

This variant is paper-grain sensitive.

Dragging the stylus or mouse quickly produces a thinner stroke; dragging slowly gives you a wider one.

See Also

Qualities of Brushes

Total Oil Brush

This variant produces a tighter appearing stroke than Smeary Bristles, but is otherwise the same.

See Also

Qualities of Brushes

Smeary Mover

This variant is similar to Smeary Bristles, but it smears existing paint instead of adding new paint.

See Also

Smeary Bristles

Coarse Smeary Mover

This is a semi-anti-aliased version of Smeary Mover.

See Also

Smeary Mover

Coarse Smeary Bristles

This is a semi-anti-aliased version of Smeary Bristles.

See Also

Smeary Bristles

Coarse Distorto

This brush is a semi-anti-aliased version of Distorto.

See Also

Distorto

Thick Oil
Smears with a stroke loaded with paint.

Tiny Smudge
Single-pixel, multibristled smudging tool.

Water Color

The Water Color brush variants produce some of the prettiest effects in Painter. Using these variants you'll be able to produce some very lifelike watercolor paintings.

All the Water Color variants, except Wet Eraser, are paper-grain sensitive and interact with the selected paper texture. The Grain slider works differently with the Water Color brushes than with other brushes. With Water Color variants, moving the slider to the right makes paper texture more pronounced and moving it to the left makes the paint appear flatter.

Except for the Wet Eraser, the Water Color brush variants' stroke widths are affected by stylus pressure. Press more heavily for wider brush strokes; press more lightly for more narrow ones. Use the Advanced Controls: Expression (Sliders) Palette to get similar results with the mouse.

See Also

Painting with Water Colors
Simple Water
Water Brush Stroke
Wet Eraser
Pure Water Brush
Spatter Water
Broad Water Brush
Large Water
Large Simple Water
Diffuse Water
Qualities of Brushes
Determining Expression

Painting with Water Colors

Before painting with the Water Color variants, there are a couple of things to set up.

1. Select a water color variant to paint with.

   This automatically activates Painter's wet paint layer. When you paint with Water Color variants, you paint in the wet layer---a separate layer that floats above your image area. Painting in the wet layer lets you add color without affecting your existing image. This is especially useful for illustrating. You can draw your image with one of the pens and then color it using Water Color variants.

2. Adjust for pooling.

   After you paint with the Water Color variants, you'll notice that color pools on the edges just like when you paint with real-life watercolor. Before you send the color to the image layer, you can control the pooling for all strokes in the wet layer with the Wet Fringe slider on the Advanced Controls: Water Colors (Water) Palette. Moving the slider to the left decreases pooling; moving it to the right increases pooling. To get different pooling amounts for individual strokes, adjust the Wet Fringe slider for one or more strokes, dry them, paint more watercolor strokes, and adjust the Wet Fringe slider again. You can't adjust pooling after you dry strokes.

3. When you're finished painting, send the watercolor strokes to the image layer by choosing **Canvas: Dry** (**Ctrl+Y**). You may want to save an image with the wet layer on so you can continue working on it another time. In this case, don't use the Dry command before saving.

4. When you're finished using the Water Color variants, turn off the wet layer by choosing **Canvas: Wet Paint**.

You can't use selection tools to select and delete an area in the wet layer. To clear the wet layer, first choose **Canvas: Dry** (**Ctrl+Y**) and then **Edit: Undo** (**Ctrl+Z**). Or use the Wet Eraser variant, which lets you erase watercolor strokes in the wet layer.

See Also

Making Adjustments for Water Colors

Simple Water
Gives you a watercolor stroke without bristles.

Water Brush Stroke

This variant is a watercolor bristle brush. When you first make a stroke, a dotted line appears while Painter computes the stroke.

Wet Eraser

Erases watercolor strokes in the wet layer.

The Wet Eraser is pressure sensitive. Pressing heavily with a stylus erases more quickly; pressing lightly erases more slowly.

To get the same effect with a mouse, adjust the Opacity slider on the Controls: Brush Palette. Or change settings on the Advanced Controls: Expression (Sliders) Palette to base opacity on the direction you drag the mouse.

See Also

Qualities of Brushes
Determining Expression

Pure Water Brush

This variant behaves like the Water Brush Stroke except that instead of adding color to your image, it adds water.

When you first make a stroke, a dotted line appears while Painter computes the stroke.

See Also

Water Brush Stroke

Spatter Water
Spatters water randomly when you make a stroke.

Broad Water Brush
Paints a wide stroke showing brush bristles.

See Also
Customizing Bristle Brushes

Large Water
Produces a gossamer watercolor stroke.

Large Simple Water

This brush is a larger version of Simple Water.

See Also

Simple Water

Diffuse Water
Edges of this brush diffuse after the stroke is made.

Airbrush

Simulates the look of a traditional airbrush by applying a fine spray of ink or paint.

Like an airbrush or spray can, the spray hides anything underneath it.

When you press with the stylus, your strokes contain a heavier concentration of paint and when you press more lightly, the paint is more transparent.

See Also

Fat Stroke
Thin Stroke
Feather Tip
Spatter Airbrush
Single Pixel Air
Qualities of Brushes

Fat Stroke
Covers a large area with a soft, anti-aliased paint stream.

Thin Stroke
Covers less territory than the Fat Stroke.

See Also
Fat Stroke

Feather Tip

Paints soft, anti-aliased lines that have varied widths.

These thick-and-thin variations are more apparent when you widen your stroke by moving the Size slider on the Brush Controls: Size Palette to the right.

See Also

Changing Brush Size

Spatter Airbrush

The Spatter Airbrush is paper-grain sensitive and produces a semi-anti-aliased brush stroke.

Stylus pressure determines how much paper grain is revealed. To get the same effect with a mouse, adjust the Grain slider on the Controls: Brush Palette. Or base grain on the direction you drag the mouse by changing settings on the Advanced Controls: Expression (Sliders) Palette.

In traditional airbrushing, a technique of adjusting the brush to produce a coarse variation in the size of the paint droplets is often desirable. The Spatter Airbrush simulates this technique by introducing a random texture into the airbrush spray. An excellent paper texture to use for this result is the caviar texture set to 25% in the More Wild Textures library.

See Also

Qualities of Brushes
Determining Expression
Selecting Paper Textures
Changing Paper Libraries

Single Pixel Air
Single-pixel airbrush that builds up based on pressure.

See Also
Qualities of Brushes

Pencils

Use Pencils for anything you'd use real pencils for, from rough sketches to fine-line drawings.

Like their real-life counterparts, Pencils interact with paper texture.

All the Pencils build to black.

Except for the Colored Pencils variant, the Pencils are also pressure sensitive in terms of opacity.

Adjust the Opacity slider on the Controls: Brush Palette to get the same effect with a mouse. Or base grain and opacity on the direction you drag the mouse by changing settings on the Advanced Controls: Expression (Sliders) Palette.

With the Colored Pencils, 2B Pencil, Sharp Pencil, and 500 lb. Pencil variants, dragging the stylus or the mouse quickly gives you a thinner line, dragging slowly a thicker one. These thick-and-thin variations are more apparent if you drag the ±Size slider on the Brush Controls: Size Palette to the right.

See Also

Colored Pencils
Thick & Thin Pencils
2B Pencil
Sharp Pencil
500 lb. Pencil
Single Pixel Scribbler
Qualities of Brushes
Determining Expression
Changing Brush Size

Colored Pencils

Produces lines with semi-anti-aliased edges.

Use this brush to get the same effect as using real colored pencils.

See Also

Qualities of Brushes

Thick & Thin Pencils

With the stylus or the mouse, the semi-anti-aliased line you draw with this tool will be thick or thin depending on the direction of your stroke.

See Also

Qualities of Brushes

2B Pencil
A soft lead pencil that produces thin, anti-aliased lines.

See Also
Qualities of Brushes

Sharp Pencil
A hard lead pencil with semi-anti-aliased strokes.

See Also
Qualities of Brushes

500 lb. Pencil
Creates fat, semi-anti-aliased lines.

See Also
Qualities of Brushes

Single Pixel Scribbler

A one-pixel pencil point.

Pressure effects opacity.

See Also

Qualities of Brushes

Eraser

Oops! You made a mistake! No problem, just erase it.

Painter gives you two kinds of erasers: the Eraser variants, which erase back to the paper color you chose when you started your new document, and the Bleach variants, which erase to white.

Other Eraser variants, called Darkeners, increase density. With all the Darkener variants, moving the Opacity slider on the Controls: Brush Palette to the right darkens areas more quickly; moving it to the left darkens areas more slowly. Pressing heavily with a stylus darkens an area more quickly; pressing lightly darkens areas more slowly.

With all the Eraser and Bleach variants, when you press more heavily on your stylus, you'll erase more; the more lightly you press, the less you'll erase.

See Also

Qualities of Brushes

Water

Water smudges and dilutes strokes made by any painting or drawing tool.

With all the Water variants, the harder you press on your stylus, the more apparent the smear will be.

Adjust the Opacity slider on the Controls: Brush Palette for a similar effect with the mouse.

See Also

Just Add Water
Grainy Water
Frosty Water
Tiny Frosty Water
Big Frosty Water
Single Pixel Water
Water Spray
Water Rake
Qualities of Brushes

Just Add Water

Smudges with smooth, anti-aliased strokes.

This variant removes paper grain from strokes when it smears and reacts to the velocity of your stroke.

See Also

Qualities of Brushes

Grainy Water

This variant reacts to paper grain.

It is ideal for smearing existing textured strokes because it helps them maintain their graininess.

You can also use it to add some texture to smooth strokes. The smear reflects the selected paper texture.

See Also

Qualities of Brushes

Frosty Water
Smears with a hard-edged, brittle stroke.

Try choosing different paper textures for some interesting results.

Tiny Frosty Water

A sharpened version of Frosty Water.

See Also

Frosty Water

Big Frosty Water
A large-brush version of Frosty Water.

See Also
Frosty Water

Single Pixel Water

The tiniest level of Water brush available, similar to wetting a single hair and using it to smear an image.

Water Spray
This variant sprays pixels of water onto the image.

Water Rake
Multibristle water applicator.

Chalk

Chalk reproduces the thick, rich texture of real-life pastels.

Chalk interacts with paper grain.

All Chalk variants make strokes that cover or hide underlying ones.

With a stylus, the Chalk variants are pressure sensitive in terms of opacity. Adjust the Opacity slider on the Controls: Brush Palette to get the same effect with a mouse.

See Also

Artist Pastel Chalk
Sharp Chalk
Large Chalk
Square Chalk
Oil Pastel
Qualities of Brushes

Artist Pastel Chalk
Produces a medium width, semi-anti-aliased stroke.

Sharp Chalk
A sharper version of Artist Pastel Chalk.

See Also
Artist Pastel Chalk

Large Chalk
A wider version of Artist Pastel Chalk.

See Also
Artist Pastel Chalk

Square Chalk
Uses a captured rectangular tip to produce a chiseled edge.

Oil Pastel

Slightly smears the underlying color.

Uses a captured triangular tip to produce a chiseled edge.

Charcoal

Charcoal behaves like real charcoal and is ideal for sketching.

Charcoal interacts with paper grain and strokes cover underlying ones.

With a stylus, Charcoal is pressure sensitive in terms of Grain and Opacity.

Adjust the Grain slider and Opacity slider on the Controls: Brush Palette to get the same effect with a mouse.

See Also

Gritty Charcoal
Default Charcoal
Soft Charcoal
Qualities of Brushes

Gritty Charcoal

Gives you a deep-toned, semi-anti-aliased stroke that is thick or thin depending on which direction you drag the stylus or mouse.

Default Charcoal
Produces texture-intensive, semi-anti-aliased charcoal lines.

Soft Charcoal
Use Soft Charcoal when you need soft, anti-aliased strokes.

Pen

Drawing with the Pen is like drawing with ballpoint and fountain pens that never clog and never run out of ink.

See Also

Fine Point
Smooth Ink Pen
Calligraphy
Pen and Ink
Flat Color
Scratchboard Tool
Scratchboard Rake
Pixel Dust
Single Pixel
Leaky Pen
Qualities of Brushes

Fine Point
Produces ballpoint pen strokes that react to paper texture.

See Also
Qualities of Brushes

Smooth Ink Pen

Drawing with this Pen is like drawing with your favorite fountain pen and inkwell, minus the mess and fuss.

The Smooth Ink Pen interacts with paper texture and produces strokes that get darker as you layer them.

Using a stylus, heavy pressure widens the stroke, light pressure produces a thin stroke. Also with a stylus, the Smooth Ink Pen is pressure sensitive in terms of grain.

Use the Grain slider on the Controls: Brush Palette to get the same effect with a mouse or use the Advanced Controls: Expression (Sliders) Palette to base grain on the direction you drag the mouse.

See Also

Qualities of Brushes
Determining Expression

Calligraphy

It's now possible to hand letter headlines in newsletters and comps. Just pick up your Calligraphy Pen!

Strokes that you make with the Calligraphy Pen cover underlying strokes.

Pressing harder with a stylus creates wider strokes, pressing less heavily creates thinner lines. Use the Advanced Controls: Expression (Sliders) Palette to base stroke width on the direction you drag the mouse.

Using either the stylus or the mouse, you can also vary line width by dragging in different directions. Keeping the Opacity slider on the Controls: Brush Palette in its default position gives you the most inklike lines.

See Also

Qualities of Brushes
Determining Expression

Pen and Ink

With the Pen and Ink variant, the width of the stroke is determined by how fast you drag your stylus or mouse.

The faster you go, the thinner the lines will be; the slower you drag, the thicker the lines.

See Also

Qualities of Brushes
Determining Expression

Flat Color

This variant lets you fill in large areas with strokes that hide underlying ones.

See Also

Qualities of Brushes
Determining Expression

Scratchboard Tool

You can use this variant as a dark color on a white background, but to get the full effect, start a new document, click **Paper Color...**, and choose black by dragging the indicator all the way to the right of the scroll bar in the color picker. Then choose white on the Art Materials: Colors Palette and you can create a scratchboard design.

Using a stylus, you can widen lines by pressing heavily and draw thin ones by pressing lightly.

For the same effect with a mouse, use the Advanced Controls: Expression (Sliders) Palette to base stroke width on the direction you drag the mouse.

See Also

Qualities of Brushes
Determining Expression

Scratchboard Rake

This variant is like the Scratchboard Tool in that it is very effective when you use white on a black background. It produces a multilined stroke that is ideal for creating crosshatch shading.

Move the Opacity slider on the Controls: Brush Palette to the left for more transparent strokes. Move it to the right for more opaque strokes.

With a stylus, pressing heavily gives you a wider, denser stroke, pressing lightly gives you a thinner, more transparent stroke.

If you're using a mouse, you can get the same transparent-and-opaque effect as pressing lightly with the stylus by moving the Opacity slider to the left before you begin a stroke. You can also base stroke width and opacity on the direction you drag the mouse.

See Also

Scratchboard Tool
Qualities of Brushes
Determining Expression

Pixel Dust

Pixel Dust draws a random distribution of pixels in a spray pattern.

Single Pixel

Single Pixel draws with a single pixel. The pixel is always full value.

Pressure produces no effect.

This variant is useful as a single-pixel line tool with the Straight Lines draw style.

See Also

Qualities of Brushes
Drawing Straight LInes

Leaky Pen

This variant is a leaky pen. Click and drag and you'll see. The more you drag the more it leaks.

Pick blue or black first to really get the full effect.

Felt Pens

Digital comps are possible using the Felt Pens in Painter.

The Felt Pens draw smooth, anti-aliased lines.

What makes the Felt Pens unique is their lifelike tendency to turn to black when you layer strokes.

With a stylus, Felt Pens are pressure sensitive in terms of opacity. To get the same effect with a mouse, use the Advanced Controls: Expression (Sliders) Palette to base opacity on the direction you drag the mouse.

See Also

Fine Tip Felt Pens
Medium Tip Felt Pens
Felt Marker
Dirty Marker
Single Pixel Marker
Qualities of Brushes
Determining Expression

Fine Tip Felt Pens

Draw narrow felt marker strokes with this tool.

The opacity of the stroke is determined by pressure.

See Also

Qualities of Brushes

Medium Tip Felt Pens

This variant draws medium-width felt marker lines.

Drag quickly for a thin stroke, slowly for a thick stroke.

Felt Marker

The Felt Marker gives you a softer shade than the Felt Pens. Varying the angle at which you draw changes the width of the stroke.

See Also

Qualities of Brushes

Dirty Marker

As with the Felt Marker, the Dirty Marker stroke width is determined by the angle at which you draw.

It produces shades that turn black more quickly than those made with the Felt Marker.

See Also

Felt Marker
Qualities of Brushes

Single Pixel Marker
A Felt Pens variant.

Pressure affects opacity.

See Also
Qualities of Brushes

Crayons

Here are the digital crayons you always wanted.

The Crayons produce semi-anti-aliased strokes that interact with paper texture.

Crayon strokes get darker as you layer them.

With a stylus, the Crayons are pressure sensitive in terms of opacity and grain. Adjust the Grain slider and Opacity slider on the Controls: Brush Palette to get the same effect with a mouse.

See Also

Default
Waxy Crayons
Qualities of Brushes

Default
This is your basic crayon.

Waxy Crayons
Smears underlying color into the current color.

Dodge
A darkroom technique used to lighten specific areas of an image (often used in conjunction with Burn).

Burn
In photography, a darkroom technique used to darken selected areas of an image.

Customizing Painter's Brushes

Painter provides almost limitless variations for customizing brushes.

For help in customizing Painter's brushes, click a topic.

Using the Controls Palettes

As with all Painter's tools, you select a palette by clicking its icon on the front of the drawer.

When you're customizing brushes, you'll probably want to work with more than one Brush Controls Palette or Advanced Controls Palette at a time. Just tear off as many palettes as you need.

The Brush Controls: Size Palette can be especially useful when you're designing brushes. Its Preview Window illustrates the individual mark made by a brush, called the dab. (Laying down a series of brush dabs results in a brush stroke.) With the Brush Controls: Size Palette open, you can see the results of the changes you make on other palettes.

Changes you make to brushes with the Brush Controls Palettes and Advanced Controls Palettes are temporary. They disappear as soon as you switch to another variant or brush. If you want to keep a brush, you can save it.

Changing Brush Size

Use the Brush Controls: Size Palette to get the exact width and tip you want for your brush strokes. For example, it's here that you'll sharpen pencils and taper bristle brushes.

See Also

Size Palette Preview Window
Brush Tip Profiles
Size Slider
±Size Slider
Size Step Slider
Build Button

Size Palette Preview Window

The Preview Window in the center of the Brush Controls: Size Palette shows how your changes affect the brush dab.

Clicking in the Preview Window lets you toggle between hard and soft views of the dab.

In the hard view, an inner and outer pair of circles shows the minimum and maximum sizes of a brush. The inner, black circle shows the minimum stroke width. The outer, gray circle shows the maximum stroke width.

The soft view shows the density distribution of the current brush tip.

Brush Tip Profiles

The six brush tip profiles in the Brush Controls: Size Palette show your choices for brush tips.

A brush tip profile shows a cross section of density distribution across the diameter of a brush dab. Variations in this density distribution produce different mark-making qualities in a brush stroke.

You can think of a brush tip profile as a bell-curve graph representing the density spread across the brush pad.

For example, an individual pad made by an airbrush produces a soft-edged circular mark with minimum density at the outer edge of the pad. Density increases inward toward the center of the pad to a maximum value at the exact center. Different mediums have different density distributions.

Here's a description of each brush tip profile:

Pointed profile. Maximum density at the center with rapid fall off to the edge.

Medium profile. Wide area of greater density at the center with rapid fall off to the edge.

Linear profile. Maximum density at the center with an even fall off to the edge.

Dull profile. Maximum density at the center with a high density weighting to the edge.

Watercolor profile. Maximum density at the outer edge in a ringlike fashion with medium internal density.

1-Pixel Edge. Maximum density throughout with a rapid fall off at the edge, producing a 1-pixel, anti-aliased edge.

Size Slider

Controls the width of the brush dab and, therefore, the brush stroke.

Moving the slider to the right makes a brush wider. Moving it to the left makes a brush narrower.

You can also change brush size by holding down the **Ctrl-Alt** keys and dragging your mouse or stylus. A circle appears in the image window, designating the size of your brush. Release the **Ctrl-Alt** keys and, in most cases, the brush builds automatically. If the brush doesn't build, press **Ctrl+B**.

±Size Slider

Controls the difference between the thinnest and widest width of a stroke.

Moving the slider to the right increases the difference between the thinnest and widest portion of a stroke.

Size Step Slider

Controls the transition between the thin and thick sections of a stroke.

Moving the slider to the right makes the transition appear more abrupt.

Moving it to the left makes the transition smoother.

Build Button

When you finish making changes on the Brush Controls: Size Palette, you need to click **Build** (if the button is raised and highlighted) to create the brush before you begin using it.

If you're working on a slower PC, the wider you make the stroke, the longer it takes to build the brush. Larger ±Size values also increase build time.

Pressing **Ctrl+B** also builds the brush.

Adjusting the Angle

When you expand the Brush Controls: Size Palette by clicking the grow box in the upper-right corner, the Angle Control sliders and Dab Type buttons appear.

For elliptical brushes, an angle can be described in relation to the length of the ellipse. A brush with a set of angles---for example, the Impressionist brush---can create interesting effects.

Use the Angle Control sliders to create an elliptical brush that has a range of angles and to adjust the angle of the brush.

See Also

Squeeze Slider
Angle Slider
Ang Rng Slider
Ang Step Slider

Squeeze Slider

Controls the shape of the brush.

Squeezing a brush changes it from round to elliptical.

Moving the slider to the left makes a brush more elliptical and moving it to the right makes a brush more round.

Angle Slider

Controls the angle of an elliptical brush.

Moving the slider to the right turns the brush in a clockwise direction; moving the slider to the left turns the brush in a counterclockwise manner.

Ang Rng Slider

Controls the range of angles the brush will contain.

Setting this slider to 180° means you'll get every angle between 0° and 180° in your stroke.

Ang Step Slider

Controls the angle resolution in brushes with Ang Rng greater than 0°. Setting this slider at 5° means that you get an elliptical brush dab every 5° within the current angle range setting.

Moving the slider to the right results in fewer brush dab angles.

Moving the slider to the left creates more brush dab angles.

Changing Brush Types

At the bottom of the expanded Brush Controls: Size Palette are the Dab Types.

Every brush has a dab type and a stroke type. Dab types control the character of the dabs. Stroke types control the way a series of dabs is laid down.

Note: Some combinations of dab and stroke types aren't possible and you won't be able to select them.

Painter's dab types are:

Circular dabs are controlled by the Size Palette. Squeezing Circular dabs on the Size Palette makes them elliptical. The tip selected on the Tips Palette controls the density distribution of the dab.

A **1-Pixel** dab consists of one pixel. You can't change its size. You'll use 1-pixel brushes mostly when you zoom in to edit at the pixel level.

Bristly dabs are controlled by the sliders in the Brush Controls: Bristle Palette. When you select **Bristly Dab**, the soft view of the Preview Window on the Size Palette displays a Bristly dab.

Captured dabs are dabs that you create and capture with **Tools: Brushes: Capture Brush**.

See Also

Capturing Brushes

Customizing Bristle Brushes

Bristles, a new feature in Painter 3, lets you create the look of a real brush, complete with the striations that the hairs on a real brush make. Use the sliders on the Bristle Palette to design the many individual painting tips in a single brush dab. (The actual size of the dab is set on the Brush Controls: Size Palette.)

The **Thickness slider** controls the diameter of the brush's set of bristles.

The **Clumpiness slider** applies a random proportional variance across a set of bristles, producing variation in brush marks.

The **Hair Scale Slider** controls the density of bristles in the brush dab.

The **Scale/Size slider** controls the degree of size variation applied to a bristle set. At 0% there is no size change applied to the bristle set. Setting this slider to a value greater than 0% creates a set of scaled iterations of the bristles dab. You can't use this slider if the **±** Size slider in the Brush Controls: Size Palette is set at the minimum value of 1.00.

Adjusting Dab Spacing

Most brush strokes in Painter appear to be continuous. In fact, they are a series of closely spaced individual dabs.

The Spacing sliders on the Brush Controls: Spacing Palette adjust the distance between dabs to control the illusion of a continuous brush stroke.

Expanding the palette reveals the Stroke Types buttons and the Bristles slider.

See Also

Spacing/Size Slider
Min Spacing Slider
Stroke Types

Spacing/Size Slider

Controls the amount of space between the brush dabs that make up a stroke.

Moving the slider to the right makes brush strokes appear less dense, which is especially useful with the bristle brushes, but can be a problem for one-stroke brushes like Crayons.

Brush dabs can get spaced out, for instance, when you widen brush strokes in the Brush Controls: Size Palette.

To make a stroke look more like a continuous line, move the Spacing/Size slider to the left.

Min Spacing Slider

Specifies the minimum spacing in pixels between dabs of paint along the brush stroke.

Moving the slider to the right adds space between paint dabs, giving you a dotted line.

Stroke Types

Expanding the Brush Controls: Spacing Palette reveals the Stroke Types buttons.

A **Single** stroke brush has one path associated with it. You can use Bristly and Captured dab types with the Single stroke type to create the effect of multiple bristles.

A **Multistroke** brush is made up of a set of strokes. The Bristles slider at the bottom of the palette controls the number of strokes. Each stroke in a multistroke brush can have a different color. (You adjust the colors on the Art Materials: Colors Palette.) Multistroke brushes must be precomputed, which generates a delay in the stroke's appearance on the screen. Because of this delay, multistroke brushes, such as the Van Gogh brush, work best when you apply them in short strokes.

Rake strokes are composed of a set of strokes. Like Multistrokes, Rake strokes can have more than one color. The Bristles slider at the bottom of the palette controls the number of strokes. All other rake control is done with the Advanced Controls: Rake Palette. The Scratchboard Rake is an example of a Rake brush.

Hose is a stroke composed of the current Image Hose file (selected in the Brush Controls: Nozzle Palette). The Hose Stroke type is a single stroke.

Using Brush Looks

Brush Looks are brushes saved from the Brush Look Designer and stored in the Brush Controls: Looks Palette.

Unlike other brushes, Brush Looks are linked to paper grains, and, in the case of the Image Hose, to Nozzle files. By saving these additional pieces of information, you can create your own unique brushes that can be retrieved as easily as a regular brush.

Painter provides several Brush Looks. You can create as many of your own Brush Looks as you like, but if your Brush Looks drawer becomes too full, you may want to save your Brush Looks in separate libraries.

See Also

Selecting a Brush Look
Using the Brush Look Designer
Creating Brush and Brush Looks Libraries
Opening Brush and Brush Looks Libraries

Selecting a Brush Look

Select a Brush Look from the ones Painter provides or those you created yourself.

1. On the Brush Controls Palette, click the Looks icon to display the Looks Palette.
2. On the Looks Palette, click a Brush Looks icon to select it. For other Brush Looks libraries, click **Library**.

   An Open dialog box appears.
3. Select a Brush Looks library and click **OK** or press **Enter**.

   The Brush Looks drawer fills with Brush Looks. The icon for each Brush Look illustrates its stroke.
4. Click the Brush Look you want to use to select it.

See Also

Using the Brush Look Designer
Creating Brush and Brush Looks Libraries
Opening Brush and Brush Looks Libraries

Using the Brush Look Designer

The Brush Look Designer lets you see what your changes look like as you design a brush.

It also makes it possible to save a brush as a Brush Look, which, unlike other brushes, can include paper texture and a link to an Image Hose Nozzle file as part of the brush.

1. Choose **Tools: Brushes: Brush Look Designer**.

   The Brush Look Designer window appears with an example of a brush stroke on a sample background.

2. Change backgrounds, if you like, by clicking the boxes at the bottom of the window.

   For example, you might use a striped background to see the smear of drip method brushes. You can change the background color by selecting a color on the Art Materials: Colors Palette and then clicking the **Set Colors** button on the Brush Look Designer window.

3. Use the features described in this chapter to customize the brush in any way you like. You can also include paper textures, color variability, and Image Hose files as part of the brush's design.

   The Brush Look Designer shows your changes. Most of the changes happen right away, but to see changes you make on the Brush Controls: Size Palette, you must first click **Build** or press **Ctrl+B**. Click **OK** to use the brush or click **Save** to save it as a Brush Look.

   You can paint or draw with the new brush right away, save it as a Brush Look or save it as a variant.

Adjusting the Image Hose

The Image Hose paints with a set of source images from a Nozzle file. Each element of a Nozzle file has a 24-bit color layer and an 8-bit mask layer. You generate the content for these files by first creating and preparing several floaters and then using the **Tools: Image Hose: Make Nozzle From Group** command to convert the grouped set of floaters into a Nozzle file.

See Also
Image Hose

Adjusting Rakes

A Rake stroke is made up of a set of strokes.

The Rake Palette is on the Advanced Controls Palette.

The settings on the Advanced Controls: Rake Palette determine the characteristics of a rake stroke, with the exception of the number of bristles, which is set on the Brush Controls: Spacing Palette.

See Also

Contact Angle Slider
Brush Scale Slider
Turn Amount Slider
Spread Bristles Button
Soften Bristle Edge Button

Contact Angle Slider

Adjusts how much of the brush touches the painting surface.

Moving the slider to the left creates a low-contact angle that keeps the dab width narrow, as if only the tip of the brush were in contact with the painting surface.

Moving the slider all the way to the right creates a high-contact angle, allowing the dab to widen to its maximum width, as if the entire surface of the brush were in contact with the painting surface.

Brush Scale Slider

Controls the spacing between the individual bristles in a brush. (The size of each individual bristle depends on the current setting in the Brush Controls: Size Palette.)

Turn Amount Slider

When you turn a real brush to paint a curving line, bristles at the edges of the brush move in and out of contact with the painting surface, depending on the brush's location along the curve.

The Turn Amount slider simulates this bristle displacement.

As the turn amount increases, the rake bristles displace changes based on the direction of the brush.

Spread Bristles Button
Dynamically adjusts the brush scale of the bristles with pressure.

Soften Bristle Edge Button
Makes a brush's outer bristles transparent.

Adjusting the Well

The Advanced Controls: Well Palette determines how a brush interacts with a medium, such as paint or ink. Use it to control the way a medium flows from a brush.

See Also

Resaturation Slider
Bleed Slider
Dryout Slider

Resaturation Slider

The Resaturation slider controls the amount that color is replenished in a stroke.

Moving the slider to the right increases saturation, making color last longer through the stroke.

Moving the slider to the left reduces saturation, causing the stroke to run out of color sooner.

Bleed Slider

The Bleed slider controls how much colors mix together.

Moving the slider to the right increases the extent of the bleed.

Moving it to the left reduces bleed.

Dryout Slider

The Dryout slider determines how quickly a brush runs out of its medium. Dryout is measured in pixels.

Moving the slider to the left makes a brush's reservoir empty more quickly.

When the slider is set to the far right, no dryout will occur.

Adding Randomness

Randomness is used in Painter to introduce an accidental quality. These controls are found on the Advanced Controls: Random Palette.

See Also

Dab Location Placement Slider
Clone Location Sliders
Random Brush Stroke Grain
Random Clone Source

Dab Location Placement Slider

Introduces a randomized jitter into brush stroke dabs. Instead of appearing regularly along a stroke, dabs appear randomly outside the brush stroke path.

Move the slider to the right to increase the variation from the brush stroke path.

Clone Location Sliders

Work with brushes that use a source image to clone with.

The **Variability** slider randomizes the location where Painter picks up an image in a source document as you apply it to a destination image with a Cloner. Moving the slider to the right increases randomness. For a completely random effect, select **Random Clone Source**. The higher the slider number, the more pixels the image will be offset.

The **How Often** slider controls how often Painter displaces parts of an image when picking up those parts from the source document.

Moving the slider to the left gives a rougher look because there is less time between moves.

Moving it to the right gives a smoother look because more time between moves results in less distortion of the original image.

Random Brush Stroke Grain

Works in any document, not just a clone, to randomize the placement of paper grain.

When you select Random Brush Stroke Grain, the results will be random.

The Spatter Airbrush is an example of Random Grain usage.

Random Clone Source

Takes pieces randomly from a source document.

Unlike the Variability slider, Random Clone Source causes Painter to randomize changes in location completely as it picks up pieces of the image, resulting in a highly distorted image.

Determining Expression

Pressing heavily on a stylus achieves some amazing outcomes in Painter; but what if you're using a mouse? The good news is that by using the Advanced Controls: Expression (Sliders) Palette, you can choose ways other than pressure to determine factors like how much your brush will show paper texture, how dense the color will be, and how wide the brush stroke will be.

Stylus and mouse users alike can use the Advanced Controls: Expression (Sliders) Palette for inventive painting and drawing. For example, you can use the light and dark areas of a source document to determine the character of brush strokes in a clone.

With the Advanced Controls: Expression (Sliders) Palette, you can use eight different controls to set eight main components of a brush. (Two of the controls---Tilt and Bearing---were added to Painter for tablets that support these features.)

Move the eight vertical sliders up and down to set the controls.

See Also

Size
Jitter
Opacity
Grain
Color
Angle
Resat
Bleed

Size

The Size setting on the Advanced Controls: Expression (Sliders) Palette tells Painter how to determine brush stroke width. The actual brush width is set on the Brush Controls: Size Palette. The ±Size slider on the Size palette must be set to greater than the minimum value of 1 for the Size setting to affect brush width.

When you set **Size** to **None**, the stroke is unaffected by the stylus or mouse.

When you set **Size** to **Velocity**, dragging the mouse or stylus quickly makes narrower strokes, dragging slowly makes wider strokes.

When you set **Size** to **Direction**, dragging the mouse or the stylus in one direction gives you narrower strokes, dragging in another gives you wider strokes.

When you set **Size** to **Pressure**, pressing heavily on a stylus gives wider strokes, pressing lightly gives narrower strokes.

When you set **Size** to **Tilt**, tilt determines brush stroke width.

When you set **Size** to **Bearing**, bearing determines brush stroke width.

