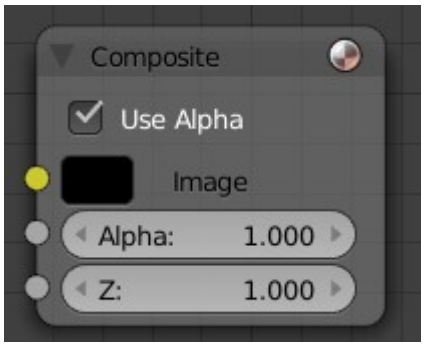
11.4 Compositing - Output nodes

Output Nodes

These nodes are used to output the composited result in some way.

- Composite Node
- Viewer Node
- Split Viewer Node
- File Output Node
- Levels Node

Composite Node



Composite Node

The Composite node is where the actual output from the compositor is connected to the renderer. Connecting a node to the *Composite* node will output the result of that node's full tree to the Renderer; leaving this node unconnected will result in a blank image. This node is updated after each render, but also if you change things in your node-tree (provided at least one finished input node is connected).

You can connect three channels: the actual RGBA image, the Alpha image, and the Z (depth) image. You should only have one Composite node in your map so that only one final image is rendered when the *Compositing* button is pressed on the Render Options Post-Processing panel. Otherwise, unpredictable results may occur.

Note

If multiple Composite nodes are added, only the active one (last selected, indicated with a slightly darker header) will be used.

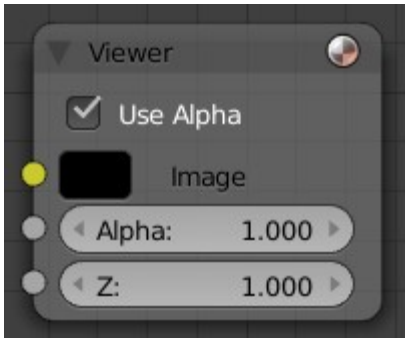
Saving your Composite Image

The RENDER button renders a single frame or image. Save your image using `F3` or the *File→Save Image* menu. The image will be saved using the image format settings on the Render panel.

To save a sequence of images, for example, if you input a movie clip or used a Time node with each frame in its own file, use the *ANIM* button and its settings. If you might want to later overlay them, be sure to use an image format that supports an Alpha channel (such as PNG). If you might want to later arrange them front to back or create a depth of field effect, use a format that supports a Z-depth channel (such as EXR).

To save a composition as a movie clip (all frames in a single file), use an AVI or Quicktime format, and use the *ANIM* button and its settings.

Viewer Node



Viewer Node

The *Viewer* node is a temporary, in-process viewer. Plug it in wherever you would like to see an image or value-map in your node-tree.

`LMB` click on the image to update it, if it wasn't done automatically. You can use as many of these as you would like. It is possible to automatically plug a Viewer node to any other node by pressing `Shift-Ctrl-LMB` on it.

Note

It is possible to add multiple Viewer nodes, though only the active one (last selected, indicated with a slightly darker header) will be shown on the backdrop or in the UV/Image editor.

Border Compositing

A border for the viewer node can be defined using `Ctrl-B` and selecting a rectangular area.

This border is used to define the area of interest of the viewer node which restricts compositing to this area. Used for faster previews by skipping compositing outside of the defined area of interest. This is only a preview

option, final compositing during a render ignores this border.

Use `Ctrl-Alt-B` to discard the defined border and see a full preview.

Tile order

The tile order can be defined for the backdrop image, using the *Tile order* field in the properties of the viewer node (*Properties* panel in *Properties* sidebar, with the viewer node selected):

Rule of thirds
: Calculates tiles around each of the 9 zones defined by the **rule of thirds** (see Rule of Thirds for more information).

Bottom up
: Tiles are calculated from the bottom up.

Random
: Calculates tiles in a non-specific order.

Center
: Calculates the tiles around a specific center, defined by *X* and *Y* fields.

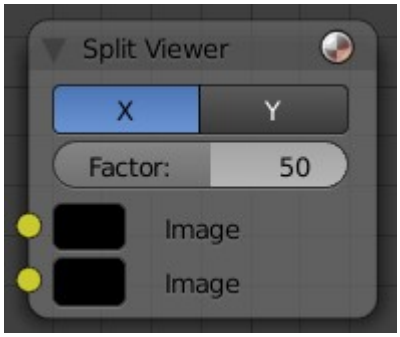
Using the UV/Image Editor Window

The viewer node allows results to be displayed in the UV/Image Editor. The image is facilitated by selecting *Viewer Node* on the window's header linked image selector. The UV/Image Editor will display the image from the currently selected viewer node.

To save the image being viewed, use Image ‣ Save As Image (`F3`) to save the image in a file.

The UV/Image Editor also has three additional options in its header to view Images with or without Alpha, or to view the Alpha or Z itself. Holding `LMB` in the Image display allows you to sample the values.

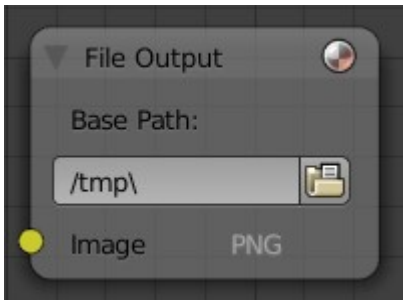
Split Viewer Node



Split Viewer Node

The *SplitViewer* node takes two images and displays one half of each on each side (top socket on the right half, bottom socket input on the left). Use this node for making side-by-side comparisons of two renderings/images, perhaps from different renderlayers or from different scenes. When transitioning between scenes, you want to be sure the stop action is seamless; use this node to compare the end of one scene with the beginning of another to ensure they align.

File Output Node



File Output Node

This node puts out an RGBA image, in the format selected, for each frame range specified, to the filename entered, as part of a frameset sequence. This means that the name of the file will be the name you enter plus a numeric frame number, plus the filename extension (based on format). Based on the format you choose, various quality/compression options may be shown.

To support subsequent arrangement and layering of images, the node can supply a Z-depth map. However, please note that only the OpenEXR image formats save the Z information.

The image is saved whenever Blender feels like it. Just kidding; whenever you press the Render button, the current frame image is saved. When you press the Anim button, the frameset sequence (specified in the Start and End frame) is saved.

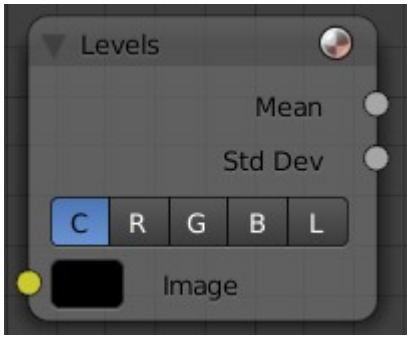
This node saves you from doing (or forgetting to do) the Save Image after a render; the image is saved automagically for you. In addition, since this node can be hooked in anywhere in the noodle, you can save intermediate images automatically. Neat, huh?

Note

Filespecs

As with all filename entries, use `//` at the beginning of the field to shorthand reference the current directory of the `.blend` file. You can also use the .. breadcrumb to go up a directory.

Levels Node



Levels Node

The Levels Node takes an image as an input, and can output a 1D value based on the levels of an image. It can read the input's *Combined RGB*, *Red*, *Green*, *Blue*, or *Luminance* channels.

It can output a *Mean* value, or average of values, or a *Standard deviation*, which measures the diversity of values.