

NEW FEATURES FROM FUSION 5.0 – 5.01

This document uses the term Fusion to refer to both Fusion and DFX+. If a change affects Fusion or DFX+ specifically, that will be mentioned in the notes. This is a document listing only new features and capabilities added to Fusion since version 5.00 was released. For a comprehensive list of changes, please consult `release_notes.html` in the root folder of your Fusion installation.

General

Holding down Shift while choosing Set Render Range or dragging a tool to the time ruler will now set the Global Range to the tool's valid extent.

Fusion no longer requires a separate license to support view-on and previews via the frame buffer of the HD Bluefish cards.

Tools

Tracker patterns can now be deleted from the pattern list.

The grain tool has a new scale function that scatters/jitters the generated grain pattern, which can prevent the appearance of 'blockiness' as the grain gets larger.

White Balance can now do gamma correction with proper linear toe portion. Now supports "real" sRGB, and Rec 709. Fixed gamma / transfer function for PAL/SECAM and SMPTE-C.

Formats

Fusion now load 32bit float PSDs from Photoshop CS2.

Fusion can now read 10bit RGBA DPX files.

Fusion can now read DV OMFs if the AVID DV QuickTime codec is installed. Writing out DV OMFs is not possible at this time.

OpenEXR format options now display a drop down list showing available channels, rather than requiring you to know the channel names in advance.

Displays

The Grid toolbar button has been removed from the display views and a LUT toolbar button has been added. Click to toggle LUT enable, popup for a list of LUTs.

Fusions display can now use any macro as a View Look Up table (LUT). To use a macro as a LUT first create the macro, and save the Macro in the Fusion:\LUTs folder. It should then be possible to apply the macro as a LUT in the view, either by using the display views LUT context menu, or by clicking on the arrow next to the LUT button in the view toolbar. The LUT button replaced the Grid button in the toolbar, and allows you to disable the current LUT or change LUTs.

Fusion can now import old DF4 style .lut files.

A 'displayed depth range' option has been added to the View Preferences, so you can more easily view Z buffer data outside our default -1000..0 range (e.g. from Maya, LW etc)

Previews were improved so that they would behave a bit more like previews in previous versions. You can now double-click in a view to play the current preview (if there is one), and double click again to stop. Hold down SHIFT while clicking for reverse playback. You can also right-drag to scrub the current preview.

A Play button now appears in the bottom right corner of the preview. Click on the button to start or stop playback of the preview, or shift-click on the button to play the preview in reverse. A small text label appears next to the play button, indicating the current frame or timecode.

Bins

One can now apply similar view settings to a number of bin subfolders.

One can also specify per-user library root from Bin \ Security preferences

Generic files can now be added to the bins. These objects can now be 'opened' (in associated app) by either double click, or Open context menu. Generic files will attempt to use the shell/explorer icon for the file.

Settings can use an icon from a .bmp file of the same name.

3D and Particles

The 3D software renderer can now output z-depth, z-coverage, and BG color channels.

An "Import Transform" button has been added to the transform tab of most 3D tools. This is used to import transformations from supported 3D file formats.

Motion blur is now available on particles, provided the Motion Blur settings for the pRender tool and the Renderer3D tool are the same.

Support for loading obj files via the FBX Mesh tool is now available.

Dropping a camera on a view (from a toolbar or a bin) will now set it up automatically to match the current view camera and starts viewing through it.

A "Copy View to" submenu in the Camera submenu has been added. This will copy the current view position/angle to the chosen camera/light/other object.

Basic texture mapping is now part of the 3D text. You can use images produced by other tools in the composition, clips from the disk, or even brushes from the brushes directory.

Particle 3D Sphere regions now provide rotation and pivot inputs controls.

Blobs should cast shadows in 3D correctly now.

Network Rendering and Network Manager

One can now network render a composition even if the path to the composition is valid only to the render manager. The render manager now opens the composition and streams it to each of the slaves. Paths used for footage in the composition still need to be valid for all slaves though.

Scripting

For a complete list of changes to scripting, read the scripting manual installed with the 5.01 update.

Remote Monitor

"Remote Monitor" is a new command line eyeonScript script found in Fusion:\Scripts\Commandline that allows you to connect to a remote render monitor and monitor the slave list and the job list. You can perform most of the

same functions that are available via the render manager – such as adding and deleting jobs or slaves, reordering jobs, and other tasks.

Remote Monitor is the first application to make use of IUP, a graphics library provided with eyeonScript which provides greater flexibility than AskUser() did.

Open in SciTE

“Open in SciTE” is a composition script that will open the current composition in the version of SciTE that is shipped and installed with Fusion. If you wish to use a different text editor, you will need to modify the script slightly.

Highlight Animated Tools

“Highlight Animated Tools” is a tool script that will change the background color of tool tiles for any tool in the flow which has animation applied to it.

Animate 3D Parameters

“Animate 3D Parameter” is a tool script that works on any tool with a set of 3D transformation controls. It will animate all twelve of the sliders used for 3D transforms, including XYZ Offset, Rotation and Scale.

Explore Clip or FBX Directory

“Explore Clip or FBX Directory” is a tool script that will display a Windows file browser focused on the folder containing the file on disk used by the tool. This also works on Loaders, Savers and FBX Mesh tools.

Search Comments

“Search Comments” is a composition script that will search the flow for a tool with a specific comment. If the comment is found, it will select the tool. If multiple tools are selected, it will display a dialog containing a drop down listing all the tools that fit the criteria.

Updated Scripts

The “Render Manager Status” and “Change Paths” scripts were both updated to deal with changes in attributes of objects they relied on.