Features and Benefits

Autodesk® 3ds Max® 2014 software brings a fresh approach to 3D animation for motion graphics, visual effects, design visualization, and game development. With the innovative new Populate feature set for automatic crowd generation, a significantly augmented Particle Flow toolset, and a performance-enhanced viewport that now supports Microsoft® DirectX® 11 shaders, 3ds Max 2014 embraces concepts and technology required by today’s modern pipelines. And, with new Perspective Match and Vector Map tools that cross the 2D/3D divide, 3ds Max 2014 provides new ways of working that can help artists extend their creative capabilities.

Top Features and Benefits

**Populate**
Now artists can bring worlds to life in a few simple steps, with the new crowd animation feature set in 3ds Max 2014. Offering high-level control of plausible human animation, Populate enables artists to quickly and easily generate moving or idle crowds within selected areas of a scene to enrich architectural presentations with realistic human activity, or to previsualize a film or video scene. Populate comes with a set of animations and characters for use in common public settings: sidewalks, hallways, lobbies, and plazas; crowd composition tools enable artists to connect walkways into patterns of pedestrian flow.

**Improved Viewport Performance**
Interactive and playback performance for complex scenes, CAD data, and deforming meshes is significantly improved in 3ds Max 2014, thanks to new adaptive degradation techniques, improved texture memory management, the addition of parallelized modifier computations, and certain other optimizations.

**DX 11 Viewport Rendering**
Artists can now take advantage of the power of Microsoft® DirectX® 11 software to help create and edit high-quality assets and images in less time, with new support for DirectX 11 shaders in 3ds Max 2014. In addition, a new API exposes DirectX 11 capabilities in 3ds Max with HLSL (High Level Shading Language) support.
Augmented Particle Flow System
In 3ds Max 2014, the power and flexibility of the Particle Flow system has been significantly augmented to help motion graphics artists and visual effects specialists create more sophisticated, realistic, and customized physical simulations in less time. The new Advanced Data Manipulation toolset enables artists to create customized Particle Flow tools from different combinations of up to 25 different suboperators. With the new mParticles module for the MassFX simulation system, artists can simulate natural and manmade forces, create and break bonds between particles, and collide particles with each other and with other objects. The new Cache Disk operator offers the ability to precalculate and store Particle Flow simulations as separate files on disk, while the Cache Selective operator enables artists to cache only certain types of data—both helping to facilitate faster iterations. And finally, a set of Particle Flow ‘Freebies’ from Orbaz Technologies: Camera Culling Operator, Camera IMBlur Operator, Copy Out Test, Display Script Operator, Stop Operator, and Stop Gradually Test is now included by default.

Perspective Match
The new Perspective Match feature enables artists to interactively match the camera view of a scene to the perspective of a photo background. With this feature, artists can easily place a CG element into the context of a still-frame photographic background, making it ideally suited to print and advertising composites.

Vector Map Support
Now artists can load vector graphics as texture maps and render them at dynamic resolutions; no matter how much the view is zoomed in, graphics will remain crisp and clear. With PDF support that includes animated page transitions, artists can create textures that change over time, while designers can create richer and more dynamic CAD illustrations through the support for AutoCAD® software PAT Hatch Pattern files. The feature also supports AI (Adobe® Illustrator® software), SVG, and SVGZ formats.

Other Key Features and Benefits

Focus on Workflow
With the understanding that small things can make a big difference, 3ds Max 2014 offers a number of workflow improvements to help increase overall productivity: fixes to UV Unwrap, Snapping, Caddies, and Viewport switching; Isolate tool enhancements; unified poly editing shortcuts; and improved scene management related to missing plug-ins. Customers can suggest their own workflow improvements using the Small Annoying Things forum at 3dsmaxfeedback.autodesk.com.

Windows 8 Support
3ds Max 2014 now supports the Microsoft® Windows® 8 operating system.

2D Pan and Zoom
New viewport tools enable artists to pan and zoom the viewport as though it were a two-dimensional image, without affecting the actual camera position. This is useful for accurate line placement when camera matching, building a scene from outlines or blueprints, and magnifying dense meshes for selection.

Automatic Gamma
A new Automatic Gamma option detects the file type and applies the appropriate Gamma settings when saving and loading image files. This helps to reduce the requirement for artists to manually set Gamma for typical rendering workflows.

Enhanced State Sets
It’s now possible to record state changes to object modifiers—useful for render pass control and scene management. Artists can also control State Sets via right-click menus, and the State Sets UI can be docked in a viewport for increased accessibility.
Enhanced After Effects Interoperability

The Media Sync functionality that provides two-way transfer of data between 3ds Max and Adobe® After Effects® software now supports Text objects. Font, font size, kerning and certain other text attributes—together with animated properties such as position and scale—can be synced bidirectionally.