



18

Post Production

Overview



Rendering produces a 2D, bitmapped image of your scene. Anything you do with that image is considered post production. Post production might include compositing, filtering, cropping, and retouching the image in an image-editing application.

Rendering an animation produces a movie—either a single file that contains all frames (QuickTime or AVI) or a sequence of files. Post production on a movie might include any of the still-image operations, like compositing and filtering. It might also include more advanced work, like editing clips together and adding sound effects.

Post-Production Applications



Ray Dream Studio 5 is a 3D illustration and animation tool. It does not provide comprehensive post-production features. You may use an image editing or paint application such as Fractal Design Painter®, Micrografx Picture Publisher®, Corel Photo-Paint®, or Adobe Photoshop for the best in post-production results. In some cases, you might want to use your imaging application to adjust colors or contrast, apply an effect or image filter, or paint directly onto the image.

Ray Dream Studio saves renderings in file formats that are compatible with virtually any pre-press or layout application.

Compositing

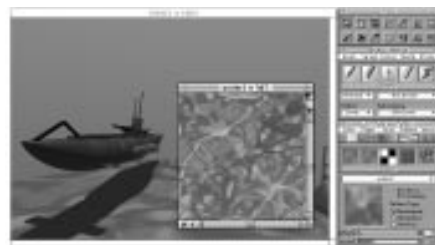
Compositing is the process of pasting one image onto another. For example, if you built a sub in Ray Dream Studio 5, you could paste it onto a scanned photo of an ocean. If you're careful, the sub can appear as though it was under the ocean when the original photograph was taken.

Usually, the foreground image (what you paste) is not a rectangle, but an irregularly shaped selection of the rendered objects. This selection should be created from an auto-generated mask. (The mask is created

when you request a rendering.) This ensures precise outlines on the objects you paste.



In Ray Dream Studio you can create the basic objects in your scene and then use another application to add a different background or other effects.



In an image editing application, like Painter, you can use the mask created by the rendering process to add a background to your illustration.



This final underwater scene was created by compositing a the objects created in Ray Dream Studio with an ocean texture us Fractal Design Painter.

Note: You can set the background color or imagery in the **Scene Settings window: Effects tab: Background or Backdrop** controls.



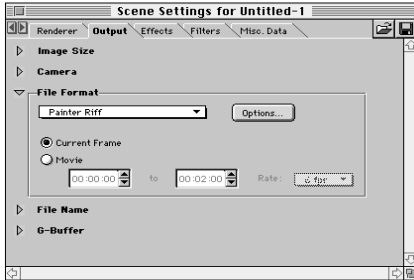
Objects in photographs have their own perspective. If the modeled object you composite does not match the perspective of the background, it will seem unnatural and out of place. After rendering, you can't change the perspective of the objects you create. Before rendering, however, it's easy.

You want to set the perspective and the direction of lighting to match the background image before rendering.



To set up a scene to render with a mask:

- 1 When you're ready to render your scene, display the **Scene Settings** window: **Output** tab: **File Format** controls.



Use the file format controls to select a format that supports multiple channels.

- 2 Make sure the selected file format supports saving multiple channels.

Painter (RIF), Adobe Photoshop, and TIFF are good choices.
 - 3 Display the **Scene Settings** window: **Output** tab: **G-Buffer** controls.
 - 4 Enable the **Mask** checkbox.
 - 5 For best results, render with **Adaptive Oversampling/Antialiasing**.
- Display the **Scene Settings** window: **Renderer** tab.

- For the **Ray Tracer** renderer, enable **Adaptive Oversampling** option at **Fast** or **Best** quality.
- For the **Adaptive** renderer, enable the **Antialiasing** option with **Edges** or **Best** setting.

To composite using Fractal Design Painter:

This procedure uses Painter as the post-production application. The steps in Adobe Photoshop would be nearly identical.

- 1 Render the scene—either directly or through the Batch Queue.
 - 2 If you rendered directly, save the image to a convenient location. Verify the file format before saving.
 - 3 Open the rendered image in Fractal Design Painter (or another image-editing application).
- The mask generated during the rendering appears in the **Mask List** palette.
- 4 Choose **Select** menu ▶ **Load Selection**.
 - 5 In the dialog, make sure the mask is selected in the pop-up. Click **OK**.

Painter selects the objects of your rendering.

- 6 Choose **Edit** menu ▶ **Copy**.

You're now done with this file.

- 7 Open the background image. (The image you are pasting onto.)

- 8 Choose **Edit** menu ▶ **Paste**.

The pasted selection comes into the image as an image floater.

- 9 Drag the floater where you want it.

Refer to the documentation that came with your image-editing application for additional information about working with masks and channels.