When you set **Size** to **Source**, Painter uses the light and dark areas of source documents to determine brush stroke width in the clone document.

When you set **Size** to **Random**, Painter determines brush stroke width randomly.

Jitter

The Jitter setting on the Advanced Controls: Expression (Sliders) Palette determines the way you'll get jitter in your brush strokes. The amount of jitter is controlled on the Advanced Controls: Random Palette.

When you set **Jitter** to **None**, the stroke is unaffected by the stylus or the mouse.

When you set **Jitter** to **Velocity**, dragging the mouse or stylus slowly increases randomness. Dragging quickly reduces randomness.

When you set **Jitter** to **Direction**, dragging the mouse or the stylus in one direction makes individual brush dabs more random. Dragging in another direction reduces randomness.

When you set **Jitter** to **Pressure**, pressing heavily on a stylus increases jitter. Pressing lightly closes space and decreases randomness.

When you set **Jitter** to **Tilt**, tilt determines randomness.

When you set **Jitter** to **Bearing**, bearing determines randomness.

When you set **Jitter** to **Source**, Painter uses the light and dark areas of a source document to determine brush dab randomness in a clone document. Dark areas produce less random strokes, light areas result in more random, spread-out strokes.

When you set **Jitter** to **Random**, Painter determines jitter randomly.

Opacity

For buildup method brushes, Painter uses this setting on the Advanced Controls: Expression (Sliders) Palette to determine how quickly colors build to black. For cover method brushes, it determines how colors become opaque. To control the amount of buildup or cover, adjust the Opacity slider in the Controls: Brush Palette.

When you set **Opacity** to **None**, the stroke is unaffected by the stylus or the mouse.

When you set **Opacity** to **Velocity**, for buildup brushes, dragging the mouse or stylus quickly produces a color that's truer to the one you chose in the Art Materials: Colors Palette. Dragging slowly makes the stroke muddy to black. For cover brushes, dragging the mouse or stylus quickly makes the stroke more transparent. Dragging slowly makes the stroke more opaque.

When you set **Opacity** to **Direction**, for buildup brushes, dragging the mouse or stylus in one direction produces a purer color. Dragging in another makes the stroke muddy to black. For cover brushes, dragging the mouse or stylus in one direction produces a more transparent color. Dragging in another makes the stroke more opaque.

When you set **Opacity** to **Pressure**, for buildup brushes, pressing lightly with a stylus produces a truer color. Pressing heavily makes the stroke muddy to black. For cover brushes, pressing lightly on the stylus produces a more transparent color. Pressing heavily makes the stroke more opaque.

When you set **Opacity** to **Tilt**, tilt determines how quickly buildup brush strokes muddy to black and cover strokes turn opaque.

When you set **Opacity** to **Bearing**, bearing determines how quickly buildup brush strokes muddy to black and cover strokes turn opaque.

When you set **Opacity** to **Source**, Painter uses the light and dark areas of the source document to determine how quickly buildup brush strokes muddy to black and cover strokes turn opaque in a clone document. The dark areas produce more transparent strokes and the light areas generate darker ones.

When you set **Opacity** to **Random**, Painter determines opacity randomly.

Grain

The Grain slider on the Advanced Controls: Expression (Sliders) Palette determines the way Painter figures out when to show paper texture in a brush stroke. To determine how much paper will show through a stroke, adjust the Grain slider in the Controls: Brush Palette.

When you set **Grain** to **None**, the stroke is unaffected by the stylus or the mouse.

When you set **Grain** to **Velocity**, dragging the mouse or stylus quickly reveals more paper grain, dragging slowly hides more.

When you set **Grain** to **Direction**, dragging the mouse or the stylus in one direction reveals more paper grain, dragging in another hides more.

When you set **Grain** to **Pressure**, pressing heavily on a stylus hides more paper grain, pressing lightly reveals more.

When you set **Grain** to **Tilt**, tilt determines how much grain appears.

When you set **Grain** to **Bearing**, bearing determines how much grain appears.

When you set **Grain** to **Source**, Painter uses the light and dark areas of the source document to determine paper grain in the clone document. The brush hides more paper in the lighter areas and reveals more paper texture in the darker ones.

When you set **Grain** to **Random**, Painter determines penetration randomly.

Color

Choosing a setting for Color on the Advanced Controls: Expression (Sliders) Palette lets you use two-color brush strokes. The setting determines how Painter decides when to use one color or the other. Choose the two colors that make up a stroke in the Overlapping Rectangles on the Art Materials: Colors Palette.

When you set **Color** to **None**, the brush paints with one color.

When you set **Color** to **Velocity**, dragging the mouse or stylus quickly produces one color, dragging slowly provides the other.

When you set **Color** to **Direction**, dragging the mouse or the stylus in one direction produces one color, dragging in another provides the other one.

When you set **Color** to **Pressure**, pressing heavily on a stylus produces one color, pressing lightly provides the other.

When you set **Color** to **Tilt**, tilt determines brush stroke color choice.

When you set **Color** to **Bearing**, bearing determines brush stroke color choice.

When you set **Color** to **Source**, Painter uses the light and dark areas of a source document to determine brush stroke color choice in the clone document.

When you set **Color** to **Random**, Painter determines randomly which color to use in a brush stroke.

Angle

The Angle setting on the Advanced Controls: Expression (Sliders) Palette determines how Painter decides the direction of each brush dab. Use the Brush Size and Multi-Angle palettes to determine brush angles.

When you set **Angle** to **None**, the stroke is unaffected by the stylus or the mouse.

When you set **Angle** to **Velocity**, Dragging the mouse or stylus quickly points brush dabs in one direction, dragging slowly points them in another.

When you set **Angle** to **Direction**, dragging the mouse or the stylus one way points brush dabs in one direction, dragging another way points them in another.

When you set **Angle** to **Pressure**, pressing heavily on a stylus points brush dabs in one direction, pressing lightly points them in another.

When you set **Angle** to **Tilt**, tilt determines brush dab angle.

When you set **Angle** to **Bearing**, bearing determines brush dab angle.

When you set **Angle** to **Source**, Painter uses the light and dark areas of the source document to determine brush dab angle in the clone document.

When you set **Angle** to **Random**, Painter sets brush dab angle randomly.

Resat

The Resat setting on the Advanced Controls: Expression (Sliders) Palette determines the way Painter controls resaturation---how much color is replenished in a stroke. Resaturation is determined by the setting on the Advanced Controls: Well Palette.

When you set **Resat** to **None**, the stroke is unaffected by the stylus or the mouse.

When you set **Resat** to **Velocity**, dragging the mouse or stylus quickly gives less resaturation, dragging slowly resaturates strokes more.

When you set **Resat** to **Direction**, dragging the mouse or the stylus in one direction gives less resaturation, dragging in another direction increases resaturation.

When you set **Resat** to **Pressure**, pressing heavily on a stylus increases resaturation, pressing lightly reduces resaturation.

When you set **Resat** to **Tilt**, tilt determines brush stroke resaturation.

When you set **Resat** to **Bearing**, bearing determines brush stroke resaturation.

When you set **Resat** to **Source**, Painter uses the light and dark areas of the source document to determine brush stroke resaturation in the clone document. The darker source areas decrease resaturation and the lighter areas increase resaturation in the clone document.

When you set **Resat** to **Random**, Painter determines resaturation randomly.

Bleed

The Bleed setting on the Advanced Controls: Expression (Sliders) Palette tells Painter the way to determine bleed---how much colors mix together. Bleed is controlled on the Advanced Controls: Well Palette.

When you set **Bleed** to **None**, the stroke is unaffected by the stylus or the mouse.

When you set **Bleed** to **Velocity**, dragging the mouse or stylus quickly produces less bleed, dragging slowly gives you more bleed.

When you set **Bleed** to **Direction**, dragging the mouse or the stylus in one direction gives you more bleed, dragging in another produces less bleed.

When you set **Bleed** to **Pressure**, pressing heavily on a stylus gives you more bleed, pressing lightly produces less bleed.

When you set **Bleed** to **Tilt**, tilt determines the extent colors will bleed.

When you set **Bleed** to **Bearing**, bearing determines the extent colors will bleed.

When you set **Bleed** to **Source**, Painter uses the light and dark areas of your source document to determine color bleed in the clone document.

When you set **Bleed** to **Random**, Painter determines bleed randomly.

Making Adjustments for Water Colors

The Advanced Controls: Water Palette works with Painter's wet layer. The wet layer adds a color layer to an image that allows for transparent washes of color without overwriting the underlying image.

See Also

Diffusion Slider
Wet Fringe Slider
Painting with Water Color
Water Color

Diffusion Slider

The Diffusion slider on the Advanced Controls: Water Palette adjusts the edge of a brush stroke's interaction with the current paper grain. This interaction creates an accurate simulation of the tendency of a watercolor to diffuse into an absorbent paper surface.

Moving the Diffusion slider to the right increases the diffusion of the stroke's edge. Moving the slider to the left decreases it.

You can post-diffuse the wet layer by selecting the area you wish to impart additional diffusion into and hitting the **Shift+D** keyboard shortcut. Apply as often as is necessary to create the desired result.

Wet Fringe Slider

The Wet Fringe slider on the Advanced Controls: Water Palette adjusts the edges of watercolor strokes to simulate the increased pigment that migrates to the outer fringes of real watercolor deposits as they dry.

The higher the setting, the more pronounced the fringing becomes.

Changing Methods

A method is the foundation for every brush and customizing technique in Painter, except the Image Hose. A method decides the nature of a brush stroke, which in turn determines the outcome of every other customizing technique as it acts upon, or along with, the method.

Each brush and variant has a default method. The default method makes the brush act like its real-life counterpart. And if you never changed a single default method, you would still have many painting and drawing tools to choose from. But getting to know the methods and being able to vary them gives you even more options for creating new brushes or editing existing ones.

Even if you don't change a variant's method, knowing what method is all about helps you choose other customizing features. For instance, knowing that grainy in the method name means that the brush interacts with paper grain will lead you to choose unusual paper textures in the Art Materials: Papers Palette.

See Also

The Methods
Method Variations

The Methods

There are seven methods in Painter, all available on the Brushes Palette in the Method Category pop-up menu.

Variations for each method are available on the Method Subcategory pop-up menu at the bottom of the palette.

The **Buildup** methods produce brush strokes that build up the color of those below them, eventually turning them black. Felt Pens are an example of buildup brushes.

The **Cover** methods produce brush strokes that cover or hide underlying strokes. Cover strokes become more opaque the more they're applied. The Chalk is an example of a cover brush.

The **Eraser** methods either erase, darken, or smear the colors beneath them.

The **Drip** methods interact with underlying imagery to produce a distorted effect.

The **Mask** methods, used mostly for image editing, let you paint directly into Painter's masking layer.

The **Cloning** methods take a clone source and re-create it in another medium.

The **Wet** methods work in the wet layer to produce watercolor effects.

See Also

Method Variations

Method Variations

Within the methods are more defining characteristics.

For instance, brush strokes are either soft, flat or hard, and all have to do with the brush stroke's edges.

Soft methods produce smooth, anti-aliased strokes.

Flat methods produce strokes with hard, pixelly edges.

Hard methods provide brush strokes whose edges are semi-anti-aliased.

In a few instances, you'll see the words edge and variable. Edge means strokes are thick and sticky looking. Variable means a brush stroke starts off a bit more transparently.

Last, there's the word grainy. When this word is in a method name, it means the brush reacts to the selected paper grain.

So, putting together the main categories and variations results in methods. For instance, Grainy Hard Cover means that a brush stroke interacts with paper grain, has semi-anti-aliased edges, and produces strokes that hide underlying ones. Grainy Hard Cover is the default method for Chalk and Charcoal.

It's good to know how to juggle methods. Lets say you want a Charcoal-looking stroke, but instead of hiding underlying strokes, you want brush strokes to muddy to black. Change the method to Grainy Hard Buildup. Now let's say you want a smoother, anti-aliased stroke. Change the method to Grainy Soft Buildup. The stroke still isn't quite right. You don't want to see paper texture, so you choose Soft Buildup. Your stroke has smooth, anti-aliased edges and turns black. Soft Buildup is the default setting for Medium Tip Felt Pens.

See Also

Buildup Methods
Cover Methods
Eraser Methods
Drip Methods
Wet Methods
Cloning Methods

Buildup Methods

This section describes and gives examples for each Buildup method.

The **Soft Buildup** method creates anti-aliased brush strokes that build to black. Examples of this method are Medium Tip Felt Pens, and the Felt Pen Cloner.

The **Grainy Soft Buildup** method creates paper-grain-sensitive, anti-aliased brush strokes that build to black. Examples of this method are 2B Pencil, Fine Point Pen, and Smooth Ink Pen.

The **Grainy Edge Flat Buildup** method creates paper-grain-sensitive, aliased brush strokes that build to black. The addition of the word "edge" means the strokes appear more thick and sticky.

The **Grainy Hard Buildup** method creates paper-grain-sensitive, semi-anti-aliased brush strokes that build to black. Examples of this method are Colored Pencils, Thick & Thin Pencils, Sharp Pencil, 500 lb. Pencil, and Crayons.

The **Soft Variable Buildup** method creates anti-aliased brush strokes that build to black.Variable means a brush stroke starts off a bit more transparently. Examples of this method are Fine Tip Felt Pens, Felt Marker, and Dirty Marker.

Cover Methods

This section describes and gives examples for each Cover method.

The **Flat Cover** method creates hard-edged strokes that hide underlying ones. Examples of this method are Loaded Oils, Calligraphy, Pen and Ink, Flat Color, Big Loaded Oils, and Big Wet Oils.

The **Soft Cover** method creates anti-aliased brush strokes that hide underlying ones. Examples of drawing tools that have this method as the default are Calligraphy, Pen and Ink, Flat Color, Scratchboard Tool, Scratchboard Rake, Leaky Pen, and Small Loaded Oils. Paint brushes that have this method as the default are Fine Brush, Sable Chisel Tip Water, Brushy, Coarse Hairs, Airbrush, Seurat, Oil Brush Cloner, Driving Rain Cloner, Camel Hair Brush, Cover Brush, Van Gogh, Auto Van Gogh, and Van Gogh Cloner. An editing tool that has this method as the default is Just Add Water.

The **Grainy Flat Cover** method creates paper-grain-sensitive, hard-edged brush strokes that hide underlying ones. An example of this method is Grainy Water.

The **Grainy Soft Cover** method creates paper-grain-sensitive, anti-aliased strokes that hide underlying ones. An example of this method is Soft Charcoal.

The **Grainy Edge Flat Cover** method creates paper-grain-sensitive, thick, sticky hard-edged strokes that hide underlying ones. Examples of this method are Frosty Water, Rough Out, Hard Oil Cloner, Penetration Brush, and Oil Paint.

The **Grainy Hard Cover** method creates paper-grain-sensitive, semi-anti-aliased strokes that hide underlying ones. Examples of this method are Ultrafine Wash Brush, Smaller Wash Brush, Chalk, Default Charcoal, Gritty Charcoal, Hairy Brush, Graduated Brush, Hairy Cloner, Chalk Cloner, Spatter Airbrush, Piano Keys, Square Chalk, and Oil Pastel.

Eraser Methods

This section describes and gives examples for each Eraser method.

The **Soft Paper Color** method takes away brush strokes and restores the paper color you chose when you created your document. Erasers are an example of this method.

The **Soft Paint Remover** method bleaches out brush strokes and replaces them with white. Bleaches and Dodge are examples of this method.

The **Soft Paint Thickener** method deepens the color of any part of an existing image, picking up the color from the image rather than from the Art Materials: Colors Palette. Examples of this method are Darkeners (Eraser variants) and Burn.

The **Soft Mask Colorize** method works with the mask layer. When used with the current brush, it replaces the positive and negative areas of the underlying mask with the current primary and secondary colors.

Drip Methods

This section describes and gives examples for each Drip method.

The **Drip** method smears soft strokes using either image color or the color selected in the Art Materials: Colors Palette depending on the current setting of the Grain slider. Examples of this method are Distorto, Melt Cloner, Impressionist, and Impressionist Cloner.

The **Hard Drip** method smears semi-anti-aliased strokes using either image color or the color selected in the Art Materials: Colors Palette depending on the current setting of the Grain slider. Coarse Distorto is an example of this method.

The **Grainy Drip** method smears paper-grain-sensitive, anti-aliased strokes using either image color or the color selected in the Art Materials: Colors Palette depending on the current setting of the Grain slider. Examples of this method are Smeary Bristles, Total Oil Brush, Smeary Mover, Thick Oil, and Flemish Rub.

The **Grainy Hard Drip** method smears paper-grain-sensitive, semi-anti-aliased strokes using either image color or the color selected in the Art Materials: Colors Palette depending on the current setting of the Grain slider. Examples of this method are Coarse Smeary Mover and Coarse Smeary Bristles.

Wet Methods

This section describes and gives examples for each Wet method.

The **Grainy Wet Buildup** method is used in the wet layer. It produces watery, paper-grain-sensitive brush strokes. Examples of this method are Pure Water Brush, Spatter Water, Simple Water, Broad Water Brush, Water Brush Stroke, Large Water, and Large Simple Water.

The **Grainy Wet Abrasive** method deposits color into the wet layer. Strokes replace color under them, giving a true watercolor feel.

The **Wet Remove Density** method erases watercolor brush strokes in the wet layer. The Wet Eraser is an example of this method.

Capturing Brushes

A new feature of Painter 3 is the ability to create your own brush shapes. Any brush shape is possible, for example, you might want to try letters or flowers.

1. Draw the brush shape.

   Use black on a white background to define opaque areas. You can also use grays to define partially transparent areas of the brush.

2. Select the brush shape with the Rectangular Selection Tool. Make a square selection by holding down the **Control** key while you select the brush shape.

   Painter uses the selected area to map the brush size. When the brush is built, this area is sampled to compute each brush dab. When the scale between the original area and the brush dab is large, sampling can appear highly aliased. To eliminate the aliasing, soften the image before you capture.

3. Choose **Tools: Brushes: Capture Brush**.

4. If necessary, adjust the brush dab in the Brush Controls: Size Palette. Change it if necessary, and then. if Painter doesn't automatically build your brush, click **Build**.

5. Draw with the brush.

If you like the brush you captured, you can save.

See Also

Capturing Brushes

Saving Brushes

Unless you save them, changes you make to brushes disappear as soon as you switch to another variant or brush. If you want to keep a brush, save it, either as a variant to an existing brush or as a variant to a new brush.

See Also

Saving Variants
Deleting Variants
Saving Changes to an Existing Variant

Saving Variants

A brush can have up to 32 variants. Follow these steps to save a changed brush as a variant of the current brush:

1. Choose **Tools: Brushes: Save Variant**.

   The Save Variant dialog box appears.
2. Type a name for your variant, say blunt pencil, as a variant to a Pencil.
3. Click **OK** or press **Enter**.

Deleting Variants

Follow these steps to delete a variant.

1. Choose the variant from the Variant pop-up menu.
2. Choose **Tools: Brushes: Delete Variant**.
   Painter asks if you want to delete the variant.
3. Click **Yes** to delete the variant.

Saving Changes to an Existing Variant

You can also save changes to a variant without creating a new one. For instance, you may feel that the stroke width for the Sharp Chalk variant would never be useful to you unless you tapered it more on the Brush Controls: Size Palette.

Choose **Tools: Brushes: Save Built Variant**.

Your changes are incorporated in the variant.

If you decide that the original variant was the one you wanted after all, choose the variant in the pop-up menu, then choose **Tools: Brushes: Restore Default Variant**. The variant returns to its original settings.

Creating New Brushes

You can add your own brush categories to Painter's Brushes Palette to create a new medium or to organize customized settings by project, design, or client.

1. Decide on a picture that will appear in the Brushes Palette for your new brush.

   This picture can be art you created or imported.
2. Use the Rectangular Selection Tool to select the portion of the picture that will appear in the Brushes Palette. For best results, make a square selection by holding down the **Control** key while you select the brush shape.
3. Choose **Tools: Brushes: Save Brush**.
4. Type a name for your brush and click **OK** or press **Enter**.

Your new brush and its picture now appear on the Brushes Palette. This new brush is only a container. For it to produce strokes with particular attributes, you have to create and save variants to it.

If for some reason you want to delete the new brush, delete it from the Brush Library with the **Tools: Movers: Brush Mover** command.

See Also

Saving Variants
Creating Brush and Brush Looks Libraries

Creating Brush and Brush Looks Libraries

You can set up a library of brushes or Brush Looks for individual designs, projects, or clients. One thing to keep in mind when you create libraries is the size of the drawer. Although you can scroll the contents of the drawer, if you want to be able to see your brushes or Brush Looks at a glance, its best to keep your libraries small.

There are two ways to create a new library. You can use the **Library** button in the drawer of the Brushes Palette or the Brush Controls: Looks Palette. You can also use the **Tools: Movers: Brush Mover** command or the **Tools: Movers: Brush Look Mover** command.

The advantage of using the **Library** button is that it's readily accessible in the Brushes or the Looks Palette. The advantage of the Brush Mover or Brush Looks Mover is that it also lets you set up the library in other ways, for example, by moving existing brushes into it.

To create a library with the **Library** button:

1. Open the drawer of the Brushes Palette or the Looks Palette and click **Library**.

   The Brushes or Brush Looks dialog box appears.
2. Click **Open Library**.

   An Open dialog box appears.
3. Click **New**.
4. In the dialog box that appears, type a name for the new library and click **Save**.

To create a library with the **Tools: Movers:** commands:

1. Choose **Tools: Movers: Brush Mover** or **Tools: Movers: Brush Looks Mover**.

   The Brush Mover or Brush Looks Mover dialog box appears.
2. To create a new library, click **New**. Type a name for the new library and click **Save** or press **Enter**.

   The new library's name appears on the right side of the dialog box.
3. To move brushes or Brush Looks into your new library, click the brush or Brush Look you want to move and then click **Copy**.
4. If you want to rename a selected brush or Brush Look, click **Change Name**. In the dialog box that appears, type the new brush or Brush Look name and click **OK** or press **Enter**. When Painter asks if you're sure you want to change the name, click **Yes**.
5. If you want to change the current picture in the Brushes Palette for the selected brush, select the image you want for the new picture before you open the Brush Mover. Then click **Change Picture** to replace the brush's current picture. When Painter asks if you're sure you want to change the picture, click **OK** or press **Enter**.
6. If you want to delete a selected brush or Brush Look, click **Remove**. Be careful. If you remove one of Painter's default brushes by mistake, the only way to retrieve it is to reinstall Painter. When you reinstall Painter, you'll lose any of the custom variants, brushes, Brush Looks, or papers you created.
7. If you want to move a brush or Brush Look to another, existing library, click **Close** to close the open library on the right side of the dialog box. Then click **Open**. Locate the library you want, click it, and click **Open** or press **Enter**. Then follow the earlier instructions for moving a brush or Brush Look.
8. When you have finished making changes in the dialog box, click **Quit** or press **Enter**.

Note: To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

See Also

Opening Brush and Brush Looks Libraries

Opening Brush and Brush Looks Libraries

When you want to work with a set of brushes or Brush Looks, open its library.

1. Open the drawer of the Brushes or Looks Palette and click **Library**. The Brushes or Brush Looks dialog box appears.
2. Click **Open Library**.
3. In the dialog box that appears, select a library and click Open. The brushes or Brush Looks in the library appear on the Brushes or Looks Palette.

See Also

Creating Brush and Brush Looks Libraries

Using Art Materials

Painter's art materials include libraries of unique paper textures, gradations, and weaves, as well as an extensive suite of sophisticated color tools.

For help with art materials, click a topic.

Art Materials Palette

With Painter 3, your art supplies are conveniently organized on a single palette---the Art Materials Palette.

From this palette, you can display a Colors Palette, a Papers Palette, a Grads Palette, a Sets Palette, and a Weaves Palette.

Remember, Painter lets you tear off palettes. So, if you like, you can work with two or more of the Art Materials Palettes at the same time. Just drag the icons for the palettes you want to use off of the palette front. They automatically expand to full size.

Using Color Sets

Color sets are the primary method in Painter 3 for organizing, using, and saving groups of colors. They also make it possible to annotate images with color names.

A color set is always open, even when it isn't visible. Its name appears on the Art Materials: Sets Palette as the current color set.

Some color sets, like the Pantone color set, are well known and organized both by name and color relationship. Other sets might be palettes that you create and select because they're useful for a particular project or image, or simply because they constitute a pleasing palette.

A selected color in the color set also becomes the current color, visible on the Art Materials: Colors Palette, as well as on the Controls: Brush Palette and the Controls: Dropper Palette.

See Also

Displaying Color Sets
Customizing Color Sets
Creating a Color Set
Viewing Printable Colors
Adding a Color to a Color Set
Deleting a Color from a Color Set
Changing a Color in a Color Set
Finding Colors
Color Set Text File Format

Displaying Color Sets

Painter provides two color sets: Painter Colors and the Pantone Matching System®. The name of the current color set appears at the top of the Art Materials: Sets Palette. The **Library** button gives you access to other color sets.

To display the current color set:

Choose **Window: Color Set (Ctrl+8)**.

The Color Set appears on the screen.

To display a new color set:

1. If the Art Materials: Sets Palette isn't open, open it by clicking the Sets icon on the Art Materials Palette.
2. Click **Library**.

   The File Directory dialog box appears.
3. Click **Open Library...**.
4. Select a color set from the directory and click **Open**.

   The new color set appears.

You can set a default color set in the General Preferences dialog box.

See Also

Default Libraries

Customizing Color Sets

Customizable color sets mean that you can arrange colors in any way you want them. For example, you can go from a single column of large, named color rectangles separated by a white grid to forty rows and columns of small squares that aren't separated by names or grid lines.

Your changes take effect immediately. And you can make changes in any order until the color set is exactly the way you want it. The following steps just give you a place to start.

1. If the Art Materials: Sets Palette isn't open, open it by clicking the Sets icon on the Art Materials Palette. If the color set is locked, click the **Padlock** button on the Sets Palette to unlock it.
2. Click a **Sort Order** radio button to order the colors in the set. Click **Saved** to sort colors in the order they were originally entered. Click **HLS** to order colors by hue, luminance, and saturation; **LHS** for a luminance, hue, saturation order; or **SHL** to order colors by saturation, hue, and luminance.
3. Use the **Color Square Size** box to adjust the size of the individual squares in the color set. Click the single arrows to expand or contract each square by one pixel. Click the double arrows to double or halve the size of each square.
4. Use the **Color Set Size** box to change the number of rows and columns in the color set. Click the single arrows to add or delete rows or columns one at a time. Click the double arrows to double or halve the number of rows or columns.
5. Click the **Display Text** checkbox at the bottom of the **Color Square Size** box to turn the color names on and off. Click the adjacent up and down arrows next to it to adjust the height of the text field.
6. Click the **Display Grid** checkbox at the bottom of the **Color Set Size** box to turn the grid on and off. Turning it off eliminates the lines between colors. You can see more colors, but the separations between colors are not as distinct as when the grid is on.

Creating a Color Set

With Painter, you can make and keep as many color sets as you like. For example, you might want to make separate color sets for each of your projects or clients. It's even handy sometimes for a single image to have its own color set.

The colors in your color set can come from an existing color set, from the selected color on the Art Materials: Colors Palette, or from an image. If you want to pick up colors from an image, open the image before you begin creating the color set.

1. On the Sets Palette, click **New Set**.

   A title bar appears with the name Color Set.
2. Choose a color you wish to add to the new color set.

   You can choose a color from the Art Materials: Colors Palette or from an existing image.
3. If the color set is locked, click the **Padlock** button on the Sets Palette to unlock it.
4. On the Sets Palette, click **Add Color**.

   The color is added to the color set. To name the newly added color, double-click the color swatch and enter a name in the dialog box that appears.
5. Repeat this procedure until you have chosen all of your color set colors.
6. If you want to change the name of a color in a color set, double-click the color. Then in the dialog box that appears, type the new name and click **OK**.
7. Click the **Color Set** close box.

   A dialog box appears asking you to name the Color Set.
8. Type a name for the Color Set and click **OK**.

Adding a Color to a Color Set

You can choose a color from the Art Materials: Colors Palette or from an existing image.

1. Choose the color you want to add to the open color set.
2. If the color set is locked, click the **Padlock** button on the Sets Palette to unlock it.
3. On the Sets Palette, click **Add Color**.

   The color is added to the color set. To name the newly added color, double-click the color swatch and enter a name in the dialog box that appears.

Deleting a Color from a Color Set

Follow these steps to delete a color from a color set.

1. Choose the color set from which you wish to delete a color.
2. If the color set is locked, click the **Padlock** button on the Sets Palette to unlock it.
3. Click the color you want to delete to select it.
   The current selection frame surrounds it.
4. On the Sets Palette, click **Delete Color**.
   A dialog box appears asking you if you really wish to delete the color.
5. Click **OK**.
   Painter deletes the chosen color from the color set window.

Changing a Color in a Color Set

Follow these steps to change a color in a color set.

1. Choose the new color you want to place into the open color set.
   You can choose a color from the Art Materials: Colors Palette or from an existing image.
2. If the color set is locked, click the **Padlock** button on the Sets Palette to unlock it.
3. Hold down the **Option** key and click the color in the color set that you want to replace.
   The new color replaces the old one in the color set.

Finding Colors

Painter makes it easy to find a color on a color set, either by looking for it by name or by matching the selected color.

1. On the Art Materials: Sets Palette, click **Find Color**.

   The Find Color dialog box appears.

2. Select whether you want to find a color by name or find a color that's closest to the current color.

3. Click **Search**. If the name isn't found, the **OK** button is grayed out.

   When the color set is visible, Painter surrounds the found color with the current selection frame.

Color Set Text File Format

Color sets are created and maintained in editable text files. For information, see Tech Note No. 1, Color Set Text File Syntax, supplied on your Painter 3 Extras CD.

Annotating Colors

Painter's Annotation feature uses the color names in a color set to label the colors in your images. You can hide or show these labels in your on-screen or printed image. (Only color sets with names will annotate properly.) You can annotate anything in an image, including floaters.

Annotations can be up to 31 characters long. They float in a separate layer on top of the image and can be saved in the .RIF format with your image.

Annotations are included when you record a session, and they are properly scaled when you play back at a different resolution.

When you move a floater, its annotations go with it. This might cause some confusion, however. If you move an annotated floater on top of another, the visible annotation might actually belong to the underlying floater, even though it appears to be labeling the top one.

See Also

Creating Annotations
Showing Annotations
Deleting Annotations
Working with Sessions
Working with Floaters

Creating Annotations

Follow these steps to create an annotations.

1. Create an image using a color set that includes names for the colors.
2. Choose **Canvas: Annotate**.

   The Annotation dialog box appears.
3. Click the color you wish to annotate and drag to an area outside the color.

   When you let go, the color's name appears with a line pointing to the annotated section.

   If a color isn't an exact match for a color in the color set---for example, because you're annotating brush strokes applied at less than 100% opacity---Painter approximates the color and puts an asterisk after the color's name.
4. Continue to click and drag until all your colors are annotated.
5. Click **Done** or press **Enter**.

   If you refill an annotated area using the Cartoon Cel or Contiguous Pixel Fill Palette options, the annotation will update to reflect the new color.

See Also

Showing Annotations
Deleting Annotations
Filling an Area

Deleting Annotations

Follow these steps to delete an annotation.

1. With the Annotation dialog box open, click the Annotation tag to select it.
2. Press **Backspace**.

See Also

Creating Annotations
Showing Annotations

Showing Annotations

Follow these steps to show or hide color labels.

Choose **Canvas: View Annotations**.

To hide an annotation, choose **Canvas: View Annotations** again.

See Also

Creating Annotations
Deleting Annotations

Selecting Color with the Dropper

With the Dropper Tool, you can pick up a color from an existing image and use the color elsewhere.

1. Click the Dropper Tool on the Tools Palette to select it.
2. Make sure that the front overlapping rectangle on the Art Materials: Colors Palette is active. If not, click it to make it active.
3. Move the cursor to the color you wish to pick up.

   The cursor is in the shape of a dropper.
4. Click the color. (You can pick up a color with the Dropper from nonactive windows as long as the window is visible.)

   The overlapping rectangle now shows this color, and the current color ring is on the color in the triangle.
5. Click the Brush icon on the Tools Palette, select the brush you want to use, and start painting.

Shortcut: When the Floating Selection, Paint Bucket, Brush, or Rectangular Selection Tool is selected, hold down the **Ctrl** key to display the Dropper.

Selecting Two Colors

The overlapping rectangles on the Art Materials: Colors Palette and the Controls: Brush Palette display the selected primary and secondary colors.

Usually you work with only the primary color, the one shown on the front rectangle. Using one color produces a solid brush stroke. By selecting a secondary color on the back rectangle, you can determine the colors for the multicolored brush strokes of the Graduated Brush.

The settings for the brush on the Advanced Controls: Expression (Sliders) Palette determine how Painter decides when to use one color or the other.

1. Select the Graduated Brush variant of the Brush.
2. Click the front rectangle on the Colors Palette to select it.
3. Select a color on the Colors Palette or from a color set.

   The front rectangle shows your selection.
4. Click the back rectangle and again, select a color.
5. Click the front rectangle to make it active again so that it will be available the next time you want to work with only the primary color.
6. Make a stroke.

   The stroke contains the two colors you just selected. If you don't see both colors, try making some adjustments on the Advanced Controls: Expression (Sliders) Palette.

By the way, by setting color variability, you can make any brush paint with a variable range of colors.

See Also

Determining Expression
Setting Color Variability

Printable Colors

The overlapping rectangles on the Art Materials: Colors Palette, the Controls: Dropper Palette, and the Controls: Brush Palette can be set to show how the selected color will print.

Your monitor displays many more colors than can actually print on an offset press. The rectangles can display the printable color that's closest to the on-screen color you select.

See Also

Viewing Printable Colors
Displaying Images in Printable Colors
Video Legal Colors

Viewing Printable Colors

Follow these steps to view printable colors.

