

## Accelerate your work. Achieve superior results.

Autodesk® 3ds Max® 8 delivers flexible, state-of-the-art, productive tools designed for 3D artists in many industries, including game development, design visualization, and visual effects.

### Key Features

#### Animation

Mix, edit, and transition motions from any 3ds Max animation. Import standard motion capture formats directly to your character rig. Use our new open file format based on XML to write motion files from custom tools and bring them into 3ds Max. Develop photorealistic characters with our improved character development features, cloth and hair simulation tools, award-winning Reactor® physics system, and particle flow.

#### Modeling

Extensive, industry-best polygon tools for low- or high-resolution modeling. New, superior polygon modeling tools accelerate the process of adding detail to geometry. Use our fast, unique Edit Poly approach to create everything from simple to complex models.

#### UV Mapping Tools

Control unfolding of UV seams with pelt mapping. Create a flat, unified map for texturing your objects by stretching out UVW coordinates. Relax UVs and remove distortion by accurately matching UVs to object geometry. Save tremendous amounts of time and hours of work since seams are exactly where they should be and rarely—if ever—need adjusting afterwards.

#### Skinning

Skin anything from low polygon, high-quality game meshes to the most dense of visual effects models. Vertices are now assigned to a bone by default to prevent unwanted stretching and minimize the need to edit envelopes.

#### Materials

Use displacement maps to build extremely detailed high-resolution meshes and then apply “normal maps” to low-resolution

models, significantly boosting the apparent levels of detail possible in the game engine without requiring extra polygons. Define unlimited numbers of textures, use real-world measurements for architectural materials, and create solutions for any complex materials using our unrivaled material editor.

#### MAXScript Scripting Language

Build solid MAXScripts in less time with our new MAXScript debugger. Add functionality into tools with full control over the user interface. Use this object-oriented scripting language to create scripts to extend your 3ds Max toolset, or to optimize your workflow throughout your pipeline.

#### Rendering

A wide variety of rendering options included with the software (a powerful native renderer, the popular mental ray® renderer, and others available from third parties) are complemented by command-line control and the Autodesk® Backburner™ render management system.

#### Lighting

Use multiple lighting models to enable compatibility of beautiful lighting simulations with detailed textures or animated vertex colors for console and PC game compatibility. Use radiosity adaptive subdivision to produce higher quality, enhanced lighting in your scene.

#### Visualization

Visualize data from a variety of Autodesk applications in a rich modeling, rendering, and animation environment.

#### SDK

Full Software Developer's Kit (SDK) for building high-powered custom tools directly in a programmer's language. Also includes iGame, a higher-level interface designed to simplify exporter development and more.

## New in 3ds Max 8

### Modeling

- Build detail into geometry with Edit Poly Bridge.
- Have greater control of geometry with new Slide and Pinch option in Edit Poly Connect.
- Select edge geometry by growing and shrinking selections along Ring/Loops.
- Simplify the process of cleaning up models—remove edge and vertices in a single pass.
- Sweep modifier.

### UV Unwrapping and Mapping

- Pelt Mapping defines custom seams and allows you to unfold UVs according to those custom seams.
- Relax UV and Remove Distortion provide an accurate match of object geometry to texture map UVs by smoothing existing mapping coordinates.
- Direct access to quick mapping types (box, cylindrical, spherical) in the UV Unwrap modifier simplifies your modifier stack.
- Export UV Template Image allows you to export an image of your unwrapped UVs for use in paint applications.

### Skinning

- Skin Weight Tools give you quick access to primary skinning tools.
- Vertices are assigned to a bone by default to prevent unwanted stretching and minimize the need to edit envelopes when you apply Skin modifiers.

### MAXScript Scripting Language

- Automate your production pipeline with the ability to query a database using MAXScript SQL Connect and Queries.



Image courtesy of Funcom

- Build MAXScripts faster with our MAXScript debugger. This debugger follows industry standards and allows you to set break points and isolate any issues in your scripts.
- Expression controllers now have full MXS support.
- Rebuilt scripted controller supports name independence.

### Character Animation

- Motion capture formats now include HTR Import and Export support for 3ds Max bones and TRC data import. Import standard motion capture formats directly into 3ds Max to drive your character, facial, and Biped® animation.
- Load and save animation using our new XML-based motion data types. This allows you to save, load, map, and retarget animation between characters. Repurpose animation between rigs of varying sizes, proportions, and design. Break down retargeted motions into component parts to repurpose portions of the original animation for reuse.
- No longer limited to Biped motions, use the Motion Mixer to mix, edit, trim, filter, time warp, and transition motions from any 3ds Max animation.
- Limit controller enables you to ease in and out of a layered limit on top of a motion curve. This clamps motion values for greater control and smoother transitions.
- Select, view, manipulate, and work with curves more easily with the improved Track View.

