

Release Notes

MultiGen® Creator
Version 2.6
for Windows® 2000 Professional
and Windows® XP Professional

April 2003



MultiGen-Paradigm
VISUALIZE REALITY

Release Notes

MultiGen® Creator Version 2.6 April 2003

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Release Notes

MultiGen Creator 2.6 includes all fixes addressed in Creator 2.5, patches, and additional fixes made later than the patches.

MultiGen Creator runs on standard PC workstations with the Windows 2000 Professional or Windows XP Professional operating system.

For the latest product information, visit our web site at: <http://www.multigen-paradigm.com>.

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Contents of the Creator CD

- Creator installer: \Creator Install\Setup.exe
- OpenFlight API installer: \OpenFlightAPI Install\Setup.exe
- DFD API installer: \DFDAPI Install\Setup.exe
- Adobe Acrobat Reader Search Software: \Acrobat Reader\rp500enu.exe
- Creator online help file: Creator Install\Help\mgcreator.chm
To display CHM files, you need Internet Explorer 4 or higher installed.
- *Help Summary*, the Creator online help file in PDF format:
\User_Manuals\HelpSummary.pdf
- *Creating Models for Simulations* and *Creating Terrain for Simulations*, in PDF format: \User_Manuals\ModelingGuide.pdf and
\User_Manuals\TerrainGuide.pdf
- *MultiGen Creator Desktop Tutor*, in PDF format: \User_Manuals\Tutor.pdf.
Files you use when you perform the tutorials in this book are located in:
\User_Manuals\Tutorial_Files\DesktopTutor\Models,
\User_Manuals\Tutorial_Files\DesktopTutor\Textures, and
\User_Manuals\Tutorial_Files\DesktopTutor\Batch_Tutorial
- Sample OpenFlight models and textures from Victory Simulations, Inc. (These are provided as a courtesy and are not to be redistributed.):
\Gallery\3rd_Party_Models\Victory_Simulations.
- Textures from www.texturama.com: Registered Creator users can receive a discount on Texturama textures. See the Texturama README.txt in that folder.
\Gallery\3rd_Party_Textures\Texturama
- Media files: .mp3 (audio) and .wmz (skin file for Windows Media Player 7.0 or higher).
\Free_Stuff\Media Files
- \Free_Stuff: includes plug-ins, sample materials, terrain, and OpenFlight models. Everything in the Free Stuff directory is supplied “as is.” MultiGen-Paradigm Technical Support does not support anything in this directory.
- New shadow textures for the Tree Wizard and Building Wizard:
\Gallery\Textures

Note: The HMD and NIFF plug-in game console exporters are not included in this release. The Vpf2Dfd utility (VPF to DFD conversion utility) is also not included.

Compatibility Issues

These are compatibility issues with the OpenFlight format, OpenFlight Loader, and Windows.

OpenFlight Format

MultiGen Creator 2.6 writes files in OpenFlight format version 15.8. Opening a database file created with the latest release in an older version of Creator might result in a loss of data or in objects not appearing correctly. This is particularly true for features such as Mesh nodes or Multitexture. For example, if multitextures are applied to polygons, you can only view the base texture in an older Creator version; however, the multitexturing information has not been lost, only the ability to view it, unless you save the file using the older version of Creator.

Windows Support

Creator 2.6 for Windows is compatible with Microsoft Windows XP Professional, and Windows 2000 Professional (not the Home Edition). MultiGen Creator is not compatible with Windows NT 4.0, Windows 98 or Windows ME.

Note: Please check the Support pages of the MultiGen-Paradigm web site periodically for updated information. The URL is <http://www.multigen-paradigm.com>.

Performance Issues

Consider these issues for best performance in Creator 2.6 for Windows.

Display Settings

For best results when using Creator, turn off the full drag option when dragging windows. This will improve your performance when moving windows around. To disable this option, right-click on the Windows desktop and choose Properties from the menu that appears. The Display Control Panel will appear. In Windows NT, select the Plus! tab; in Windows 2000 and XP, select the Effects tab. Clear the checkbox "Show window contents while dragging."

3D Accelerator Cards

If you experience problems with rendering when using an OpenGL 3D accelerated graphics card, visit our web site at <http://www.multigen-paradigm.com> for the latest information from MultiGen-Paradigm Support.