1. Choose a bright green by making sure that the selection ring is in the right-hand point of the triangle.
2. Click **Printable Colors Only** on the Art Materials: Colors Palette.

   The on-screen color is replaced with the printable color.

Once you select **Printable Colors Only**, your brush stroke's color will be restricted to showing only printable colors.

See Also

Printable Colors
Displaying Images in Printable Colors
Video Legal Colors

Displaying Images in Printable Colors

If you forget to check **Printable Colors Only** before you paint part or all of your image, you can still display the colors as printable colors.

1. If you want to apply printable colors to only part of the image, select that part.
2. Choose **Effects: Tonal Control: Printable Colors...**.

   The Enforce Printables dialog box appears.
3. Click **OK** or press **Enter**.

See Also

Printable Colors
Viewing Printable Colors
Video Legal Colors

Video Legal Colors

Painter 3 also has the ability to set up colors for use in video. Painter supports both the NTSC (U.S.) and PAL (European) video systems. Only bright yellows and cyans are not video legal.

1. Select part of your image.
2. Choose **Effects: Tonal Control: Video Legal Colors...**. The Video Legal Colors dialog box appears.
3. Choose the NTSC (U.S.) or PAL (European) video system from the System pop-up menu.
4. Click **OK** or press **Enter**.

See Also

Printable Colors
Viewing Printable Colors
Displaying Images in Printable Colors

Setting Color Variability

Use the Art Materials: Colors Palette to set up multiple colors for any of Painter's brushes.

To display the Art Materials: Colors Palette, click the Colors icon on the Art Materials Palette and expand the palette if necessary.

The ±HSV sliders control ranges of hues, saturations, and values.

Moving the ±Hue slider to the right increases the number of hues in the brush stroke. These colors are the ones adjacent to the selected color on the color wheel.

Moving the ±Saturation slider to the right increases the amount of variability in the color intensity of the brush stroke.

Moving the ±Value slider to the right increases the amount of variability in the brightness of the brush stroke.

You can try different ±HSV slider settings with any of the brushes to get some interesting results. Moving these sliders to the right is most useful when you're working with brushes like Painter's new Loaded Oils brush, the Van Gogh and Seurat variants of the Artists brush, and the Hairy Brush. Color variability is saved with a variant.

Using Paper Textures

Painter 3 offers many creative ways for incorporating paper textures into your images, whether you are using them in connection with brush strokes or emblazing them on part or all of your image.

When you choose a paper texture and a brush that interacts with paper grain, you see the results with each stroke.

If you find a brush and paper combination you really like, you can save it as a brush look.

You can also get some amazing special effects by applying paper texture to a finished image.

See Also

Selecting Paper Textures
Using the Papers Palette
Changing Paper Libraries
Inverting Paper Grain
Resizing Paper Grain
Capturing Paper Textures
Making Paper Textures
Changing Paper Color
Setting Up Paper Libraries
Using Brush Looks
Special Effects

Using the Papers Palette

The Art Materials: Papers Palette is where all your paper textures are stored. In addition to using it to select paper, you can use this palette to open other paper libraries and invert or resize the grain.

You can also change paper grain by randomizing it.

See Also

Random Brush Stroke Grain

Changing Paper Libraries

Painter's paper textures are stored in libraries. Open a new library to change your paper choices.

1. Open the drawer of the Art Materials: Papers Palette by clicking its handle.
2. Click **Library**.

   A directory appears with a list of paper libraries.
3. Double-click the library you want to open, or select it and click **Open**.

   A new set of paper textures appears in the drawer.

You can also set up your own libraries.

See Also

Setting Up Paper Libraries

Inverting Paper Grain

You can think of paper grain as a three-dimensional landscape. Usually color reacts to paper texture by coating the peaks and ignoring the valleys. Checking the **Invert Grain** checkbox makes color fill the valleys and ignore the peaks.

Here's a trick for getting two-colored paper textures. After selecting a paper texture and clicking and dragging in the image with one color, check **Invert Grain**, pick another color, then drag in the same area. You now have a duotone section in your image.

See Also
Resizing Paper Grain

Resizing Paper Grain

Use the Scale slider at the bottom of the Papers Palette to resize the paper grain.

With the slider at 100%, the texture is the one shown on the Papers Palette. You can scale the texture down to 25% and up to 400%.

See Also

Inverting Paper Grain

Capturing Paper Textures

The **Tools: Textures: Capture Texture** command lets you turn a section of an image into a surface texture available on the Papers Palette.

1. Open or create an image.
2. Select a piece of the image with the Rectangular Selection Tool. (For instructions, see Selecting, Deselecting, and Reselecting.)
3. Choose **Tools: Textures: Capture Texture...**.

   The Save Texture dialog box appears.
4. Move the Crossfade slider to the right to blend the distinction between tile borders.
5. Type the name of your new texture and click **OK** or press **Enter**.

   Your texture now appears in the Papers Palette drawer and is added to the current library.

See Also

Making Paper Textures
Setting Up Paper Libraries

Making Paper Textures

The **Tools: Textures: Make Paper Texture** command lets you make homemade paper textures.

1. Choose **Tools: Textures: Make Paper Texture...**.

   The Repeating Texture dialog box appears. The Preview Window reflects your changes.
2. Choose a pattern from the Pattern pop-up menu to use as the basis of your paper texture.
3. Adjust the Spacing and Angle sliders.

   Moving the Spacing slider to the right opens up space between rows and columns in the selected pattern.

   Moving the Angle slider changes the direction in which the pattern rows are lined up.
4. When you like the look of the texture, type a name for it and click **OK**.

   Your new texture appears as the last item in the Papers Palette.

See Also

Capturing Paper Textures
Setting Up Paper Libraries

Changing Paper Color

Choose **Canvas: Set Paper Color** to change the paper, or background, color of an opened document to the current color without affecting the rest of your work.

After changing the paper color, using the Eraser will erase back to the new paper color.

See Also

Setting Paper Color

Setting Up Paper Libraries

Libraries are perfect for organizing paper textures, for example, by client or by project. To take full advantage of libraries as an organizational tool, keep them small. With a small library, you can easily see all the paper textures at once in the drawer of the Papers Palette.

1. Choose **Tools: Movers: Paper Mover**.

   The Paper Mover dialog box appears.

2. To create a new paper library, click **New...**. Type a name for the new library and click **Save** or press **Enter**.

   The new library's name appears on the right side of the Paper Mover dialog box.

3. To move paper textures into a library, click the paper texture on the left side of the dialog box and then click **Copy**. If you don't see the paper texture, click **Close** to close the library on the left side of the dialog box. Then click **Open** and choose a new library.

4. If you want to rename a selected paper texture, click **Change Name...**.

   The Change Paper Name dialog box appears. Type the new name and click **OK** or press **Enter**.

5. If you want to delete a selected paper texture, click **Remove**.

6. If you want to move a paper texture to another, existing library, click **Close** to close the open library on the right side of the dialog box. Then click **Open...**, choose a new paper texture, and follow the instructions in Step 3 for moving a paper texture into a library.

7. When you're finished making changes in the Paper Mover dialog box, click **Quit** or press **Enter**.

Note: To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

See Also

Changing Paper Libraries

Using Gradations

Use the Art Materials: Grads Palette to select and control the gradations Painter provides for filling areas of your images.

To open the Grads Palette, click the Grads icon on the Art Materials Palette.

Across the drawerfront are gradations provided for your use. You can also create your own. (Open the drawer to see more gradations.) Click the gradation you want to use.

In the center of the palette, the Preview Window shows how the current settings affect the selected gradation. The Rotation Ring changes the angle of the gradation in the Preview Window. Click anywhere in the ring to change the angle. The red ball shows the selected angle.

The gradation types on the right of the palette let you select from four styles of gradations---linear, radial, spiral, or circular. The Preview Window shows the effect of the selected style.

Note: To adjust a spiral gradation, hold down the **Ctrl** key as you drag the red ball to the left or right.

The controls let you create a wide variety of gradations.

The gradation orders that appear at the bottom of the palette determine how a gradation behaves. The top row (from left to right) orders the current gradation from left to right, left to right and mirrored, and right to left. The bottom row orders the current gradation from left to right and doubled, right to left and mirrored, and right to left and doubled. The preview strip above the gradation orders shows the selected gradation order and the Preview Window shows its effect on the selected gradation.

See Also

Filling with Gradations
Mapping a Gradation to Image Luminance
Making Your Own Gradations
Setting Up Gradation Libraries
Opening Gradation Libraries

Filling with Gradations

After selecting a gradation, you can use it to fill all or part of an image.

1. If you want to fill a selected area of an image, use any selection tool to select it.
2. Click the Paint Bucket on the Tools Palette to select it.
3. On the Controls: Paint Bucket Palette, click one of the What to Fill radio buttons to determine whether Painter fills the entire image if it's blank, or contiguous pixels, the mask, or the cartoon cel.
4. On the Controls: Paint Bucket Palette, click the Gradations radio button to fill with the selected gradation.
5. On the Art Materials: Grads Palette, select the gradation you want to use, the gradation style, and the gradation order. Adjust the angle until the gradation you want appears in the Preview Window.
6. Click the document with the Paint Bucket. You can also choose **Effects: Fill** and when the Fill dialog box appears, click the **Gradation** button and click **OK**.

   Painter fills the image with the gradation.

See Also

Filling an Area
Selecting, Deselecting, and Reselecting
Creating Paths

Mapping a Gradation to Image Luminance

Another way to fill an image with a gradation is to replace an image's luminance values with a gradation's luminance values. For example, using a black-to-white gradation to replace color in an image will produce a black-and-white rendition of the image.

1. Open the image whose luminance you want to express in a ramp.

   You can select part of the image or use the entire image.

2. On the Art Materials: Grads Palette, select the ramp you want to use.

3. Choose **Tools: Gradations: Express in Image**.

   Painter replaces the colors in the image with the colors in the gradation based on matching luminance.

Making Your Own Gradations

Painter lets you use any imagery as a source for creating new gradations.

For example, you could capture the colors in a photo of a sunset as a gradation, or paint your own range of colors as the content of a gradation.

1. Use any tools to draw a gradation or use the colors in an existing image.
2. Use the Rectangular Selection Tool to select a horizontal or vertical area.

   Make the selection as nearly horizontal or as nearly vertical as possible. If the selection is horizontal, Painter uses the first row of pixels starting at the upper left for the gradation. If the selection is vertical, Painter uses the first column of pixels starting at the upper left for the gradation.

   Note: To create the smoothest gradation between a series of colors, draw a row or column of one-pixel colors using a tool like the Single Pixel Pen. Select only that row or column of pixels.
3. Choose **Tools: Gradations: Capture Gradation**.

   The Save Color Ramp dialog box appears.
4. Type a name for the gradation and click **OK** or press **Enter**.

   Your new gradation appears in the Preview Window. Its icon is saved on the drawerfront and inside the drawer as part of the current library.

See Also

Setting Up Gradation Libraries
Opening Gradation Libraries
Selecting, Deselecting, and Reselecting

Setting Up Gradation Libraries

Organizing gradations in libraries is a good way to keep track of the ones you use for individual designs, projects, or clients.

When you create gradation libraries with the Gradation Mover, keep in mind that if there are more than 25 gradations in the library, you won't be able to see them all in the drawer. You'll have to scroll to find what you need.

1. Choose **Tools: Movers: Gradations Mover**.

   The Gradations Mover dialog box appears.

2. To create a new gradations library, click **New...**. Type a name for the new library and click **Save** or press **Enter**.

   The new library's name appears on the right-hand side of the Gradations Mover dialog box.

3. To move gradations into a library, click the gradation on the left side of the dialog box and then click **Copy**. If you don't see the gradation name, click **Close** to close the library on the left side of the dialog box. Then click **Open** and choose a new library.

4. If you want to rename a selected gradation, click **Change Name...**. The Change Gradation Name dialog box appears. Type the new name and click **OK** or press **Enter**.

5. If you want to delete a selected gradation, click **Remove**.

6. If you want to move a gradation to another, existing library, click **Close** to close the open library on the right-hand side of the dialog box. Then click **Open...**, choose a new gradation, and follow the instructions in Step 3 for moving a gradation into a library.

7. When you're finished making changes in the Gradation Mover dialog box, click **Quit** or press **Enter**.

8. To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

See Also

Opening Gradation Libraries

Opening Gradation Libraries

When you want to work with a different group of gradations, open its library.

1. Open the drawer of the Grads Palette and click **Library**.
   The Gradations dialog box appears.
2. Click **Open Library...**.
3. In the dialog box that appears, select a library and click **Open**.
   The selections in the library appear in the Grads Palette.

See Also

Setting Up Gradation Libraries

Using Weaving

Painter 3 contains a virtual loom in its Art Materials: Weaves Palette.

Using the Weaves Palette you can create your own weaves and use them as unique fill patterns.

Painter 3 comes with two libraries of traditional patterns that you can modify and save with new names.

Users with a background in traditional weaving can use their knowledge to create and experiment with patterns of their own.

See Also

Opening the Weaves Palette
Selecting a Weave
Changing Fiber Type
Adjusting Scaling and Thickness
Displaying the Color Set for a Weave
Changing the Colors for a Weave
Saving Weave Changes
Setting Up a Weaves Library
Opening Weave Libraries
Advanced Weave Editing Techniques

Opening the Weaves Palette

Use the following procedure to open the Weaves Palette.

Click the Weaves icon on the Art Materials Palette.

At the top of the Art Materials: Weaves Palette is a drawer containing a Weaves library. Below are controls that let you preview the selected weave pattern, choose its fiber type, change colors, vary the scale of the weave and the thickness of its threads, and access the advanced editing palette.

See Also

Selecting a Weave
Changing Fiber Type
Adjusting Scaling and Thickness
Displaying the Color Set for a Weave
Saving Weave Changes
Setting Up a Weaves Library
Opening Weave Libraries
Advanced Weave Editing Techniques

Selecting a Weave

Select a weave when you want to use it to fill part or all of your image. Or select a weave so that you can change its fiber type, the scaling and thickness of its threads, or its colors.

On the drawerfront of the Weaves Palette, click the weave you want to use. If you don't find the weave you want on the drawerfront, open the drawer to see more weaves.

The weave you selected appears in the Preview Window.

See Also

Opening the Weaves Palette
Changing Fiber Type
Adjusting Scaling and Thickness
Displaying the Color Set for a Weave
Changing the Colors for a Weave
Filling an Area

Changing Fiber Type

Painter can display a weaves pattern as two-dimensional or show the interwoven threads three-dimensionally, complete with shadows.

On the Art Materials: Weaves Palette, click **Fiber Type**.

The button changes to show either a two-dimensional or three-dimensional pattern. Depending on which weave is selected, you may or may not see a change in the Preview Window.

For different two- and three-dimensional effects, you can adjust the scaling and thickness sliders at the bottom of the Weaves Palette.

See Also

Opening the Weaves Palette
Adjusting Scaling and Thickness

Adjusting Scaling and Thickness

The four sliders at the bottom of the Weaves Palette control the thickness of threads and the spacing between them. The top two sliders control horizontal dimensions; the bottom two control vertical dimensions. By adjusting these sliders, you can create a wide variety of weaves with any one of the patterns supplied.

1. Click the weave you want to adjust. If you'd like to try an example, select **buchanan 14**.

   Its image appears in the Preview Window.

2. Click **Fiber Type** until the button shows a three-dimensional pattern.

   For most weaves, you won't see a change in the Preview Window yet. For example, for buchanan 14, the scale sliders are both set to 1 and the thickness sliders to 100. In order to see a change, you have to enlarge the weave by increasing its scale.

3. Adjust the horizontal and vertical scale sliders.

   You still might not see a change in the Preview Window until you also adjust the thickness sliders. For example, with buchanan 14 selected, set both the H Scale and V Scale to 12. The weave still looks flat.

4. Adjust the horizontal and vertical thickness sliders. For example, with buchanan 14 selected, set both the H Thick and V Thick sliders to 39%.

   The interwoven threads with shadow appear in the preview window.

Note: The thickness sliders have no effect when the two-dimensional fiber type is selected.

See Also

Opening the Weaves Palette
Changing Fiber Type
Saving Weave Changes

Displaying the Color Set for a Weave

You can display the color set used for a weave.

1. Select the weave.
2. Click **Get Color**.

   The color set for the weave appears.

If you like, you can change the colors in the set, and apply them to the weave pattern.

See Also

Opening the Weaves Palette
Changing the Colors for a Weave

Changing the Colors for a Weave

You can change the colors in the color set for a weave and apply them to the weave pattern.

1. Select a new color from the Art Materials: Colors Palette.
2. Hold down the **Alt+Ctrl** key and click the color that you want to replace on the color set.

   The new color replaces the old one on the color set.
3. Click **Put Color**.

   The Preview Window shows the weave with the new colors.

   If you fill an image with the weave pattern, Painter uses the new color set.
4. Save or discard your changes to the color set by clicking the color set's close box. In the dialog box that appears, click **Yes** to save the changes or **No** to discard them. If you click **Yes**, a dialog box appears so that you can enter a name for the new color set.

   The new color set doesn't replace the original color set for the weave. You can open the new color set from the Art Materials: Sets Palette.

See Also

Displaying the Color Set for a Weave
Displaying Color Sets

Saving Weave Changes

After altering the scaling and thickness or color of a weave, you can save your changes as a new weave pattern.

1. On the Weaves Palette, click **Save**.

   A dialog box appears asking you to name the new weave.

2. Type a name for the weave and click **OK**. (If you don't type a new name, Painter replaces the existing weave with the changed weave.)

   The new weave pattern appears in the current weaves library.

Setting Up a Weaves Library

Setting up weaves in libraries is a good way to organize the weaves you create and to keep the weaves that appear in a drawer at one time to a manageable number.

1. Choose **Tools: Movers: Weaves Mover**. The Weaves Mover dialog box appears.
2. To create a new weaves library, click **New...**. Type a name for the new library and click **Save** or press **Enter**. The new library's name appears on the right side of the Weaves Mover dialog box.
3. To move weaves into a library, click the weave on the left side of the dialog box and then click **Copy**. If you don't see the weave name, click **Close** to close the library on the left side of the dialog box. Then click **Open** and choose a new library.
4. If you want to rename a selected weave, click **Change Name...**. The Change Weave Name dialog box appears. Type the new name and click **OK** or press **Enter**.
5. If you want to delete a selected weave, click **Remove**.
6. If you want to move a weave to another, existing library, click **Close** to close the open library on the right side of the dialog box. Then click **Open...**, choose a new weave, and follow the instructions in Step 3 for moving a weave into a library.
7. When you're finished making changes in the Weaves Mover dialog box, click **Quit** or press **Enter**.
8. To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

See Also

Opening Weave Libraries

Opening Weave Libraries

When you want to work with a different group of weaves, open its library.

1. Open the drawer of the Weaves Palette and click **Library**. The Weaves dialog box appears.
2. Click **Open Library...**.
3. In the dialog box that appears, select a library and click **Open**.

   The selections in the library appear in the Weaves Palette.

See Also

Setting Up a Weaves Library

Advanced Weave Editing Techniques

The **Edit** button on the Weaves Palette opens the Edit Weaving dialog box. It lets you create your own weaving patterns and is based on Fractal Design's own weaving language.

Use of this dialog box and the weaving language is explained in Painter Technical Note #4.

Filling an Area

To fill an area with color, gradations, or a weaving pattern, use the Paint Bucket on the Tools Palette or the **Fill** command on the Effects menu.

See Also

Filling an Area Using the Paint Bucket
Filling an Area Using the Fill Command
Using the Cartoon Fill Method
Lock-Out Color
Mask Threshold
Leaky Line Work
Closing Line Work Leaks
Tying Up Loose Ends

Filling an Area Using the Paint Bucket

When you want to use the Paint Bucket, click its icon on the Tools Palette. Selecting the Paint Bucket displays the Controls: Paint Bucket Palette. This palette shows choices for what to fill and what to fill with. The current fill is shown on the left of the palette.

1. Click the Paint Bucket on the Tools Palette to select it.

   The Controls: Paint Bucket Palette opens at the bottom of the screen.

2. Click the radio button for what you want to fill with when you click with the Paint Bucket in the image window.

   Image fills an image area differently depending on whether or not an area of the screen is currently selected. If no area is currently selected, the Paint Bucket will fill all contiguous pixels based on the color of the pixel clicked on by the Paint Bucket. If an area of the screen is currently selected, the Paint Bucket will fill either the inside or outside of the selection depending on where the Paint Bucket is when clicked.

   Mask fills contiguous areas of the Mask layer based on the luminance values of the selected Fill With Source.

   Cartoon Cel fills the interiors of areas whose boundaries have been used to generate a mask based on their luminance.

3. Click the radio button for what you want to fill the area with.

   Current Color uses the selected color. When you select it, the Fill Display shows the selected color.

   Gradation uses the selected gradation. When you select it, the Current Fill rectangle shows the selected gradation.

   Clone Source uses the current clone source image determined with the **File: Set Clone Source** command. The source image appears in the Current Fill rectangle.

   Weaving uses the selected Weaving pattern.

4. When you're finished adjusting the Fill Palette, click with the Paint Bucket in the desired area to fill it with the new color.

See Also

Filling an Area Using the Fill Command
Set Clone Source
Using the Cartoon Fill Method

Filling an Area Using the Fill Command

When you want to fill an area with color, gradations, or a weaving pattern, you can use the **Effects: Fill** command or the Paint Bucket on the Tools Palette.

1. Select part of your image.
2. Choose **Effects: Fill (Ctrl+F).**

   The Fill dialog box appears.
3. Select what you want to fill with, either the current color, gradation, clone source, or weaving.
4. Click **OK** or press **Enter**.

   The selected area fills with your choice.

See Also

Filling an Area Using the Paint Bucket

Using the Cartoon Fill Method

The Cartoon Cel fill method is especially good for producing solid fills within sections surrounded by anti-aliased lines that otherwise would have white space showing between the color and the line.

These solid fills are facilitated when you mask lines using **Edit: Mask: Auto Mask**. Once your line work is in the mask layer, you fill using the Cartoon Cel fill method. Image sections may be refilled infinitely without damage to the line work.

1. With black as the selected color, draw two separate circles with the Scratchboard Tool variant of the Pen.
2. Choose **Edit: Mask: Auto Mask**. Then choose **Image Luminance** in the Using pop-up menu and click **OK** or press **Enter**.

   A mask protects the black lines. If you save an image prepared in this way to a .RIF file, the mask layer line mask is saved and restored properly when you reopen the file.
3. Select a color from the Art Materials: Colors Palette.
4. Click the Paint Bucket Tool on the Tools Palette to select it.
5. On the Controls: Paint Bucket Palette, click **Cartoon Cel**, the last What to Fill button.
6. Click the fill style you want to use. The Cartoon Cel fill method works with all of them.
7. Click inside a circle.

   The color fills the area within the black line.

If you are recording your session, Cartoon Cel fills are captured as well. When playing back at a different resolution, Cartoon Cel fills (and their limiting rectangles) are properly scaled.

See Also

Using Auto Mask
Working with Sessions
Lock-Out Color
Mask Threshold
Leaky Line Work
Closing Line Work Leaks
Tying Up Loose Ends

Lock-Out Color

The Lock-Out Color dialog box appears when you double-click the Paint Bucket Tool, and works with contiguous pixel fills to protect areas that are the same color as the color square next to the Lock-Out Color checkbox.

Use this feature to lock out the black in a line drawing or when working on detailed art where clicking in small spaces is difficult. To avoid accidentally filling the adjacent space, lock its color. Use this feature to fill individual squares when you use grid paper in the Effects menu.

1. Choose the color of the area you want to protect from the Art Materials: Colors Palette or from a color set. You could also select the Dropper on the Tools Palette, then click the color in the image.
2. Open the Lock-Out Color dialog box by double-clicking the **Paint Bucket Tool**.
3. Click **Set** to automatically check the Lock-Out Color checkbox and update the square next to it to your chosen color.
4. Click **OK**.

To change the locked-out color, pick another color, then click **Set**. To turn off locked-out color, click the checkbox next to it.

See Also
Mask Threshold

Mask Threshold

The Mask Threshold slider on the Lock-Out Color dialog box works with the Cartoon Cel fill method. It permits filling of image sections surrounded by lines that aren't black.

When you protect non-black lines with **Generate Mask** using Image Luminance, the line masks are varying levels of transparency. Only black lines receive solid masks. Moving the Mask Threshold slider to the right compensates for the transparency of the line mask.

You'll have to experiment with Mask Threshold slider settings until the fill is limited to the area within the line. If the slider is too far to the left, the whole image is filled. Press **Ctrl+.** to abort the fill, or choose **Edit: Undo (Ctrl+Z)** if you don't catch it. Keep moving the slider a bit more to the right and clicking in the area until the fill is limited by the line.

Mask Threshold slider changes are recorded if you are recording your session.

See Also

Using the Cartoon Fill Method
Lock-Out Color

Leaky Line Work

In complex drawings, the lines don't always meet where they are supposed to. This creates a leak that can send Cartoon Cel or contiguous pixel fills into areas where you don't want them, sometimes even through the whole image.

1. With Cartoon Cel or Image selected on the Controls: Paint Bucket Palette, click within the image section you wish to fill.
2. Without releasing the mouse or stylus, drag a rectangle that is a bit larger than the area you are filling.
3. Let go.

   If there is no leak, only the area within the black lines will be filled.

   If there is a leak, the fill will go outside the area, but not beyond the constraints of your rectangle.

Sometimes you can't tell if there's a leak just by looking at your image. But if you click in a small area and see the prompt, Now Looking for Extent of Fill, there probably is a leak and Painter is preparing to fill a bigger area than you had in mind. To abort the fill, press **Ctrl+.** or choose **Edit: Undo (Ctrl+Z)** if you don't catch it.

See Also

Using the Cartoon Fill Method
Closing Line Work Leaks
Tying Up Loose Ends

Closing Line Work Leaks

When you use the Cartoon Cel fill method, you can fix leaks manually by editing the line's mask with a masking pen or brush.

1. Display the Drawing and Visibility buttons by opening the Objects: P. List Palette or clicking the **Selection Adjuster Tool** to display the Controls: Selection Adjuster Palette. You may also use the icons in the lower left of the image window.
2. Click the middle Visibility icon to display the line work's mask in red.
3. Select a Masking brush.

   The Visibility icon automatically is set to red.
4. Choose black on the Art Materials: Colors Palette to draw lines into the mask or choose white to erase them. Where you use black, red masking lines appear; where you use white, whatever is behind the mask appears.
5. To hide the red mask, click the first Visibility button.

See Also

Using the Cartoon Fill Method
Masking Techniques
Leaky Line Work
Tying Up Loose Ends

Tying Up Loose Ends

In typical cartoon line work, open areas, for example, hair, tail feathers, and brush bristles, sometimes need to be filled. The following technique works only with Cartoon Cel.

1. Once you've generated your mask, turn the mask layer on by choosing the middle Visibility button.
2. Choose black on the Art Materials: Colors Palette.
3. Connect the strand ends by drawing a line across them with a masking brush. Visible in the mask layer, this line is invisible in the image.
4. Hide the mask layer by clicking the first Visibility button.
5. Fill.

   The ends are cut off where you drew lines in the mask.

See Also

Using the Cartoon Fill Method

Leaky Line Work

Closing Line Work Leaks

Editing

For help with basic editing tasks, click a topic.

Zooming In
Zooming Out
Changing the Zoom Level
Using the Grabber Tool
Rotating an Image
Selecting, Deselecting, and Reselecting
Editing Techniques
Resizing an Image
Resizing Your Canvas

Zooming In

Zoom in with the Magnifier Tool or by choosing a zoom level on the Controls: Magnifier Palette.

1. Click the Magnifier Tool icon on the Tools Palette.

   The cursor changes to a magnifier. The plus sign (+) on the magnifier indicates that you are increasing magnification---zooming in.

   The Zoom Level pop-up menu on the Controls: Magnifier Palette shows how much the magnification will increase each time you click with the magnifier.

2. Click the image.

   With each click, the image grows by the selected zoom level. The percentage that the document is magnified appears in the title bar next to the document name.

See Also

Zooming Out
Changing the Zoom Level

Zooming Out

Zoom out with the Magnifier Tool or by choosing a zoom level on the Controls: Magnifier Palette.

1. Hold down the **Ctrl** key.

   The plus sign (+) on the Magnifier Tool turns to a minus sign (-).

2. While holding down the **Ctrl** key, click the image.

   The image shrinks by the selected zoom level.

See Also

Zooming In
Changing the Zoom Level

Changing the Zoom Level

You can see anywhere from 8.3% to 1200% of your image in Painter.

1. Click the Zoom Level pop-up menu on the Controls: Magnifier Palette.
2. Choose the zoom factor you need.

Shortcut: You can use the Magnifier Tool while another tool is selected. Hold down **Ctrl+Spacebar** to zoom in and **Alt+Ctrl+Spacebar** to zoom out. Also, you can click and drag with the Magnifier Tool to create a rectangle that Painter will use to calculate the nearest zoom level to fill the screen with the selected area.

See Also

Zooming In
Zooming Out

Using the Grabber Tool

The Grabber Tool gives you a quick way to scroll an image.

1. Click the Grabber Tool on the Tools Palette.

   The cursor changes to the Grabber Tool and the Controls: Grabber Palette shows the zoom level. (You can change the zoom level from this palette.)

2. Drag the Grabber Tool to move your image. To center an image with the Grabber Tool selected, click once in the image window.

Shortcut: To use the Grabber Tool while another tool is selected, hold down the **Spacebar**.

See Also

Changing the Zoom Level

Rotating an Image

Rotate an image on the screen to accommodate the way your arm, wrist, and hand draw naturally.

1. Click the Rotate Page Tool icon on the Tools Palette.

   The cursor changes to a hand with a pointing finger and rotate page controls appear on the Controls Palette.

2. Press down on your stylus or mouse and a rectangle with an arrow pointing at the top of the screen appears.

3. Drag the rectangle or the arrow to the angle you want. To constrain page rotation to 90° angles, hold down the **Shift** key while rotating the page.

   The new rotation angle appears on the Controls: Rotate Page Palette.

4. To return the image window to its normal position, select the Rotate Page Tool and click once in the image window.

Shortcut: Hold down the **Spacebar+Option** keys to display the Rotate Page cursor. Continue to hold it down as you rotate the page with your stylus or mouse. To return the page to its original position, hold down the **Spacebar+Option** keys and click once in the image window. To constrain page rotation to 90° angles, hold down the **Shift** key while rotating the page.

Selecting, Deselecting, and Reselecting

You can select rectangular areas of your image with the Rectangular Selection Tool.

Painter also provides a number of ways to create irregular selections (called paths).

See Also

Selecting Part of an Image
Deselecting Part of an Image
Selecting an Entire Image
Deselecting an Entire Image
Reselecting an Image
Adjusting a Selection
Selecting a Square
Editing Rectangular Selections
Creating Paths

Selecting Part of an Image

Use the following steps to select part of an image with the Rectangular Selection Tool.

1. Click the Rectangular Selection Tool on the Tools Palette.

   The cursor changes to a cross hair and shape dimensions and screen location coordinates appear on the Controls Palette.
2. Drag with the stylus or the mouse in the part of the image you wish to select.
3. Let go of the mouse or stylus.

   The area is selected.

Painter has other tools for creating more complex selections (called paths).

See Also

Deselecting Part of an Image
Selecting an Entire Image
Deselecting an Entire Image
Adjusting a Selection
Editing Rectangular Selections
Creating Paths

Deselecting Part of an Image

Use the following steps to deselect part of an image.

1. Click the Rectangular Selection Tool on the Tools Palette.
2. Click outside the selected area.

   Or choose **Edit: Deselect** (**Ctrl+D**).

See Also

Deselecting an Entire Image
Selecting Part of an Image
Selecting an Entire Image
Adjusting a Selection
Editing Rectangular Selections

Selecting an Entire Image

Use the following procedure to select an entire image.

Choose **Edit: Select All** (**Ctrl+A**).

Or double-click the Rectangular Selection Tool to select all of the visible image.

See Also

Deselecting an Entire Image
Selecting Part of an Image
Deselecting Part of an Image
Adjusting a Selection
Editing Rectangular Selections

Deselecting an Entire Image

Use the following procedure to deselect an entire image.

Double-click the Rectangular Selection Tool.

Or choose **Edit: Deselect** (**Ctrl+D**).

See Also

Deselecting Part of an Image
Selecting an Entire Image
Selecting Part of an Image
Adjusting a Selection
Editing Rectangular Selections

Reselecting an Image

Edit: Reselect (Ctrl+R) works only when you deactivate a selection with the Outline Selection Tool.

See Also

Deselecting an Entire Image
Selecting Part of an Image
Deselecting Part of an Image
Adjusting a Selection
Editing Rectangular Selections

Adjusting a Selection

You can adjust any corner of a selection made by the Rectangular Selection Tool.

Press the **Shift** key as you click and drag with the Rectangular Selection Tool.

See Also

Selecting Part of an Image
Editing Rectangular Selections

Selecting a Square

You can make a square marquee with the Rectangular Selection Tool.

Press the **Shift+Ctrl** keys as you drag the Selection Tool.

See Also

Selecting Part of an Image

Editing Rectangular Selections

Choose **Tools: Selections: Edit Rectangular Selection...** to bring up a dialog box that lets you adjust the size and location of the current rectangular selection by entering top, left, bottom and right values.

This command is useful for precise positioning and size adjustment.

1. Choose **Tools: Selections: Edit Rectangular Selection... (Shift+Ctrl+E)**.

   The Edit Rectangle Selection dialog box appears.

2. Enter numbers in the Top and Left boxes.

   These numbers represent the offset from the top-left corner of the image window.

3. Enter numbers in the Height and Width boxes to change the size of the rectangular selection.

   Clicking the Show Bottom and Right radio button relabels the Height and Width boxes to Bottom and Right, so you may resize the rectangle based on the offset from the bottom-right corner of the image window.

Editing Techniques

Use the following basic techniques to edit your images.

Undoing a Change
Partially Undoing a Change
Clearing an Image
Cutting or Copying a Selection
Pasting a Selection
Pasting into a New Image
Deleting a Selection
Moving a Selection

Undoing a Change

Painter provides several ways to undo a change.

