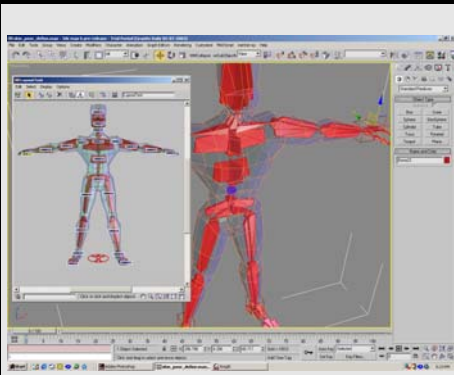


3ds max® 6

features & benefits

SCHEMATIC VIEW

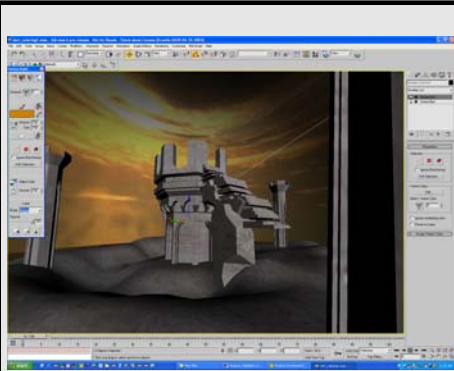


Redesigned from the ground up, the *Schematic View* is a node-based scene graph giving users access to object properties, materials, controllers, modifiers, hierarchy, and non-visible scene relationships such as wired parameters and instancing.

Schematic View also allows for background images, loading/saving of setups, and automatic arrangement of nodes based on physical scene placement (makes arranging nodes for character rigs easy).

A host of filtering options and full exposure to *MAXscript*™ gives users flexibility for getting the exact information they need from *Schematic View*, and extensibility for custom views.

VERTEX PAINT

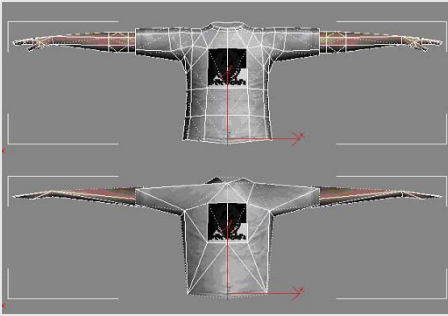


Extending its already-comprehensive set of *Vertex Paint* capabilities, **3ds max 6** software gives Game Artists and Level Editors an easy to use solution for painting and editing color and custom attribute information onto any of the 99 channels of information available per vertex using a host of tools.

Interactively resize brushes, apply new coloring (or tint existing levels), and paint game-specific attributes right onto the model (such as surface friction and damage values). The *Vertex Paint Modifier* now functions as a "Paint Layer" – multiple layers can be applied, supporting many of the Photoshop-style blending modes analogous to digital painting.

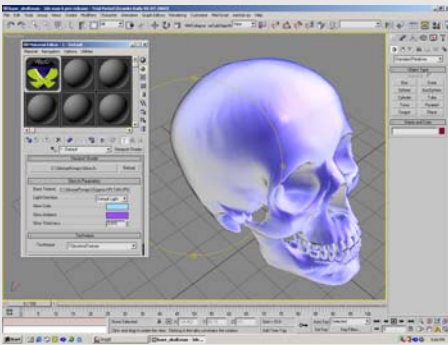
Vertex Colour Opacity is also animatable, allowing users to change the opacity of a *Vertex Paint Layer* over time. Game artists can now explore combinations of additive radiosity lighting interactively, in a manner that lets them see how this effect will be implemented in-game.

MULTI RESOLUTION MESH



The *MultiRes Modifier* now supports all 99 map channels per vertex, ensuring existing map channels and coordinates are preserved when generating LODs.

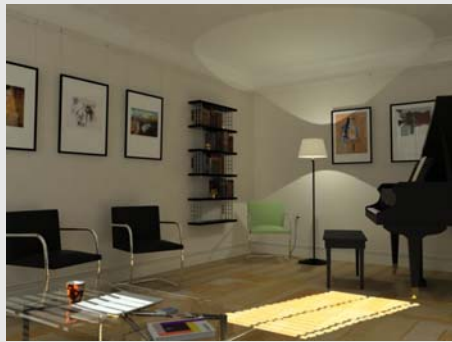
DYNAMIC SHADER UI



For Xbox and PC developers, this new approach to creating artist-friendly Hardware Shaders allows for any .FX shader parameter to be revealed as an editable parameter in the **3ds max Material Editor**.

