

The cover art features a dark, atmospheric background with a glowing red and orange nebula-like effect. A large, metallic, reflective object, possibly a stylized flame or a piece of machinery, is positioned on the left side, curving upwards and to the right. The object has a highly polished, mirror-like surface that reflects the surrounding light.

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Service Pack 1 Release Notes

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Autodesk Maya 2009 Service Pack Release Notes

1

Introduction

The Maya 2009 Service Pack release notes contain information about what's fixed and known limitations and workarounds for this release.

Refer to the following sections for more information:

- [What's new?](#) on page 1
- [What's fixed?](#) on page 2
- [Release notes](#) on page 8

What's new?

The following sections lists new features in the Maya 2009 Service Pack.

What's new in General

Preserve Child Transform added to Rotate and Scale marking menus

You can now select the Preserve Child Transform option from the Rotate ('E' + the left mouse button) and Scale ('R' + the left mouse button) marking menus. When this option is selected, moving a parent object does not move its children.

Latest Maya FBX plug-in included

The latest version of the Maya FBX plug-in is included with this service pack.

What's new in mental ray for Maya

License scheme for multi-core CPUs

The license scheme for multi-core CPUs has been changed. The limit of 2 or 4 cores per CPU has been removed.

Performance improvement in scenes with global illumination

Significant performance improvement for scenes using global illumination with the mia_material_x_passes shader.

What's fixed?

The following sections list the software limitations that were fixed in the Maya 2009 Service Pack.

What's fixed in General

MayaPluginWizard now works with Maya 2009

The MayaPluginWizard has been updated to work with Maya 2009.

Tutorials and What's New Help menu links

The Tutorials and What's New are accessible through the Help menu. When you select Help > Tutorials or Help > What's New, Maya loads the expected documentation.

What's fixed in Basics

User defined normals ignored on skinned polygon mesh

In previous versions of Maya, user defined (locked) normals were ignored on a non-uniformly scaled polygon mesh when skinned. This has been fixed.

Moving from a set to its members now treated as a pick walk

In previous versions of Maya, moving from a selected set to its members via a pick walk was originally by the current component's rule for pick walking. This has been changed so that moving from a selected set to its members via a pick walk is now treated as a pick walk itself.

For example, moving from a set to the vertices of its contents previously seemed like one pick walk because there was no rule for vertices. Now, moving from the set to its contents is considered a pick walk. Maya then performs a second pick walk across the vertices of each object.

Tumbling complex scenes

Tumbling a very complex scene occasionally caused Maya to stop unexpectedly. This has been fixed.

Frame Rate inaccurate on variable clock speed systems

In previous versions of Maya, turning on the Frame Rate display could lead to inaccurate calculations of FPS on systems with variable clock speeds. This has been fixed.

Importing a .obj with Create Multiple Objects on

In previous versions of Maya, importing a .obj file with the Create Multiple Objects option turned on rearranged the vertex order of the meshes. This has been fixed.

(Mac) Camera based selection

In Maya 2009, turning on Camera Based Selection on Mac OS caused component selection to fail. This has been fixed.

Locking rotateOrder attribute no longer locks its rotate attributes

In Maya 2009, attempting to lock a transform's rotateOrder attribute also locked the individual rotation attributes (X, Y, Z) as well. This has been fixed.

What's fixed in Assets

Switching away from the container tab in the Attribute Editor

When switching from a container tab to another tab, then back to the Attribute Editor, previously opened frames of published attributes had to be reopened,

because the frame layout was reset. This has been fixed so that the frames are automatically opened when the user returns to the container tab.

Creating a container with nodes that reference other container's contents

In Maya 2009, Maya could freeze if you created a container with a transform node that had referenced nodes from other containers as children. This has been fixed. Maya now prevents non-container referenced nodes from being added to a new container. Referenced container nodes can be added to new containers manually.

400 Published Attribute limit for Channel Box

A maximum of 400 published attributes can be shown in the Channel Box at one time to improve selection speed. If you want to display more than 400 published attributes, you can modify the limit used by the channel box with the optionVar's `containerChanBoxMaxWithTemplate` and `containerChanBoxMaxNoTemplate`.

For example:

```
optionVar -intValuecontainerChanBoxMaxWithTemplate 1000
```

A negative value prevents the Channel Box from culling any attributes. Note that setting this value greater than 400 may result in some performance loss when selecting objects.