To undo your most recent change, select **Edit: Undo (Ctrl+Z)**.

To go back to the most recently saved version of your image, choose **File:Revert**. Revert doesn't work on untitled, and therefore unsaved, documents.

See Also

Partially Undoing a Change

Partially Undoing a Change

Fade is an editing technique in Painter to undo part of your most recent change. Fade can partially undo any just-completed operation.

1. Choose **Edit: Fade**. The Fade dialog box appears.
2. Move the slider until the preview reflects the amount you'd like to fade.
3. Click **OK**.

See Also

Undoing a Change

Clearing an Image

You can clear all or part of an image.

1. Select all or part of your image.
2. Choose **Edit: Clear**.

   The selected area fills with the paper color that you chose in the New Picture dialog box when you created your document.

Cutting or Copying a Selection

The Cut and Copy commands on the Edit menu work the way they do in other programs.

1. Select the area that you would like to cut or copy.
2. Choose **Edit: Cut (Ctrl+X)** or **Edit: Copy (Ctrl+C).**

   When you choose Cut, the selected area fills with the paper color you selected in the New Picture dialog box when you created the document, or the paper color you used with the **Canvas: Set Paper Color** command.

See Also

Pasting a Selection
Pasting into a New Image

Pasting a Selection

The Paste command on the Edit menu works the way it does in other programs.

Choose **Edit: Paste: Normal (Ctrl+V)**.

See Also

Cutting or Copying a Selection
Pasting into a New Image

Pasting into a New Image

Paste into a new image when you want to automatically create a new document containing the cut or copied section.

This feature is useful for cropping.

Choose **Edit: Paste: Into New Image**.

Deleting a Selection

Follow these steps to delete part of an image.

1. Select the part of the image you want to delete.
2. Press the **Backspace** key.

   The selected area fills with the paper color you selected in the New Picture dialog box when you created the document.

Moving a Selection

After selecting something in Painter, you can drag it anywhere in an image with the Rectangular Selection Tool.

1. Select part of an image.
2. Click inside the selection and drag the stylus or mouse to move it.

   Moving the selection changes the cursor to the Floating Selection Tool, and the selection becomes a floater.
3. When you're finished, let go of the mouse or the stylus.

Note: Holding down the **Alt** key while moving a selection makes a copy of the selection.

See Also

Moving Floaters

Resizing an Image

Painter lets you change existing image dimensions or resolution or both.

1. Choose **Canvas: Resize.**

   The Resize Image dialog box appears. The top half of the box shows the current image size. In the bottom half, you'll assign new image dimensions.
2. Type a new width or height. The available units of measure are pixels, inches, centimeters, points, picas, columns, and percent. When you type a new width or height, the other dimension changes proportionally.
3. Type a new resolution if desired. The available units of measure are pixels per inch and pixels per centimeter.
4. Check the Constrain File Size box if you want to freeze the amount of disk space the file occupies.
5. Click **OK** or press **Enter**.

   The image reflects your changes.

See Also

Resizing Your Canvas

Resizing Your Canvas

You can dynamically expand the size of your canvas while you're working.

1. With the image window open, choose **Canvas: Canvas Size**.

   A dialog box appears that tells you the current width and height and lets you add pixels to the top, left, bottom, and right.

2. Type in the number of pixels you want to add to each dimension and click **OK** or press **Enter**.

   Your changes are immediately reflected in the size of the image window.

See Also

Resizing an Image

Special Effects

Painters powerful image-editing capabilities make it possible to, among other things, control the focus and orientation of an image and change its surface texture.

For help with Painter's special effects, click a topic.

Powerful Palettes

You can use some of the effects dialog boxes with the Art Materials Palettes without closing the dialog box.

For example, you can base the Color Overlay effect on the selected paper grain and color. If the Papers and Colors palettes are open when you choose **Effects: Surface Control: Color Overlay**, you can change paper grains and colors and see your changes reflected in the preview of the Color Overlay dialog box. You can even open other paper texture libraries and color sets while the dialog box is open.

To make your job even easier, you can move these effects dialog boxes out of the way, if necessary, for full access to other palettes.

Effects that have these special properties are Adjust Colors, Adjust Selected Colors, Color Overlay, Dye Concentration, Apply Surface Texture, Apply Screen, and Glass Distortion.

Selecting Areas for Special Effects

You can apply any of Painter's special effects to a selected part of an image or to the entire image.

To apply special effects to part of an image, select part of the image. You can use any of Painter's selection tools, including the Rectangular Selection Tool, the Oval Selection Tool, and the Magic Wand. You can also apply special effects to selected type and floaters. When you select a floater, Painter applies the effect to the entire floater.

To apply special effects to the entire image, you don't need to select it. When no part of the image is selected, Painter automatically applies an effect to the entire image.

Adjusting Brightness and Contrast

Use Tonal Control to adjust or alter colors in an image.

The Brightness/Contrast window adjusts the contrast and brightness of your overall image in the RGB format, unlike Dye Concentration which converts the image to a dye density domain and adjusts it there.

1. If you want to adjust brightness and contrast for only part of the image, select that part.
2. Choose **Effects: Tonal Control: Brightness/Contrast**.
3. Adjust the sliders. Move the upper slider to adjust image contrast. Move the lower slider to adjust image brightness.

   The image redraws when you let up on your mouse or stylus.
4. When the adjustments are the way you want them, click **Apply**. If you want to reset the sliders to normal, click **Reset**.

Adjusting Colors

Adjust Colors lets you control the hue, saturation, and value of an image in much the same way as you would adjust your TV.

1. If you want to adjust colors for only part of the image, select that part.
2. Choose **Effects: Tonal Control: Adjust Colors**.

   The Adjust Color dialog box appears.
3. Adjust the sliders to control the overall hue, saturation, and value levels in the selection.
4. Choose a command from the Using pop-menu to determine what Painter uses as the source for the color adjustment.

   For example, the Paper Grain command uses the selected paper grain to control the amount of color adjustment. (You can change paper grain while this dialog box is open.)
5. When you are satisfied with the way your changes look in the Preview Window, click **OK** or press **Enter**. (To remove your changes from the Preview Window and return your image to the way it was, press **Reset**.)

Adjusting Selected Colors

If you wanted to turn a green apple to red, you could with Adjust Selected Colors. This command adjusts colors within an image selectively based on proximity to a particular color you select.

1. Choose **Effects: Tonal Control: Adjust Selected Colors.**

   The Selective Color Adjustment dialog box appears.

2. Click the image to select the color you want to adjust. Click as many colors as you like, but use only one at a time.
3. Adjust the sliders to control the overall hue, saturation, and value levels.
4. Use the H Extent, S Extent, and V Extent sliders to specify the extent of the HSV color space selected around the selected center color.

   The Feather sliders affect the softness at the edges of the selected colors. Move the Feather sliders to the right to increase the amount of color space that is affected by the command.

   Adjust the H Feather slider to control the number of hues affected.

   Adjust the S Feather slider to control the range of saturation affected.

   Adjust the V Feather slider to control the range of values affected.

5. Choose a command from the Using pop-menu to determine what Painter uses as the source for the color adjustment.

   For example, Image Luminance uses the brightness of the image to control the color adjustment.

6. When you are satisfied with the way your changes look in the Preview Window, click **OK** or press **Enter**. (To remove your changes from the Preview Window and return your image to the way it was, press **Reset**.)

Posterizing Using Color Set

Painter can posterize your image based on a color set. Because you want only a few colors in the image, you may want to create a color set based on the dominant colors in the image you are posterizing.

1. Open the image you wish to posterize.
2. Open or create a color set to use as your set of colors.
3. Choose **Effects: Tonal Control: Posterize Using Color Set**.

   The image is reduced to the colors in the current color set.

This command differs from the Posterize command.

See Also
Posterizing an Image
Creating a Color Set

Equalizing an Image

The Equalize effect improves contrast, adjusting black and white points and distributing the pixels' brightness levels throughout the entire range of available brightness levels. To achieve this effect, Painter creates a histogram showing the number of pixels for each brightness level value. Equalize allows gamma adjustment, which lightens or darkens an image without changing highlights or shadows.

To equalize an image:

1. If you want to equalize only part of the image, select that part.
2. Choose **Effects: Tonal Control: Equalize**.

   The Equalize dialog box appears containing a histogram.
3. Click **Apply** to equalize the selection automatically.

To set the white and black points manually:

1. Inside the Equalize dialog box, drag the small white triangle under the histogram to the left and drag the black triangle to the right.

   Now, any values in the image located to the right of the white marker become white; any values to the left of the black marker become black. Your changes will be apparent while you're still in the dialog box.
2. Click **Apply** to apply changes.

To adjust the image's gamma:

1. Move the Brightness slider to the right to increase gamma, which makes the image darker. Move the slider to the left to decrease gamma, making the image lighter.

   Changing the gamma adjusts only the midtones of an image and leaves the white and black areas untouched. Your changes will be apparent while you're still in the dialog box.
2. Click **Apply** to apply changes.

To cut down on the time it takes to compute a histogram in the Equalize Shades dialog box, you can select an area of your image that represents the range of grayscale shades in the entire image. If you are happy with the results, check the **Apply to Entire Image** box and Painter will equalize the entire image. Click **Apply** to affect the selection only.

Posterizing an Image

Posterizing an image adjusts the number of color levels it contains.

1. If you want to posterize only part of the image, select that part.
2. Select **Effects: Tonal Control: Posterize**.

   The Posterize dialog box appears.
3. Enter a number of levels.

   The lower the number you enter, the more dramatic the effect will be.
4. Click **OK** or press **Enter**.

Note: To posterize an image combined with a paper grain, use **Apply Screen**. To posterize to two levels and adjust the threshold level, use **Equalize**.

See Also

Using Apply Screen
Equalizing an Image

Making a Negative

Choose **Effects:Tonal Control:Negative** to turn part or all of your image into a negative.

Rotating an Image

You can rotate all or part of an image.

1. If you want to rotate only part of the image, select that part.
2. Choose **Effects: Orientation: Rotate**.
   The Rotate Selection dialog box appears.
3. Enter the angle you want, or drag a corner of the selection.
   The Rotate Selection dialog box reflects the numerical value of the angle.
4. Click **OK** or press **Enter**.
   The image continues to float until you drop it.

Scaling an Image

Scale lets you change the dimensions of part or all of your image. Scale also works on grouped floaters.

1. If you want to scale only part of the image, select that part.
2. Choose **Effects: Orientation: Scale**.
3. Either drag the selection handles or enter the percentages that you want to increase or decrease the selection by.
4. Check **Constrain Aspect Ratio** to maintain the selection's proportions. Unchecking this item lets you change horizontal and vertical measurements independently.
5. Check **Preserve Center** to keep the item anchored in its location.
6. Click **OK** or press **Enter**.

   The image floats until you drop it.

Distorting an Image

The **Effects: Orientation: Distort** command lets you distort the shape of an image or part of an image.

1. Select all or part of your image.
2. Choose **Effects: Orientation: Distort**.

   Handles appear around the selection and the Distort Selection dialog box appears.
3. Drag the handles to reshape the selection.
4. Check the **Better (Slower)** box if you'd like a more accurate rendering of your changes, although it will take longer. Checking this box is particularly useful in highly distorted cases.
5. Click **OK** or press **Enter**.

   A dialog box tells you Painter is distorting the selection. The image floats until you drop it.

Flipping an Image Horizontally

Flipping an image horizontally makes it the mirror image of itself.

1. If you want to flip only part of the image, select that part.
2. Choose **Effects: Orientation: Flip Horizontal**.

See Also

Flipping an Image Vertically

Flipping an Image Vertically

Flipping an image vertically makes it the vertical mirror image of itself.

1. If you want to flip only part of the image, select that part.
2. Choose **Effects: Orientation: Flip Vertical**.

See Also

Flipping an Image Horizontally

Creating a Drop Shadow

Drop Shadow automatically creates a drop shadow for floaters. You can add a drop shadow to a single floater or to a group.

1. Select the floater or group of floaters you want to add a shadow to.
2. Choose **Effects: Objects: Create Drop Shadow**.

   The Drop Shadow dialog box appears.
3. Enter information in the dialog box to determine the X and Y offset and the opacity of the shadow, as well as the radius, angle, and thinness.

   The X and Y offset refers to the number of pixels to the left, right, top, or bottom of the floater.

   The radius is the length of the shadow. The higher the offset, the greater the length of the shadow.

   The angle is the apparent direction the shadow is cast.

   Thinness governs the fade-out of the shadow's edge.
4. Click **OK** or press **Enter**.

   The drop shadow appears with the floater.

The drop shadow is a separate floater that is grouped with the original floater. Check **Collapse to One Layer** in the Drop Shadow dialog box if you want the floater and its shadow to be one floater when the operation is completed. If you wish to apply a drop shadow to several floaters at once, group the floaters before applying the shadow.

See Also

Selecting Floaters
Working with Multiple Floaters

Color Overlay

Use Color Overlay to simultaneously add color and texture to an image.

1. Select the color you want to fill an area with.
2. Select the area you want to fill.
3. Choose **Effects: Surface Control: Color Overlay**.
4. Choose a model.

   Dye Concentration means the paper absorbs the color.

   Hiding Power means the color covers what's beneath it.
5. Move the Opacity slider until the preview reflects your preferred opacity.
6. Choose a command from the Using menu:

   Uniform Color adds a flat tint to the image.

   Paper Grain produces the texture base of the paper you choose in the Art Materials: Papers Palette. (If the Papers Palette is open, you can choose different textures while the Color Overlay dialog is open.)

   Image Luminance creates texture based on the image's brightness.

   Original Luminance adds texture in a cloned image based on the source document's brightness.

   Mask adds texture around a selection.
7. Click **OK** or press **Enter**.

Dye Concentration

Dye Concentration adjusts color intensity and adds surface texture. It works by adjusting pigments so you can use it, for example, to lighten an underexposed photo or to darken an overexposed one.

1. If you want to adjust only part of the image, select that part.
2. Choose **Effects: Surface Control: Dye Concentration**.

   The Adjust Dye Concentration dialog box appears.
3. Choose a command from the Using menu:

   Uniform Adjustment adjusts color without adding a texture.

   Paper Grain produces a texture based on the selected paper.

   Image Luminance creates texture based on the image's brightness.

   Original Luminance adds texture in a cloned image based on the source document's brightness.

   Mask adds texture around a selection.
4. Adjust the sliders.

   When you choose **Uniform Adjustment**, moving the Maximum slider above 100% increases color density. A value below 100% decreases it. Moving the Minimum slider has no effect. With the other Using menu commands selected, both sliders are operable.

   If you think of texture as peaks and valleys, the Maximum slider controls the dye on peaks and the Minimum slider controls dye in the valleys. You can set Maximum as high as 800%. The lower you set Minimum, which can be as low as 0%, the higher the contrast will be between peaks and valleys. The higher the Minimum slider, the flatter the paper will appear.
5. Click **OK** or press **Enter**.

Note: The Art Materials: Papers Palette can be used while the Dye Concentration dialog box is open.

Apply Lighting

Apply Lighting lets you establish one or more light sources of any color from any direction with any intensity for part or all of your image. Apply Lighting requires a math co-processor.

1. If you want to apply lighting to only part of the image, select that part.
2. Choose **Effects: Surface Control: Apply Lighting**.

   The Apply Lighting dialog box appears.

   In the upper left is a preview of how the changes you make in this dialog box affect your image.

   In the lower left is a scrolling palette of lighting choices that have been preset. When you first open the dialog box, the first setting is selected, it has a black line around it, and its name appears under the scroll bar. When you click a choice, the Preview Window shows how it will look.
3. After you choose a lighting effect, click **OK** or press **Enter**. Painter applies it to your image.

See Also

Editing Apply Lighting
Setting Up a Lighting Library

Editing Apply Lighting

Use the controls in the Apply Lighting dialog box to achieve other lighting effects. The Preview Window shows your changes, so you can play around and see what happens.

Note: Standard camera-based principles apply to editing lighting. For example, if you turn up the lights, you may have to adjust exposure.

The small part of the indicator in the Preview Window points to your **Light Source**; the large part shows where the light actually is. To move the indicator, drag its large end. To change the light source direction, drag the small end. To create another indicator, click anywhere else. Click once on an indicator to select it. To remove it, press **Backspace**.

The **Brightness slider** is like a dimmer knob. Moving it to the left turns down the light source, moving it to the right increases brightness.

The **Distance slider** controls how far the big circle in the indicator is from the light source. If you move the light source closer, you may have to change the image's exposure.

The **Elevation slider** controls your light's angle. At 90° the light is shining straight down, and at 1° it's very shallow.

The **Spread slider** controls the light beam's width.

The **Exposure slider** controls the image's brightness as in photography. Moving the slider to the left decreases exposure, moving it the right increases exposure.

The **Ambient slider** controls the surrounding light in an image. Moving the slider to the left gives you stark lighting, moving it to the right softens the light.

For **Light Color**, click the square and choose a color for your light source in the Color Picker. Then click **OK** or press **Enter**.

Ambient Light Color. Click the square and choose a color for the surrounding light in the Color Picker. Click **OK** or press **Enter**.

After making your changes, click **Save**, type a name for your new lighting variant, and click **OK** or press **Enter**. It is now a choice in the palette and can be used with any image.

See Also

Apply Lighting
Setting Up a Lighting Library

Setting Up a Lighting Library

Follow these steps to set up a library of lighting effects.

1. Choose **Tools: Movers: Lighting Mover**.

   The Lighting Mover dialog box appears.

2. To create a new lighting library, click **New...**. Type a name for the new library and click **Save** or press **Enter**.

   The new library's name appears on the right-hand side of the Lighting Mover dialog box.

3. To move lighting variants into a library, click the lighting variant on the left side of the dialog box and then click **Copy**. If you don't see the variant name, click **Close** to close the library on the left side of the dialog box. Then click **Open** and choose a new library.

4. If you want to rename a selected lighting variant, click **Change Name...**. The Change Lighting Name dialog box appears. Type the new name and click **OK** or press **Enter**.

5. If you want to delete a selected lighting variant, click **Remove**.

6. If you want to move a lighting variant to another, existing library, click **Close** to close the open library on the right-hand side of the dialog box. Then click **Open...**, choose a new variant, and follow the instructions in Step 3 for moving a lighting variant into a library.

7. When you're finished making changes in the Lighting Mover dialog box, click **Quit** or press **Enter**.

8. To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

See Also

Apply Lighting
Editing Apply Lighting

Applying Surface Texture

Another Painter sleight of hand is the ability to add a three-dimensional surface texture to your image. You'll use this option for something as simple as adding a paper texture or for a complex move like creating an oil painting.

To add a Paper Texture:

1. Choose a paper grain on the Papers Palette.
2. If you want to apply paper texture to only part of the image, select that part.
3. Choose **Effects: Surface Control: Apply Surface Texture**.

   The Apply Surface Texture dialog box appears.
4. Choose **Paper Grain** from the Using menu.

   The Preview Window shows how the selected paper looks on your image. (If the Papers Palette is open, you can choose different textures and see the effects in the Apply Surface Texture dialog box.)
5. Move the Amount slider to control how much surface texture is applied to the image. Moving the slider all the way to the right applies the maximum amount.
6. Check **Shiny** for a tinselly, aluminum-foil effect.
7. Click the buttons above Light Direction to change highlight and shadow locations.
8. When the Preview Window shows the image is the way you want it to be, click **OK** or press **Enter**.

Note: We have been asked if you can apply a paper texture when you first create an image and then paint or draw over it. You can, but the paper is erasable, which is good if you want to make changes to the paper, but not good if you only want to edit a stroke and not the paper. Generally, you'll add the paper texture as the last step, not the first step, in developing your image.

The next question usually is how to create brush strokes that show the paper texture. The answer is that the brushes that react to paper grain pick up the texture that you choose in the Papers Palette, not the paper that you add using Apply Surface Texture.

See Also

~~Qualities of~~ Brushes
Using Paper Textures

Image Luminance

Follow the steps for applying surface texture, but choose **Image Luminance** from the Using menu, instead of **Paper Grain**. Painter uses the image's brightness to determine where to add surface texture.

See Also

Applying Surface Texture

Other Using Menu Commands

The **3D Brush Strokes** command works in a cloned image and makes brush strokes appear to be three-dimensional, giving them the illusion of oil paints (the difference between the clone and the original becomes three-dimensional texture).

Original Luminance works in a cloned image and gives you an embossing effect.

The **Mask** command produces surface texture around the edges of a selection.

See Also

Embossing
Using Auto Mask

Using Apply Screen

Apply Screen is another way to add texture to an image. It combines luminance, the selected paper texture, and the three colors you pick in the Apply Screen dialog box to add a three-color screen to an image.

1. Select an area.
2. Choose **Effects: Surface Control: Apply Screen**.

   The Apply Screen dialog box appears.
3. Click each square to call up the Color Picker. Click the color you want to use, then click **OK** or press **Enter**.
4. Move the Threshold 1 slider to determine how much of the top and middle squares' color will be in the image.

   Moving the slider to the left increases the amount of the top color.

   Moving it to the right increases the amount of the middle color.
5. Move the Threshold 2 slider to determine how much of the middle and bottom squares' colors will be in the image.

   Moving the slider to the left increases the amount of the middle color.

   Moving it to the right increases the amount of the bottom color.
6. Choose a command from the Using menu:

   Paper Grain produces the selected paper grain. If the Papers Palette is open, you can choose different textures while the Apply Screen dialog box is open.

   Image Luminance creates texture based on the image's brightness. It is similar to a three-level posterization.

   Original Luminance adds texture in a cloned image based on the source document's brightness.

   Mask adds texture around a selection.
7. Click **OK** or press **Enter**.

Sharpening the Focus of an Image

This effect heightens contrast by intensifying highlights and shadows.

1. If you want to sharpen only part of the image, select that part.
2. Choose **Effects: Focus: Sharpen**.
3. Adjust the sliders.

   Radius determines how much of the edge of an element is affected. The farther the slider is to the right, the wider the affected area will be.

   Highlight determines the intensity of the bright areas. The farther the slider is to the right, the brighter the highlight will be.

   Shadow determines the depth of the shadows. The farther the slider is to the right, the darker the shadows will be.
4. When you like the focus, click **OK** or press **Enter**.

Softening the Focus of an Image

This effect increases the transition from one part of your image to another, enhancing the anti-aliasing of strokes.

1. If you want to soften only part of the image, select that part.
2. Choose **Effects: Focus: Soften**.

   The Soften dialog box appears.
3. Adjust the Radius slider.

   The farther the slider is to the right, the more steps there will be between one image element and another, which will mean more blurring.
4. Click **OK** or press **Enter**.

Applying Motion Blur

Motion Blur makes an image appear as if it has been blurred by movement or the panning of a camera.

1. If you want to blur only part of the image, select that part.
2. Choose **Effects: Focus: Motion Blur**.
3. Set the sliders.

   The farther the **Radius** slider is to the right, the faster the image will appear to be moving.

   Angle sets the direction in which the image seems to travel.

   Thinness blurs the image in a direction perpendicular to the angle you choose with the Angle slider.
4. Click **OK** or press **Enter**.

Glass Distortion

Using this effect, another bit of Painter magic, you can put your image behind glass.

1. If you want to distort only part of the image, select that part.
2. Choose **Effects: Focus: Glass Distortion**.

   The Glass Distortion dialog box appears.
3. Adjust the sliders.

   The farther you move the Amount slider to the right, the more distorted your image will be.

   The farther you move the Variance slider to the right, the more your image will break up, like glass shattering.
4. Choose a command from the Using menu:

   Paper Grain produces texture based on the selected paper texture.

   Image Luminance creates texture based on the image's brightness.

   3D Brush Strokes creates three-dimensional texture by comparing the difference between the source document and the cloned document.

   Original Luminance adds texture in a cloned image based on the source document's brightness.

   Mask adds texture around a selection.
5. Click **OK** or press **Enter**.

Using Blobs

This effect is a good step to take before doing marbling because it involves simulating a pattern in paint floating on liquid in a pan. It takes whatever you copy or cut to the Clipboard (or uses the current color if the Clipboard is empty) and puts it in a swirling pattern by placing blobs into the liquid image. Called a Stone pattern, this effect is used as a starting point in marbling. Blobs requires a math co-processor.

1. If you want to blob only part of the image, select that part. The first time you try this effect, it's a good idea to select a recognizable element.
2. Choose **Edit: Copy (Ctrl+C)** or **Edit: Cut** (**Ctrl+X**).
3. Select a 2-inch square blank area in your image.
4. Choose **Effects: Esoterica: Blobs**.

   The Create Marbling Stone Pattern dialog box appears.
5. The first field is Number of blobs. The first time you try this effect, try entering 20.
6. Minimum Size and Maximum Size designate blob size. The first time you try this effect, try setting Minimum Size at 50 and Maximum Size at 60.
7. Subsample creates the anti-aliasing steps. The first time you try this effect, try entering 8.
8. Click **OK** or press **Enter**. You'll see a swirling pattern using the element you copied or cut.

Hint: Try using a circular selection shaded like a sphere (instead of a recognizable element) and using the Airbrush before choosing **Edit: Copy**. This produces bubblelike elements.

See Also

Marbling an Image

Marbling an Image

This effect creates marbled patterns and is based on an actual technique of pulling on ink or pigment that floats on liquid in a pan. The marbling is achieved by dragging a rake through the liquid in various directions. The controls here are similar to those used by real-life marblers.

1. If you want to marble only part of the image, select that part.
2. Choose **Effects: Esoterica: Apply Marbling**.

   The Apply Marbling dialog box appears.
3. The Preview Window shows the direction of the marbling, which you can change by clicking the buttons on the right.
4. Adjust the sliders. Here's what they do:

   Spacing adjusts the space between rake teeth. The higher the spacing, the more dispersed the marbling.

   Offset adjusts how much the rake shifts each time it passes over the image. The higher the offset, the more complex the marbling effect.

   Waviness determines how deep the waves are. The lower the amount, the flatter the waves.

   Wavelength controls the wave's curve. Moving the slider to the right lengthens the curve's period.

   Phase decides the point in the wave's period the wave starts.

   Pull controls how much the ink is pulled by the rake. The farther the slider is to the right, the more intense the pull is. Changes in this slider aren't reflected in the preview's rake display.

   Quality improves the quality (anti-aliasing) of the marbling, but the farther you move the slider to the right, the longer the marbling will take.
5. After completing your adjustments, click **OK** or press **Enter**.

See Also

Using Blobs

Warping an Image

Image Warp lets you distort the surface of an image as if it were a sheet of pliable film. With this command, your images can look as though they're reflected in a fun house mirror.

1. If you want to warp only a part of an image, select that part.
2. Choose **Effects: Surface Control: Image Warp**.

   The Image Warp dialog box appears.
3. Drag the cursor over the Preview Window to distort the image.

   A circle appears as you drag, denoting the area affected. The Size slider controls the size of the area affected by dragging the cursor. The higher the number, the larger the affected area.
4. Choose the **Linear** radio button to pull the selected area as if you were pulling from the top of a cone.

   Choose the **Cubic** radio button to pull a flat surface.

   Choose the **Sphere** button to pull a surface as if it were a lens.
5. When you're finished warping the image, click **OK** or press **Enter**.

Using Highpass

Highpass suppresses low-frequency areas containing gradual or smooth transitions of brightness levels. This leaves high-frequency areas, or just the edges of an image, containing stark shifts between brightness levels.

You can make the highpass more pronounced by using the **Equalize** command.

1. If you want to highpass only a part of an image, select that part.
2. Choose **Effects: Esoterica: Highpass**.

   The Highpass dialog box appears.
3. Move the Radius slider to determine the amount that the low-frequency areas will be suppressed.

   This value defines a radius in pixels around each pixel in the selected image area.

   Moving the slider to the left suppresses larger amounts of low-frequency information.

   Moving the slider to the right suppresses smaller amounts of low frequency information.
4. Click **OK** or press **Enter**.

See Also

Equalizing an Image

Using Grid Paper

Using Grid Paper in the Effects menu, you can add horizontal or vertical lines or a grid to part or all of your image. The lines are fully editable and blendable with the rest of your design. Unlike the Grid Overlay, a transparent layer that floats above your image like Tracing Paper, Grid Paper becomes part of your image.

1. If you want to apply Grid Paper to only a part of an image, select that part.
2. Select **Effects: Esoterica: Grid Paper**.

   The Grid Options dialog box appears.
3. Set the following:

   Grid Options determine whether your grid will have squares, vertical lines, or horizontal lines.

   Horizontal Spacing determines the amount of space between horizontal lines.

   Vertical Spacing determines the amount of space between vertical lines.

   Line Thickness sets the width of grid lines.

   Grid Color changes the color of grid lines. Click the color square to display the Color Picker. Choose a color in the Color Picker, then click **OK** or press **Enter**.

   Background changes the grid's background color. Click the background color square to display the Color Picker. Choose a color in the Color Picker, then click **OK** or press **Enter**.
4. Click **OK** or press **Enter**.

Accessing Third-Party Plug-Ins

Once Painter knows where to find your Kai's Power Tools and other third-party plug-ins, you can also access them from within a document.

1. Select all or part of your image.
2. Choose the Effects Menu.

   You see a list of your plug-ins at the bottom of the menu. You can now use them to edit your image.

You can also use the **File: Acquire** and **File: Export** commands to send images in and out of Painter by way of plug-in devices, such as scanners, film recorders, color printers, and so on.

See Also

Using Plug-Ins

Cloning

Use cloning to transform any image, such as a scanned photo, into any art medium you can think of. Cloning is a two-step process. First you create a clone of an image. Then you use brushes or commands or both to transform the cloned image.

For help with cloning, click a topic.

Creating a Clone Document

However you use cloning, you'll start out the same way, by making a clone of your image. You can clone an image that you created in Painter or one that you created in another paint program.

There are several ways to set up a clone image. The most basic is to do the following:

1. Open an existing Painter-compatible document.

   This document will be the source document.

2. Choose **File: Clone**.

   A duplicate of the document appears with the words "Clone of" preceding the original document's name in the title bar. An invisible computer link maps this clone and its source.

Once you have a clone of your original image, you can use Painter's brushes to recreate it in a different medium and you can use Painter's special effects to embellish it.

Keep your original document open while you work in the cloned image to maintain the computer link between the two documents that permits the cloning effects.

See Also
Making an Existing Document a Clone

Making an Existing Document a Clone

After you've worked with cloning a bit, you'll start to see the need for other ways to set up clones.

For instance, what if you close your source and clone documents and open them again? You'll want to re-establish the link between them when you reopen.

What about working with two open documents? Can't one be the source and the other the clone?

What if you want to go "backward," that is, make a clone into the source document and open the original as the clone?

Using the following three functions, you can set up any two images as source and clone documents.

Ctrl+Alt-File: Clone
Set Clone Source
Shift-Click

Ctrl+Alt-File: Clone

When no documents are open, use the following steps to open one document as a source and a second as a clone.

1. Choose **File: Open** to open a source document.
2. Hold down the **Ctrl+Alt** keys and choose **File: Clone**.

   The Open dialog box appears. Use it to choose the file that will be the clone document.

The first document is now the source document and the second is the clone.

See Also

Set Clone Source
Shift-Click

Set Clone Source

When two or more documents are already open, you can establish one as the source document by clicking it and choosing **File: Clone Source**.

The second document automatically becomes a clone document.

See Also

Ctrl+Alt-File: Clone
Shift-Click

Shift-Click

Maybe you don't want to clone a whole image. Maybe you just want to borrow a portion of it or rearrange pieces within the same document. You can do either using the keyboard in combination with the Cloners. This feature differs from Clone Source. With Clone Source, the source and the clone images will be in register from the top-left corner. With **Shift-Click**, you can pick up any piece from the source and put it anywhere within the clone.

1. Open the source document, the document you want to clone from. Leave it open while you lift parts of it.
2. Open a new or existing document, the document where you want to transfer parts of the source document. You can also transfer parts of an image from one place to another within the same document.
3. Select a brush. You can select a Cloner variant from the Brushes Palette or select any brush along with a cloning method. Or you can select any brush and check **Use Clone Color** on the expanded Art Materials: Colors Palette.
4. Click anywhere in the source document to make it active.
5. Hold down the **Shift** key and click the part of the image you want to clone.
6. Click anywhere in the clone document to make it active.
7. Drag your stylus or mouse to where you want the image from the source document to appear.

   The area you clicked in the source document now begins to appear in the clone. This first stroke establishes the mapping between the clone and the original.

Note: If you use this cloning technique with an existing image, remember that many of Painter's Brushes, like pencils and felt pens, are absorbed into the paper and turn black. If you clone with one of these tools in a dark area of your image, you may not see any results. Try choosing pastels, chalk, or one of the other tools that covers underlying colors.

See Also

Ctrl+Alt-File: Clone
Set Clone Source
Turning Painters Other Brushes into Cloners
Qualities of Brushes

Using Tracing Paper

After creating a source and clone document, you can set up an on-screen light box using Painter's Tracing Paper.

To use Tracing Paper the source and clone documents must be the same size.

1. In the clone document, select all or part of the image.
2. Press the **Backspace** key.

   The selected part of your image disappears, leaving a blank painting surface.
3. Choose **Canvas: Tracing Paper (Ctrl+T),** or click the Tracing Paper icon in the vertical scroll bar.

   A 50% ghost of the original image appears.
4. Trace the image with any plain brush, Cloner brush, or brush you transform into a Cloner.

   Your brush strokes appear at 50% opacity.
5. After tracing the image, choose **Canvas: Tracing Paper (Ctrl+T)** or click the Tracing Paper icon again.

   The faint original image disappears and the new strokes appear at 100% opacity. If you need to make any adjustments to the new image, just turn Tracing Paper on again. You can turn it on and off as often as you like.

See Also

Creating a Clone Document
Making an Existing Document a Clone
The Cloners Brushes
Turning Painters Other Brushes into Cloners
Alternatives to Tracing Paper

Alternatives to Tracing Paper

If you don't want to use Tracing Paper, you can work in your clone image using one of three other techniques. One way is to keep the image visible, which is useful with Auto Van Gogh.