This brings the best workflow in the industry for artists and programmers to work together in building bleeding-edge effects for games that take advantage of Pixel/Vertex hardware rendering.

RENDER TO TEXTURE



Texture Baking tasks can now be deployed across your entire farm of computers. Customer can make the most of their hardware investment while increasing the visual quality of textures by baking real-world solutions.

SPLINE/PATCH MODELING



Highly effective enhancements have been made to improve Patch Modeling workflow & Spline Cage generation.

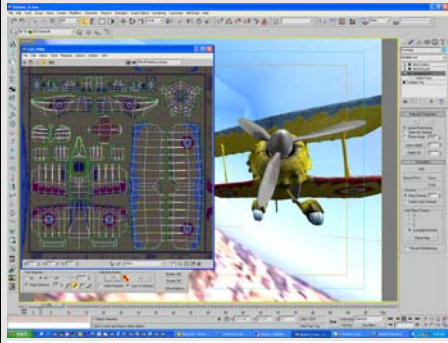
Automatically and Interactively create Cross Sections in Spline Cages without additional modifiers, and Edit Patch will now automatically build a patch surface for a complete underlying Spline Cage, and includes surface threshold, interior patch, and control for surface Normals. The end-result of these additions creates a solid Patch Modeling workflow with only 2 modifiers (the Spline, and the Patch), whereas previously 5 modifiers were needed to achieve the same result.

New additional Patch tools include Reset Tangents, automatic Patch Smoothing, a Handle Sub-Object mode, Extrude Spline, and faster Viewport performance through filtering of Interior Edges.

The quad menu commands for tangencies are now available without having to focus the mouse over the vertex you currently have selected.

3ds max technology has superior Bezier Patch Modeling capabilities with new tools offering a very fluid workflow for the experienced NURBS modeler.

RELAX UV COORDINATES



Particularly useful for texturing complex, organic surfaces, *Relax UV* takes any selection of mapping coordinates and makes them evenly spaced, independent of the object's vertices.

This simple tool takes much of the manual labor out of creating mapping coordinates that are easy to work with, and can be found in the *Unwrap UVW modifier*.

MIRROR SKIN WEIGHTS

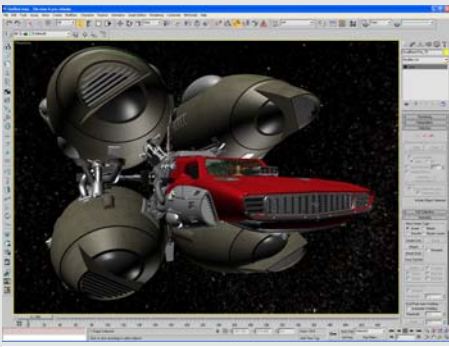


Assigning skin weighting is now easier for symmetrical characters: simply focus on setting up one half of your character and have the weights mirror symmetrically across the model. This can be done on the entire mesh or one bone at a time.

EDIT VERTEX NORMALS

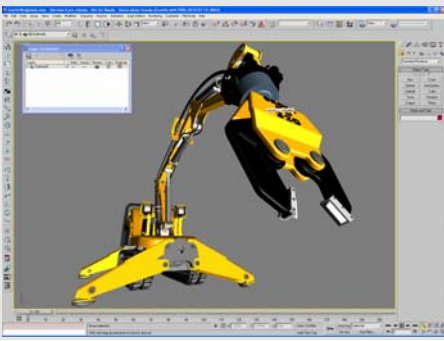
Now available in the base mesh as well as with the *Edit Normals Modifier*, an improved set of tools for manually editing selections of normals – a boon for game developers for creating normal maps or needing to refine their art at levels previously not available. Edited normals are also taken into account for rendering.

EDITABLE POLY / MESHSMOOTH



Meshsmooth and *Editable Poly* now includes Isoline display (results in a much cleaner mesh in the Viewport and) – allowing the artist to focus on the defining topology without having to see every resulting edge.