Referencing a file multiple times with locked unpublished attributes

In Maya 2009, referencing a file with previously locked unpublished attributes multiple times could result in those attributes being unlocked in the files referencing them. This has been fixed.

Simplify Curve and Resample Curve and published containers

In Maya 2009, attempting to simplify or resample animation curve nodes that have been published to a container does nothing. This has been fixed.

Container names and Heat Map

In Maya 2009, turning on the Heat Map in the Hypergraph caused some containers to turn black, which made their names difficult to read. This has been fixed so that the color of the container name adjusts along with the container color.

What's fixed in API

MFnMesh::setStringBlindData and MFnMesh::setBinaryBlindData on data meshes

MFnMesh::setStringBlindData and MFnMesh::setBinaryBlindData no longer introduce instability into Maya when used on data meshes.

Using MPxModelEditorCommand in edit or query mode

A custom MPxModelEditorCommand is set up by using the 'scriptedPanelType' command to specify callback scripts which are used to create the panel, parent it to a layout, and so forth. Previously, if those scripts used the custom MPxModelEditorCommand in edit or query mode, it was possible for Maya to become unstable and possibly stop unexpectedly. This has now been fixed.

MUiMessage when setting a callback on UI

Previously, MUiMessage would sometimes fail when trying to set a callback on a piece of UI. This has now been fixed.

What's fixed in Python

Executing MPolyMessage::addPolyComponentIdChangedCallback

Previously, executing the MPolyMessage::addPolyComponentIdChangedCallback callback caused Maya to stop unexpectedly. This has been fixed.

Callback parameters passed as pointers

Callback parameters which are passed as pointers, such as the 'decision' variable passed to several MLockMessage callbacks, are now handled properly in Python. Note: Since these parameters are pointers, you must use the appropriate MScriptUtil.set*() method to set a return value into them.

Environment variables when using mayapy.exe or maya.standalone

Previously, when using mayapy.exe or maya.standalone, the Maya environment variables (MAYA_APP_DIR, MAYA_SCRIPT_PATH, and so forth) were not set to their platform defaults since they are not immediately accessible to os.environ. This has now been fixed.

Opening a file using maya.cmds.file with loadReferenceDepth (lrd)

Previously, when opening a file using the maya.cmds.file command with loadReferenceDepth (lrd) set to either "all" or "topOnly", Maya sometimes stopped unexpectedly after loading some of the references. When this occurred, Python also stopped unexpectedly. This problem has now been fixed.

Removing plug-level callbacks

MMessage.removeCallback() no longer generates a Python exception when removing plug-level callbacks such as those set up by MLockMessage.setPlugLockQueryCallback().

What's fixed in Animation and Rigging

Error when opening Maya Muscle Spline window

A problem with the Muscle Spline window has now been fixed. You can select Muscle > Bonus Rigging > Create Muscle Spline to open the Muscle Spline window and set up a spline rig as expected.

Using curve influence objects with the wrap deformer

A problem that caused unexpected deformations when using curve influence objects for the wrap deformer has been corrected. You can now use curves to deform surfaces with the wrap deformer as expected.

What's fixed in Rendering

mia_material_x_passes shader and photons

Previously, the mia_material_x_passes shader did not work with photons (global illumination and caustics from multiple lights). This has now been fixed.

mia_material_x_passes shader Cutout Opacity attribute

Previously, when you used the mia_material_x_passes shader with the Cutout Opacity attribute, Maya sometimes unexpectedly stopped when rendering. This has now been fixed.

BSP2 and building motion structure

Previously, BSP2 was only looking at the motion statement "on/off" to build the motion structure, without looking at the shutter value. For example, it built the motion structure even if the shutter was 0.0 0.0. This problem has now been fixed.

Enable Overrides when baking

Previously, the Enable Overrides attribute in the object's Shape node, Object Display section, Drawing Overrides sub-section, was not respected during baking. This has now been fixed.

Rendering passes with files converted from Maya to .mi format

Previously, when the command line was used to convert Maya files to .mi format, the passes in the .mi file did not render. This has now been fixed.

mental ray for Maya bug fixes

The following issues have been fixed:

- The return value of the query `miQ_NUM_TEXTURES`, for hair objects with placeholders. The return value is now correct.
- The infinite loop problem for the `mkmishader` that occurred occasionally when the tool was run on some .mi files. This is now fixed.

