



>> Maxwell Render 1.6: List of Highlights

> General

- **Maxwell Displacement:** Displacement is a powerful texture-driven tool that can help users to create real geometric detail on objects on-the-fly while rendering. As opposed to many other displacement solutions currently available in the industry, Maxwell Render offers you its very own, unique displacement technology which is capable of simulating any detail without extra memory consumption. Many of the other displacement methods presently offered pre-tessellate the given geometry and displace the vertices of this new cluster, which wastes a lot of memory resources before and during the render. Maxwell Render does not use triangle tessellation methods and does not prepare subdivided/tessellated geometry before rendering. Even when rendering, this technology has nothing to do with additionally created triangles.

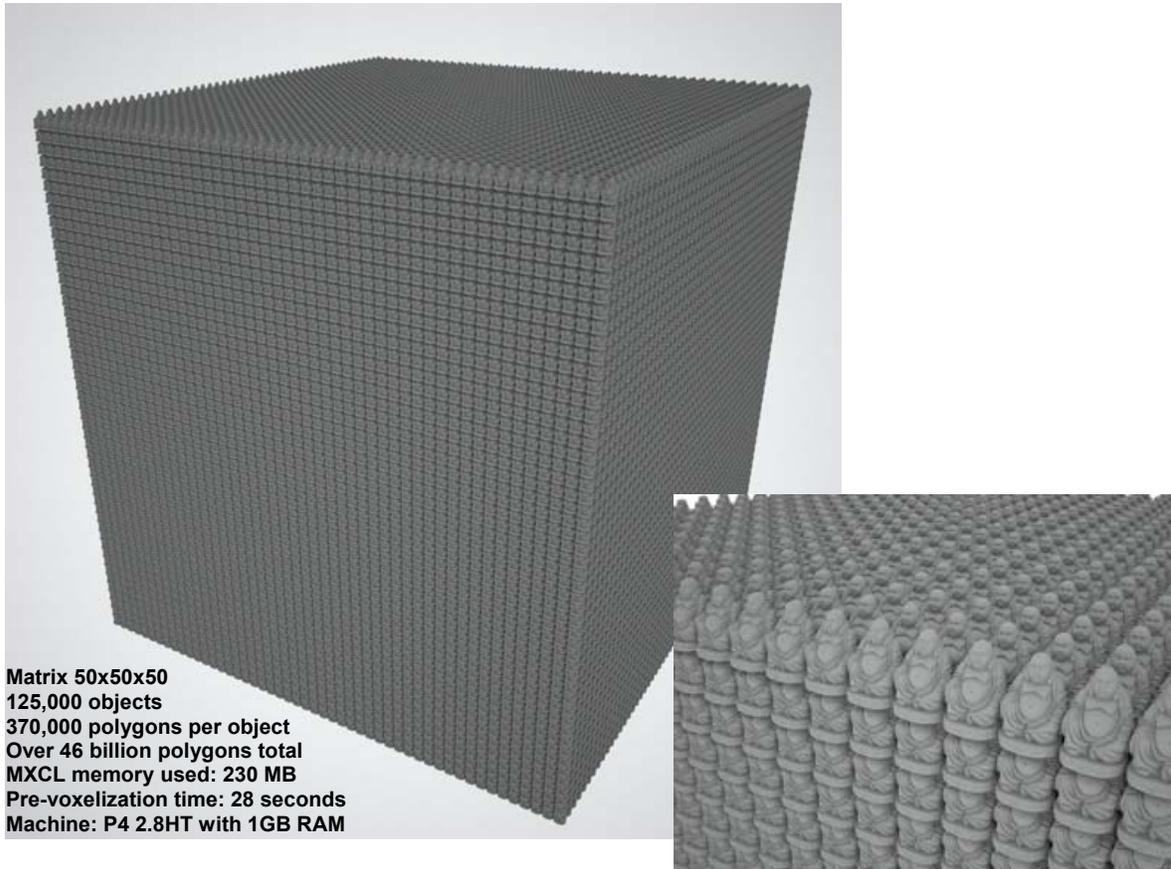
Maxwell's powerful infinite surfacing technology is capable of rendering very fine displacements even beyond texture resolution. With its seamless precision control, users can easily customize surface accuracy/ability and optimize the performance depending on their needs. In addition, Maxwell Displacement has very few parameters and is very comfortable to control.



Chair and cloth rendered using Maxwell Displacement and clipmaps.
All images created by our testers using Maxwell Displacement



- **Instances:** Support for Instances means that you can have thousands of high polygon objects in your scene and Maxwell Render will render them using the same amount of memory as if you only had one of those objects in the scene. Instances are extremely useful to reproduce objects such as plants, bricks, stones and furniture.