Another way is to clear part or all of the clone image (as when you use Tracing Paper) so you can see the image transformation more clearly. You'll use this empty window with such brushes as pencils and felt pens whose colors tend to turn black quickly. With none of the image showing, however, it might be hard to tell where you are.

A third possibility is to lighten the entire image to use it as a first layer of your work. With this option, the clone contains the original image, whereas with Tracing Paper, only a ghost of the original appears, not the image itself.

To lighten a clone document:

1. With the clone document active, choose **Effects: Surface Control: Dye Concentration**.

   The Adjust Dye Concentration dialog box appears.
2. Move the Maximum slider to the left until the image is as light as you would like it to be and choose **Uniform Adjustment** from the Using menu.
3. Click **OK**.

   The image is now as light as it was in the Adjust Dye Concentration dialog box and you can use it as the first layer of your new design.

See Also

Dye Concentration
Using Tracing Paper

The Cloners Brushes

The Cloners variants on the Brushes Palette have been set up to provide the media you're most likely to want to clone with. When you click and drag in a cloned image with them, they pick up color from the original while you control the direction of brush strokes.

Many behave like their plain brush counterparts. For example, the Chalk Cloner produces the same effect as the Artist Pastel Chalk variant of the Chalk brush. You can further refine the Cloner variants with Painter's customizing functions.

When working with the Cloners, keep in mind that if you don't like the strokes you've made, you can delete them and try again, as long as the original document stays open. You don't "use up" the original image when you clone it.

See Also

Pencil Sketch Cloner
Felt Pen Cloner
Hairy Cloner
Oil Brush Cloner
Chalk Cloner
Hard Oil Cloner
Van Gogh Cloner
Melt Cloner
Driving Rain Cloner
Straight Cloner
Soft Cloner
Impressionist Cloner
Clone Location Sliders

Pencil Sketch Cloner

Imitates pencil lines.

To get a quick-sketch effect with uneven lines, open the Advanced Controls: Random Palette and move the Clone Location How Often slider all the way to the left.

See Also

Pencils
Clone Location Sliders

Felt Pen Cloner

Recreates felt pen strokes that get darker as you draw.

To keep the colors from darkening up too quickly, move the Opacity slider on the Controls: Brush Palette to the left.

See Also

Qualities of Brushes

Hairy Cloner

Paints like the Hairy Brush variant of the Brush, producing somewhat anti-aliased strokes that show the brush's hair lines and react to paper grain.

This brush is useful with oil painting.

See Also

Qualities of Brushes

Oil Brush Cloner

Gives you anti-aliased brush strokes that hide underlying ones. This is another good brush to use with oil painting.

Short strokes work best with the Oil Brush Cloner.

How quickly you drag the mouse or stylus determines the width of the stroke. Drag slowly for thick strokes, quickly for thin ones.

See Also

Qualities of Brushes

Chalk Cloner
Draws like the Artist Pastel Chalk variant of the Chalk brush.

Hard Oil Cloner

This brush gives you a harsh stroke with a hard edge that interacts with paper grain and hides underlying strokes.

It's good for oil painting and works best with short strokes.

How quickly you drag the mouse or stylus determines the width of the stroke. Drag slowly for thick strokes, quickly for thin ones.

Choose different paper textures in the Art Materials: Papers Palette for unusual results.

See Also

Qualities of Brushes
Selecting Paper Textures

Van Gogh Cloner
Paints multicolored brush strokes in the style of Vincent Van Gogh.

See Also
Using Auto Van Gogh

Melt Cloner

Melts an image so that it looks like it's dripping and works the way the Distorto variant in the Liquid brush works.

When you use this brush with oil painting, it looks like you applied paint with a palette knife.

Driving Rain Cloner

This variant clones your image as it would look through a window during a rainstorm.

1. Choose the Driving Rain Cloner.
2. Click and drag the stylus or the mouse.
   Slanted brush strokes that look like rain drops appear.
3. When you're done, let go of the stylus or mouse.

To fill in your image with the Driving Rain Cloner automatically, use **AutoClone**.

See Also

Using AutoClone

Straight Cloner

Duplicates the original image without changing it.

Simply click and drag in the clone and you'll see your original image come through.

This brush is great for getting back your image if you decide you prefer the original to the changes you've made.

Soft Cloner
Gives you airbrush-style strokes that hide the underlying image.

See Also
Qualities of Brushes

Impressionist Cloner

Uses the directions of your brush strokes to place many short dabs in varied colors based on the original image.

Turning Painter's Other Brushes into Cloners

If you don't want to use any of the Cloners brush variants for the work you do, no problem. You can turn any brush into a Cloner.

There are two ways to turn a brush into a Cloner. You can check **Use Clone Color** on the expanded Art Materials: Colors Palette or choose a cloning method in the Brushes Palette Method Category pop-up menu. Each way produces slightly different results.

You can further refine Cloners with Painter's features for customizing brushes.

See Also
Using Clone Color
Using Cloning Methods
Customizing Painter's Brushes

Using Clone Color

Using Clone Color lets the brush pick up color from the original while staying true to its own nature. **Use Clone Color** takes averaged samples of color from the clone source, resulting in an approximation of the original.

1. Select any brush.
2. Click the Colors icon on the Art Materials Palette to open the Art Materials: Colors Palette. Expand the palette, if it isn't already expanded, by clicking on the grow box in the upper right corner.
3. Click **Use Clone Color**.

Using Cloning Methods

Cloning methods give you brush strokes that are closer in nature and color to the source document than to the selected brush.

Because the cloning methods use a full set of pixels from the original document, you get a truer copy of the original than you do with Use Clone Color.

Also, unlike using clone color, cloning methods preserve the original image texture in the clone.

1. Select any brush.
2. Choose a cloning method from the Brushes Palette.

   Now painting in the clone renders the original image in the style of the cloning method.

See Also

Cloning Methods

Cloning Methods

Here's a brief description of the cloning methods.

Hard Cover Cloning gives you semi-anti-aliased brush strokes that hide underlying strokes.

Soft Cover Cloning produces anti-aliased brush strokes that cover layered ones.

Grainy Hard Cover Cloning works like Hard Cover Cloning but brush strokes also interact with paper grain.

Grainy Soft Cover Cloning works like Soft Cover Cloning but brush strokes also interact with paper grain.

Drip Cloning pushes color around as if it were wet, cloning the original with distortion based on your stroke.

See Also

Changing Methods

Fine-Tuning the Cloning Methods

Four settings on the Advanced Controls: Random Palette can affect the results of the cloning methods.

Moving the Clone Location Variability slider to the right softens brush strokes and works best with the bristle brushes for creating an impressionistic effect.

Moving the Clone Location Variability slider a bit to the right and the Clone Location How Often slider to the left gives drawing tools a sketchy feel.

Clicking **Random Clone Source** makes the cloning methods randomly pick up pieces from the source document. What you get with your brush is random snippets of the image.

Clicking **Random Brush Stroke Grain** makes the cloning methods pick up paper grain at random from the current paper grain.

See Also

Adding Randomness

Using AutoClone

Using a Cloner brush can take a long time if you're working on a large area. You can have Painter do the strokes for you.

1. Select the tool you want to clone with.

   AutoClone works best with the Driving Rain Cloner and the Seurat tool. If you want the Seurat tool to pick up color from the source document, click **Use Clone Color** on the expanded Art Materials: Colors Palette.

2. Select all or part of your image.

3. Choose **Effects: Esoterica: AutoClone**.

   Painter applies dabs of paint automatically to the selected area in 5-second intervals. If you want to vary the color of the dots more, open the expanded Art Materials: Colors Palette. Then set the ±H, ±S, and ±V Color Variability sliders to 15% each.

4. When the right amount of the clone has filled in to suit your design, click anywhere in the image to turn off AutoClone.

If you apply AutoClone to a big area, the paint may fill smaller rectangular tiles one at a time. If you click to stop the AutoClone, it stops where it left off. It won't automatically finish the final tile of the overall selected area. To fill in nonrectangular areas, you can use AutoClone with selections.

When you use AutoClone with the Felt Pen Cloner and other tools that turn black as you repeat strokes, areas darken rapidly. You can slow down the color buildup and still use AutoClone by dimming your original image.

AutoClone works with the Seurat tool in original images, too. Just select the Seurat tool, the area, and the color you want to fill it with, and choose **Effects: Esoterica: AutoClone**. Multiple dots will fill the area. This is great for creating new textures in color.

Note: Another way to automate cloning is by recording and playing back individual brush strokes. This feature is especially useful for filling in backgrounds.

See Also

Setting Color Variability
Alternatives to Tracing Paper
Recording Individual Strokes
Playing Back Recorded Strokes
Paths and Selections

Using Auto Van Gogh

The **Effects: Esoterica: Auto Van Gogh** effect works with the Auto Van Gogh variant of the Artists brush. This algorithmic approach to placing directional brush strokes results in a Van Gogh-like rendition of an image.

1. Select the image you want to use.
2. Choose **File: Clone** to create a clone.
3. Select the Van Gogh variant of the Artists brush.
4. Adjust color variability on the Art Materials: Colors Palette.
5. Choose **Effects: Esoterica: Auto Van Gogh**.

The effect requires two passes. When applied, your image will be rendered in a set of directional brush strokes.

See Also

Setting Color Variability

Embossing

You can make a clone document look like it was embossed. Painter uses the original luminance (the brightness of the source document) to create the surface texture in the clone.

1. Clone an image by choosing **File: Clone**.
2. Choose **Edit: Select All (Ctrl+A)** to select the whole image.
3. Press **Backspace** to delete the image.
4. Choose any color on the Art Materials: Colors Palette other than black. If you want the embossed image to be white, leave the screen blank.
5. If you chose a color, choose **Effects: Fill (Ctrl+F)**. Click the **Current Color** radio button.
6. Choose **Effects: Surface Control: Apply Surface Texture**.

   The Apply Surface Texture dialog box appears. The Preview Window shows how the embossed image will look.
7. Choose **Original Luminance** from the Using pop-up menu.
8. Check **Shiny** if you want a tinselly or aluminum-foil effect.
9. Click the buttons above Light Direction to change the location of highlights and shadows. Check the Preview Window to see the effect of lighting changes.
10. Click **OK**.

    The clone is now an embossed version of the original.

You can also use the luminance of a source document to determine the character of brush strokes in a clone. If you want to experiment, try changing the source settings on the Advanced Controls: Expression (Sliders) Palette.

See Also

Applying Surface Texture
Determining Expression

Creating Repeating Patterns

Here's a terrific Painter feature for textile designers and anyone else who creates patterns. You can have Painter fill a document with an image you create.

1. Create the image that you want to use as the repeating image. It can be any size, but you might want to use a small image the first time, say a 1-inch square. You can also select a piece of an existing image or photograph to use as the repeating image.
2. Choose **Tools: Patterns: Capture Pattern**.

   The image is now a tile, ready to become part of a pattern.
3. Start a new document.
4. Click the **Paint Bucket** on the Tools Palette to select it.

   Paint Bucket controls appear on the Controls Palette.
5. On the Controls: Paint Bucket Palette, click the first **What to Fill** button to fill the entire image and click the third **Fill With** button to fill the image with the clone source.
6. Click in the document.

   It fills with the repeated pattern.

You can also fill in the repeating pattern with a brush. Just select a Cloner brush, or use another brush and check **Use Clone Color** on the expanded Art Materials: Colors Palette. Then use the brush to paint the repeating pattern in the clone.

See Also

Filling an Area Using the Paint Bucket

Wrap-around Color

When you paint into a captured pattern, Painter uses a technique called wrap-around color. If you paint off any edge of the image, your stroke continues on the opposite side, top, or bottom. Using this technique allows you to create seamless patterns.

Note: For best results, open a new image window, select all, and choose **Tools: Patterns: Capture Pattern**. Now paint your pattern using wrap-around color. Use an Image Hose Nozzle for interesting results.

Paths and Selections

Selections in Painter are a form of paths. The different kinds of paths include selections, outlines, curves, and mask representations.

For help with paths and selections, click a topic.

Types of Paths

In Painter there are four types of paths, selections paths, outline paths, curve paths, and mask representation paths.

See Also

Selection Paths
Outline Paths
Curve Paths
Mask Representation Paths

Selection Paths

In Painter, selection paths are shown as black-and-white dashed lines, also known as marching ants. This kind of path also defines masked areas.

Its also possible to have negative selection paths, and these paths are shown as red-and-white dashed lines.

Selections have three main uses in Painter. The first and simplest is that you can select part of an image in order to change it---for example, by applying a special effect. The second is that you can select an area to mask it, for example to shield it during painting or retouching. The third is that you can use a selection to convert an area into a floater.

See Also

Outline Paths
Curve Paths
Mask Representation Paths

Outline Paths

Painter keeps selections around even if theyre inactive. When a selection is inactive (not rendered into the mask) it becomes an outline path. Its shown as a solid black or red line.

An outline path can be moved around like a selection, and because it is not rendered into the mask, it can be moved and adjusted more quickly than a selection path.

Using outline paths it is possible to maintain multiple masks within a single image, because activating the outline path is easy.

See Also

Selection Paths
Curve Paths
Mask Representation Paths

Curve Paths

You can design using Bézier curves in Painter by using curve paths.

Curve paths are shown as a solid outline with control points and handles, like in draw applications.

Painter lets you import and export curve paths, and easily convert curve paths to selections and then back to curves.

See Also

Selection Paths
Outline Paths
Mask Representation Paths
Drawing a Bézier Curve Selection

Mask Representation Paths

Painter lets you paint into the mask, import masks from other programs, and generate masks from image or color data.

After doing one of the above, Painter calculates representative paths for the mask data you've created. These paths are shown as green-and-white dashed lines.

You can use these paths in the same ways you use selections. But the difference between these paths and selections is that selections are rendered into the mask and representative paths are computed from the mask.

See Also

Selection Paths
Outline Paths
Curve Paths

Basic Steps for Paths

The following steps are the basic ones you'll use when you work with selection, outline, and curve paths.

1. Create a path.

   Painter provides a number of different ways to create paths. Or, instead of creating your own, you can use one of the paths Painter provides.

2. If you like, edit the path until its exactly the way you want it by, for example, reshaping, smoothing, feathering, or moving it.

3. Determine how the path behaves.

   The Objects: P. List Palette is where you turn paths into selections, determine what area the selection protects when you use it for drawing or effects, and determine how the path is displayed.

4. Use a selection in your artwork as you draw, fill areas, and apply special effects. Painter 3 also makes it easy to work with groups of paths.

5. Save the path, if you like, in a path library, one that Painter provides or one that you create yourself.

See Also

Creating Paths
Editing Paths
Setting Up Selections in the Mask
Using Masks
Saving Paths in the Current Library
Saving Paths in Different Libraries

The Objects: P. List (Path List) Palette

The Objects: P. List Palette is where you control paths.

To open the Objects: P. List Palette, click the P. List icon on the Objects Palette.

The large area at the top of the palette is the Path List, where youll see the names of the paths in the current image.

The icons to the left of each name allow you to determine whether the path appears as a selection marquee, an outline, or a series of Bézier curves.

The groups of buttons next to the pencil (the Drawing buttons) and the eye (the Visibility buttons) determine how a selection is masked and displayed.

See Also

Using the Path List
Drawing and Visibility Buttons

Drawing and Visibility Buttons

The Drawing buttons determine whether the inside or outside of a selection is masked when you draw on an image. The first button turns off the selection so that is has no effect when you draw on an image. When the second button is selected, the selection protects the area inside its outline. When the third button is selected, the selection protects the area outside its outline.

The Visibility buttons determine how a selection looks. The first button makes the selection invisible, without turning it off. Clicking the second button displays the selection as a colored mask. Clicking the third button displays a selection as a selection marquee, also called marching ants. This button must be selected to apply an effect.

Youll see these Drawing and Visibility buttons in other places in Painter. They appear on the Controls: Outline Selection Palette and on the Controls: Path Adjuster Palette, as well as at the bottom left corner of the image window.

See Also

Setting Up Selections in the Mask

Creating Paths

In Painter, there are quite a few ways to create paths. The simplest one is using the Rectangular Selection Tool on the Tools Palette. With the Rectangular Selection Tool, you are limited to a rectangular area. So Painter has other tools for more complex selections.

The Oval Selection Tool allows you to make circular and oval selections. The Outline Selection Tool makes it possible to trace and draw paths freehand, with straight lines, and with Bézier curves. The Magic Wand creates a selection based on color similarity. The Text Selection Tool creates selections from font outline information. Masking brushes let you create a mask that can be turned into a selection by painting a mask on an image. Also, you can use imported EPS art from Illustrator and Freehand as a selection.

See Also

Selecting, Deselecting, and Reselecting
Drawing Selections with the Outline Selection Tool
Using the Magic Wand
Creating Text Selections
Painting a Mask to Create a Selection
Using Paths from the Path Library
Importing Paths from EPS Files

Drawing Selections with the Outline Selection Tool

Use the Outline Selection Tool on the Tools Palette to draw freehand and straight-line selection paths, or Bézier curve paths.

If you zoom up the size of your image, the Outline Selection Tool behaves as it did at 100%. This allows you to create precise selections if, for instance, you are working on a photograph and need to protect an intricate area.

Also, if the grid is turned on, the straight-line selections and Bézier curve paths are snapped to grid points as you create them.

See Also

Drawing a Freehand Selection
Drawing a Straight Line Selection
Drawing a Bézier Curve Selection

Drawing a Freehand Selection

With freehand selections, your drawing style is not restricted.

1. Click the Outline Selection Tool on the Tools Palette to select it.
2. On the Controls: Outline Selection Palette, select the Freehand Draw Style.
3. Click and drag on the area where you want the selection to be.

   When you let up on the stylus or the mouse, the selection appears as a selection marquee.

If the selection is close to the shape you need, you can edit or resize it.

If you dont like the shape of the selection, draw another. Painter replaces the first one. The first selection still exists, its just inactive. Note that inactive selections (outline paths) appear as solid lines so you can use them as a reference when making a new freehand selection.

See Also
Editing a Freehand Selection Path

Drawing a Straight Line Selection

To draw straight-line selections, you draw in a point-to-point manner. Line segments can be constrained to 45° and the points are adjustable by converting the selection to a Bézier curve.

1. Click the Outline Selection Tool on the Tools Palette to select it.
2. On the Controls: Outline Selection Palette, select the Straight Lines Draw Style.
3. Click where you want the selection to begin.

   An origin mark appears.
4. Click and hold.

   A rubber band appears that shows where the line will be.
5. Position your line by moving the rubber band with the mouse or stylus.
6. Set the line by releasing the mouse or stylus.
7. Continue this process, creating the sides of the polygon. To constrain the line angle to 45° or 90°, hold down the **Shift** key as you click.
8. Complete the polygon by clicking inside the origin marker or pressing **Enter**.

   Painter draws a line from the ending point to the origin point and the polygon becomes a selection.

Drawing a Bézier Curve Selection

To draw Bézier curve paths, you create curved shapes based on a series of control points that use handles to adjust the curves.

1. Click the Outline Selection Tool on the Tools Palette to select it.
2. On the Controls: Outline Selection Palette, select the Bézier Curve Draw Style.
3. Click the point where you want the curve to begin and, without letting go of the mouse or stylus, drag out a handle in the direction you want your curve to go.
4. Click a second point where you want the curve to extend, and drag a second handle.

   A curve rises from between the two control points. If you dont click and drag the handles you will draw a straight line between the points.
5. Let go of the mouse or stylus.

   The curve is finished. Youll notice that it is surrounded by selection points, which you will use to move the curve and refine its shape.

See Also

Controlling Bézier Curve Length and Angle
Continuing Bézier Curves
Deleting a Bézier Curve Segment
Closing Off a Bézier Curve
Editing a Bézier Curve Path

Controlling Bézier Curve Length and Angle

Follow these steps to control the length and angle of a Bézier curve.

1. Control the length of the curve by altering the distance between the control points.

   The closer you position the control points, the narrower the curve. The farther apart the control points are, the wider the curve.

2. Control the angle of the curve by adjusting the length of the handles.

   The shorter the handles, the smaller the curves angle will be. The longer the handles, the greater the angle. Each handle also controls the amount of curvature of the curve at the corresponding control point.

See Also

Drawing a Bézier Curve Selection
Continuing Bézier Curves
Deleting a Bézier Curve Segment
Closing Off a Bézier Curve
Editing a Bézier Curve Path

Continuing Bézier Curves

Use this procedure to continue drawing Bézier curves.

1. Click and drag out a third control point that is connected to the second control point.
2. Continue to click and drag, creating curves needed to design whatever shape you desire.

See Also

Drawing a Bézier Curve Selection
Controlling Bézier Curve Length and Angle
Deleting a Bézier Curve Segment
Closing Off a Bézier Curve
Editing a Bézier Curve Path

Deleting a Bézier Curve Segment

To delete the most recently drawn curve segment, press the **Backspace** key.

See Also

Drawing a Bézier Curve Selection
Controlling Bézier Curve Length and Angle
Continuing Bézier Curves
Closing Off a Bézier Curve
Editing a Bézier Curve Path

Closing Off a Bézier Curve

To close off a shape, click the starting point. The next mouse click begins a new shape.

If you dont close off a shape, control points and Bézier curves are added to the end of the currently selected shape.

See Also

Drawing a Bézier Curve Selection
Controlling Bézier Curve Length and Angle
Continuing Bézier Curves
Deleting a Bézier Curve Segment
Editing a Bézier Curve Path

Using the Magic Wand

Instead of selecting areas by drawing a shape over them, the Magic Wand makes a selection according to pixel color. Pixels come in related groups of colors based on hue, saturation, and value. You can adjust Painter to accept a narrow or wide range of pixels within a color group, or multiple color groups.

The Magic Wand looks only for contiguous pixel areas in the image. If you want to find all instances of a color group in an image or an area of the image, the image or the area must be selected with the Rectangular Selection Tool.

1. Choose **Edit: Magic Wand**.

   The Magic Wand dialog box appears and the cursor becomes a magic wand.

2. Click and drag the Magic Wand over the color group you want to select.

   The HSV sliders in the Magic Wand dialog box change, reflecting the range of selected colors. The Magic Wand selection will now be displayed as a colored mask.

3. To add to the selected area, you can either hold down the **Shift** key and drag the Magic Wand over additional areas, or you can adjust the HSV sliders to increase the number of color groups in the selection.

4. Click **OK** or press **Enter**.

   A selection marquee appears around the selected area.

Creating Text Selections

Add type to your images by using the Text Selection Tool. You can work with text as you do other selections.

1. Click the Text Selection Tool on the Tools Palette.

   Text selection controls appear on the Controls Palette.

2. On the Controls: Text Selection Palette, use the Point Size slider to choose the point size.

   If, after you type on the screen, youre not happy with the size, you can either resize it as you would resize any selection, or you can delete it, adjust the point size, and retype.

3. Choose a font from the Font pop-up menu.

4. Move the cursor into the document. It changes to an I-beam.

5. Click where you want text to appear and type.

   Like any selection, the type is surrounded by a selection marquee. You can now use it like any selection.

You can kern type by dragging one or more active letters with the Path Adjuster Tool or nudge active characters with the keyboard arrow keys. The tracking slider in the Controls: Text Selection Palette also allows you to control the spacing Painter puts between the letters you type.

See Also

Selecting Paths

Painting a Mask to Create a Selection

With Painters masking tools, you can paint a mask in an image and turn it into a selection.

1. Choose the Masking brush from the Brushes Palette.
2. Select a color from the Art Materials: Colors Palette. Use black to add to the mask and use white to take away from the mask.
3. Paint a mask in the image.
4. To convert the mask to a selection, choose the third Visibility icon to create a mask representation path (green-and-white marching ants) from the mask.

See Also

Masking Techniques
Drawing and Visibility Buttons

Using Paths from the Path Library

Instead of creating your own selections, you can use the ones Painter provides. Painter provides a set of basic geometric selections in the Objects: Paths Palette.

1. Click the first icon on the Objects Palette, the Paths icon, to open the Objects: Paths Palette.

   Five paths appear on the drawerfront. More are stored inside the drawer.

2. Drag the path you want to use into an open document.

   It becomes the current path.

See Also

Saving Paths in the Current Library
Saving Paths in Different Libraries
Creating Path Libraries
Opening Path Libraries

Importing Paths from EPS Files

You can make paths from EPS files, such as those created in Freehand and Illustrator.

To do this, you can choose **Tools: Selections: Open EPS as Selection** and choose from the directory that appears.

Or you can use the **Library** button in the Objects: Paths Palette drawer.

1. Open the drawer of the Objects: Paths Palette and click **Library**.

   A dialog box appears.

2. Click **Open EPS**.

   The Open dialog box appears.

3. Open the EPS file you wish to import as a path.

   The new path appears in your document. If you like, you can save it in a path library.

See Also

Saving Paths in the Current Library
Saving Paths in Different Libraries
Creating Path Libraries
Opening Path Libraries

Editing Paths

If you're not happy with a path, you can edit it.

For most editing operations, you select a path before you change it. Painter provides two tools for selecting a path: the Path List and the Path Adjuster Tool.

See Also

Using the Path List
Selecting Paths
Converting Path Types
Deactivating an Active Selection
Using Deselect
Using Reselect
Selecting More Than One Path at a Time
Making a Set of Paths Active in the Mask
Deselecting One Path
Selecting All Paths
Deselecting All Paths
Renaming Paths
Deleting Paths
Moving and Resizing Selection Paths
Grouping Paths
Editing a Freehand Selection Path
Editing a Bézier Curve Path
Using Selections to Edit Selections
Adding to a Current Selection
Subtracting from a Current Selection
Feathering Selections
Smoothing Paths
Widening Paths

Using the Path List

When you add a path to a document, either by creating it or dragging in an existing one, the name of the path appears in the Path List on the P. List Palette.

A path can be selected in the list by clicking its name. If theres a selected path in the list, its name appears in bold and highlighted in blue.

This list is great for keeping track of paths, but you can also use it to make paths active, to rename them, and to group them.

See Also

The Objects: P. List (Path List) Palette

Selecting Paths

Use the Path List or the Path Adjuster Tool on the Tools Palette to select a path so you can edit it, for example, by deleting, moving, or resizing it.

When you click the Path Adjuster Tool, the Controls: Path Adjuster Palette provides a number of ways to adjust paths.

Click the path with the Path Adjuster Tool.

Or click the name of the selection in the Path List.

Handles appear around the path (only when you are using the Path Adjuster Tool) to show that it is active and its name turns bold in the Path List.

Converting Path Types

Painter offers four types of paths for greater flexibility. Each path type is created differently and, depending on the task, one may be more suitable than another.

For example, a curve path has Bézier control points and handles that allow for precise adjustment of a path. On the other hand, the Outline Selection Tool can create freehand paths that would be difficult to make with a Bézier pen.

Converting between path types lets you start a shape with one path type and finish up in another.

See Also

Convert to Curve
Convert to Selection
Converting Path Types Using the Icons

Convert to Curve

Choose **Tools: Selections: Convert to Curve** to change all selected paths into curves.

Choosing this command is the same as clicking on the pen icon next to a Path List item in the Objects: P. List Palette for each selected path.

Use this command if there is no pen icon next to the name in the Path List.

See Also

Converting Path Types Using the Icons

Convert to Selection

Choose **Tools: Selections: Convert to Selection** to change selected paths into selections.

Choosing this command is the same as clicking the circle icon next to a Path List item in the Objects: Path List Palette for each selected path.

See Also

Converting Path Types Using the Icons

Converting Path Types Using the Icons

A path in the Path List has space in its list item for two icons. These icons, to the left of the paths name, indicate which of the four types the path is. The left icon indicates the outline selection state. The right icon indicates whether Bézier curve data is associated with the path.

The icon on the far left is a dashed circle when the path is a selection path. The left icon is a solid circle when the path is an outline path. A path in this (dormant) form appears in the image as a solid outline (only when either the Path Adjuster Tool or the Outline Selection Tool is selected).

The right icon is a pen icon, which indicates that the path can be edited in Bézier curve form. When this icon is solid, the path is in Bézier curve form and appears on screen as a Bézier curve with handles (only when either the Path Adjuster Tool or the Outline Selection Tool is selected).

The left icon is a green dashed circle when the path is a mask representation.

You can click these icons to change the state of a path---from selection to outline to Bézier curve and back.

The active selections are the ones that are displayed as dashed circles. (You can activate more than one at a time.) These are the ones Painter uses when you apply color or effects.

Deactivating an Active Selection

Follow these steps to deactivate an active selection.

1. Click the active selection Path List.
2. Press **Enter** to convert the active selection to an outline path.

   Or click the dashed circle icon.

   The selection is converted to a solid outline indicating that it is inactive. The icon in the Path List changes to a solid circle.

See Also

Converting Path Types Using the Icons
Outline Paths

Using Deselect

When you are using the Path Adjuster Tool and you choose **Edit: Deselect (Ctrl+D)**, all paths are deselected.

If you are not using this tool, choosing **Edit: Deselect** makes selections invisible in the image. (Check the Objects: P. List Palette and youll see that the left Drawing and Visibility buttons are outlined in red.)

See Also

Drawing and Visibility Buttons

Using Reselect

Edit: Reselect (Ctrl+R) turns on the display of the selections that define the mask.

You can also turn them on by clicking the third Visibility icon in the Objects: P. List Palette.

See Also

Drawing and Visibility Buttons

Selecting More Than One Path at a Time

Follow this procedure to select more than one path at a time:

1. Click the Path Adjuster Tool on the Tools Palette.
2. Hold down the **Shift** key and click the paths you want to select.
   Or drag a selection marquee around the paths you want to select.

You can also use the Path List to group paths and work with them as a group.

See Also

Grouping Paths

Making a Set of Paths Active in the Mask

To make a set of paths active in the mask, you may need to press the **Enter** key to turn the selected paths into selections that define the mask.

Deselecting One Path

Use this procedure to deselect a path while keeping others selected.

On the Path List, **Shift**-click a selected path to deselect it.

Or click the Path Adjuster Tool on the Tools Palette. Then hold down the **Shift** key and click the paths you wish to deselect. If there is a complex overlapping of paths, click the edge of a path to select it.

Selecting All Paths

Follow this procedure to select all paths.

Click the Path Adjuster Tool on the Tools Palette and choose **Edit: Select All (Ctrl+A)**.

Or drag a selection marquee around the paths with the Path Adjuster Tool.

Deselecting All Paths

Follow this procedure to deselect all paths:

Click the Path Adjuster Tool on the Tools Palette and choose **Edit: Deselect (Ctrl+D)**.
Or click with the Path Adjuster Tool anywhere outside of the paths.

Renaming Paths

In the Path List, Painter simply names your paths selection 1, selection 2, and so on, but you can call them anything you like.

1. Double-click its name in the Path List or select the name and press **Enter**.
2. Type a new name in the Path Attributes dialog box that appears and click **OK** or press **Enter**.

Deleting Paths

Deleting a path means its gone forever, unless you saved it in a library. Instead of deleting it, you might want to turn it off or make it invisible with the Drawing and Visibility buttons.

1. Select the path with the Path Adjuster Tool.
2. Press **Backspace**.

If the Path Adjuster Tool isnt chosen when you press **Backspace**, Painter deletes the image area inside the selection instead of the selection.

See Also

Drawing and Visibility Buttons

Moving and Resizing Selection Paths

To move or resize a selection path, you must first choose the Path Adjuster Tool from the Tools Palette. These methods work on individual paths or on groups.

To move a path, drag the path to the new location.

To resize a path, drag a corner or side path handle.

To resize a path proportionally, **Shift-**click and drag a corner handle.

To rotate a path, hold down the **Ctrl** key and drag a corner handle.

To skew a path, hold down the **Ctrl** key and drag a side handle.

To copy a path, hold down the **Ctrl+Alt** keys and drag a copy of the active path to a new location.

Grouping Paths

The Path List makes it possible to put together paths in groups and makes it easy to manage large groups. When paths are grouped, Painter treats them as a single entity so that, for example, you can move them together.

1. On the P. List Palette, select the paths you want to group by clicking them.
2. Hold down the **Shift** key and click to select additional paths you want to include in the group.

   Each selected path is highlighted.
3. On the P. List Palette, click **Group**.

   A group name appears above the paths on the list. Painter names groups Group 0, Group 1, Group 2, and so on. Grouped items appear in a hierarchy in which clicking triangles reveals the contents of directories. When the triangle is pointing to the right, the group is locked and the entire group can be dragged as a unit.

See Also

Adding a Path to a Group
Removing a Path from a Group
Renaming a Group
Ungrouping Paths

Adding a Path to a Group

Follow this procedure to add a path to a group.

1. On the Path List, make sure the group is open .
2. Drag the name of the path, or the name of another group, into the group.

See Also

Grouping Paths

Removing a Path from a Group

Follow this procedure to remove a path from a group.

On the Path List, drag the name of the path, or the name of another group, out of the group.

See Also

Grouping Paths

Renaming a Group

Follow this procedure to rename a group.

1. Double-click the group name in the Path List.
2. Type a new name in the dialog box that appears and click **OK** or press **Enter**.

See Also

Grouping Paths

Ungrouping Paths

Follow this procedure to ungroup paths.

1. Select the group either by clicking it with the Path Adjuster Tool or by clicking its name on the Path List.
2. Click the **Ungroup** button in the P. List Palette.

   Painter now treats each path in the group individually.

Note: To apply an effect to a group, the group must be closed and all paths in the group must be displayed as marching ants. With the group closed, but selected in the Path List, pressing the **Enter** key will either activate or deactivate all members of the group.

See Also

Grouping Paths

Editing a Freehand Selection Path

Add or subtract pieces of freehand selections to get the shape you want.

1. Click the Outline Selection Tool on the Tools Palette to select it.
2. With a selection showing, hold down the **Shift** key and use the Outline Selection Tool to draw a piece where youd like to add or subtract from the existing selection. With a stylus, press more heavily to add or subtract a bigger area, press lightly to add or take away a smaller piece or make a gentler change.

