Maxwell Render

	Maxwell Render
Developer(s)	Next Limit Technologies
Initial release	26 April 2006; 13 years ago
Stable release	5.0[1] / 30 October 2019; 4 months ago
Operating system	Linux (on x86-64) Mac OS X (on IA-32 and PowerPC) Microsoft Windows (on IA-32 and x86-64)
Available in	English
Type	Raytracer
License	Proprietary commercial software
Website	www.maxwellrender.com

Maxwell Render is an unbiased 3D render engine, developed by Next Limit Technologies in Madrid, Spain. This stand-alone software is used in the film, animation, and VFX industry, as well as in architectural and product design visualization.[2][3] It offers various plug-ins for 3D/CAD and post production applications.[4]

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Overview

Maxwell Render was released to the public as an early alpha in December 2004 (after two years of internal development) utilizing a global illumination (GI) algorithm based on a metropolis light transport variation.[5] Next Limit Technologies released its latest version of Maxwell Render V4.2 in February 2018.[6]

The [physically correct rendering](#) engine was originally used as a tool for [animation](#) and [visual effects](#). Maxwell Render's trademark Multilight feature,[7] which permits the changing of light intensities and colors in [real time](#), was used in the feature film *[The Curious Case of Benjamin Button](#)*.[8]

General features

Physically-based advantages

- Accuracy
- Advanced Ray Tracing
- Physical Sky
- Fast scene set-up
- Layer-based materials
- Multilight

Multilight™ FIRE: Fast Interactive Rendering

- Immediate feedback to make adjustments to lighting, materials and camera settings

Materials Realistic Camera Model

- Real camera parameters: f-Stop, Focal length, Shutter speed, ISO, film size, diaphragm blades

Memory Saving Instances Accurate 3D Motion Blur Hair, Grass and Fur

- Compatible with many hair systems: Maya Shave and a Haircut, Maya hair, 3ds Max hair, CINEMA hair, Ornatrix

Volumetrics Particle Rendering

- Integration with RealFlow software
- Maxwell Sea
- Maxwell Volumetric
- Maxwell Grass
- Maxwell Scatter

Industry standard support

- Alembic
- AxF
- Deep compositing
- Pixar Open SubDiv
- Python scripting
- VDB

Network Rendering Post Production

- Post production plug-ins
- Channels
- Custom Alphas

Interaction with other software

Maxwell Render for [SketchUp](#)[9] is a simplified version of Maxwell Render, fully integrated into the SketchUp software application. Users can set the camera, lighting and environment, apply SketchUp or Maxwell MXM materials, and render and save image files. It is widely used in product design, architectural and engineering visualization.

Plug-ins

3D application plug-ins

- SolidWorks
- SoftImage
- MODO
- MAYA
- Houdini
- Rhinoceros
- SketchUp
- LightWave
- Graphisoft ArchiCAD
- Bonzai 3D
- REVIT
- 3DS MAX
- CINEMA 4D
- form Z

Postproduction application plug-ins

- Photoshop
- Nuke
- After effects

Third party supported plug-ins

- solidThinking
- blender

Version history

2004 Maxwell Render Alpha version

2005 Maxwell Render Beta version

    Maxwell Render 1.0

2006

    Maxwell Render 1.1

    Maxwell Render 1.5

2007 Maxwell Render 1.6

    Maxwell Render 1.6.1

2008 Maxwell Render 1.7

2009 Maxwell Render 2.0

    Maxwell Render Suite 2.6

2011

    Maxwell for Google SketchUp

    Maxwell Render 2.7

2012 Maxwell Render Learning Edition

    Maxwell Render 2.7.1

    Maxwell for SketchUp

2013

    Maxwell Render 3.0

    Maxwell Render 3.0.1

2014

    Maxwell Render 3.0.1.1 beta

    Maxwell Render 3.1

2015 Maxwell Render 3.1.0.2

    Maxwell Render 3.2

2016 Maxwell Render 4.0.0.11

    Maxwell Render 4.0.1.1

2017

    Maxwell Render 4.1

    Maxwell Render 4.2.0.2

2018

    Maxwell Render 4.2.0.3

2019 Maxwell Render 5.0

See also

- Ray tracing
- [Indigo Renderer](#) - Another commercial unbiased renderer
- [Kerkythea](#) - A free unbiased renderer
- [LuxRender](#) - An open source unbiased renderer
- [Octane Render](#) - A commercial unbiased GPU-accelerated renderer