- **Voxelization multithreading:** This can potentially offer great time savings for those with multi-core systems, especially when enabling motion blur. Memory usage during voxelization has also been optimized, which will be most noticeable on 64-bit systems and to a lesser extent on 32-bit systems.
- **Network improvements:** Users now have the option to set a **global sampling level (SL)** for cooperative renderings so they no longer need to set the SL of each node separately. It's now also possible to set more than one manager and users can specify managers also by machine name, not just IP.
- **Sun in Sky dome:** It is now possible to use the sunlight from the physical sky together with the Maxwell Render sky dome.
- **Free Dosch Design HDRIs:** Maxwell Render 1.6 comes with a package of eight free HDRIs from Dosch Design. Previews are included in Maxwell Render 1.6, and the high-res HDRIs will be made available as a separate download, exclusively for clients, shortly after the release of 1.6. More details will be provided to clients by email.
- **64 bits multi-core bug fixed:** Some users experienced slowdowns on 64-bit multi-core systems. These issues have been solved so that the 64-bit performance is no longer below

expected. The fix applies to OSX and Linux as well. These fixes have led to speed improvements and some scenes will now render remarkably faster depending on scene set-up. Speed improvements of 15 to 20% have been reported by the testing team.

- **Motion blur:** Motion blur has been reactivated and is available from all plug-ins that support motion blur.

- **Alpha channel:** The Maxwell Render alpha channel has seen several bug fixes and enhancements. Now, the alpha channel doesn't generate sampling noise in empty areas, and it matches with the render channel without edge issues.

- **Numerous bugs fixed**

> Maxwell Studio

- **Hierarchy support:** Besides regular groups, Studio now also supports grouping objects in hierarchies of virtually unlimited depth. Objects can be parented to other objects; groups can be parented to an object, etc.

- **New transform framework:** A completely new system with a much more solid framework for translation, scaling and rotation of objects and groups. This also includes improved gizmos.

- **Others:** Much more robust UV creation and manipulation; Instances support; Geometry Importers improved; General stability and performance improved; Great number of bugs fixed.

> Plug-ins

- **General:** All the plug-ins for Maxwell Render have been updated and improved, incorporating a great number of bug fixes and ensuring complete adaptation to version 1.6. Please visit the plug-in section at the [customer download page for more information](#) about improvements and bug fixes in your plug-in.

- **Displacement and instances:** Supported in **all** the plug-ins that support these features.

- **2008 versions:** Now available for all our currently supported Autodesk plug-ins (3dsMax 2008, Maya 2008).

- **Lightwave plug-in:** The Lightwave plug-in has gone through a deep-clean, resulting in a great number of bug fixes and improvements.

- **SolidWorks plug-in:** Maxwell Render 1.6 comes with a new plug-in for SolidWorks 2007 and 2008. This plug-in offers fully integrated materials (save directly in the SW document); a Maxwell object-properties window showing the material-source and a thumbnail preview of the selected object; a Maxwell Database Manager containing all Maxwell material sub-components; improved mesh export performance; and more.

- **Cinema 4D plug-in:** This completely updated plug-in brings extensive material integration with a new Maxwell Material now added to the list of Cinema materials. Active MXM textures are shown in the view port when the material is applied, and it is possible to change the shown texture. Textures can now be rendered in the Cinema4D render to be able to adjust the placement of textures doing fast previews, without starting MXCL. Other improvements include the possibility to enable or disable animation, regardless of which filename padding format is chosen, a STOP button to stop saving animations and more.

- **XSI plug-in:** Numerous enhancements have been implemented and now the plug-in comes with an active texture display or BSDF color in the XSI viewport; date/time settings as in Maxwell Studio; extra command line flags; and more.

Maxwell Render 1.6: supported plug-ins					
Platform	Version	Win32	Win64	Mac OSX	
	3ds Max	7	✓	✓	■
		8	✓	✓	■
		9	✓	✓	■
		2008	✓	✓	■
	Viz	07	✓	✓	■
		08	✓	✓	■
	Maya	7	✓	✓	✓
		8	✓	✓	✓
		8.5	✓	✓	✓
		2008	✓	✓	✓
	Lightwave	8.x	✓	■	✗
		9.x	✓	✓	✓ (9.3 UB)
	Cinema4D	9.6 and up	✓	✓	✓
	Rhino	4	✓	■	■
	XSi	5.x	✓	✓ (5.1)	■
		6.01	✓	✓	■
	SolidWorks	2007 (service p. 3.1)	✓	✓	■
		2008	✓	✓	■
	ArchiCAD	10	✓	✓	✓
		11	✓	✓	✓
	Form-Z	5.5	✓	✗	✓ (ppc)
		6.x (recommended)	✓	✗	✓ (UB)
	SketchUp	5 (limited)	✓	✓	✓
		6	✓	✓	✓

- ✓ Maxwell Render plug-in is available
- ✗ 3D application on this o/s exists but we do not yet have a plug-in
- Not applicable – 3D application on this o/s does not exist