   The selection redraws showing your change.

See Also

Drawing a Freehand Selection

Editing a Bézier Curve Path

When a path is shown as a Bézier curve you can use the Path Adjuster Tool or the Outline Selection Tool to edit the curve. Drag a handle to move a point in the curve or to adjust a curves angle and tension.

See Also

Drawing a Bézier Curve Selection

Using Selections to Edit Selections

Using selections to cut pieces out of intersecting selections is handy for effects such as opening up an area in a selection (in essence, punching a hole in the selection) and for creating layered shapes or image sections.

Punch a hole in a selection by turning an intersecting selection into a negative selection so that it cuts a piece out of a positive one. You can use the **Option+Ctrl** keys or you can use the plus and minus buttons on the bottom of the Objects: P. List Palette. The keyboard is best for simple situations, for example, when you first draw a negative selection or if you only need one selection. The P. List Palette buttons are best for more complex editing maneuvers, such as working with multiple selections and switching back and forth between negative and positive selections.

Using selections to edit selections is the only time that selections are considered to be positive or negative. The terms "positive" and "negative" do not refer to whether a selection is turned on or off or to how the Drawing and Visibility buttons are set.

1. Select the Outline Selection Tool and draw a selection of any shape.

   On the Controls: Outline Selection Palette, the third Drawing and Visibility buttons are selected, meaning you can paint inside the selection, which is displayed as a selection marquee.

2. Draw a second selection and make it overlap the first.

   Both selections are still positive.

3. Look at the circle icons to the left of the selection names in the P.List. The second selection you drew appears as an outline. Click it to change it to a dashed circle and make the selection active.

4. Click the second Visibility button on the Controls: Outline Selection Palette to preview the selections as a color.

   The two selections appear as one shape.

5. Click the third Visibility button on the Controls: Outline Selection Palette to view the selections as a marquee again.

6. Click the selection on the right with the Path Adjuster Tool to make it active.

7. Click the minus button on the Controls: Path Adjuster Palette.

   The red selection marquee shows that the selection is now negative.

8. Make sure the icons to the left of the selection names in the P. List appear as dashed circles.

9. Click the second Visibility button on the Controls: Path Adjuster Palette to preview the selections as a color again.

   The negative selection takes a bite out of the positive selection.

The Path List provides another way to work with negative selections. Painter lets the top paths in the P. List take priority over the ones below it. So, when selections overlap, you can move a negative selection around in the list to control which positive selections it takes a bite out of.

Adding to a Current Selection

You can work with more than one selection at a time.

1. With a selection already showing, select the Outline Selection Tool and any draw style you like.
2. Move the cursor into the image and hold down the **Ctrl** key.

   A small plus sign appears next to the cursor.
3. Continue holding down the **Ctrl** key as you draw a new selection.

   You now have two current selections, and you can add as many as youd like. Any effects or fills you use will apply to all of the selections.

Subtracting from a Current Selection

Use the Outline Selection Tool to subtract from the current selection.

1. Draw a selection.
2. With the Outline Selection Tool selected, hold down the **Option+Ctrl** keys.

   A small minus sign appears next to the cursor.
3. Still holding down the **Option+Ctrl** keys, draw inside the first selection.

   You now have a selection with a hole in it. When you paint across the two selections with a brush, there will be color inside the selection but not inside the hole.

Feathering Selections

Using the Feather slider at the bottom of the Controls: Outline Selection Palette, you can feather the edge of a selection (even after you have created it).

If you leave the Feather slider all the way to the left, no feathering is done and the selection has a one-pixel-wide edge with anti-aliasing. Moving the slider to the right increases the feathering, centered on the selection edge.

The feathering setting stays with a selection when it is moved or rotated. Also, the Feather slider remains in the same position until you change it, and applies to new and existing selections. However, the feathering setting will not be saved when you save a selection in the path library.

Smoothing Paths

The **Smooth** button on the Objects: P. List Palette lets you smooth paths.

1. Click the Path Adjuster Tool and click a path to select it.
2. Click **Smooth** on the Objects: P. List Palette.
3. Repeat the above steps to make the effect more pronounced.

Widening Paths

The **Widen** button on the Objects: P. List Palette lets you widen paths.

1. Click the Path Adjuster Tool and select a path.
2. Click **Widen** on the Objects: P. List Palette.
   The Widen Selection dialog box appears.
3. Enter the number of pixels you want to widen by.
   You can use negative numbers to shrink the selection.
4. Click **OK** or press **Enter**.

Setting Up Selections in the Mask

After you create and edit paths, you need to set them up as selections to protect your artwork. This is where the Drawing and Visibility buttons come in. The Drawing and Visibility buttons are available on the Objects: P. List Palette and the Controls: Path Adjuster Palette.

To turn a path into a selection, click the path in the Path List and press **Enter**. The **Enter** key will toggle the selection state of the path.

To make a selection invisible without turning it off, click the first Visibility button.

To protect the area inside a selection so that you can draw outside it, click the second Drawing button.

To protect the area outside a selection so that you can draw inside it, click the third Drawing button.

To display a mask as a color, click the second, or middle, Visibility button.

To display a selection as a selection marquee or marching ants, click the third Visibility button.

See Also

Drawing and Visibility Buttons

Setting Selection Mask Color Overlay and Opacity

If you work with your selection as a color overlay (the second, or middle, Visibility button) rather than as a selection marquee (the third Visibility button), you may want to change its color to contrast with your work area. Or you can make the overlay transparent or opaque.

1. Open the Objects: P. List Palette.
2. Click the square in the lower right-hand corner of the Objects: P. List Palette.

   The Color Picker appears.
3. Select a color on the Color Picker.
4. Click **OK** or press **Enter**.

   The mask is now the color you selected.

Note: If the cursor is the same color as the selection, you can change the cursor color by choosing **Edit: Preferences: General** and clicking one of the color rectangles.

See Also

Drawing and Visibility Buttons
Cursor Setup

Making Masks Transparent or Opaque

Follow this procedure to make masks transparent or opaque.

1. Click the second, or middle, Visibility button to show the selection as a color.
2. On the expanded Objects: P. List Palette, check or uncheck the **Transparent Mask** checkbox.

Using Masks

After you create a selection and set it up in the mask the way you want it, youre ready to draw or paint.

If you want to draw inside or outside the selection, just select a brush and begin.

Painter's AutoClone and Auto Van Gogh features also work with selections.

See Also

Using Masks for Special Effects
Filling an Area
Using AutoClone
Using Auto Van Gogh

Using Masks for Special Effects

While you can use a selection to select a piece of your image that you will then apply an effect to, you can also use the mask determined by the selection to actually create the special effect. This is done in the Using pop-up menus that are included with most of the commands on the Effects menu.

The Using menus let you decide how Painter will come up with a given texture. With Paper Grain chosen, for instance, Painter uses the selected paper texture as the basis for the effect, whether its Glass Distortion or Apply Screen. In each of these Using menus, Mask is a choice for creating texture. What this choice does is create texture based on the edge of the selection.

The following steps use **Effects: Surface Control: Apply Surface Texture** as an example, but the steps apply to any command on the Effects menu that has a Using menu.

1. Choose **File: New**.
2. In the New Picture dialog box, click **Set Paper Color** and choose a sky blue. Then click **OK** or press **Enter**.
3. Draw a selection with the Outline Selection Tool.
4. Click the Path Adjuster Tool on the Tools Palette.

   Path Adjuster controls appear on the Controls Palette.
5. On the Controls: Path Adjuster Palette, move the Feather slider to 6.
6. Choose **Edit: Deselect**.

   Your selection disappears, but it still exists.
7. Use the Rectangular Selection Tool to draw a marquee around the now invisible selection.
8. Choose **Effects: Surface Control: Apply Surface Texture**.
9. Choose **Mask** from the Using menu and click **OK** or press **Enter**.

   A texture appears at the edge of the selection, as if it were embossed into your image.

See Also
Special Effects

Saving Paths in the Current Library

If you create a path that youll use again, you can save it in the current paths library.

1. Use the Path Adjuster Tool to select the path you want to save.
2. Open the Objects: Paths Palette and then open the drawer.
3. Drag the path you selected into the Objects: Paths drawer.

   The Save Path dialog box appears.
4. Type in the name of the path and click Save.

Painter provides a library of paths, but you can create as many additional libraries as you need.

See Also

Using Paths from the Path Library
Saving Paths in Different Libraries
Saving a Path as an EPS File
Creating Path Libraries
Opening Path Libraries

Saving Paths in Different Libraries

Follow these steps to save a path in a different library.

1. Use the Path Adjuster Tool to select the path you want to save.
2. Open the Objects: Paths Palette and then open the drawer.
3. Click the **Library** button inside the drawer.
   The Paths dialog box appears.
4. Click the **Library** button at the bottom of the dialog box.
   A directory box appears.
5. Select the name of the paths library in which you wish to save your path.
6. Click **Save**.
   The Save Path dialog box appears.
7. Type the name of the path and click **Save**.

See Also

Using Paths from the Path Library
Saving Paths in the Current Library
Saving a Path as an EPS File
Creating Path Libraries
Opening Path Libraries

Saving a Path as an EPS File

Follow these steps to save a path as an EPS file:

1. Use the Path Adjuster Tool to select the path you want to save, or highlight a path in the current library in the Path dialog box.
2. Open the drawer on the Objects: Paths Palette and click the **Library** button.

   A dialog box appears.
3. Click **Save EPS**.

   A Save dialog box appears.
4. Locate the disk on which you want to save the EPS file. Type a file name then click **OK** or press **Enter**.

   The path is saved as an EPS file.

Note: The EPS file you just saved can be opened in most other illustration programs that support the EPS file format.

See Also

Using Paths from the Path Library
Saving Paths in the Current Library
Saving Paths in Different Libraries
Opening Path Libraries

Creating Path Libraries

You can create your own custom libraries to organize selections by category. When youre creating a library, keep in mind that the smaller the library, the easier it will be to see its contents at a glance in the drawer of the Objects: Paths Palette.

There are two ways to create a new library. You can use the **Library** button in the drawer of the Objects: Paths Palette or you can use the **Tools: Movers: Path Mover** command. The advantage of using the **Library** button is that its readily accessible in the Paths Palette. The advantage of the Path Mover is that it also lets you set up the library in other ways, for example, by moving paths into it.

To create a library with the **Library** button:

1. Open the drawer of the Objects: Paths Palette and click **Library**.

   The Paths dialog box appears.
2. Click **Open Library**.

   An Open dialog box appears.
3. Click **New**.
4. In the dialog box that appears, type a name for the new library and click **Save**.

To set up libraries with the Path Mover:

1. Choose **Tools: Movers: Path Mover**.

   The Path Mover dialog box appears.
2. To create a new path library, click **New**. Type a name for the new library and click **Save** or press **Enter**.

   The new librarys name appears on the right-hand side of the Path Mover dialog box.
3. To move paths into a library, click the path name on the left side of the dialog box and then click **Copy**. If you dont see the path name, click **Close** to close the library on the left side of the dialog box. Then click **Open** and choose a new library.
4. If you want to rename a selected path, click **Change Name**. The Change Path Name dialog box appears. Type the new path name and click **OK** or press **Enter**.
5. If you want to delete a selected path, click **Remove**.
6. If you want to move a path to another, existing library, click **Close** to close the open library on the right-hand side of the dialog box. Then click **Open**, choose a new path, and follow the instructions in Step 3 for moving a path into a library.
7. When youre finished making changes in the Path Mover dialog box, click **Quit** or press **Enter**.

Note: To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

See Also

Using Paths from the Path Library
Saving Paths in the Current Library
Saving Paths in Different Libraries
Saving a Path as an EPS File
Opening Path Libraries

Opening Path Libraries

When you want to work with a different group of paths, you can open another path library.

1. Open the drawer of the Objects: Paths Palette and click **Library**.
   The Paths dialog box appears.
2. Click **Open Library**.
3. In the dialog box that appears, select a library and click **Open**.
   The paths in the library appear in the Paths Palette.

See Also

Using Paths from the Path Library
Saving Paths in the Current Library
Saving Paths in Different Libraries
Saving a Path as an EPS File
Creating Path Libraries
Opening Path Libraries

Stroking Selections with the Current Tool

If you want to use the current brush to draw along a selections outline, first choose the brush you wish to outline with and then choose **Tools: Selections: Stroke Selection**.

The drawing icons in the Objects: P. List Palette determine whether the stroke is drawn on the inside, outside or both sides of the selection.

See Also

The Objects: P. List (Path List) Palette

Working with Floaters

Floaters are image elements that float above the background of your image. Select pieces of your image, float them, and move them around to suit your design. Layer multiple floaters and move them from front to back. Apply effects to floaters without affecting the background or alter the background without changing the floaters. Floaters remain independent of the background even when theyre deselected, so you can move them again at any time. You can even save a document with the floaters still floating.

For help with floaters, click a topic.

Basic Steps

Here are the basic steps you'll use when you work with floaters:

1. Select an image to float with any selection tool. Or use one of the floaters supplied on the Objects: Floaters Palette.
2. Turn the selection into a floater by clicking inside it with the Floating Selection Tool.
3. Select the floater so that you can move it around and change it.
4. Work with multiple floaters---layer them, change the order of the layers, and group them.
5. Finish your composition by dropping the floaters into the background.
6. Save floaters and keep them organized in floater libraries.

About Painter's Layers

It's helpful to keep in mind that floaters float in a layer above Painter's background layer. A floater has a visible 24-bit color layer and an invisible 8-bit color mask layer. The background has its own mask layer.

You can change a floater's mask layer in various ways that affect the visibility of the color layer. For example, you can adjust a floater's opacity. Painter's masking brushes make it possible to reveal parts of one layer through another.

See Also

About Masks

Selecting Images to Float

There are two ways to select an image to float: with Painter's selection tools and with masking tools.

You can use any selection method to select an image to float. Selections created with the Rectangular Selection Tool, the Outline Selection Tool, the Magic Wand, and the Text Selection Tool are all potential floaters, as are EPS files imported from Illustrator or Freehand.

You can also select images to float with the Auto Mask command, the Masking brushes, and masks brought into Painter from ColorStudio or Photoshop.

See Also

Creating Paths
Using Auto Mask
Bringing in Masks from Other Programs
Using Masking Brushes

Floating a Selection

Use the Floating Selection Tool or the Rectangular Selection Tool to float a selected image.

Make sure that the selection is displayed as a marquee (the last Visibility button), not as a mask (the middle Visibility button).

1. On the Tools Palette, click the Rectangular Selection Tool or the Floating Selection Tool.
2. Click inside the selection to float it.

   You now have a floater that you can move anywhere in your image without it becoming part of the image.

Once you create a floater, you can use any of Painter's tools and effects to change it. You can also save it and use it repeatedly.

Note: If you don't want to cut the selection from the background and leave a hole, make a copy of it by holding down the **Option** key when you click inside the selection.

See Also

Using Existing Floaters

Using Existing Floaters

Another way to include a floater in an image is to get one of the floaters Painter provides on the Objects: Floaters Palette.

1. If the Objects Palette doesnt appear on the screen, choose it from the Window menu or press **Ctrl+5**.
2. Click the Floaters icon on the Objects Palette to open the Floaters Palette.
3. Find the floater you want to use.

   If you don't see one you like on the drawerfront, open the drawer to see more.
4. Drag the floater you want to use from the drawerfront, or from the inside of the drawer, to where you want it in your document.

   The floater "explodes" to its original size.

You can also save your own floaters in the Objects: Floaters Palette.

See Also

Floating a Selection
Saving a Floater
Opening a Floater Library

Saving a Floater

You can save your own floaters in the Objects: Floaters Palette.

1. Click the floater with the Floating Selection Tool. Hold down the **Option** key if you want to leave a copy in the image window.
2. Drag the floater to the Floaters Palette, either into the drawer or onto the drawerfront.

   The Save Floater dialog box appears.
3. Type a name for the floater and click **OK** or press **Enter**.

   A thumbnail of the floater appears in the drawer.

See Also

Floating a Selection
Opening a Floater Library
Organizing Floater Libraries

Opening a Floater Library

Painter's floaters are stored in libraries. Open a new library when you want to use floaters in another library.

1. Click **Library** in the drawer of the Objects: Floaters Palette.
2. Double-click the library you want to open, or select it and click **Open** or press **Enter**.

See Also

Organizing Floater Libraries

Opening the F. List (Floater List) Palette

When a floater is in the image window, its name appears in the list of floaters on the Objects: F. List Palette.

The list shows the currently selected floater in bold type. If no floaters are selected, everything in the list appears in plain type.

Click the F. List icon on the Objects Palette.

You'll use the Floater List Palette to select, edit, layer, and group floaters, as well as to drop them into the background.

This palette also determines visibility among floaters and in relation to the background mask layer.

See Also

Selecting Floaters
Deselecting Floaters
Reselecting Floaters
Feathering Edges
Working with Multiple Floaters
Determining Which Part of a Floater Is Masked
Using Floater Mask Visibility Buttons
How Floaters Interact with the Background

Selecting Floaters

Select floaters before you move or change them. You can use the Floating Selection Tool, the Rectangular Selection Tool, or the Objects: F. List Palette.

Click the floater with the Floating Selection Tool or the Rectangular Selection Tool. Or click the floater's name on the F. List Palette.

A selection marquee surrounds the floater in the image and its name is bold and highlighted on the F. List Palette.

See Also

Opening the F. List (Floater List) Palette
Deselecting Floaters
Reselecting Floaters
Hiding the Selection Marquee

Deselecting Floaters

You can deselect floaters using the Floating Selection Tool, the Rectangular Selection Tool, or the Objects: F. List Palette.

Click outside the floater with the Floating Selection Tool or the Rectangular Selection Tool.

Or click in the empty space below the F. List Palette.

The floater's selection marquee disappears and its name appears in plain text on the F. List Palette.

Note: A deselected floater continues to float.

See Also

Opening the F. List (Floater List) Palette
Selecting Floaters
Reselecting Floaters

Reselecting Floaters

You can reselect floaters using the Floating Selection Tool, the Rectangular Selection Tool, or the Objects: F. List Palette.

If all or part of the floater is visible, click it with the Floating Selection Tool or Rectangular Selection Tool. Or click its name on the F. List Palette.

If a floater is invisible, click its name on the F. List Palette.

If there are two layered floaters, clicking in a floater's visible part selects, even if you click within the other's selection marquee.

See Also

Opening the F. List (Floater List) Palette
Selecting Floaters
Deselecting Floaters
Working with Multiple Floaters

Hiding the Selection Marquee

Hiding the selected floater's selection marquee is handy when you apply an effect and you don't want the marquee to interfere.

Click the **Show Selection Marquee** checkbox in the bottom-left corner of the F. List Palette.

Or press **Shift+Ctrl**+**H**.

Moving Floaters

Once a floater is selected, you can move it anywhere in an image.

To move a floater:

Drag the selected floater with the Floating Selection Tool or the Rectangular Selection Tool. You can also do slight nudges by pressing the arrow keys on your keyboard while a floater is selected.

When you move the floater the first time, it can leave a hole in the background. Choose **Edit: Undo (Ctrl+Z)** to restore the background image while retaining the floater.

To move a floater and keep a copy:

Hold down the **Option** key and drag the floater with the Floating Selection Tool.

Painter makes a copy of the floater while preserving the image.

You can also move floaters as a group and move them on top of each other to create layers that you can then order and combine in complex ways.

See Also

Selecting Floaters
Working with Multiple Floaters

Editing Floaters

The possibilities for editing floaters range from standard editing techniques like copying and pasting to unique features like feathering. You can cut or copy a floater to the Clipboard so that it can be pasted into any image window, enhance a floater with commands on the Effects menu, select a floater and delete it, paint in a floater, paint into the background behind a floater, change a floater's opacity, and feather its edges.

The Controls: Floating Selection Palette that appears when you select the Floating Selection Tool makes a number of ways to edit floaters immediately accessible. You can use this palette to change a floater's opacity and feather its edges.

This palette also provides compositing methods and ways to work with multiple floaters that are described later in this chapter.

See Also

Changing a Floaters Opacity
Feathering Edges
Painting in a Floater
Painting in the Background
Cloning with Floaters

Changing a Floater's Opacity

To make a floater more or less transparent, select it and adjust the Opacity slider in the Controls: Floating Selection Palette.

Feathering Edges

To feather the edges of a selected floater, move the Feather slider in the Floaters Palette.

How much you can feather a floater is determined in the General Preferences dialog box. Choose **Edit: Preferences: General**. Notice that the floater Pre-Feather is preset to 16 pixels, making this the maximum setting allowed for the Feather slider. You can change this default to any number up to 50. The change takes effect the next time you start Painter.

Use the **Trim** and **Expand** buttons on the Objects: F. List Palette to edit a floater's edge. The **Trim** button reduces a floater's selection marquee to the minimum rectangle necessary to contain the 24-bit color and 8-bit mask information. The **Expand** button adds to the extent of a floater's edge, allowing you to feather it by an amount greater than it was originally set.

See Also

Pre-Feather
Opening the F. List (Floater List) Palette

Painting in a Floater

When you want to paint or draw in a floater, just select it and start painting. The floater's mask automatically protects the background. Make sure you select a floater first or your stroke will appear in the background, not in the floater.

You can use most of Painter's brushes to paint or draw in floaters, except the Water Color brushes. The wet layer won't work when a floater is selected. You can, though, deselect floaters and paint with Water Colors in the background.

See Also

Selecting Floaters
Deselecting Floaters
Painting in the Background

Painting in the Background

Floaters remain active even when they aren't selected, so you can edit the background without disturbing them.

1. Deselect the floaters.
2. Paint with any brush and color.

   The color goes into the background behind the floaters. Image-editing effects will also happen behind deselected floaters.

   Try a simple effect. Choose **Effects: Fill (Ctrl+F)**. Fill the background with the current color. Floaters are unaffected by the application of effects, whether they are fills or Effects menu commands.

See Also

Deselecting Floaters
Painting in a Floater

Cloning with Floaters

If you clone an image with floaters, the floaters in the clone are dropped, creating a fully composited, flat copy of the original. Using the Cloner brushes in your clone brings in both floaters and the background from your original.

Working with Multiple Floaters

With multiple floaters, a highly complex visual composition builds up quickly.

The Objects: F. List Palette provides a way to organize and track floaters in an image. It also lets you layer overlapping floaters to determine which are in front and which are behind, and lets you group floaters so that you can move them as a unit.

See Also

Layering Floaters Using the F. List Palette
Layering with the Controls: Floating Selection Palette
Grouping Floaters
Changing a Group's Name
Ungrouping Floaters
Moving a Group
Unlocking a Group
Collapsing a Group

Layering Floaters Using the F. List Palette

When parts of floaters overlap, the floaters are layered. You can use the F. List Palette to change and track the front-to-back order of the overlapping floaters.

1. Select the floater.
2. Drag the name of the floater to the location in the list that reflects the order you want in your image.

   For example, if you want the floater on top of the other images, drag it to the top.

You can also use the Controls: Floating Selections Palette to layer floaters.

See Also

Selecting Floaters
Layering with the Controls: Floating Selection Palette

Layering with the Controls: Floating Selection Palette

When parts of floaters overlap, the floaters are layered. You can use the Controls: Floating Selections Palette to change and track the front-to-back order of the overlapping floaters.

1. Select the floater by clicking it with the Floating Selection Tool or by clicking its name on the Objects: F. List Palette.
2. Use the Front, Back, and Arrow buttons to change the position of the selected floater.

   Click **Front** to bring it to the front or the top of the pile.

   Click **Back** to send it to the back.

   Click the right arrow to bring the floater to the front one layer at a time or click the left arrow to send it behind the other floaters one layer at a time.

   The Objects: F. List Palette reflects your changes.

You can also use the Objects: F. List Palette to layer floaters.

See Also

Selecting Floaters
Layering Floaters Using the F. List Palette

Grouping Floaters

Group floaters when you want to move them around as a single unit. You can ungroup them any time. If you like, you can copy a group (**Option**-click) and save it in a floater library.

Even when floaters are part of a group, you still select and edit them individually.

1. On the F. List Palette, drag the floaters you want to group so that they are all adjacent to each other.
2. **Shift**-click each floater you want in the group.
3. Click **Group**.

   A selection marquee surrounds the floaters in the image window and the names of the floaters appear under a group name on the F. List Palette. Painter names groups Group 0, Group 1, and so on. You can rename groups if you like.
4. To add a floater to the group, drag its name into the group. Add a group to another group in the same way by dragging the group name into the group. Drag a floater out of a group to make it an individual floater again.
5. Create more groups by repeating steps 1, 2, 3, and 4.

Once floaters are grouped, clicking and dragging on one floater moves the entire group.

See Also

Changing a Group's Name
Ungrouping Floaters
Moving a Group
Unlocking a Group
Collapsing a Group
Organizing Floater Libraries

Changing a Group's Name

Follow these steps to rename a group.

1. Double-click the group's name.
   The Floater Attributes dialog box appears.
2. Type a new name and click **OK** or press **Enter**.
   The new name appears in the floater list.

See Also

Grouping Floaters

Ungrouping Floaters

You can ungroup floaters at any time.

1. On the F. List Palette, click the group name.
2. Click **Ungroup**.

See Also

Grouping Floaters
Unlocking a Group
Collapsing a Group

Moving a Group

On the F. List Palette, grouped floaters appear in a hierarchy in which you click triangles to reveal the contents of directories. When the triangle is pointing to the right, the group is locked and you can drag the floaters as a unit.

You can also move the group pixel by pixel:

1. Double-click the group's name.

   The Floater Attributes dialog box appears. The Top and Left boxes show the group's location in the document window. Since 0,0 is the top-left corner of the window, lowering the Top number moves the group up, raising it lowers the group. Lowering the Left number moves the group to the left, raising it moves the group to the right.
2. Type the desired values in the Floater Attributes dialog box.
3. Click **OK** or press **Enter**.

   The group moves to the location you specified.

See Also

Grouping Floaters
Unlocking a Group

Unlocking a Group

If you want to edit individual floaters in a group or move them separately, make sure the triangle in front of the group name is pointing down, revealing the floaters of that group, and allowing you to select them. This means you can click a group member and independently paint into it, change its opacity, feather it, or move it.

See Also

Grouping Floaters
Ungrouping Floaters
Moving a Group
Collapsing a Group

Collapsing a Group

If you want to make a group permanent, click the **Collapse** button on the F. List Palette.

Collapsing a group reduces all the floaters in the group to a single layer and item. You cannot access the original individual elements after collapsing them.

See Also

Grouping Floaters

Compositing Special Effects

Painter can visually combine a floater with what's behind it, whether it's another floater or the background, using the Composite Method pop-up menu on the Controls: Floating Selection Palette.

These composite methods are temporary. If you don't like the effect, pick another. The composite method you choose doesn't build on the previously selected one, it replaces it.

1. Make sure there's either a floater beneath the one you'll work with or a background image.
2. Use the Floating Selection Tool to select the floater.

   Floater controls appear on the Controls Palette.
3. Choose one of the following commands from the Composite Method pop-up menu on the Controls: Floating Selections Palette.

   Default is the default way a floater interacts with an underlying image---it covers or hides it.

   Gel In photography, a gel is a film that is placed in front of a light to alter its color. The Gel command tints the underlying image with the floater's color. So, for example, a yellow floater gives the underlying image a yellow cast.

   Colorize The hue and saturation of the floater replaces those beneath it. Use this to convert a grayscale image into color and vice versa. A colored floater colors a grayscale underlying image. A black floater turns the underlying color image into grayscale.

   Reverse-Out The floater reverses what's behind it. This is a great way to drop out type. Place a floater over black type and the type turns white. Colors go to their opposite on the color wheel, like a color negative.

   Shadow Map Blocks light, letting you create shadows without changing the image.

   Magic Combine combines the floater with the underlying image based on luminance. The parts of the floater that are lighter than the underlying image appear within the bottom image. One way to use this command is for filling type. With a photograph as the top floater and black type as the underlying image, choosing Magic Combine fills the type with the image.

   Pseudocolor translates the floater's luminance into hue. Use it to experiment with interpreting luminance in the color spectrum or to translate a gray scale floater into a spectrum of color.

See Also

Finishing a Composition

Finishing a Composition

When you're satisfied with the way floaters appear in an image, you can quickly merge one or all of them into the background to create a finished composition.

Remember that you can save a document with floaters still floating. If you want to leave your options open, you might want to save two copies of an image, one with the floaters still floating and one with them dropped into the background.

To merge a floater or group of floaters with the background:

1. Select the floater or group of floaters you want to drop.
2. Click **Drop** on the F. List Palette, or choose **Edit: Drop**.

To composite all floaters simultaneously:

Click **Drop All** on the F. List Palette.

See Also

Compositing Special Effects
Saving Documents with Floaters

Saving Documents with Floaters

You can save your document in the .RIF format with "live" floaters. Selections are still floating when the document is reopened. These selections can be saved in a floaters library and accessed in any Painter document.

The .RIF format in Painter 3 or Painter X2 is the only format that supports saving floaters. When you open a .RIF file in older versions of Painter and Fractal Design Sketcher, floaters are ignored. You'll have to drop them and save the image before opening it in one of Fractal Design's other programs, or use another format.

You can save images with floaters in formats other than .RIF, including Photoshop. When you open the document in these formats in Painter 3 or in other programs, the floaters are automatically dropped or composited into the background image. In Photoshop's case, whatever is in the selection layer will appear in Photoshop's first alpha channel.

See Also
Organizing Floater Libraries

Organizing Floater Libraries

You can create your own custom libraries to organize floaters by category. When you're creating a library, keep in mind that the smaller the library, the easier it will be to see its contents at a glance in the drawer of the Objects: Floaters Palette.

There are two ways to create a new library. You can use the **Library** button in the drawer of the Objects: F. List Palette or you can use the **Tools: Movers: Floater Mover** command.

The advantage of using the Library button is that it's readily accessible in the F. List Palette. The advantage of the Floater Mover is that it also lets you set up the library in other ways---for example, by moving floaters into it.

To create a library with the Library button:

1. Open the drawer of the Objects: Floaters Palette and click **Library**.

   The Floater dialog box appears.

2. Click **Open Library**.

   An Open dialog box appears.

3. Click **New**.

4. In the dialog box that appears, type a name for the new library and click **Save**.

To set up libraries with the Floater Mover:

1. Choose **Tools: Movers: Floater Mover**.

   The Floater Mover dialog box appears.

2. To create a new selection library, click **New**. Type a name for the new library and click **Save** or press **Enter**.

   The new library's name appears on the right side of the Floater Mover dialog box.

3. To move floaters into a library, click the floater on the left side of the dialog box and then click **Copy**. If you don't see the floater, click **Close** to close the library on the left side of the dialog box. Then click **Open** and choose a new library.

4. If you want to rename a selected floater, click **Change Name**. The Change Floater Name dialog box appears. Type the new selection name and click **OK** or press **Enter**.

5. If you want to delete a selected floater, click **Remove**.

6. If you want to move a floater to another, existing library, click **Close** to close the open library on the right side of the dialog box. Then click **Open**, choose a new floater, and follow the instructions in Step 3 for moving a floater into a library.

7. When you're finished making changes in the Floater Mover dialog box, click **Quit** or press **Enter**.

Note: To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

Masking Techniques

Painter's masking techniques allow for some powerful effects.

For help with masking techniques, click a topic.

About Masks

In Painter, images have a background layer and each floater also represents a layer of its own. The image background layer and each floater layer has a mask that determines what will show and what will be hidden in a floater.

In the background, masks are used to protect areas from change. Painter provides Masking brushes that you can use to paint the mask of a layer. Using these Masking brushes, you can also interweave floaters with the background, making the floaters appear to be behind parts of the background. This is done by painting the background mask and adjusting the image visibility of the floater.

See Also

Working with Floaters
About Painters Layers
Paths and Selections

Creating and Editing Masks

To create and edit floater masks, you can use the **Edit: Mask: Auto Mask**, **Edit: Mask: Color Mask**, and **Edit: Mask: Feather Mask** commands, and the Masking brushes on the Brushes Palette. You can also change masks by dropping floaters with the **Drop With Mask** checkbox on the Objects: F. List Palette. Checking the **Add To Mask** checkbox on the Nozzle Palette and using an Image Hose brush changes the background mask.

When you use one of the above masking commands for a floater, or paint in it with a Masking brush, you alter the floaters mask layer.

To restore a floater to its original mask, click **Restore** on the F. List Palette.

To create and edit background masks, you can use all of the Edit menu Mask commands, the Masking brushes on the Brushes Palette, and any of the selection tools.

You can also open ColorStudio and Photoshop documents that contain masks. (These files must be in RGB format. Painter will use any mask information contained in channel 4 of these images.)

You can change the way the background mask is displayed by using the Mask Visibility buttons on the Objects: P. List Palette, on the Controls: Path Adjuster Palette, Controls: Outline Selection Palette, and in the corner of every image window.

Also, after creating a background mask, you can turn the area it describes into a floater.

See Also
Working with Floaters
Paths and Selections

Creating Background Masks with Selection Tools

To create a background mask with the selection tools, use any selection tool to create a selection as you usually would.

Then click the second, or middle, Visibility button on the Objects: P. List Palette.

The selection now forms the background mask.

See Also
Creating Paths

Using Auto Mask

Use the **Edit: Mask: Auto Mask** command to create a mask for a background or a floater. You can choose to base the mask on various possibilities. For instance, choosing Image Luminance creates a mask based on the light and dark areas of an image. This command is ideal for creating masks for black-and-white cartoon line drawings that you can then fill with color.

After you create a background mask with **Edit: Mask: Auto Mask**, click the second, or middle, Visibility button on the Objects: P. List Palette to see it.

1. Choose **Edit: Mask: Auto Mask**.

   The Auto Mask dialog box appears.

2. Choose a command from the Using menu:

   Paper Grain determines where the selection layer will be transparent, based on the peaks and valleys of the paper texture selected on the Art Materials: Papers Palette. You can get some great textural effects with this in your background mask layer combined with floaters.