### Biped Animation

- Use true Euler rotation and Bezier positioning curves to edit Biped motions.
- Animate long-necked or unusual characters with greater detail and expression of motion using new neck and tail bones.
- Use Layers to retarget motion capture and key-framed motions with precise IK positions preserved.
- Twist bones with 3-degrees-of-freedom (DOF) joints to easily animate characters on a pose-by-pose basis and adjust mesh deformation.
- Ability to rotate the Biped pelvis as a ball joint (3-DOF) removes restrictions on range of movement and improves the quality of motion capture when applied to the Biped skeleton.
- Expanded support for motion capture data for fingers, toes, and the neck of your Biped. This allow for capture of greater subtlety of motion—such as bendable toes.

### Rendering

- mental ray 3.4 adds powerful rendering functionality to the 3ds Max rendering capabilities. It offers a simplified user interface for working with global illumination and subsurface scattering shaders, as well as a unified indirect lighting model, which provides consistent results when switching between different 3ds Max radiosity modes.
- Quickly batch-render a series of stills from different angles, with the option to change render settings and layers in between views.

## Asset Management and Collaboration

- Share, control, and manage your work-in-progress assets using Asset Tracker, our new source control solution tightly integrated with Autodesk® Vault software and compatible with existing asset management solutions.
- Repath and retarget assets and their locations for better control over production dependencies.
- Quickly mask 3ds Max objects in Autodesk® Combustion® compositing software using tightly integrated material and render IDs.
- Bring generated image sequences into Autodesk® Toxik™ and Autodesk® Cleaner® XL applications. 3ds Max generates information about path location, frame numbers, frame rate, resolution, and camera name that will be displayed within your Toxik workspace.
- Define and save path configuration files. The path configuration file is stored with your scene file and allows you to share paths for asset locations, easily managing collaboration among members of your creative team.
- Enjoy more flexibility and dynamic range for lighting adjustments post-render using the OPEN EXR rich file format.

## Hair and Fur

- Styling and brush tools for combing hair and brushing along complicated contours with “re-comb,” as well as support for clumping and frizz for added realism.
- Hair dynamics tools use the dynamics engine of Shave and the dynamic forces of 3ds Max to inherit inertia directly from the Skin or any other modifier’s surface movement.
- mental ray integration provides fast, memory-efficient, and direct rendering using the native mental ray hair primitive.
- Use instanced geometry as individual hairs to easily create forests, fields of flowers, and other landscapes.

## Cloth

- Use clothing patterns as the basis for real-world clothing that reflects both fabric type and clothing pattern.
- Define the type of cloth either by setting up its properties or selecting from a list of cloth types, including silk, cotton, and wool—clothing will behave as it would in the real world depending on the material.
- Build real, tailor-made clothes, not just baggy, draped cloth. Even create inner seam lines for pleats and vents.
- Save and share cloth preset types to drive artist productivity and ensure that clothing is consistent when using the same fabrics on different cloths, characters, etc.

## Design Visualization

- Use radiosity adaptive subdivision to produce higher-quality, enhanced lighting in your scene.

- Real-world measurements allow you to more accurately place physically scaled materials onto objects in the scene.
- Capture object, layer, material, camera, and light information as a “scene state” that can be saved and restored at will.
- Import/link models from Autodesk® Revit® software to create high-quality images of models with 3ds Max via the DWG format, and have the scene objects correspond directly to individual Revit objects.
- Access the Autodesk Inventor® file format option directly within the import tool.
- Convey ideas and share designs by exporting models from 3ds Max for viewing with Autodesk® DWF™ Viewer and Autodesk® DWF™ Composer.



Image courtesy of Marcel Schwarz



Image courtesy of Pseudo Interactive

### Software Developer's Kit

- Extensible development environment enables programmers and scripting professionals to integrate custom workflow tools, viewers, and real-time engines in the 3ds Max core.
- iGame developer access to the DirectX® layer allows full control of what is displayed in the 3ds Max viewport.
- Plug-in architecture provides extensibility for nearly any system component.

## System Requirements

### Hardware

- Intel® Pentium® III or AMD® processor, 500 MHz or higher (dual Intel)
- Xeon™ or dual AMD Athlon® or Opteron® 32-bit system recommended)
- 512 MB RAM (1 GB recommended)
- 500 MB swap space (2 GB recommended)
- Graphics card supporting 1024x768x16-bit color with 64 MB RAM
- OpenGL® and Direct3D® hardware acceleration supported; 3D graphics accelerator 1280x1024x32-bit color with 256 MB RAM recommended
- Microsoft® Windows®-compliant pointing device (optimized for Microsoft IntelliMouse®)
- Wacom™ Intuos® or similar pressure-sensitive tablet recommended for vertex paint

- DVD-ROM drive
- Optional: sound card and speakers, cabling for TCP/IP-compliant network, 3D hardware graphics acceleration, video input and output devices, joystick, MIDI instruments, three-button mouse

### Software

- Microsoft Windows XP Professional (SP2) (recommended) or Home Edition (SP2), or Windows 2000 (SP4)
- Microsoft Internet Explorer 6
- DirectX 9.0c (required), OpenGL (optional)

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Web: [www.autodesk.com/3dsmax](http://www.autodesk.com/3dsmax)

Reseller listings are available at

[www.autodesk.com/resellers](http://www.autodesk.com/resellers)



House Of Flying Daggers. Directed by Zhang Yimou. Visual Effects by Animal Logic.  
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