



NVIDIA MENTAL RAY FOR MAYA FAST, FLEXIBLE, DEPENDABLE

Image courtesy of Amaru Zeas

NVIDIA® mental ray® has set the standard for photorealistic rendering across the film, visual effects, and design industries for over 25 years.

Now it's available directly from those who created it, seamlessly integrated into Autodesk Maya. The NVIDIA mental ray for Maya plug-in gives you interactive viewport rendering and easy-to-use global illumination with substantial GPU acceleration, as well as all the functionality and compatibility you're used to.

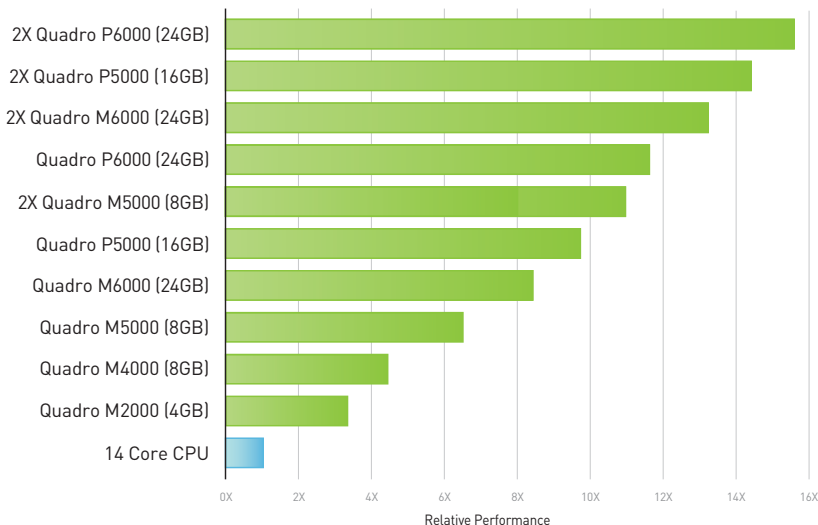
NVIDIA mental ray for Maya NEW FEATURES

- > Progressive & interactive within the Maya Viewport shows final results as you edit.
- > GI Next makes global illumination easy and 2 to 4X faster than earlier methods of similar quality.
- > GPU acceleration for GI-Next delivers up to 10X more performance per GPU in the system over a 14 core CPU alone.
- > Independent Standalone mode is now included for production pipeline flexibility.

SYSTEM REQUIREMENTS

SOFTWARE	Autodesk Maya 2017 or Maya 2016
OPERATING SYSTEM	64-bit Windows 7 or 10, Linux, Mac OS 10.10.5 - 10.11.x
GPU ACCELERATION	Optional: NVIDIA GPU of Fermi Generation or later with 2 GB memory minimum

MENTAL RAY WORKSTATION PERFORMANCE SCALING



Tests run on a workstation with Intel Xeon E5 2697 V3, 14 cores, 2.6 GHz, 32GB RAM, running Windows 7 SP1 64-bit, using mental ray 3.14.3 and NVIDIA driver version 373.01 at 1920 x 1080 resolution.

FREE FOR CREATIVE USE

mental ray for Maya lets you make rendering decisions and see the results for individual frames within Maya—for free. Get your copy at www.nvidia.com/mentalrayformaya

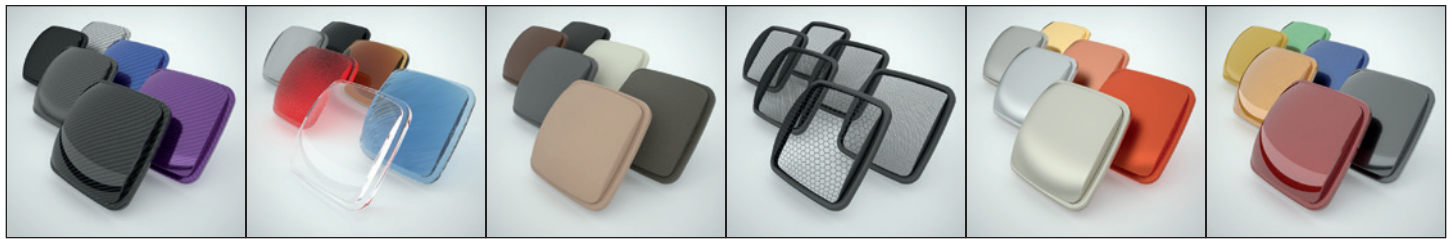
PRODUCTION RENDERING LICENSING

Production rendering requires a mental ray license. The same license enables sequence rendering in Maya, Maya Batch, headless Maya, or mental ray in Standalone or Satellite modes.