Filtering Images

You may have image filters for Adobe Photoshop, either from Adobe Systems or from a third-party. You may use these filters directly from Ray Dream Studio 5.

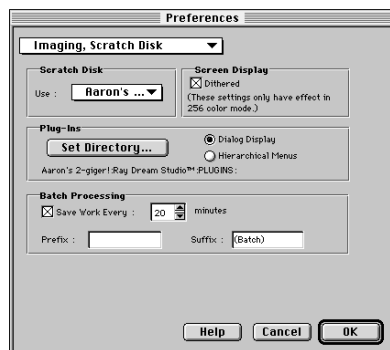
Most plug-in filters are compatible with Ray Dream Studio 5; however, filters that specifically require Adobe Photoshop are not.

To use filters you must first identify the folder containing your plug-in modules (filters). If you plan to share plug-ins

between applications, make sure you move all your plug-ins into a single folder so that Ray Dream Studio 5 can find all of them.

To identify the folder containing your plug-in modules (filters):

- 1 Choose **File** menu ► **Preferences**.
- 2 Choose **Imaging, Scratch Disk** from the pop-up.



Use the plug-in controls to locate and load plug-in filters.

- 3 Click **Set Directory**.
- 4 Use the dialog to locate and select the folder containing the plug-in modules.



If you add additional filters to your plug-in folder, you will need to re-identify the folder before you can use the filters.

When you have identified the plug-ins for Ray Dream Studio 5, you can use them on an image in the **Image** window, in the **Shader Editor** on texture maps, in render effects or on backgrounds and backdrops.

To use filters on the background or backdrop (before rendering):

- 1 Display the **Scene Settings** window: **Effects** tab: **Background or Backdrop** controls.
- 2 Pop-up the disk icon and choose **Filter** from the menu.

Ray Dream Studio displays the list of available filters appears.

- 3 Select one of the filters.

To use a filter in the Shader Editor:

- 1 Display the **Current Shader Editor**.
- 2 Select the channel containing the texture map you want to filter.

- 3 Pop-up the disk icon and choose **Filter** from the menu.

Ray Dream Studio displays the list of available filters appears.

- 4 Select one of the filters.

Advanced Filter Techniques

You can use the G-Buffer data as a control medium for certain types of image filters and effects.

For example, the Distance G-Buffer data might be useful for developing an image that fades or blurs in the distance.

With a little imagination, you'll discover other interesting ways to use G-Buffer data in an image-editing application, like Painter or Adobe Photoshop.

In Painter, G-Buffer data appears in the mask channels. Many effects let you choose from these masks on the **Using** pop-up.



When you render an image, you can generate Distance G-Buffer data which can then be used in Painter to make your image appear to fade.



In Painter, the Distance G-Buffer data appears as a mask.



You can adjust the brightness, contrast of the mask to create depth in a flat image.

In some cases, you'll want to load the mask as a selection to control an effect.

Some G-Buffer data may be difficult to use from a mask, and you'll want to move it onto the Canvas image layer.



To convert a mask channel to an image in Painter:

- 1** Remove the rendered RGB image.
- 2** You can choose **Select menu** ▶ **Select All** then **Edit menu** ▶ **Cut**. (If you prefer, you can float the image, then hide the floater.)

The canvas should be white.

- 3** In the **Mask List**, select the mask for the G-Buffer channel you want to use.

- 4** Click **Load Selection**.

You can replace the current selection.

You should have marching ants roughly describing the G-Buffer data. The marching ants follow a line, but the selection data is 8-bit.

- 5** Set the current color to black and fill the selection.

This gives you a grayscale image derived from the G-Buffer data.

Animation Post Production

For some post-production work on animations, you'll want to use Fractal Design Painter. Painter opens either movie files or sequenced files, so you may render your Ray Dream Studio animation to either format. For the best quality, use uncompressed, sequenced files.

- You can use Painter to composite animations with background stills, video or other animations. To do this, you'll want to make sure to include a mask when you render the animation.
- You can apply image effects to an animation and add special effects with floaters.
- You can paint directly onto an animation using any of Painter's fabulous brushes.

- You can use cloning to convert the imagery to a Natural-Media style—watercolors, for example.

You'll find detailed instructions for these and other techniques in your Fractal Design Painter User Guide.

You might want to use Adobe After Effects for some animation post-production tasks. You'll need a movie-editing application, like Adobe Premiere, to edit animation clips together and synchronize sound effects.

Printing Images



You can print your rendered images directly from Ray Dream Studio 5. If you require color separations, you'll have to work with your image in a pre-press application.



To print an image from Ray Dream Studio 5:

With the **Image** window active, choose **File menu ▶ Print**.

Ray Dream Studio displays the standard **Print** dialog. Refer to your system documentation for more information.