# 3ds Max Design 2013 Features and Benefits

# **Overview**

Architects, engineers, and visualization specialists have deadlines that are getting shorter and shorter, while customers are raising the quality bar higher and higher. With this in mind, Autodesk has focused the 2013 release of Autodesk® 3ds Max® Design software on three main themes:

- Rendering Revolution: Creativity comes from exploring options, and users have never had as many options. For the 2013 release, we've added interactive rendering for truly iterative feedback.
- Smart Data: It's not enough just to read some data; you want to make sure that the data fits your workflow. The 2013 release delivers enhanced data exchange between Autodesk 3ds Max Design and a larger-than-ever range of applications: improvements to the interface with AutoCAD® 2013 and Autodesk® Revit® Architecture 2013 software, interoperability with Adobe® After Effects® and Adobe® Photoshop®, and extended support for many more CAD products.
- **Usability**: Recognizing that 3ds Max Design is used in many different ways, the new customizable workspaces and viewport tabs enable you to adjust the user interface to the way you want to work. In addition, we've helped to accelerate your productivity by resolving many workflow inhibitors identified by customers.

# **Top Features and Benefits**

#### **ActiveShade Interactive iray Rendering**

Experience a truly iterative creative process for finalizing renderings, with new ActiveShade support for the NVIDIA® iray® renderer from NVIDIA. ActiveShade enables 3ds Max Design users to iterate more effectively by providing an interactive rendering session that constantly updates as changes are made to cameras, lighting, materials, and geometry. By shortening the feedback loop, designers and architects can more efficiently fine-tune their scene, making it faster and easier to achieve their intended look.

#### **Nitrous Viewport Performance and Quality**

The Nitrous accelerated graphics core has received a number of enhancements. 3ds Max Design users will enjoy the increased interactivity on large scenes, together with new support for image-based lighting, depth of field and accelerated particle flow display. In addition, improved support for shadows in large scenes, and improved workflows for interior scenes all extend the Nitrous functionality.

# **Enhanced Interoperability with Autodesk Revit Architecture**

Facilities working with both 3ds Max Design and Autodesk Revit Architecture 2013 software can now take advantage of more efficient data exchange. Revit files (.RVT) can now be directly imported into the 3ds Max Design 2013, enabling users to select a data view of choice to load from within the Revit file.

# **DirectConnect Support**

New support for the Autodesk® DirectConnect family of translators enables 3ds Max Design 2013 users to exchange industrial design data with engineers using leading CAD (computer aided design) products: AutoCAD software, Autodesk® Inventor® software, Autodesk® Alias® software, Dassault Systèmes SolidWorks® and Catia® system, PTC Pro/ENGINEER®, Siemens PLM Software NX, JT™, and certain other applications. A wider range of file formats is supported; for certain of these you must have the CAD product also installed for it to work. The data is imported as native solids Body objects that can be interactively re-tesselated as needed. Now 3ds Max Design users can refine the data until they get the precision they need in their renderings.

# **Enhanced AutoCAD Interoperability**

New support has been added for lights, daylight system, and exposure control in the importer for AutoCAD 2013 software files.

# **Enhanced Interoperability with Adobe Photoshop**

Enjoy greater flexibility when finishing renderings in Adobe® Photoshop® software, with the new ability to output renderings in a layered PSD format that retains layer order, opacity, and blend modes (for example, multiply or screen).

# **Adobe After Effects Interoperability**

3ds Max Design users whose creative toolsets include Adobe® After Effects® software can now enjoy a level of interoperability that sets a higher standard for 2D/3D data exchange. The new Media Sync functionality provides two-way transfer of cameras, lights, null objects, plane objects/solids, footage (including footage layering), blend modes, opacity, and effects; with it, users can iterate more effectively and reduce rework to complete projects in less time.

#### **Enhanced Civil 3D Interoperability**

The Civil View feature set that provides interoperability with AutoCAD® Civil 3D® 2013 software now supports an egg-shaped profile for piping or tubing.

# **Render Pass System**

Scenes can now be more easily segmented for downstream compositing, thanks to an entirely new render pass system. A state recorder enables users to capture, edit, and save the current state, while a visual interface shows how compositing and render elements are wired together to create the final result. Designers can more quickly set up and execute multiple render passes from a single file; individual passes can be modified without the need to re-render the whole scene, enhancing productivity.

# **Customizable Workspaces**

3ds Max Design users can now select from a choice of default or custom workspaces. Each workspace can have individual settings for menus, toolbars, ribbon, and viewport tab presets; in addition, selecting a new workspace can automatically execute a MAXScript. This enables users to easily configure the workspace to suit their preferences or to fit the task at hand; as an example, it is possible to configure one workspace for modeling, and a different one for animating.

# **Tabbed Layouts**

Easily create and switch between several viewport layout configurations, in order to have efficient access to the views required for a particular task. Layouts can include both 3D and extended viewports. Selecting a different layout is as simple as clicking on its icon, or pressing a hotkey. Users can share customized View Tabs with other users by saving and loading presets.

# **Other Key Features and Benefits**

# iray Enhancements

The iray renderer now offers support for motion blur, helping users create more realistic images of moving elements. In addition, a large number of improvements to iray have been added: support for "no diffuse bump", the round corner effect, and more procedural maps; improved sky portals, glossy refractions, translucency, and IOR (index of refraction); faster exterior scene convergence; and the ability to handle larger output resolutions.

#### **Focus on Workflow**

With the understanding that small things can make a big difference, 3ds Max Design 2013 includes a number of improvements: the ability to manipulate the camera when cutting polygons and during the creation process, enhancements to the skin modifier, and a modeless array dialog. Customers can suggest their own workflow improvements using the Small Annoying Things forum at 3dsmaxfeedback.autodesk.com.

# **Slate Compositing Editor**

Perform simple compositing operations directly within 3ds Max Design with the new Slate Compositing Editor. The schematic node-based interface enables rendered layers and passes to be easily wired together and combined with certain compositing nodes, for example, blends and color corrections; the resulting composite can then be sent to Adobe After Effects or Adobe Photoshop, or certain other image compositing applications for further refinement.

# **Multi-Language Deployment**

3ds Max Design 2013 now uses the Unicode standard, facilitating shipment in multiple languages within a single executable. This enables facilities to offer their artists the ability to run the software in a choice of languages without the requirement to reinstall.

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