

3ds max™ 6 discreet®

technical specifications



New Version 6 Features Include

- Schematic View
- Particle Flow
- Vertex Paint
- **mental ray® 3.2**
- **reactor® 2** stuntman/vehicle dynamics
- Dynamic Shader UI
- Network Render to Texture
- Network Region Render
- Spline/Patch Modeling
- Relax UV's
- Command line access to .max file
- Mirror Skin Weights
- Edit Vertex Normals
- Shell Modifier
- Consolidated rendering workflow
- Load/Save Rendering Settings
- Autodesk VIZ® Render Support
- Layer Manager
- Command Line Rendering
- HDRI Support
- “Blobmesh” metaballs

3ds max 6, the world's most widely used professional 3D modeling, animation and rendering solution, offers the ultimate professional 3D tools required for creating eye-catching visual effects, cutting-edge games, and distinct design visualizations.

Animation

Unique, weighted Animation Controller Subsystem allows for multiple algorithms to drive any animation channel, including custom expressions

Curve Editor and Dope Sheet control every animated parameter, with extensive filtering to isolate relevant data

Character tools include volumetric Skinning with hierarchies or spline, spring-based secondary animation, Progressive Morphing, and FFD lattices

reactor® 2 allows full interaction of keyframed and dynamically-simulated objects including new Virtual Stuntman dynamics and fast, accurate Vehicle Simulation solvers

Modeling

Enhanced Spline/Patch workflow eliminates excess Modifier Stack operations, and includes intuitive cross-section functionality, reset patch tangents, and default filtering of interior edges

Editable Poly improvements include the integration of Meshsmooth and a new Isoline Display mode that keeps the artist focused on building good model topology without having to view every resulting polygon in the viewport

Shell Modifier adds depth to any selection of faces by building new polygons based on vertex or face normals—the perfect tool for adding “Mech” elements to any character or vehicle

Blobmesh is a metaball compound object that works as a modeling tool or in conjunction with Particle Flow for organic surfaces and cohesive fluids

Texture Mapping

Unwrap UV Modifier has extensive tools for editing mapping coordinates up to 99 channels, and includes the ability to use differing unwrapping algorithms and direct manipulation of texture coordinates to dramatically decrease texturing time

The Relax Modifier makes it simpler and easier to even out existing mapping coordinates for textures

Rendering

Fast, film-quality hybrid scanline renderer includes global illumination and photorealistic lighting tools, plus unlimited distributed network rendering

Command line rendering enables batch operations using text files and commands from the prompt including image resolution, anti-aliasing, super-sampling, raytracing parameters, environment settings, file output control, layers, and network rendering

Region Net Render allows portions of an image to be deployed across a network, ideal for large format and print size frames

High Dynamic Range Imaging (HDRI) files (.hdr, .pic) can be loaded and saved with **3ds max 6** renders for the new artistic approach to realistic rendering

mental ray rendering is now integrated within and as part of each **3ds max** license as a powerful new rendering option

Lighting

Full photometric IES Lighting System controls include shadows, shadow color and density, projected images, contrast, edge softness, attenuation and decay

Surface level lighting control with separate ambient, diffuse, and specular manipulation

2D Lighting Data Exporter saves lighting analysis data as Radiance Picture Files or .TIF format

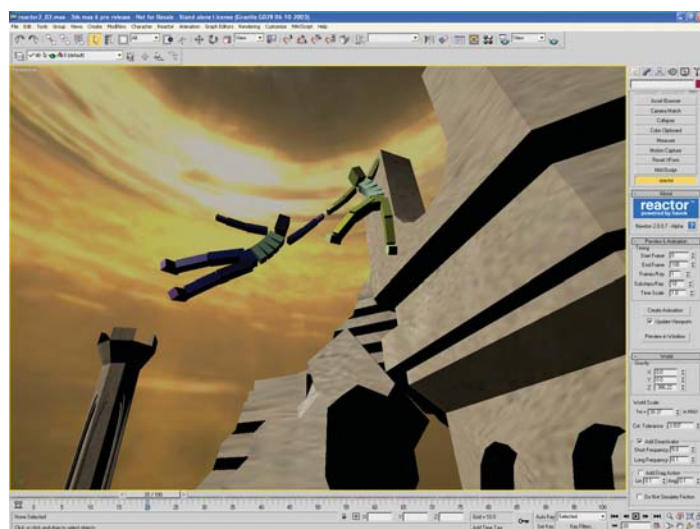
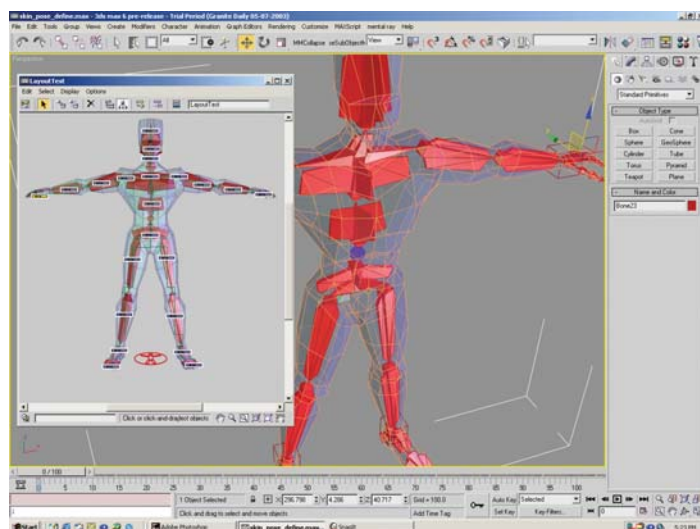
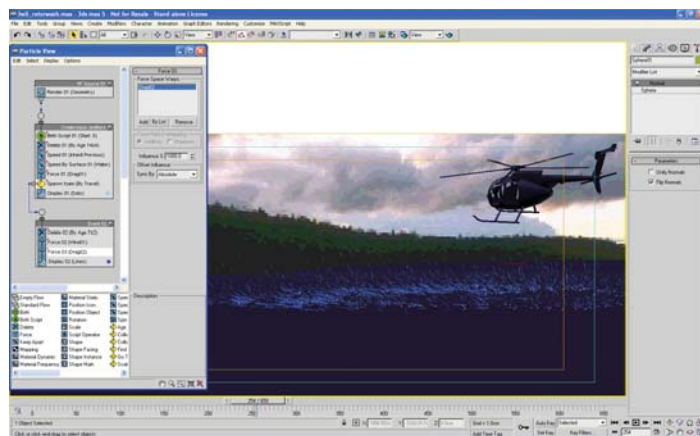
Games