What's fixed in Dynamics and Effects

nCaching high resolution grid fluid effects

Previously, in Maya 2009, caching high resolution grid fluid effects, which were supported with the previous fluid cache system, caused Maya to stop unexpectedly. This problem has been fixed.

You can now nCache fluid effects with grids that are comparable to the size of those that could be cached with Maya 2008.

Connections not created for velocity channels when objects are cached in same file

You can now cache Position and Velocity of two nCloth objects in the same cache file. This means that you no longer need to make additional connections for the velocity channels or specify the names of the channels you want to

associate with each of the data outputs on the cache node. Note that cache blending of velocity channels is not yet supported.

nCloth caching failures with selected objects or Dynamic Relationship editor

nCloth caching no longer fails if you select both an nCloth object and its output mesh, or if the Dynamic Relationship editor is open (which automatically selects the nCloth object and its output mesh) when you nCache an nCloth object.

Exclude Collisions on nCloth Transform constraint

Previously, if an nCloth object with a Transform constraint had Exclude Collisions enabled on its dynamicConstraintShape node, any constraints subsequently added to the nCloth object also applied to the exclude collision behavior. This problem has been fixed.

nParticle Age calculations in expressions

Previously, using Age in nParticle expressions resulted in the age being computed incorrectly, which caused nParticles to die off (disappear from the scene) prematurely, and in some cases, caused Maya to stop unexpectedly. This problem has been fixed.

Caching nParticles with spriteTwistPP requires Cacheable Attributes set All

Previously, if you cached an nParticle object that included the spriteTwistPP attribute with Cacheable Attributes set to Position, Position and Velocity, or Dynamics and Rendering (on the nParticleShape node), Maya stopped unexpectedly when the cached scene was saved and then reopened. In some cases, this behavior also occurred when an nParticle object included one of the spriteScalePP attributes.

Now, the spriteTwistPP attribute is cached using the Dynamics and Rendering or the All setting. If Position or Position and Velocity are selected as Cacheable Attributes, Maya ignores the spriteTwistPP and spriteScalePP attributes if they are not cached.

Release notes

The following sections list the software limitations in the Maya 2009 Service Pack.

General release notes

(Mac) FBX symbols are not exported

If you are writing your own plug-ins, note that symbols in the version of the Maya FBX plug-in included with this service pack are not exported.

Workaround

Download and re-install the Maya FBX plug-in from <http://www.autodesk.com/fbx>.

(Mac) Playback performance issue in OS X

If you experience stuttering during playback, it is recommended that you change the number of threads Maya is using during playback.

Workaround

Enter the following using the Maya Command Line:

```
threadCount -n # of threads
```

(Mac) Scene view corruption with Preselection Highlight enabled

When working on a Mac, if Preselection Highlight is on and you start a marquee select on a highlighted face or edge, the scene view displays a large white face with multiple white edges.

Workaround

Turn off Preselection Highlight.

Basics release notes

Hotbox freezes Maya when switching contexts in Linux

When working with Maya 2009 in Linux, Maya may freeze if you press spacebar while the mouse cursor is over a window that overlaps the Maya UI. In this case the Hotbox usually appears but you cannot click any other part of the UI.

Workaround

You can set the following environment variables to control the hotbox timeout code.

MAYA_HBDOWN_ENABLE=1

MAYA_HBDOWN_TIME=30000

MAYA_HBDOWN_DEBUG=0

Once these variables are set, the hotbox times out, and Maya returns control to the user.

File -open and paths relative to current working directory

In Maya 2009, file path resolution did not look for files in the current working directory when a user ran the file -open command. This has been fixed.

Rendering release notes

2D motion vector pass and Toxik

The 2D motion vector pass in mental ray for Maya is 3-channel, and does not support 4-channels.

Workaround

To use the extend option on the blur node in Toxik, you can render a coverage pass and use Set Alpha in Toxik.

Artisan, 3D Paint and Paint Effects release notes

Paint Effects do not update on Linux

On Linux, Paint Effects strokes do not appear in the scene view if they are the first strokes applied to the scene immediately after the Paint Effects Panel is opened or initialized. Also, a system bell is heard, but no warning message appears.

Workaround

Refresh the scene view, by tumbling the scene for example, and the Paint Effects strokes appear as expected.