PHYSICALLY BASED MATERIALS—VERIFIED FOR ACCURACY

vMaterials



Composites

Glass

Leather

Mesh

Metal

Paint

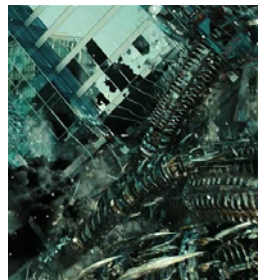
The NVIDIA vMaterials catalog for product and building design is a collection of real-world materials described in the NVIDIA Material Definition Language (MDL). Designed and verified by NVIDIA

material specialists for accuracy, control, and consistency, vMaterials provide a fast, reliable way to add realistic materials to your designs. Easily browse, change, and adjust materials to get just the look that's

needed within the supported applications. While vMaterials is the perfect addition to mental ray, it can be used in any application that supports NVIDIA MDL.



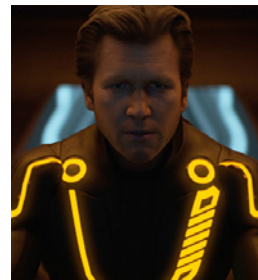
Image and scene courtesy Romain Lavoine



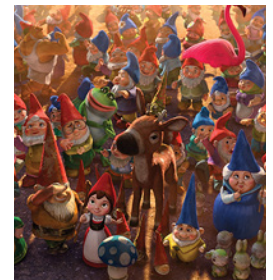
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Tron Legacy, ©Disney Enterprise Inc.



Gnomeo and Juliet. ©Miramax Film NY, LLC. All rights reserved.

FEATURES

Interactive Global Illumination

Intuitive global illumination engine (GI Next) requiring minimal setup or tuning that's 2-4X faster than earlier GI methods of similar quality

Additional GPU acceleration for GI Next that supports traditional shaders and effects and only loads geometry into GPU memory

Ideal for interactive lighting workflows within the Maya viewport

Fast and easy-to-use Image Based Lighting and procedural environments like Sun&Sky

Light Important Sampling that enables a large number of lights without sacrificing performance

Multiple Importance Sampling that speeds up physically based setups with MDL materials

Much faster rendering of modern lighting setups with area lights and emissive materials

Visual Effects

Supports all Maya geometry types with controllable tessellation quality

Fast motion blur and depth-of-field camera effects with Unified Sampling

The freedom to render massive amounts of hair, fluids, and particles, like Bifrost liquids and foam

Memory-efficient procedural instancing of myriads of elements at render time for massive scenes and crowds with XGen

Realistic rendering of human hair styles and animal fur with XGen and Maya Hair/Fur

Photon Mapping for efficient and sharp caustics

High-quality displacement mapping including vector displacement

Cel shading and contour rendering for cartoon and anime productions

Materials and Shaders

The ability to use custom C-shaders or load and use arbitrary MDL definitions and materials

Intuitive and unique layering workflow with layering shaders (MILA)

Flexible render pass system built into layering shaders (MILA)

Extreme extensibility through custom shaders for programmable effects

Efficient handling of large resolution file textures by loading on demand only

Procedural textures for resolution independent effects and 3D color or density maps

Volumetric and scattering materials for real-world skin rendering and atmospheric effects like clouds or dust

Workflow

Full support for all established Maya workflows

Interactive look develop and lighting directly in the Maya Viewport or IPR

Continuous visual feedback with progressive rendering of final results during scene interactions

Light baking with Maya Batch bake to both texture and vertices

Full animation support of geometry, material, and light parameters

Swatch rendering and real-time material preview for mental ray custom shaders and phenomena

Support for production techniques like Alembic geometry caches, UV tiling, and deep data

Complete color management and HDR pipeline from texture input to image output

Batch Rendering

Efficient Maya Batch rendering for final frame animations on any machine

Background rendering of quick batch jobs on the same machine

Efficient network rendering outside of Maya using mental ray Standalone mode

Pipeline rendering control with .mi files and mental ray Standalone mode

Accelerate tiled-rendering with multiple machines running mental ray Satellite mode.

For more information visit: www.pny.com

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