Vertex Paint Modifier functions as a paint layer, with Photoshop®-style blending modes, interactive painting of color and attribute information over 99 vertex channels

Dynamic Shader UI creates artist-friendly UI components for HLSL Shaders, based on the parameters in the DirectX .FX file

Edit Vertex Normals, available as a modifier and as a base mesh property, has a suite of tools for manually editing normals

Channel Info Editor allows for viewing and editing of per-vertex channel information in a spreadsheet-style view



Cameras

Unlimited number of cameras using industry-standard parameters for accurate real-world camera matching and results

Interactive clipping plane, dolly, FOV, grid overlay, orbit, roll, vertigo zoom, zoom and safe frame display

Precise alignment with either horizontal, vertical, or diagonal field-of-view measure, plus support for orthogonal projection

Extensive Depth of Field and Motion Blur controls also include a viewport preview mode to speed up the iterative process

Materials and Mapping

Combine unlimited number of textures to give ultimate control over materials

Shading algorithms include Anisotropic, Blinn, Oren-Nayar-Blinn, Phong, Metal, Multi-layer, and Strauss with independent sampler options

Material/Map Browser portrays hierarchies with thumbnails and drag-and-drop assignment

Viewport Interaction

WYSIWYG viewport environment with multi-textures per face, blended true transparency, Phong highlights, procedurals, and display of Pixel and Vertex shaders

Multiple coordinate systems like View, Screen, World, Local, Chosen Object, Grid, or Parent space for flexible manipulation of any object type

Interactive axis constraints and modeless keyboard entry supported

Selection methods include pick, fence, rectangular, lasso, and circle with object class filters, select-by-name, named selection sets, mesh extents, backface exclusion, polygon boundary, smoothing, material ID, and face normal angle architecture

Multi-threaded processing throughout **3ds max 6** software for superior performance and scalability

Supports OpenGL® and Direct3D® hardware acceleration, and Heidi software acceleration for any Windows® display

Plug-in architecture provides extensibility for nearly any system component

MAXScript™

MAXScript object-oriented scripting language mirrors SDK to provide access to plug-in parameters

Scripts can be called from **3ds max 6** interface or embedded into .max file

Scripts can be appended to other plug-ins, generate alternative interfaces, or can be treated as a plug-in class to **3ds max 6**



Visual MAXScript generates interactive interface elements like Sliders, Dropdown lists, Check boxes, buttons, Color pickers and more to any object, modifier or material—a great time-saver for scripting artists

Workflow

Schematic View, a node-based scene graph, offers access to object properties, materials, controllers, modifiers, hierarchy, and non-visible scene relationships such as wired parameters and instancing

File management utilities such as the MAX File Finder, IFL Manager, File Link Manager, Increment On Save, Auto-backup, the Resource Collector, Dynamic Texture Reloading, and Log Files manage daily use and transfer of **3ds max 6** data between file iterations, users, and locations

The Layer Manager is a floating table of contents, allowing for quick switching of focus on the various parts of a character, model or scene

Load and Save Render Settings enables studios to share rendering settings between artists, reducing scene setup times and ensuring consistency across the entire production for most rendering parameters



Software System Requirements

- Operating Systems: XP Professional, Windows 2000 (service pack 3), and XP Home
- Internet Explorer 6
- DirectX 8.1 (DirectX 9 Recommended)

Hardware System Requirements

- Intel® or AMD® based Processor at 300Mhz minimum (Dual Intel® Xeon™ or dual AMD Athlon™ system recommended)
- 512 MB RAM and 500 MB swap space minimum (1GB RAM and 2GB Swap Space Recommended)
- Graphics card supporting 1024x768x16-bit color with 64MB RAM. (OpenGL and Direct3D hardware acceleration supported; 3D graphics accelerator 1280 X 1024 24-bit color with 256MB RAM preferred)
- 24-bit color, 3D graphics accelerator preferred
- Windows-compliant pointing device (specific optimization for Microsoft Intellimouse™)
- CD-ROM drive
- Optional: sound card and speaker, cabling for TCP/IP-compliant network, 3D hardware graphics acceleration, video input and output device, joystick, midi-instruments, 3-button mouse

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