DWG ENHANCEMENTS



Users of Autodesk's suite of professional design tools (AutoCAD®, Autodesk® Architectural Desktop (ADT) 2004, *and more*) and other products such as Rhino and Form-Z, can now share .DWG data with the **3ds max 6** application with enhanced support for Layers, Instancing, Color, and more.

ADT 2004 SUPPORT

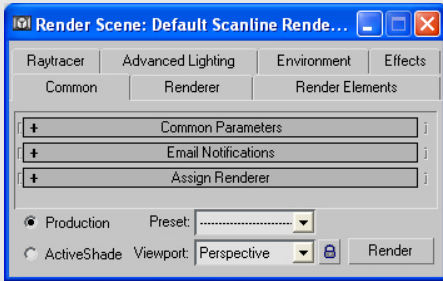


Design professionals using Autodesk® products that include VIZ Render (such as Architectural Desktop (ADT) 2004), can now leverage their design workflow, right from within **3ds max 6** software.

Lighting and material assignments are carried over, ensuring the time spent building intelligent objects and Materials on the design side can be fully leveraged by the visualization expert.

VIZ Render artists can now take advantage of the **3ds max** advanced animation and rendering capabilities, including *mental ray®*, *Network Rendering*, and *Particle Systems*.

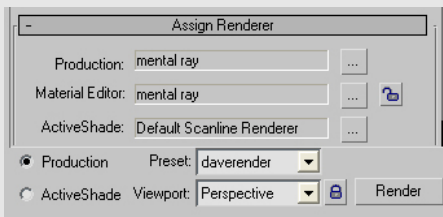
TABBED RENDER DIALOGUE



All settings related to Rendering now reside in one single location, making it faster to edit Common Rendering Settings, as well as *Render Elements*, *Advanced Lighting Parameters*, *Environment*, *Effects*, *Raytracing*, and *Renderer-Specific Parameters* (such as mental ray and third-party rendering solutions like *Brazil*, *Final Render*, and *VRay*).

This is above and beyond the legacy functionality found in other 3D applications, including Maya's new *Unified Rendering Workflow*. **3ds max 6** has the added advantage and ability to save unified rendering settings to load and save, unlike other 3D applications.

LOAD/SAVE RENDERING SETTINGS



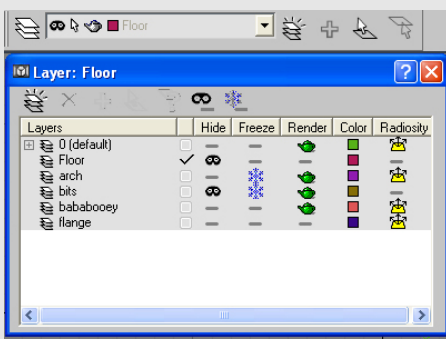
Studios can now share settings from the *Tabbed Render Dialogue* to ensure all artists are using the correct rendering settings for the shot at hand.

ARCHITECTURAL MATERIAL



This Shader is designed to simplify the creation of materials for use by architects. Design professionals are able to tap into the extensive rendering capabilities of **3ds max 6** software with an intuitive UI which exposes the necessary components to achieve high quality results using physically-based properties.

LAYER MANAGER



The Layer Manager now operates as a modeless dialogue, giving users constant access to layer properties (visibility, selectability, renderability, *et al.*) as well as scene information, without having to close the dialogue.

Furthermore, other scene-management utilities of this nature exist in the **3ds max 6** application, most notably *Named Selection Sets*, which allow for further segmentation of object and sub-object components into easily manageable groups.

COMMAND LINE RENDERING

Technical directors and rendering experts can now set up renderings from the DOS prompt and/or perform batch rendering operations using batch files. Controls include: *image resolution*, *animation range*, most *render parameters*, *file output type and location*, *submitting to network render*. *Environment settings*, *raytracing parameters*, and *effects* can also be controlled by specifying render presets to use.

REGION NET RENDER

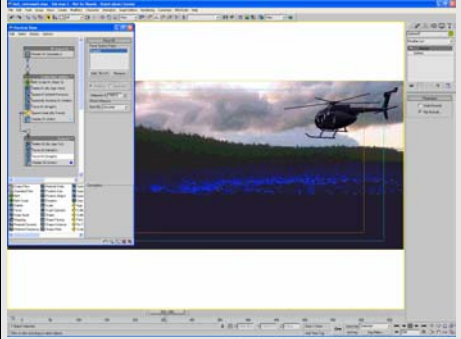
This allows portions of an image to be deployed across the free network rendering farm (up to 9,999 free render nodes per copy of max) – enabling you to tackle extremely large frames for print, faster.