Viewing Volume

The *Viewing Volume* controls the extent to which a database can be viewed from a given eye point. If the eye point is moved away from the database origin (0,0,0) by a significant amount, a portion of the geometry may be clipped. Auto LOD is on by default; if you turn off Auto LOD, the default value for the **Far Clipping Plane** of the viewing volume is set at 10,000 database units. Therefore, when the eye point is moved to a distance that is more than 10,000 database units away from the database origin, all geometry 10,000 or more units away from the eye point will seem to disappear. The distance between the **Near Clipping Plane** and the **Far Clipping Plane** limits the amount of buffer space required for Z-Buffering. The values for the **Near Clipping Plane** and the **Far Clipping Plane** can be adjusted in the *Viewing Volume* dialog box in the **View** menu (see the Creator online help).

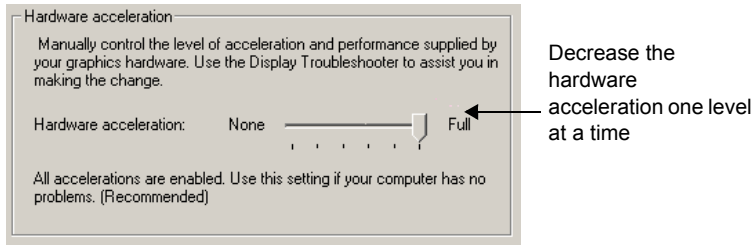
Transparent Materials and the Z-Buffer

Materials with an associated transparency may not appear as expected in Z-Buffer drawing mode. Creator uses the “fixed list order of drawing” method to display geometry that contains transparent materials, regardless of the type of drawing mode in use. A fixed list drawing order will display geometry in the order of a database structure: Top-Down, Left to Right. When displaying a transparent object in front of a solid object in Z-Buffer drawing mode, the order in which the objects appear in the database hierarchy determines whether you see the solid object through the transparent object. Place the transparent object after all other objects on a given level in the hierarchy to ensure that the transparent objects are drawn last.

Rendering Problems

If you experience rendering problems, such as refreshing the screen, redraw functionality, and mouse-related problems, try decreasing the hardware acceleration

for your video card. Decrease the hardware acceleration one level at a time, and test Creator to see if the problems are cleared.



Mouse Configuration

We highly recommend that you use a three-button mouse to use all of the Creator features. If you have a scroll wheel instead of a middle button on your mouse, set up the scroll wheel as a middle mouse button in your mouse driver.

Known Problems and Workarounds

This section describes known problems for Creator. Problem report ID numbers are referenced in parentheses, and any workarounds are noted. MultiGen-Paradigm is working to resolve these issues.

Offset Selection (#3469)

When a geometry that is far from the database origin is selected, the select outline is offset from the geometry. The geometry may also appear to "jitter" when rotating it. Both of these problems are caused by a floating point round-off error -- the geometry is drawn using one calculation path and the select outline is drawn using a different calculation path. The workaround is to localize your geometry so that the coordinates are not so large (in other words, put the geometry closer to the database origin).

Texture Editor Image Size Limitations (#3947)

Images in the 8kx8k size range or larger probably cannot be loaded into the texture editor. If the Texture Editor quits unexpectedly when trying to edit a large texture file, it may be a result of hardware limitations, such as a limited amount of hard drive space or a limited amount of texture memory on the graphics card. You can try adding RAM, upgrading the graphics card, increasing the virtual memory setting in Windows, or edit the texture using another texture editor (such as Adobe Photoshop).

Texture Composer View Altered When Translation Applied(#4289)

When you select a node in the hierarchy that has a transformation applied to it, the view in the Texture Composer may be blank or show a distorted view. If you select children of that node, the contents of that node are shown as expected.

NVIDIA GeForce3™ (or Higher) Equipped PC Workstations (#4658)

Users of MultiGen Creator on PC workstations equipped with NVIDIA GeForce3™ or higher graphics cards might see some erratic behavior that we have discovered in our tests (these tests are against Windows 2000 as the operating system).