   3D Brush Strokes sets up mask transparency based on the difference between the source image and its clone.

   Original Mask uses the mask in the original document to generate the mask in the cloned document.

   Image Luminance creates a mask based on the images light and dark areas. It is especially useful for creating masks for line drawings like cartoons. If you like, try an Example of Image Luminance.

   Original Luminance produces a mask based on the originals light and dark areas in the clone.

   Current Color creates a mask protecting the color in the image that matches selected color. Checking Invert means that everything but the current color will be masked which is especially useful for creatin mattes.

3. After making selections in the Generate Mask dialog box, click **OK** or press **Enter**.

See Also

Example of Image Luminance
Using the Cartoon Fill Method

Example of Image Luminance

The following example shows how Image Luminance can be useful for creating masks for line drawings.

1. Draw a black circle with the Scratchboard Tool variant of the Pens.
2. Choose **Edit: Mask: Auto Mask**.
3. Choose Image Luminance from the Using pop-up menu and click **OK** or press **Enter**.
4. To see the mask, click the middle Visibility button.

   A mask appears on the black circle.

Using Color Mask

With Painter 3, you can also generate a selective color mask using the **Edit: Mask: Color Mask** command.

1. Choose **Edit: Mask: Color Mask**.

   The Color Mask dialog box appears.

2. Click in the image to pick up the center color of interest.

   The HSV extent sliders control the amount of spread in color space about the center color of interest.

   The HSV feather sliders control the feather at the edges of the color space extents in hue, saturation, and value, respectively. You can use them to produce a softer mask edge result.

3. Adjust the sliders and watch your changes in the Preview Window. Click in the Preview Window and drag the hand to see other parts of the image, for example, if you want to verify the extent of your mask.

4. When the mask looks the way you want it, click **OK** or press **Enter**.

Using Feather Mask

Painter allows you to automatically feather an images mask layer. Feathering a mask can be applied to a background image with a mask or to a floater.

1. Click the middle Visibility icon if you want to see the mask as a color.
2. Choose **Edit: Mask: Feather Mask**.

   The Feather Mask dialog box appears.
3. Enter the number of pixels you wish to feather your mask.
4. Click **OK** or press **Enter**.

Bringing in Masks from Other Programs

When you open a ColorStudio 1.5 document in Painter 3, whatever is in the mask layer will appear in Painters background mask layer. Be sure to save the ColorStudio file in the .RIF format.

Photoshop 2.5 documents using RGB mode saved in the Photoshop format can also be opened in Painter 3. Anything in the first alpha channel, accessed using **Ctrl+4** within Photoshop, will appear in Painter 3s background mask layer. When floating a selection made in an image imported from Photoshop, you should click the second Floater Mask Visibility button, Masked Inside, on the F. List Palette.

See Also

Determining Which Part of a Floater Is Masked

Floating a Mask

After creating a mask in an image background layer, you can float it.

1. Click the third Visibility icon on the Objects: P. List Palette.

   The mask appears as a selection marquee or marching ants.

2. Click inside the marching ants with the Floating Selection Tool. (Hold down the Option key if you want to copy rather than cut the area from the background.)

3. If necessary, on the Objects: F. List Palette, click the third Image Mask Visibility button, Masked Outside.

   Only the masked area will be visible and you can pick it up and move it.

See Also

Working with Floaters

Using Masking Brushes

Another way to create a mask for a floater or a background is by painting into the mask layer with the Masking brushes.

By painting with the Masking brushes in floaters, you remove and replace parts of their masks, which results in hiding or revealing layered floaters. You can also retain the mask layer when you drop the floater into the background. Click the **Drop with Mask** button on the F. List Palette to turn on this feature.

See Also

Painting with Masking Brushes
Turning a Painted Mask into a Selection
Masking Brushes
Masking Methods

Painting with Masking Brushes

When you paint with the Masking brushes, you use white or black, depending on the desired effect and on how Floater Mask Visibility and Image Mask Visibility are set on the F. List Palette.

Generally, painting in any mask with black creates opaque areas and painting with white produces full transparency in the mask. Using shades of gray gives you varying levels of opacity. Feathering tends to produce intermediate gray levels as well, and a Masking Airbrush can be used for this purpose.

1. Click the last Drawing button and the middle Visibility button (found on the Objects: P. List Palette, the Controls: Selection Adjuster Palette, and the Controls: Outline Selection Palette).

   The mask layer appears as red. You can change this color by clicking the color square in the Objects: P. List Palette and choosing another color from the Color Picker. Check Transparent Selection to see the background.

2. Choose a Masking brush on the Brushes Palette.
3. Select black on the Art Materials: Colors Palette.
4. Paint where you want your mask to be.

To remove the mask, paint with white.

See Also

Turning a Painted Mask into a Selection
Determining Which Part of a Floater Is Masked
Using Floater Mask Visibility Buttons
How Floaters Interact with the Background
Using Masking Brushes

Turning a Painted Mask into a Selection

After painting the mask of a background image, you can click the third (right) Visibility icon on the Objects: P. List Palette to automatically create a selection outline for the mask.

This technique allows you to treat painted masks as selections, which facilitates floating the selection or running effects on the selection.

Masking Brushes

The following descriptions tell how each masking brush appears in the background mask.

Masking Pen
Masking Airbrush
Masking Chalk
Grainizer
Single Pixel Masking Pen
Big Masking Pen

Masking Pen

Draws smooth, anti-aliased lines.

Using a stylus, press heavily for a wide stroke, press lightly for a narrow one.

See Also

Qualities of Brushes

Masking Airbrush
Paints misty, anti-aliased strokes.

See Also
Qualities of Brushes

Masking Chalk
Draws semi-anti-aliased lines that interact with the selected paper texture.

See Also
Qualities of Brushes

Grainizer

Produces broad, grainy, anti-aliased strokes.

The grain is based on the current paper texture.

See Also

Qualities of Brushes

Single Pixel Masking Pen
Draws with a single pixel.

Useful for close-up mask editing.

Big Masking Pen

Produces broad, solid, anti-aliased lines.

Good for filling in large areas.

Masking Methods

What makes Masking brushes work is that they were created with a masking method.

You can turn any brush into a Masking brush by changing its method to one that contains the word mask.

The following topics describe each masking method.

Flat Mask Cover
Aliased or jagged-edged brush strokes that hide underlying brush strokes.

Soft Mask Cover
Anti-aliased brush strokes that hide underlying ones.

Grainy Hard Mask Cover
Paper-sensitive, semi-anti-aliased brush strokes that hide underlying ones.

Grainy Edge Flat Mask Cover
Paper-sensitive, thick and sticky, aliased strokes that hide underlying ones.

Grainy Soft Mask Cover
Paper-sensitive, anti-aliased brush strokes that hide underlying ones.

Determining Which Part of a Floater Is Masked

The Floater Mask Visibility buttons in the lower part of the F. List Palette determine which part of a floater youll see in relation to its mask. These buttons apply to floaters created with selection tools and floaters whose masks you edited with Auto Mask or the Masking brushes.

With **Masking Disabled** selected, the floaters masking information is ignored, so everything in the floater is visible. Painting with the Masking brushes in a floater with masking disabled has no effect.

With **Masked Inside** selected, whats inside the mask is invisible (or masked away), letting either underlying floaters or the background show through the floater. Using a Masking brush to paint with white hides whats behind the mask. It adds to the mask, or restores it if you removed it. Painting with black deletes the mask, making the background visible. Painting with white, conversely, reveals the floater in the area painted.

With **Masked Outside** selected, everything outside the mask becomes invisible, letting either underlying floaters or the background show through the floater. Masked Outside has the opposite effect of Masked Inside, when using a Masking brush. When a floater is masked outside, painting with white deletes the mask, making the background visible. Painting with black hides whats behind the mask. It adds to the mask, or restores it if you removed it.

Using Floater Mask Visibility Buttons

Heres an example of using the Floater Mask Visibility buttons, in this case, the Masked Outside button. Generating a mask inside a floater and choosing Masked Outside is helpful, for example, if you have multiple copies of a line drawing and want each one to appear in a different color.

Try this example of copying floaters and filling them with different colors.

1. On the Brushes Palette, select the Scratchboard Tool variant of the Pen.
2. Draw a black line, select it with the Rectangular Selection Tool, and click it once to float it.
3. Choose **Edit: Mask: Auto Mask** and choose **Image Luminance** from the pop-up menu. Click **OK** or press **Enter**.

   You now have a mask protecting the line you drew.
4. On the Objects: F. List Palette, click the third Floater Mask Visibility button, Masked Outside.
5. Hold down the Option key as you click the line with the Floating Selection Tool and drag it to a new location in the image window.

   You now have a copy of the line.
6. Select a color on the Art Materials: Colors Palette and choose **Effects: Fill (Ctrl+F)**.

   The line reflects the selected color because the mask you generated protects the area outside the line, leaving the line unprotected and available to be filled

If, by choosing Masked Outside, a floater becomes invisible, you wont be able to select it with the Floating Selection Tool. Instead, click its name on the F. List Palette, and click the first Floater Mask Visibility button, Masked Disabled, to make it visible.

How Floaters Interact with the Background

A floater can interact with a background mask so that it appears to be behind parts of the background. How floaters appear in relation to the background is set up with the Image Mask Visibility buttons on the F. List Palette.

With **Masking Disabled** selected, the floater isnt affected by the background mask.

With **Masked Inside** selected, youll see the floater outside the background mask. Painting with white in the background mask hides more of the background in relation to the floater; painting with black reveals more background.

With **Masked Outside** selected, youll see the floater inside the background mask. Painting with black in the background mask hides more of the background; painting with white reveals more background.

Creating Mattes

Using masks in combination with Painters other features can produce interesting effects. For instance, you can create a matte for a cartoon.

Try this example:

1. Select the Scratchboard variant of the Pens and draw a simple black outline of a face.
2. Choose **Edit: Mask: Auto Mask** and choose **Image Luminance** from the Using pop-up menu. Click **OK** or press **Enter**.
3. Fill the inside areas using the Cartoon Cel fill method.
4. Select white on the Art Materials: Colors Palette.
5. Choose **Edit: Mask: Auto Mask** again, this time choosing **Current Color** from the Using pop-up menu. Check **Invert** to mask everything but the current color, white.
6. Click the middle Visibility button on the Objects: P. List Palette.

   A mask covers the face. Click the first Visibility icon to hide the mask. If you turn the face into a floater, this matte becomes a clipping path.

To float the face:

1. Click the third (right) Visibility icon in the Objects: P.List Palette to view the mask as marching ants.
2. Click the image with the Floating Selection Tool to float it.
3. Fill the background behind the floater.

   White appears between the face and the marquee.
4. Click the third Floater Visibility button, Masked Outside, on the Objects: F. List Palette

   The matte now clips the face. A floater is defined, or constrained, by its original selection or mask. You can edit the mask using **Edit: Mask: Auto Mask**, or the Masking brushes.

See Also

Filling an Area

Working with Sessions

Sessions let you record and play back a single brush stroke or an entire work session.

For help with sessions, click a topic.

The Sessions Palette

The Objects: Sessions Palette provides a place for you to store the sessions you record along with the sessions Painter provides. Five buttons on the bottom of the palette make it easy to stop, play, record, pause, and advance frames when you're working with sessions.

To open the Objects: Sessions Palette, click the Sessions icon on the drawerfront of the Objects Palette.

When you want to work with a session, click its icon on the drawerfront. If you don't see a session on the front of the drawer, look for it inside. The **Library** button inside the drawer provides access to Sessions libraries.

The **Export** and **Import** buttons at the bottom of the palette let you export a session as a text file, edit it, and import it back into Painter. For information, see Tech Note #2, provided on your Painter 3 Extras CD.

The **Get Info** button displays information about the size and author of the session.

Recording Sessions

Painter provides a way to record an entire work session.

1. Choose **Tools: Session Options**.

   The Session Options dialog box appears. With **Record Initial State** checked, Painter records the tools and art materials you use during the session, including brushes, colors, and paper textures. Painter then plays back the session exactly as you recorded it. If you uncheck **Record Initial State**, Painter uses the tools and art materials that are selected when you play back the session. So by unchecking Record Initial State, you can use a different brush, color, and paper texture each time you play back the session. The **Save Frames on Playback** checkbox is explained later in this chapter.

2. Click the Record button on the Objects: Sessions Palette.

   The Record button glows red while recording is in progress.

3. Draw or paint as many strokes as you like and use any of Painter's other features and effects.

4. When you're finished, click the Stop button on the Objects: Sessions Palette.

   The Name the Session dialog box appears.

5. Type a name for your session and click **OK**.

   Painter automatically puts an icon for the session in the drawer.

See Also

Playing Back Sessions
Replaying a Session at a New Resolution
Replaying a Session into a Movie
Recording Individual Strokes

Playing Back Sessions

Use the following procedure to play back a session.

1. On the drawerfront of the Objects: Sessions Palette, click the icon of the session you want to play back.
2. Click the Play button.

   The Play button glows green to show that playback is in progress.

To stop a playing session midway, press **Ctrl+.** (hold down the **Ctrl** key and type a period).

See Also

Recording Sessions
Replaying a Session at a New Resolution
Replaying a Session into a Movie

Replaying a Session at a New Resolution

Replaying a session at a higher resolution is a good way to create a high resolution image. When you record at a low resolution, you get the benefit of the fluidity and spontaneity that results from seeing a stroke appear as you draw it. Then when you play back the session at a higher resolution, you get the benefit of the higher quality image.

When you record and play back at different resolutions, don't make too big of a jump in resolutions---four times is probably too much. For best results, experiment.

To play back a session at a different resolution, you must follow certain steps when you record the session as well as when you play it back.

1. Before you start recording, open a new document. If you like, adjust the resolution in the New Picture dialog box.
2. Before painting or drawing, choose **Edit: Select All (Ctrl+A)**.

   This action creates a reference rectangle which will be part of the recording. This reference rectangle must be recorded to play a session back into a higher resolution file later.
3. Click the **Record** button on the Objects: Sessions Palette.
4. Either choose **Edit: Deselect (Ctrl+D)** or draw inside the selected area.
5. Proceed with your session.
6. When you finish the session, click the Stop button on the Sessions Palette.

   The Name the Session dialog box appears.
7. Type a name for the session and click **OK** or press **Enter**.

See Also

Setting Resolution
Playing Back a Session at a Different Resolution

Playing Back a Session at a Different Resolution

Before playing back a session, a new document must be created to play it into. The document can have either larger or smaller dimensions than the original file the session was recorded in. It can even be different proportions than the original if you wish to distort the image.

If you record a session into a file of the same dimensions but with a higher resolution (set in the New Picture dialog box), there will be no noticeable difference in the resulting image except that the image will print at an appropriately smaller scale. In order to physically increase the resolution of the session, the dimensions of the playback file must be greater than the original session's reference rectangle. Remember, a session can only be played back at a new resolution if a reference rectangle was recorded at the beginning of a session.

1. Create a new document to play the session into.

   If you want the resulting image to be a higher resolution than the original, create a document with proportionally larger dimensions. For example, if the original document is 500 X 500 pixels, make the new document 1000 X 1000 pixels to double the size.

2. Before playing back the session, choose **Edit: Select All (Ctrl+A)**.

   The rectangle recorded at the outset of the original session will now be referenced to equate the new resolution for the larger file.

3. On the Objects: Sessions Palette, click **Play**.

   The original session will replay into the new larger document. All brushes, paper textures, and related functions will be appropriately rescaled for the new resolution.

Note: You may also play back a session within a selection at any resolution if the session was recorded after first selecting the entire image. In fact, a session recorded this way may be played back in many selections in the same image.

See Also
Replaying a Session at a New Resolution

Replaying a Session into a Movie

If you want to use a session outside of Painter, you can replay it into a movie and, if you like, save it as a Video for Windows movie.

1. Record a session.
2. Choose **Tools: Session Options**.

   The Session Options dialog box appears.
3. Select **Save Frames on Playback** and indicate how often---how many 1/10ths of a second---you want to record a frame.

   The lower the number, the more frequently a frame is recorded, and the more fluid the session will be. More frames, however, use more disk space. You might want to experiment to find the optimum balance of quality and disk resources.
4. Click **OK**.
5. Choose a session to play into a movie from the Objects: Sessions Palette.
6. Double-click a session or select it and click **Play**.

   A dialog box appears asking you to name the new frame stack that it will be playing into.
7. Type a name for the session and click **Save**.

   The New Frame Stack dialog box appears.
8. Select how many layers of onion skin you want in the movie and the storage type and click **OK**.

   Painter saves the session as a frame stack.
9. If you want to save the frame stack as a Video for Windows movie, choose **File: Save As**. In the dialog box that appears, type a name for the movie and click **Save**.

See Also

Making Movies

Setting Up Playback Libraries

Setting up libraries of recorded sessions lets you organize your sessions---for example, by client or by month. As with all Painter libraries, it's best to keep sessions libraries small so that you can see all the sessions in a drawer at a glance.

There are two ways to create a new library. You can use the **Library** button in the drawer of the Objects: Sessions Palette or you can use the **Tools: Movers: Session Mover** command.

The advantage of using the **Library** button is that it's readily accessible in the Sessions Palette. The advantage of the Session Mover is that it also lets you set up the library in other ways, for example, by moving existing sessions into it.

To create a library with the **Library** button:

1. Open the drawer of the Objects: Sessions Palette and click **Library**.

   The Sessions dialog box appears.
2. Click **Open Library**. An Open dialog box appears.
3. Click **New**.
4. In the dialog box that appears, type a name for the new library and click **Save**.

To set up libraries with the Session Mover:

1. Choose **Tools: Movers: Session Mover**.

   The Sessions Mover dialog box appears.
2. To create a new sessions library, click **New**. Type a name for the new library and click **Save** or press **Enter**.

   The new library's name appears on the right side of the Session Mover dialog box.
3. To move sessions into a library, select the session on the left side of the dialog box and then click **Copy**. If you don't see the session, click **Close** to close the library on the left side of the dialog box. Then click **Open** and choose a new library.
4. If you want to rename a selected session, click **Change Name**. The Change Session Name dialog box appears. Type the new session name and click **OK** or press **Enter**.
5. If you want to delete a selected session, click **Remove**.
6. If you want to move a session to another, existing library, click **Close** to close the open library on the right side of the dialog box. Then click **Open**, choose a new library, and follow the instructions in Step 3 for moving a session into a library.
7. When you're finished making changes in the Session Mover dialog box, click **Quit** or press **Enter**.

Note: To delete a library, highlight the library file in the Windows File Manager, and choose **File:Delete (Del).**

See Also
Opening Existing Libraries

Opening Playback Libraries

Open sessions libraries from the Objects: Sessions Palette.

1. Open the drawer of the Objects: Sessions Palette and click **Library**.
   The Sessions dialog box appears.
2. Click **Open Library**.
3. In the dialog box that appears, select a library and click **Open**.
   The sessions in the library appear in the Objects: Sessions Palette.

See Also

Setting Up Playback Libraries

Recording Individual Strokes

Recording and playing back individual strokes is a quick way to automate your drawing.

It also lets you try out strokes with different brushes and art supplies. For example, you could record a stroke with a Pencil using the color blue. You could then switch to the Airbrush and use green when you play back the stroke.

1. Choose **Tools: Record Stroke**.
2. Make a brush stroke. Painter records the stroke.

You can also use recorded brush strokes during cloning.

See Also

Playing Back Recorded Strokes
Automatically Playing Back Recorded Strokes
Using AutoClone

Playing Back Recorded Strokes

Follow these steps to play back recorded strokes.

1. Choose **Tools: Playback Stroke**.
2. Click anywhere in the image window.

   The brush stroke plays back each time you click.

To return to normal strokes, choose **Tools: Playback Stroke** again. Choose this command again and you can play back the same stroke until you record another.

See Also

Recording Individual Strokes
Automatically Playing Back Recorded Strokes

Automatically Playing Back Recorded Strokes

Use the following procedure to automatically apply multiple copies of a recorded brush stroke in a selection.

1. Select part of your image with the Rectangular Selection Tool or select your whole image with **Edit:Select All (Ctrl+A)**.
2. Choose **Tools: Auto Playback**.

   The brush strokes appear randomly within the selection.
3. Click the mouse or press on your stylus to stop auto playback.

See Also

Recording Individual Strokes
Playing Back Recorded Strokes

Making Movies

All of Painter's Natural-Media tools and textures, and its effects can be applied to a Painter frame stack, which can be derived from a Video for Windows movie or a series of numbered files. You also can use Painter's power to create your own movies, including freehand animation or animation based on video. Using Painter's powerful masking and cloning tools, you can composite two or more movies at a time.

For help with movies, click a topic.

The Frame Stacks Palette

Painter handles a movie as if it were a stack of frames. Each of the frames can be viewed in the Frame Stacks Palette, which appears when you open a movie.

The number of frames visible in the frame stack at one time is determined by the number of layers of onion skin you choose when you open a Video for Windows file, create a new frame stack, or open an existing Painter frame stack. If you choose two onion skin layers, for example, the Frame Stacks Palette will accommodate two frames at a time.

The Frame Stacks Palette contains several tools for identifying frames and for maneuvering through a Painter frame stack.

Previews of the active frames appear inside the palette.

The red arrow at the top of the palette points down at the frame that is currently shown in the image window.

The frame number appears under each frame.

The number of the current frame and the number of frames in the stack appear in the bottom-left corner.

Six VCR-like buttons are at the bottom of the palette.

The first button returns to the first frame in a stack. The **Home** key does the same thing.

The second button returns you to the preceding frame. For example, if the current frame is 3, clicking this button returns you to frame 2. The **Page Down** key on your keyboard does the same thing.

The third button stops a frame stack that's playing. Pressing **Ctrl+.** does the same thing.

The fourth button plays a Painter frame stack.

The fifth button moves to the next frame. The **Page Up** key does the same thing.

The last button moves to the last frame in the stack. The **End** key does the same thing.

When you open a movie, the Frame Stacks Palette shows the first frame at the far right of the palette. Dashed lines act as placeholders for frame numbers that will appear as you advance frames to the left.

The Frame Stacks Palette must remain open when you are working on a Painter movie. It closes automatically when you close the movie.

Opening and Saving Movies

Painter can open and save its own frame stack format, and import and export Video for Windows and sequentially numbered files.

Painter's frame stack format is a series of images, equal in size and resolution, that can be saved as 8-bit gray (256 levels of gray), 8-bit color (256 colors), 15-bit color with 1-bit mask (32,768 colors and a layer for a mask), and 24-bit color with 8-bit mask (16.7 million colors and a layer for an anti-aliased mask).

Painter imports Video for Windows' video and animation data and turns it into a frame stack. After a Painter frame stack is exported to Video for Windows, it can be synchronized with sound and embellished with other effects in video-editing applications.

Numbered files can be any series of files saved in a file format that Painter supports. The files must be the same size and resolution and be named following a specific style, which includes numbers in each file name. The only limit on the number and size of these files is your computer's available RAM and hard-disk space.

Note: The number of digits in each of the numbered files must be the same. If the number of files is 10, for example, the single-digit files must be preceded with a zero.

See Also

Opening a Painter Movie
Opening a Video for Windows File
Importing Numbered Files

Opening a Painter Movie

Follow these steps to open a Painter movie.

1. Choose **File: Open**.

   A directory appears.

2. Double-click the movie you want to open or select it and click Open.

   When selected, a preview appears and the frame size, movie size, and number of frames appear.

   A dialog box appears asking how many layers of onion skin you wish your frame stack to have.

3. Select the number of layers of onion skin for your frame stack and click **OK**.

   The first frame of your movie appears in the image window and the Frame Stacks Palette appears.

See Also

The Frame Stacks Palette

Opening a Video for Windows File

Follow these steps to open a Video for Windows File.

1. Choose **File: Open**. A directory appears.
2. Select the file you wish to open.

   A thumbnail of the first frame of the file appears in the preview, and the frame size, and number of frames appear.
3. Double-click the file you wish to open, or select it and click **Open**.

   A dialog box appears asking how many layers of onion skin you wish your frame stack to have.
4. Make your selection for layers of onion skin and click **OK**.

   The file opens as a Painter movie. The first frame of the movie appears in the image window, and the Frame Stacks Palette appears.

See Also

The Frame Stacks Palette

Importing Numbered Files

Follow these steps to import numbered files.

1. Choose **File: Open**.

   A directory box appears.

2. Click the **Open Numbered Files** checkbox at the bottom-left of the directory.

   A message appears asking you to select the first numbered file of the sequence to read.

3. Double-click the first numbered file or select it and click **Open**.

   The message reappears, this time asking you to select the last numbered file of the sequence to read.

4. Double-click the last numbered file or select it and click **Open**.

   A dialog box appears asking how many layers of onion skin you wish your frame stack to have.

5. Make your selection for layers of onion skin and click **OK**.

   The file opens as a Painter movie. The first frame of the movie appears in the image window, and the Frame Stacks Palette appears.

See Also

The Frame Stacks Palette

Creating a New Painter Movie

Follow these steps to create a new Painter Movie.

1. Choose **File: New**.

   The New Picture dialog box appears. Make your selections in this dialog box in the same way you would when opening a single Painter file.

2. Check the **Movie** radio button under Picture Type and enter the number of frames you want your new movie to contain. Remember, you can add and delete frames after the movie is made. Click **OK**.

   A directory appears asking you to name your new movie.

3. Type a name for the movie and click **OK**.

   A dialog box appears asking for the layers of onion skin and the storage type.

4. Make your selections for layers of onion skin and storage type and click **OK**.

   The first frame of the movie appears in the image window, and the Frame Stacks Palette appears, creating a frame for each frame in your new stack.

See Also

Creating a New Document
The Frame Stacks Palette

Saving a Painter Movie in Another Format

Follow these steps to save a Painter movie in another format.

1. Choose **File: Save As**.

   A dialog box appears listing the save options: Save current frame as image, Save movie as Video for Windows, and Save movie as numbered files.

2. Choose a save option and click **OK**.

Note: Click the close box on the image window, or choose **File: Close (Ctrl+W)**, to save the movie as a Painter frame stack with the name you specified earlier. The **File: Save** command can't be used and is dimmed.

Adding Frames to a Movie

Follow these steps to add new, blank frames to a movie.

1. Choose **Movie: Add Frames**.

   A dialog box appears.

2. Enter the number of frames you wish to add to your movie, and then decide where you want to add them.

3. Click **Before** or **After** and enter the number of the frame that will act as an insertion point. For example, to add 10 blank frames before existing frame 6, you would enter 10 in the Add box and click **Before** and then enter 6 in the frame number box. To add frames before frame 1, click **At start of movie**. To add frames after the last frame, click **At end of movie**.

See Also

Deleting Frames from a Movie
Erasing Frames from a Movie
Inserting a Movie
Clearing New Frames

Deleting Frames from a Movie

Follow these steps to delete frames from a movie.

1. Choose **Movie: Delete Frames**.

   A dialog box appears.

2. Enter the range of frames you wish to delete and click **OK**. For example, to delete frames 7 through 22, you would enter those frame numbers in the dialog box and then click **OK**.

See Also

Adding Frames to a Movie
Erasing Frames from a Movie

Erasing Frames from a Movie

Follow these steps to erase frames from a movie.

1. Choose **Movie: Erase Frames**.

   A dialog box appears. Erasing frames removes the content of a frame or range of frames, but does not delete the frame itself.

2. Enter the range of frames you wish to erase and click **OK**.

   For example, to erase frames 7 through 22, you would enter those frame numbers in the dialog box and click **OK**.

See Also

Adding Frames to a Movie
Deleting Frames from a Movie

Going to a Specific Frame in a Movie

Follow these steps to go to a specific frame in a movie.

1. Choose **Movie: Go to Frame**.
   A dialog box appears.
2. Enter the number of the frame you wish to go to, and click **OK**.

Inserting a Movie

Inserting a movie inserts frames from an existing movie along with their content.

Painter will insert only a Painter movie, not Video for Windows or numbered files. Convert your files to a Painter movie before trying to insert them.

1. Choose **Movie: Insert Movie**.

   A dialog box appears.

2. Indicate where you want to insert another movie.

   Click **Before** or **After** and enter the number of the frame that will act as an insertion point.

   Click **At start of movie**, if you wish to insert a movie before frame 1, or click **At end of movie**, if you wish to insert a movie after the last frame.

   Click **OK**.

   A directory box appears showing a list of movies.

3. Double-click the movie you want to insert or select it and click **Open**.

   Painter inserts all the frames in the movie into your current movie.

See Also

Adding Frames to a Movie
Opening a Video for Windows File
Importing Numbered Files

Clearing New Frames

Select **Movie: Clear New Frames** if you wish to add blank frames one at a time to the end of your Painter movie by clicking the fifth button in the Frame Stacks Palette.

If Clear New Frames is not selected, the single frames will be added, but will contain whatever was in the last frame.

See Also

Adding Frames to a Movie
The Frame Stacks Palette

Creating an Animation

Because a Painter frame stack is a series of image windows, Painter 3 is the perfect tool for creating original animation. Traditional cartoon animators work on an onion skin paper that allows them to see a sequence of frames through the transparent layers. They then draw successive frames using the previous frames for reference.

Painter allows you to perform this function, called onion skinning, by letting you work with from two to five layers of onion skin. For example, if you choose five layers of onion skin and select the first frame in the sequence of five, when you turn on Tracing Paper the first frame will be darkest and the following four frames will be lighter but visible underneath. If you wish to see frames before and after the selected frame, position the selected frame within the Frame Stacks Palette so it is preceded and followed by other frames. With the selected frame in the second position of five, it will be darkest, and it will be under the first frame and above the bottom three.

1. Create a new frame stack by choosing **File: New**.

   The New Picture dialog box appears.

2. Change settings in the New Picture dialog box.

   If you'd like to try an example that animates a drop of water, set the New Picture size to 200 pixels wide by 200 pixels high. Set the resolution to 75. Click the **Movie** radio button and enter 12 in the number of frames box. After you change settings, click **OK**.

3. Type a name for your movie and click **OK**.

   For example, name your movie WATDROP.FRM.

4. Choose how many layers of onion skin you want to use and a storage type. Then click **OK**.

   For the example, choose five layers of onion skin and save the file as 24-bit color with 8-bit mask.

   The image window and Frame Stacks Palette appear.

5. Draw an image in the first frame.

   For the example, choose the Scratchboard Tool variant of the Pen tool from the Brushes Palette and draw a small water drop at the top of the first frame.

6. Advance to the next frame (press the **Page Up** key), and turn on Tracing Paper by clicking the Tracing Paper icon on the image window scroll bar, or by pressing **Ctrl+T**.

   If you're trying the example, you will see the water drop in frame 1 through the now-transparent frame 2.

7. Draw an image in frame 2.

   For the example, draw the same water drop in frame 2, but make it slightly lower than the drop in frame 1.

8. Move to frame 3. Now you see both frames 1 and 2. Draw an image in frame 3.

   For the example, draw the drop again a little lower than in frame 2. Continue drawing the drop through frame 5. In frames 6 through 12, the drop changes its shape as it hits the ground.

9. Turn off Tracing Paper and press the play button in the Frame Stacks Palette.

   If you tried the example, your water drop falls from the top of the image window splashing on the bottom. Now add color to each of the frames, if you like.

See Also

Tracing a Movie

Rotoscoping

Painter makes it very easy to modify existing movie files. This process is called rotoscoping. As an example, we made a short movie of paint pouring from a Painter paint can. We filmed the pouring sequence against a white backdrop.

After capturing the video digitally, we imported it into Painter and removed the hands frame by frame using Painter's masking tools to delineate the areas we wanted to clean up. We then replaced that area of the image with a frame containing the empty background. Play the movie, Pourit.frm from the Painter 3 Extras CD with the mask turned on. You'll see exactly where the hands were.

Note: Always make a copy of a movie you wish to modify. Do this in the File Manager by highlighting the movie file and choosing **File: Copy (F8)**. Painter automatically saves any changes once you advance to a new frame.

Painting on a Frame

You can use any Painter tool to paint on a single frame.

1. On the Frame Stacks Palette, click the frame you wish to paint on.

   The frame appears in the image window.
2. Choose the brush you wish to use from the Brushes Palette.
3. Paint on the frame.
4. If you wish to paint on another frame, click the frame on the Frame Stacks Palette. When the frame appears in the image window, begin painting.

   Changing frames saves the previous frame. You cannot undo changes after you change frames.

See Also

Applying an Effect to a Frame

Applying an Effect to a Frame

You can apply any Painter effect to a single frame.

1. On the Frame Stacks Palette, click the frame you wish to apply an effect on.

   The frame appears in the image window.
2. Select the part of the frame you wish to apply the effect on or apply the effect to the entire frame.
3. Apply the effect.
4. If you wish to apply an effect to another frame, click the frame on the Frame Stacks Palette. When the frame appears in the image window, apply the effect.

   Changing frames saves the previous frame. You cannot undo changes after you change frames.

See Also

Painting on a Frame

Applying Sessions to Movies

You may apply a recorded session to a frame stack. Remember, a session can consist of something as simple as one command, a series of commands, or an original drawing.

For example, to apply glass distortion to an entire movie, you would begin recording a session and then choose **Effects: Focus: Glass Distortion**. Check the results in the preview window. Click **OK** when you're satisfied with the results. Then click the **Stop Recording** button and name the session. With a movie open, choose **Movie: Apply Session to Movie**. A dialog box appears from which you choose the session you wish to apply.

Use this technique to build a library of effects that can be applied to movies. More than one session can be applied to the same movie.

Painter applies the session to each frame in turn. If you have very few small frames in your movie, and the session is not a complicated one, the session may be applied quickly. If the movie is long and its file size large, a complicated session could take a long time to apply.

See Also
Working with Sessions

Setting Grain Position

Applying a session is especially useful when you wish to apply a surface texture to an entire movie. And Painter gives you the option of applying the texture exactly the same way in each frame or moving the grain randomly or in set amounts.

1. Record a session that applies surface texture or dye concentration to an entire image.
2. Choose **Movie: Set Grain Position**.