HDRI SUPPORT



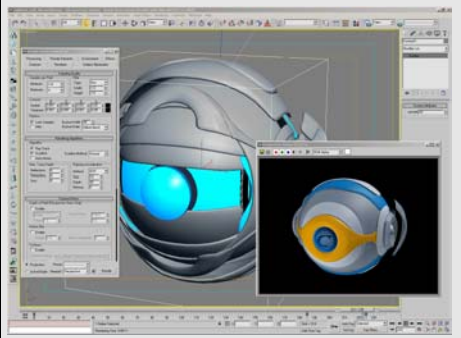
HDRI file support has been added to **3ds max 6** software. This is of special interest to film studios, allowing TDs the ability to load HDRI files (.hdr, .pic) for use with their **3ds max** renders, and also to create these formats from within the **3ds max** application.

PARTICLE FLOW



Already proven in high-end film production in films such as *Final Destination II* and *The Core*, this event-driven, node-based particle system gives users greatly increased flexibility for generating particle system solutions for the toughest production situations. Particle Flow is also exposed to the SDK and *MAXScript*.

SHELL MODIFIER



The *Shell Modifier* enables artists to build “depth” to any selection of polygons by building new faces based on the direction of the vertex normals. This is essentially the ultra “make it Mech” tool – great for vehicles, robots, space ships, any mechanized design.

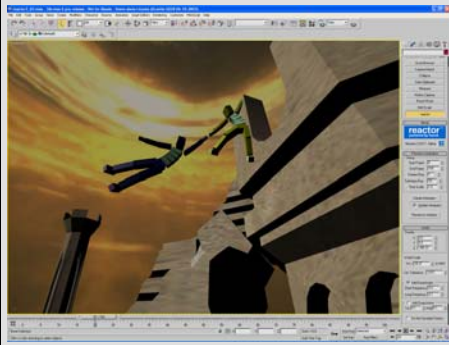
BLOBMESH



BlobMesh is an easy to use Metaball-like tool. Meshes and particles can generate “blobs” that will form a single contiguous surface when in close contact with other “blobs.”

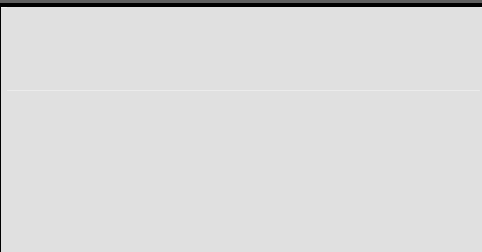
When used with a *Particle System*, many Metaball effects (such as Mercury, splashes, etc.) can be achieved.

RAG DOLL DYNAMICS



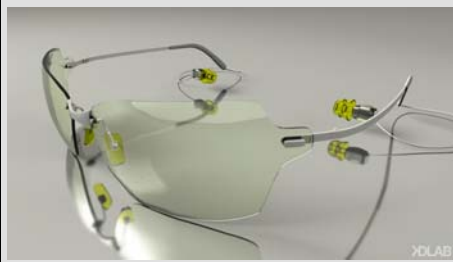
The technology that brought you amazing digital stuntmen sequences in *The Matrix: Reloaded* is now available within **3ds max 6** software – whether you are seeking physically accurate stunts, or spectacular dynamics simulations for films or games, *Ragdoll Dynamics* bring a revolutionary approach to animating digital characters.

VEHICLE DYNAMICS



Once you've set up some wheels, an axle or two, and suspension parameters, you have a vehicle that can even operate under its own power – *Vehicle Dynamics* uses real-world physics parameters to drive animation that is only achievable with heavy scripting or time-consuming keyframing in other animation software packages.

MENTAL RAY 3.2



A license of one of the world's most advanced film-quality renderers, *mental ray 3.2* is now fully integrated into the **3ds max 6** software program. With up to two processors supported per license, shaders from Lume Tools, and substantial integration into the *Material Editor*, the power of **mental ray 3.2** rendering is now available for all **3ds max** artists, with an easy-to-approach workflow making *mental ray* easier to harness.

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