- Polygons flagged as wire frame might appear gray regardless of what color you assign to the polygon. The color attributes are unaffected.
- Creator crashes on GeForce4 (Driver 6.13.10.2841) when loading a large, non-square image into the texture palette (4082 x 2985 RGB). Make your textures a power of two when possible.
- You might need to set the near clipping plane to 1.0 or greater. Values less than 1.0 can confound the Z-buffer and produce undesired results in display. Auto LOD tries to account for variable database sizes but you may still need to adjust the Near and Far clipping planes for best results.

Hidden Surfaces Visible in the Vega Viewer (#4841)

Sometimes when using the Vega Viewer, hidden surfaces are drawn on top of the model. This may be the result of clipping plane problems.

Duplicate Node IDs (#6043)

Creator automatically assigns node IDs, such as **G3**, as you create nodes. This node ID might not be unique in your hierarchy. For example, you might copy and paste a node in your hierarchy, and later create a new node that is automatically assigned the same ID. If your runtime system requires unique node names, you might experience undesired results with the database model. The runtime system might not be able to read the duplicate node names in your hierarchy correctly. Rename these nodes to prevent this problem.

Keyboard Shortcuts (#6171)

Keyboard shortcuts, such as Ctrl+Z for Undo, will not affect the Texture Editor. They will only affect the Creator database window. Click the Texture Editor buttons or menu items to apply any functions.

Compressed Textures

You can use compressed textures in Creator, which then passes them unchanged to the runtime application (such as Vega Prime). It is up to the interactive application to uncompress the textures at runtime. (The interactive application is the application that is created with the runtime application.)

For best results, author and use the compressed textures on the same type of computer (CPU, graphic cards, etc.). The graphic card libraries do the compressing and uncompressing, not Creator or the runtime application.

Environment Variables

This release of Creator is the first to support new environment variables as described in the online help under the topic "Environment Variables." These new environment variables are designed to be product specific, so that do not conflict with environment variables for other MPI products. For example, the old TXTPATH variable is replaced

with MPI_CREATOR_TXTPATH. Note that the old environment variables will work with this release of Creator but future releases may not support them. If you have conflicts with other MPI products, use the new environment variables.

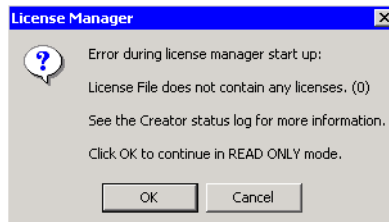
Note: Some topics in the online help still refer to the environment variables by their old name. Substitute the new name where possible. See the topic “Environment Variables” for the correct names.

Deprecated OpenFlight API Functions

The OpenFlight API samples may include some deprecated functions. These functions will continue to work, but users are referred to the OpenFlight API documentation for notes about the deprecated functions and their replacement functions. In future releases, these API samples will be updated to the most current functions.

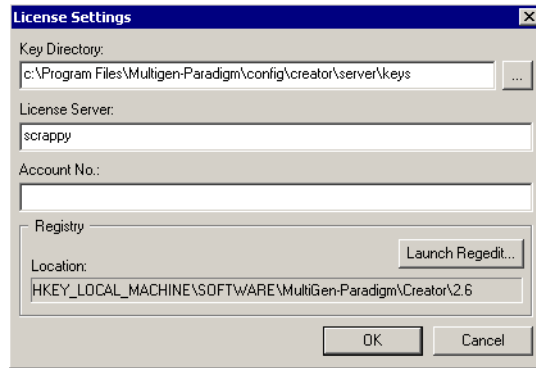
New License Manager Functionality

If you run Creator and a license is not available, you may get the following dialog box at startup:



Click **OK** to start Creator in read-only mode. If you are not sure why your license is not working, check your Status log to see the error message. Choose **Info/Status Log** and then scroll to the top to see the message.

Then choose **Info/License Settings** to display the following dialog box:



This shows the path to the current key directory and the name of the current license server computer.

If you are using a node-locked license, the path to the license file may be incorrect. Click the Browse button (...) and navigate to the correct folder. Then click **OK** to return to the *License Settings* dialog box and click **OK** again to close the *License Settings* dialog box. Restart Creator to have the change take effect.

If you are using a license server, the name of the license server computer may be incorrect. You can change the name of the computer in **License Server** to a computer serving a valid Creator license and click **OK** to close the *License Settings* dialog box. Restart Creator to have the change take effect.