   A dialog box appears.
3. Check **Grain Stays Still** if you wish the grain to stay in the same position throughout the movie. Check **Grain Moves Randomly** if you wish the grain to move as the movie plays.

   To make grain move randomly, before you record your surface texture or dye concentration session, you must choose **Tools: Session Options** and in the dialog box, make sure Record Initial State is unchecked.
4. If you wish to control the grain movement, check **Grain Moves Linearly**, and fill in the number of pixels you wish the grain to move horizontally and vertically from frame to frame.
5. Choose **Movie: Apply Session to Movie**, and select the session you recorded to apply surface texture or dye concentration.

   Painter applies texture to each frame in succession using the method you chose in the Set Grain Position dialog box.

See Also

Applying Surface Texture
Dye Concentration
Recording Sessions

Applying a Brush Stroke to a Movie

Painter also lets you apply a brush stroke to a movie. This feature is most useful when used with the Image Hose.

1. Record a brush stroke.
2. Open a movie file.
3. Choose **Movie: Apply Brush Stroke to Movie**.

   Painter applies a piece of the recorded stroke to successive movie frames until the stroke is finished.

When you apply a brush stroke to a movie using an Image Hose Nozzle, Painter deposits one or more Nozzle elements on each frame. If the Nozzle file is an animated sequence, for example, a person walking, with the right brush size, Painter can drop the images on one frame after another. Play the movie back, and the person walks across the image window.

See Also

Recording Individual Strokes

Working with More Than One Frame Stack

Open more than one Painter movie at a time if you wish to clone movies, composite them using masks, or trace one movie onto another.

Cloning Movies

Cloning from one movie into another works, for the most part, exactly like cloning from one image into another. If you have a Painter movie open and you choose **File: Clone**, Painter will create a clone only of the frame in the image window.

It is not possible to clone an entire movie using this command. Instead, open the movie, and then open a new movie with the same dimensions, resolution, and number of frames. With these two frame stacks open, you're ready to clone the original into the new movie.

1. With the original movie selected, choose **Movie: Set Movie Clone Source**.
2. Select the new movie.
3. Using a Cloner brush, clone one movie into the other frame by frame. You can switch from one Cloner tool to another at any time during the process.

Note: You can use AutoClone to do the cloning. You also can record an AutoClone session and apply the session to the new movie with a Cloner tool selected.

When used with Painter's powerful masking tools, it becomes possible to not only clone one movie into another, but also composite two or more movies.

See Also
Cloning

Cloning Movies Example

To illustrate this feature, we have chosen two Video for Windows movies of the same dimensions and resolution. One movie shows a surfer playing in the waves. The other is of traffic moving across the Golden Gate Bridge. Our goal was to make a movie of the surfer crossing the bridge. To do this we had to mask out the surfer before making the composite.

1. Open the Surfer.avi movie.
2. On the image window, set the mask visibility to the middle selection, so any mask appears red.
3. Choose the Masking Pen from the Brushes Palette and set the current color to black.
4. Mask out the surfer in each frame of the movie. This can be time-consuming work, but because the surfer changes shape and position in each frame, the masking work has to be done by hand.
5. When you're finished with the masking, play the movie with the mask still turned on.

   The red surfer twists and turns in the ocean.
6. Choose **File: Save As**, and save the masked movie as Surfmask.frm.
7. With the Surfmask.frm movie still open, open the Golden Gate Bridge movie --- bridge.avi.
8. Choose **Movie: Set Movie Clone Source**.

   The Golden Gate Bridge movie is now ready to be cloned into the Surfmask.frm movie.
9. With the Surfmask.frm movie selected, make sure you have the Mask Painting icon set to paint outside. Select the Straight Cloner tool from the Brushes Palette and paint into each Surfmask.frm frame one at a time. Make sure you advance the frames in each movie as you work.

   The mask in the surfer movie protects the surfer, but the rest of the frame is replaced with the bridge movie frames.
10. Choose **File: Save As** and save the Surfmask.frm movie as Surfbrid.frm.
11. Play the new movie.

    The surfer now twists and turns as traffic rumbles below him on the bridge.

Tracing a Movie

Have you ever wanted to animate your own cartoon but didn't know where to start? Painter's Tracing Paper option makes it possible to trace the contents of one movie into a brand new animated feature.

1. Open the movie you wish to trace.
2. Create a new movie with the same dimensions, resolution, and number of frames.
3. Select the original movie and choose **Movie: Set Movie Clone Source**.
4. Select the new movie and turn on Tracing Paper.

   The first frame of the original movie appears ghosted in the first frame of the new movie.
5. Using any of Painter's tools, textures and effects, trace the first frame.
6. When finished, click the frame advance button in the Frame Stacks Palette (or press **Page Up**) and trace the second frame.
7. Continue frame by frame until you have created your own animation.

Image Hose

Any series of photographic images or paintings can flow from your stylus or mouse when you use Painter 3's unique Image Hose. You can create your own sets of images, called Nozzles, and use the Image Hose brush to spray them in sequence, randomly, in a grid, or in response to pressure, image size, or image color.

For help with the Image Hose, click a topic.

Using the Image Hose

To help understand what the Image Hose can do, we have created an Image Hose Nozzle and saved it as a Brush Look.

Try this ready-made Image Hose first before you go on to make your own.

1. On the Brush Controls: Looks Palette, open the drawer and click the Brush Look called Clover.
2. Choose **File: New** to open a new image window.
3. Paint on the new image window.

   Painter sprays clover from your stylus or mouse. This Image Hose places the individual image elements randomly.
4. Click **Use Brush Grid** on the Brush Controls: Nozzle Palette.
5. Paint with the Brush Look.

   This time the clovers are drawn in a grid. If you draw over an element you have already painted, it will be replaced randomly with another clover leaf.

See Also

Loading a Nozzle
Choosing the Image Hose
Making a Nozzle from Floaters
Creating Grid-Based Nozzles
Loading Grid-Based Nozzles
Making a Nozzle from a Movie

Loading a Nozzle

The Image Hose uses special files, called Nozzles, to spray images on your image window.

When you want to use the Image Hose, you first load a Nozzle.

Painter comes with several Nozzles. You can use them to begin experimenting with the Image Hose.

1. On the Brush Controls: Nozzle Palette, click **Load**.

   A directory appears.

2. Open the Nozzle file by double-clicking its name in the directory or highlighting the file name and clicking **Open**.

   Opening the Nozzle file loads the Nozzle. It appears as the current Nozzle file on the Brush Controls: Nozzle Palette.

After trying the Nozzles Painter provides, you can go on to create your own.

See Also

Choosing the Image Hose
Loading Grid-Based Nozzles

Choosing the Image Hose

After loading a Nozzle file, all you have to do before you start painting is choose the Image Hose brush from the Brushes Palette the same way you choose any of Painter's brushes.

Variants of the Image Hose provide variations in the way Nozzle elements flow from the brush.

See Also

Loading a Nozzle
Image Hose Variants

Making a Nozzle from Floaters

Because each element in a Nozzle has an image layer and a mask layer, you can easily make a Nozzle using floaters from the Objects: Floaters Palette. Each floater will be an image in the Nozzle file.

1. Choose **File: New** and create a new image window 500 pixels wide by 500 pixels high. Set the resolution to 75 dots per inch.
2. Open the Objects: Floaters Palette and drag a few floaters into the new image window.
3. Open the Objects: F. List Palette and inspect the list of the floaters you dragged out of the drawer. If any of the floaters is a group, click the name of the floater to select it and then click **Collapse** to turn the group into a single floater. Also click **Trim** to take away any excess space surrounding the floater.

   Note: If you plan on spraying these Nozzle elements sequentially, they must be ordered in the F. List Palette from bottom to top.
4. Hold down the **Shift** key and select each name in the list. Then click **Group**.

   All the items are now part of the same group.
5. Choose **Tools: Image Hose: Make Nozzle From Group**.

   Painter makes a new Untitled image window. Choose **File: Save**.
6. Give this new Nozzle a descriptive name and save it as a .RIF file in the Nozzle directory inside the Painter 3 directory.

   You've created a Nozzle file.

Creating Grid-Based Nozzles

Using floaters isn't the only way to construct a Nozzle. Nozzles can also be made using Painter's grid. Using this method leaves it up to you to supply Painter with information about the Nozzle file, the number of elements, their sequence, and their dimensions.

1. Choose **File: New** and open a new file.

   If you want to try an example, make the new picture 150 pixels wide by 150 pixels high and make the resolution 75 dots per inch.

2. Choose **Canvas: Grid Options** and set up the grid to accommodate your nozzle images.

   For example, set the grid to 50 pixels by 50 pixels.

3. Turn on the grid by clicking the Grid button in the vertical scroll bar of the image window.

4. Create images in the grid squares.

   For example, use the rectangular selection tool to make a square inside one of the grid squares. Then use the Paint Bucket to fill the square with any color you choose. Do the same in the other eight squares. When you've finished coloring the grid sections, you should have what looks like a patchwork quilt. But you still need to adjust the mask that's part of every Painter file.

5. Choose a Masking brush from the Brushes Palette.

   For example, choose the Big Masking Pen variant.

6. Set the Mask Visibility button to **Color** (the middle selection) and set the Mask Drawing button to **Mask Outside** (the third choice).

   The mask covers the entire image.

7. On the Art Materials: Colors Palette, choose the color black, and paint over the entire image.

   The image reappears as you paint out the mask.

8. Save the file as a .RIF file.

   You've just created an Image Hose Nozzle.

See Also

Editing the Grid Overlay
Loading Grid-Based Nozzles

Loading Grid-Based Nozzles

There are a few extra steps to loading a Nozzle that you created using a grid.

1. On the Brush Controls: Nozzle Palette, click **Load**.

   The first time you load the Nozzle file, a dialog box appears asking you for some important information. Unlike a Nozzle built from floaters, Painter doesn't know yet how many elements are in the Nozzle file and how big they are. If you're trying the example, enter 50 in the width and height boxes because each of your grid units is 50 pixels by 50 pixels.

2. Enter the number of elements in your file. For example, there are nine in the example file, so enter **9** in the box next to Rank 1.

3. Click **OK**.

   You are ready to use the Nozzle. Just select an Image Hose brush and paint. If you followed the example, colorful squares will fill your screen.

Note: You may have noticed that the Nozzle dialog box also has spaces to enter information about Rank Index, Rank 2, and Rank 3. Nozzle ranks can simultaneously control features like pressure, direction, sequence, and other qualities, but they take some advanced information to make them work. For more information about Nozzle ranks, see the Nozzle technical note on your Painter 3 Extras CD.

See Also

Creating Grid-Based Nozzles

Making a Nozzle from a Movie

Frame after frame of a Painter movie can flow from your stylus or mouse.

1. Open the movie you wish to turn into a Nozzle file.
2. Choose **Tools: Image Hose: Make Nozzle from Movie**.
   An untitled file appears containing each movie frame.
3. Give the file a name and save it as a .RIF file.
   The file can now be opened and used like any other Nozzle file.

Image Hose Variants

The Image Hose Brush variants are programmed to provide many variations in the way Nozzle elements flow from the brush. These variations are described in the following sections.

If you want to experiment with further variants, you can make changes to brush size, the Opacity slider and Grain slider on the Controls: Brush Palette, the Dab Location slider on the Advanced Controls: Random Palette, both sliders in the Brush Controls: Spacing Palette, and, of course, the Nozzle Palette itself.

See Also

Size Designations: Small, Medium, and Large
Random Spray Variants
Random Linear Variants
Sequential Linear Variants
Directional Variants
Small Luminance Cloner Variant
3 Rank R-P-D Variant

Size Designations: Small, Medium, and Large

When spraying a Nozzle file through an Image Hose brush, the spacing between individual image elements is dictated by a combination of the settings in the Brush Controls: Size and Spacing palettes, and Advanced Controls: Random Palette.

In general, the larger the elements in a Nozzle file, the greater the spacing between the elements needs to be.

The Small, Medium, and Large variants for the different types of Image Hose brushes have been set to relatively change the settings for different size Nozzle elements.

For some Nozzle files, you might need to adjust settings on the Brush Controls palettes.

See Also
Changing Brush Size
Adjusting Dab Spacing
Adding Randomness

Random Spray Variants

These variants deposit Nozzle file elements randomly on the canvas.

The individual elements from the Nozzle file are selected at random.

The placement of the elements is random as well.

The Advanced Controls: Random: Dab Location Placement slider can be used to quickly adjust the spread between Nozzle file image elements.

See Also

Adding Randomness

Random Linear Variants

These variants deposit Nozzle file elements in a linear fashion on the canvas with no random placement.

The individual elements from the Nozzle file are selected at random.

Spacing is controlled by a combination of Brush Controls: Size and Spacing palettes.

See Also

Changing Brush Size
Adjusting Dab Spacing

Sequential Linear Variants

These variants deposit Nozzle file elements in a linear fashion on the canvas with no random placement.

The individual elements from the Nozzle file are selected in sequential order.

Spacing is controlled by a combination of Brush Controls: Size and Spacing palettes.

See Also

Changing Brush Size
Adjusting Dab Spacing

Directional Variants

These variants deposit Nozzle file elements on the canvas in a linear fashion.

The current directionality of the brush is used to determine which element in the Nozzle file is used.

The Nozzle file for Directional brushes must be created with directionality in mind to take full advantage of these variants. The Directional Arrows Nozzle file is a good example.

Spacing is controlled by a combination of Brush Controls: Size and Spacing palettes.

See Also

Changing Brush Size
Adjusting Dab Spacing

Small Luminance Cloner Variant

This variant must be used with a cloned image.

The luminance values of the source image are used to determine how much of the current secondary color is added to the individual Nozzle elements.

By using black as the additive color, a pseudo-three-dimensional relief of the source image can be created out of the Nozzle elements by painting over the clone document. The **Effects: Esoterica: AutoClone** tool can be used to automate this process.

See Also

Using AutoClone

3 Rank R-P-D Variant

Using more than one rank allows for more information to be controlled than is possible with a single rank. This is an example of a multiple rank brush that controls Randomness, Pressure, and Directionality.

The Nozzle file for multiple rank brushes must be organized with multiple levels of control in mind to take full advantage of this variant.

The Branches Nozzle file is a good example of a multiple rank brush. See the Nozzle technical note on your Painter 3 Extras CD.

Controlling the Image Hose

Use the sliders on the Controls: Brush Palette to alter the Image Hose further.

Sliding the Opacity slider to the left makes the Nozzle elements transparent. As you paint one element over the other, the colors build.

Sliding the Grain slider to the left mixes in the current secondary color. If the slider is set to 0, it fully mixes the secondary color. If the slider is set to 100, it uses only the colors in the original Nozzle. This principle is used in the Small Luminance Cloner variant of the Image Hose Brush.

Note: None of these controls will change the size of the elements. You must make smaller elements when you create your Nozzle file. If your Nozzle contains elements ranging in size, their delivery can be controlled by settings on the Nozzle Palette.

See Also

Small Luminance Cloner Variant

Nozzle Palette Controls

The Nozzle Palette controls work a lot like the Brush Controls: Expression (Sliders) Palette. By adjusting the settings, you control the way Nozzle elements flow from the Image Hose.

See Also

Sequential
Random
Source
Bearing
Tilt
Pressure
Direction
Velocity
None
Use Brush Grid
Add to Mask

Sequential

Setting the Rank control to Sequential means the Image Hose will spray Nozzle elements as you configured them when you created the Nozzle file.

The elements flow from left to right starting at the top-left element. It then moves to the next row and continues from left to right.

Random
Image Hose selects image elements at random from the Nozzle file.

Source

Source associates the luminance value in each pixel of a source image to a position in the Nozzle file, with 0% luminance (black) starting at the upper-left grid unit, proceeding left to right, and 100% luminance (white) at the lower right of the grid.

Bearing

Elements will be painted based on the bearing of your stylus (if your stylus supports bearing).

This control will not work with a mouse.

Tilt

Elements will be painted based on the tilt of your stylus (if your stylus supports tilt).

This control will not work with a mouse.

Pressure

Pressure is a great control for varying how elements are painted based on the pressure you apply with a stylus.

For example, if you set up your Nozzle starting with the smallest elements and varying their size from left to right, Painter will spray small elements if you press lightly and larger elements the harder you press.

Direction

This control associates the direction of your stroke with a position in the grid of the Nozzle file.

Elements are sprayed from your stylus or mouse depending on the direction of your stroke.

Velocity

This control will associate the velocity of your stroke with a position in the grid of the Nozzle file.

Elements are sprayed from your stylus or mouse depending on the velocity of your stroke.

None
Only the last element will be painted.

Use Brush Grid

Clicking this button constrains the Nozzle elements to an invisible grid based on the grid unit of the Nozzle file.

For example, if you paint with a Nozzle file that has nine elements in a 50 pixel by 50 pixel grid, the elements will be painted in that grid.

If you paint over a grid square, a new element will be painted on top of the previous element.

Add to Mask

With this button checked, anything you paint with the Image Hose will also paint a mask. Useful for creating more complex Nozzle files from simple ones.

Printing

You scan images directly from within Painter using TWAIN, a universal method for acquiring raster images.

You can print from Painter to any printer that has a Windows driver, including PostScript printers, such as high-resolution imagesetters.

For help with input and output, click a topic.

Using PostScript

There are several options for you to consider when you choose **File: PostScript Setup**. These controls have no effect and should not be used if you are printing to a non-PostScript printer.

See Also

Printer/Press Dot Gain
Monitor Gamma
Screen Frequency
Angle
Spot Type
Using the Print Dialog Box

Printer/Press Dot Gain

Dot Gain is the amount any halftone dot grows when it is printed. Depending on the type of printing press, paper, and ink you use, halftone dots may grow, causing your image to become darker than you wish.

To allow for dot gain, Painter lets you enter a percentage of dot gain. This percentage adjusts halftone dots so they print at the size you intended.

For example, if a 50% dot on film grows to 70% after it is printed, the dot gain is 20%. If the dot gain setting is too high, the printed results will be too light. If the dot gain percentage is too low, the printed results will be too dark.

Your print shop should be able to tell you what the dot gain will be on a specific job. Typically, web offset presses have dot gains of around 25% and sheetfed presses have dot gains of 5% to 10%.

Monitor Gamma

The gamma, or brightness, of your monitor and the printing gamma must be the same if what you print will look like what you see on your monitor.

If you haven't used a third-party optical hardware calibration device to change your monitor's gamma, you're pretty safe leaving the Monitor Gamma setting at the 1.8 default setting.

If you do use one of these calibration devices, we recommend that you set it to 1.8. If you've set your monitor to another gamma, change the Monitor Gamma in PostScript Setup to the same number.

Screen Frequency

The screen frequency option represents the fineness of the halftone screen grid which is made up of rows of dots. This grid is measured in lines per inch (lpi). The higher the lpi is, the crisper the image will be.

If you are printing a separation, Painter lets you set the screen frequency for the four process colors: cyan, magenta, yellow, and black.

Angle

The angle setting is the angle at which your halftone screen rests on your image. When printing separations, these angles can be set for each of the process colors.

Spot Type Menu

The Spot Type pop-up menu dialog box gives you options for the shape of the dots that make up your halftone screen grid.

You can also change the shape of the dots using the Spot Type pop-up menu in the EPS Options dialog box.

See Also

Spot Type

Using the Print Dialog Box

After setting up your printing controls, choose **File: Print** to open the Painter Print dialog box.

The top half of the dialog box contains the standard Windows print commands.

The bottom lists the four printing methods Painter supports---GDI Printing, Color PostScript, Separations, and B&W PostScript.

See Also

GDI Printing
Color PostScript
Separations
B&W PostScript

GDI Printing

Check this radio button if your printer uses color or black-and-white Windows Graphic Device Interface (GDI). A common GDI printer is the Hewlett-Packard DeskJet.

You cannot print separations to GDI printers, nor does Printer/Press Dot Gain, Spot Type, or screen frequency have any effect on printer output.

Color PostScript

Use this radio button in the Painter Printer dialog box if you are printing to a color PostScript printer, such as the QMS ColorScript and Tektronix color thermal printers.

These printers are affected by Printer/Press Dot Gain, Spot Type, Screen Frequency, and Angle.

Check **Color PostScript** if you have one of these printers.

Separations

You can print separations from Painter with any PostScript device, most commonly with high-resolution imagesetters.

Good separations depend on the right screen frequency and angle. Printer/Press Dot Gain and Spot Type are also crucial for producing quality color separations.

Check with your imagesetting service bureau about what kind of setup is necessary for the kind of equipment you are outputting files to.

Select **Separations** in the Painter Print dialog box if you are printing separations directly from Painter.

Painter places a color bar, registration marks, and color name on each of the four separated plates. If you wish to print negatives of your separation, check the **Negative** box in Windows Advanced Options. However, if you are using a service bureau to print your separations, check with them on the proper setup for their equipment.

B&W PostScript

Check this box in the Painter Print dialog box if you are printing on a black-and-white PostScript laser printer.

Using the Printer Settings File

Painter includes a Printer Settings file (PRINTER.STG) that contains color calibration information for obtaining a quality color separation on a high-resolution imagesetting device.

The Printer Settings Dot Gain is set to 16%, Screen Frequency for all four process colors is 133 lpi, and Angle is set to 15° for cyan, 75° for magenta, 0° for yellow, and 45° for black.

Printing Files Saved as EPS

When you save a file as EPS-DCS, Painter uses the Printer Settings file in your Painter directory to make the separation files.

If you wish to use the angle and screen frequency in the PostScript Setup dialog box, check the box next to **Use PostScript Setup** settings in the EPS Save As Options dialog box.

Note: Although Painter uses the PostScript Setup dialog box information for screen angles and frequency, Painter still uses the color separation data in the Printer Settings file.

See Also

Saving in EPS
Using PostScript

Scanning with Painter

You can scan from within Painter using TWAIN, a general method for acquiring any raster image, which is supported by several software applications and scanner manufacturers.

To access your scanner, you must first tell Painter which scanner you will be using. Choose **File: Select TWAIN Source...**. A dialog box appears allowing you to select any scanner with a TWAIN driver available on your system. Choose the scanner you wish to use. After you have chosen a scanner, choose **File: TWAIN Acquire...**, which brings up your scanner's software interface.

For TWAIN to work, you must have the TWAIN source manager, a file called TWAIN.DLL, in your Windows system directory. TWAIN.DLL comes with scanners whose software supports TWAIN. If your scanner doesn't include TWAIN.DLL, ask your scanner manufacturer how you can get a copy. Fractal Design cannot supply you with TWAIN.DLL.

If TWAIN.DLL is not in your Windows system directory, the **TWAIN Acquire** and **Select TWAIN Source** commands are not available.

The **Advanced Controls Palette** lets you customize Painters brushes.

The Advanced Controls: **Expression (Sliders) Palette** lets you use ways other than pressure to determine factors like how much a brush shows paper texture, how dense a color will be, and how wide a brush stroke will be.

Brush strokes are **aliased** when the transition between them and the adjacent image is hard-edged and jagged, with stair steps on the edges.

Brush strokes are **anti-aliased** when the transition between them and the adjacent image is smooth and without noticeable stair steps on the edges.

Painter has two **alternative color palettes**. One uses a horizontal bar instead of a wheel to select hue. The other uses RGB sliders instead of graphical color selectors. You can choose the color palette you wish to use in the General Preferences dialog box.

The **Art Materials Palette** is where you select your art materials, from the basics, like a color for your pencil, to unusual paper textures and complex color gradations.

The Art Materials: **Colors Palette** has a color ring and triangle, a pair of Overlapping Rectangles, and an HSV box that can be changed to an RGB box by clicking on it. Clicking on the grow box in the upper right corner expands the palette, revealing sliders for setting color variability and an option for using clone color.

The Art Materials: **Grads Palette** lets you select and control the gradations Painter provides for filling areas of your images.

The Art Materials: **Papers Palette** is where paper textures are stored. Use it to select paper, open other paper libraries, and invert or resize paper grain.

The Art Materials: **Sets Palette** lets you display, create, and customize color sets, Painter3's primary method for working with groups of colors.

The Art Materials: **Weaves Palette** lets you create your own weaves, or select the ones Painter provides, and use them as unique fill patterns.

The **Brushes Palette** is where you choose from Painter's wealth of drawing and painting tools.

The **Brush Controls Palette** lets you customize Painters brushes.

The Brush Controls: **Size Palette** lets you get the exact width and tip you want for your brush strokes. The Preview Window in the center of the Brush Controls: Size Palette shows how your changes affect the brush dab. Expanding the Brush Controls: Size Palette by clicking the grow box in the upper right corner displays controls for adjusting the brush angle and dab type.

Buildup refers to brush methods that result in brush strokes that build up the color of those below them, eventually turning them black.

The **Controls Palette** changes to reflect your selection in the Tools Palette and to give you instant access to the tools main functions. For example, you select the Brush Tool and the Brush Control Panel is there showing you the current primary and secondary colors, sliders for fine-tuning the brush, and radio buttons for choosing a drawing style.

The **Controls: Brush Palette** appears when you select the Brush Tool. It shows the current primary and secondary colors and includes sliders for fine-tuning the brush and radio buttons for choosing a drawing style.

Cover refers to brush methods that produce brush strokes that cover or hide underlying strokes.

A **dab** is the individual mark made by a brush. A brush stroke is a series of dabs. Dab types control the character of the dabs.

The **Draw Style** radio buttons determine whether you draw freehand or straight lines.

EPS (Encapsulated PostScript) is a file format supported by page-layout programs and vector-type draw programs.

A **floater** is an image element that floats independently above the background of an image, making it easy to work with complex compositions.

The **Floating Selection Tool** is the pointing hand tool on the Tools Palette, used to create and work with floaters.

The **formats Painter supports**.are .RIF, .TIF, .PCT, .BMP, .PCX, Targa, Photoshop, and .EPS.

The **Grain slider** on the Controls: Brush Palette determines how much paper grain shows through a brush stroke. For brushes that interact with paper grain, the Grain slider controls how much color penetrates into the paper.

Many of Painters palettes have additional controls that can be opened or hidden by clicking the **grow box** in the palettes upper right corner.

The **HSV** (Hue, Saturation, Value) color system separates colors into their natural hue (predominant spectral color), saturation (colorfulness), and value (luminance) components.

Click a **Library** button to display a new library of items in a drawer, a library provided by Painter or one you create yourself.

The **Magic Wand** tool on the Tools Palette is for making a selection based on pixel color.

A **mask** is a layer in a floater or in the background that determines what will show and what will be hidden in an image.

The **Objects Palette** is for performing Painters sophisticated image-editing and compositing functions.

The **Opacity slider** on the Controls: Brush Palette changes the cover or buildup power of brush strokes. Increasing opacity by moving the slider to the right makes cover brushes more opaque, and buildup brushes muddy up toward black more quickly. Decreasing opacity has the opposite effect.

The **Outline Selection Tool** on the Tools Palette is for drawing freehand, straight line, or Bézier Curve selections.

The **Overlapping Rectangles** show the selected primary and secondary colors. The front rectangle shows the selected primary color and the back rectangle shows the selected secondary color. Most of the time youll work with the primary color. The secondary color is for multicolor brush strokes. When you start Painter, black is the selected primary color and white is the selected secondary color.

Plug-ins are software programs that work with Painter and other applications to drive scanners and printers, support additional file formats, and provide new special-effects filters.

The **Tools Palette** determines your current activity. For example, its here that you tell Painter whether you want to draw, zoom in on a document, or select part of an image.

The **Rectangular Selection Tool** is a tool on the Tools Palette used to create rectangular or square selections.

Brush strokes are **semi-anti-aliased** when they relate to the background in a way that is between anti-aliased (smooth) and aliased (jagged).

A **session** is a recording of a Painter work session, including your brush strokes, selections on palettes, and menu choices.

A **stroke** is a series of dabs. Stroke types control the way a series of dabs is laid down.

For each brush, you can choose a **variant**. For example, if you select the Pencil, you can choose from Colored Pencils, Thick & Thin Pencils, a 2B Pencil, a Sharp Pencil, a 500 lb. Pencil, or a Single Pencil Scribbler.

The **wet layer**, where you paint with Water Color variants, is a separate layer that floats above your image area**.**

Keyboard Shortcuts

To find out the keyboard shortcuts associated with a specific topic, click a topic.

Palettes - Keyboard Shortcuts

Tools	Ctrl+1
Brushes	Ctrl+2
Art Materials	Ctrl+3
Brush Controls	Ctrl+4
Objects	Ctrl+5
Controls	Ctrl+6
Advanced Controls	Ctrl+7
Color Sets	Ctrl+8

Menu Keyboard Commands

To find out the keyboard shortcuts associated with a specific pull-down menu, click a topic.

File
Edit
Effects
Canvas
Tools
Windows

Tools Palette - Keyboard Shortcuts

Brush (Freehand)	B	
Brush (Straight-Line)	V	
Dropper		D
Floating Selection	F	
Magnifier	M	
Outline Selection (Freehand)	H	
Outline Selection (Straight-Line)		L
Outline Selection (Bézier)	P	
Oval Selection	O	
Paint Bucket	C	
Path Adjuster	A	
Rectangular Selection		R
Text Selection	T	

Screen Navigation

Scroll image with Grabber	Space bar
Center image	Space bar + click
Zoom in	Space bar + Ctrl + click
Zoom out	Space bar + Ctrl + Alt + click
Define magnification area	Magnifier + click + drag
Rotate Image	Space bar + Alt
Un-rotate image	Space bar + Alt + click
Constrain rotate to 90 degrees	Shift + Alt + Space bar

Frame Stack Navigation

First frame of stack	Home
Last frame of stack	End
Next frame	Page Up
Previous frame	Page Down
Stop at current frame	Stop Button + Alt
Stop and return to starting frame	Ctrl + .

Selections - Keyboard Shortcuts

Rectangular Selection Tool

Constrain to square	Ctrl + Shift
Adjust current rectangular selection	Shift
Edit Rectangular Selection	Shift + Ctrl + E

Oval Selection Tool

Constrain to circle	Ctrl + Shift

Painting - Keyboard Shortcuts

Brush Controls

Resize Brush	Ctrl + Alt
Build Brush	Ctrl + B
Constrain to 45 degrees (straight-line)	Shift
Adjust opacity in 10% increments	1 - 0 keys

Wet Layer

Post-diffuse	Shift + D

Cloning

Set clone source	Cloner Brush + Shift
Re-link clone source	Ctrl + File:Clone command

Outline Selection Tool - Keyboard Shortcuts

Freehand

Edit Path	Shift
Add area	Ctrl
Subtract area	Ctrl + Alt
Stroke width change with pressure	Alt

Straight Lines

Constrain to 45 degree angles	Shift
Close path	Enter

Bézier Curves

Corner/curve toggle	Alt + drag on handle
Equal length handles	Shift + drag on handle
Make last point corner	Alt + drag on point
Delete last point	Backspace

Path Adjuster Tool - Keyboard Shortcuts

Duplicate	Alt + click
Move path by 1 screen pixel	Arrow keys
Delete selected paths	Backspace
Render/un-render path	Enter

Dynamic Path Adjustment

Resize	Drag corner handles
Resize/preserve aspect	Shift + Drag corner handles
Resize/one dimension	Drag side handles
Skew	Ctrl + Drag side handles
Rotate	Ctrl + Drag corner handles

Path List - Keyboard Shortcuts

Item layer order	Click + Drag item in list
Select/deselect multiple list items	Shift + click
Attribute dialog for selected path	Double-click
Render/un-render path	Enter

Floating Selection Tool - Keyboard Shortcuts

Duplicate	Alt + click
Move floater by 1 screen pixel	Arrow keys
Hide/display marquee	Shift + Ctrl + H
Attribute dialog for current floater	Enter
Delete selected floaters	Backspace

Floater List - Keyboard Shortcuts

Item layer order	Click + Drag item in list
Select/deselect multiple list items	Shift + click
Attribute dialog for current floater	Enter
Adjust opacity in 10% increments	1 - 0 keys

Paint Bucket - Keyboard Shortcuts

Limit fill extent	Click + Drag paint bucket

Dropper - Keyboard Shortcuts

Measure mask density	Shift
Dropper access	Ctrl + Paint Bucket Ctrl + Floating Selection Tool Ctrl + Oval Selection Tool Ctrl + Rectangular Selection Tool Ctrl + Brush

Color Sets - Keyboard Shortcuts

Add current color to set	Shift + Ctrl + K
Replace current color in set	Alt + click color

Magic Wand - Keyboard Shortcuts

Add color to selection	Shift + Wand
Find all instances in area	Selection + Wand

Spiral Gradations - Keyboard Shortcuts

Adjust spirality	Ctrl + Angle Adjuster

File Menu - Keyboard Shortcuts

New	Ctrl + N
Open	Ctrl + O
Close	Ctrl + W
Save	Ctrl + S
Get Info	Ctrl + I
Print	Ctrl + P
Quit	Ctrl + Q

Edit Menu - Keyboard Shortcuts

Undo/Redo	Ctrl + Z
Cut	Ctrl + X
Copy	Ctrl + C
Paste (Normal)	Ctrl + V
Drop current floater	Shift + Ctrl + D
Select All	Ctrl + A
Deselect	Ctrl + D
Reselect	Ctrl + R
Clear Mask	Ctrl + U
Auto Mask	Shift + Ctrl + M

Effects Menu - Keyboard Shortcuts

Last Effect	Ctrl + /
Second to last effect	Ctrl + ;
Fill	Ctrl + F
Equalize	Ctrl + E
Adjust Colors	Shift + Ctrl + A
Super Soften	Shift + Ctrl + S

Canvas Menu - Keyboard Shortcuts

Tracing Paper	Ctrl + T
Dry (Wet Layer)	Ctrl + Y
Resize Image	Shift + Ctrl + R
Grid	Ctrl + G

Tools Menu - Keyboard Shortcuts

Build Brush	Ctrl + B
Edit Rectangular Selection	Shift + Ctrl + E
Load Nozzle	Ctrl + L

Window Menu - Keyboard Shortcuts

Hide/Show palettes	Ctrl + H
Zoom in	Ctrl + +
Zoom out	Ctrl + -
Full Screen Mode Toggle	Ctrl + M