MAXWELL RENDER

THE LIGHT SIMULATOR

Plugins Help

Cinema 4D

Maxwell for Cinema4D: Plug-in Help

The Maxwell for Cinema4D plugin has been created with the intention of providing an optimum integration of Maxwell Render with the version 9.6 and 10.X releases of Cinema4D for Windows 32 and 64 and Mac systems.

Here you will find an assortment of topics relating to the actual use of the plugin, as well as descriptions of the relevant parameters and interfaces.

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- Lights
- Engine
- Sky
- Layers control
- Tone Mapping
- Simulens

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Rendering

FAQ

- What does 'There is no MAXWELL_ROOT environment variable on this machine' mean?
- Why aren't my Emitters working?
- Why do projections show up as 'locked' when I open my MXS in Maxwell Studio?
- I've pressed 'Render' but no application is showing up.

Installation

The installation of the Cinema4D plugin is a very easy and straightforward process.

Installation on Windows

Once you have downloaded the zip file, uncompress the file into the Cinema4D plug-in folder.

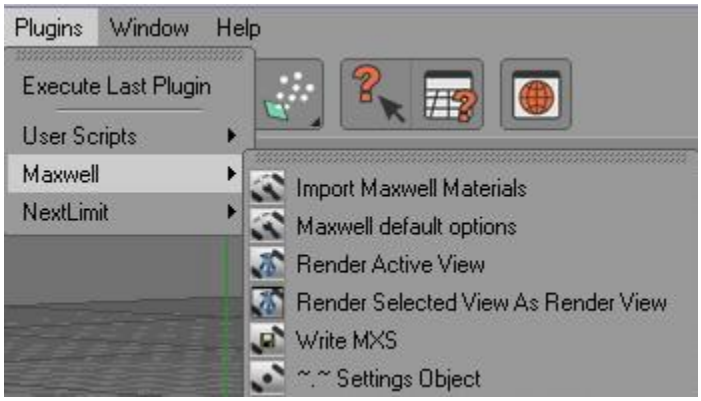
Installation on Mac

Once you have downloaded the zip file, uncompress the file into the Cinema4D plug-in folder.

Remember to install Maxwell Render in order to render from Cinema4D.

User Interface Help

The user interface for the Maxwell for Cinema4D plugin consists of several panels and menus. You can find the panels by selecting Plugin>Maxwell in the menu:

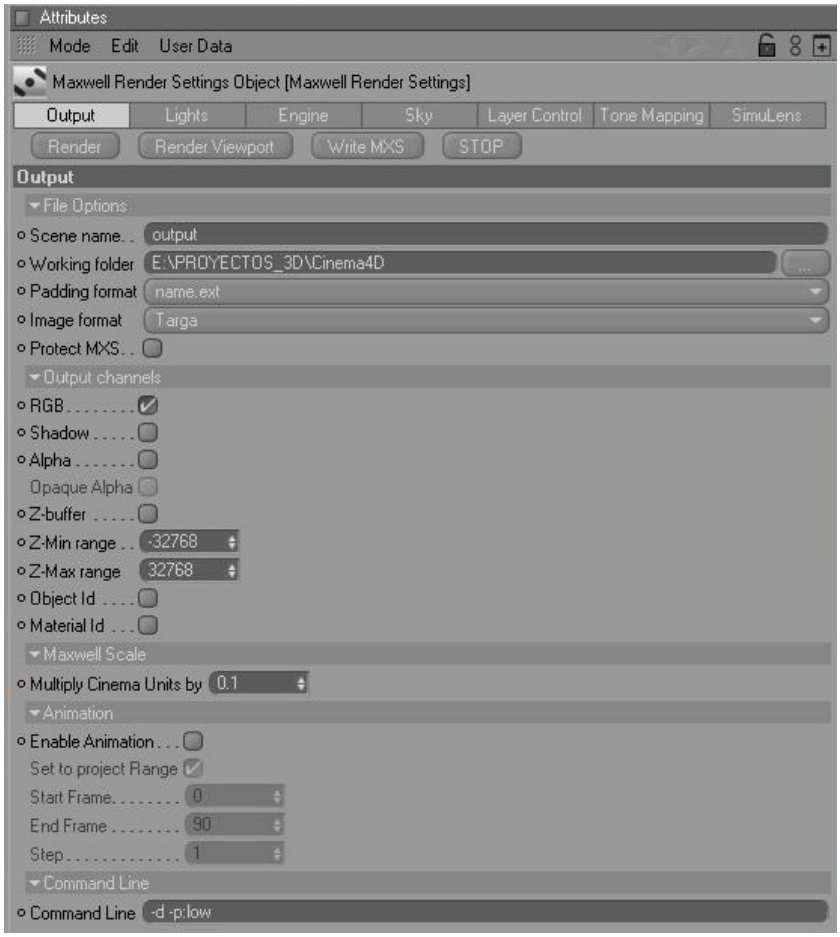


- Import Maxwell Materials
- Maxwell default options
- Render Active View
- Render Selected View As Render View
- Write MXS
- Settings Objects

The plugin has been designed to offer a comfortable workflow for Cinema4D users, including tabs that follow the logical way to work with Maxwell Render (environment, camera, materials...).

- **Import Maxwell Materials**
  - Choose the folder and it will copy all the files and folders it contains and create the corresponding Cinema-Maxwell materials in the material manager. After this, you can save them and have them ready to use. If the material database is large, this may take some time and memory, and the material thumbnails could take a while to update.
- **Render Active View**
  - Render the viewport with its current size.
- **Render Selected View As Render View**
  - Render the viewport with the settings shown in the output tab of “Rendering Settings”.
- **Write MXS**
  - Export the current frame to a single file in MXS format.

- **Settings Object**
  Create a tag to set specific render settings. You can create several Maxwell tags. The options in this tag are the same as Maxwell default options which are described in next point.
  - Render: Same as Render Selected View as Render View option.
  - Render Viewport: Render Active View.
  - Write MXS: Export the actual frame to a single file in MXS format or a sequence of MXS in case you have selected the Animation option.
  - STOP: This button stops the mxs file exporting process

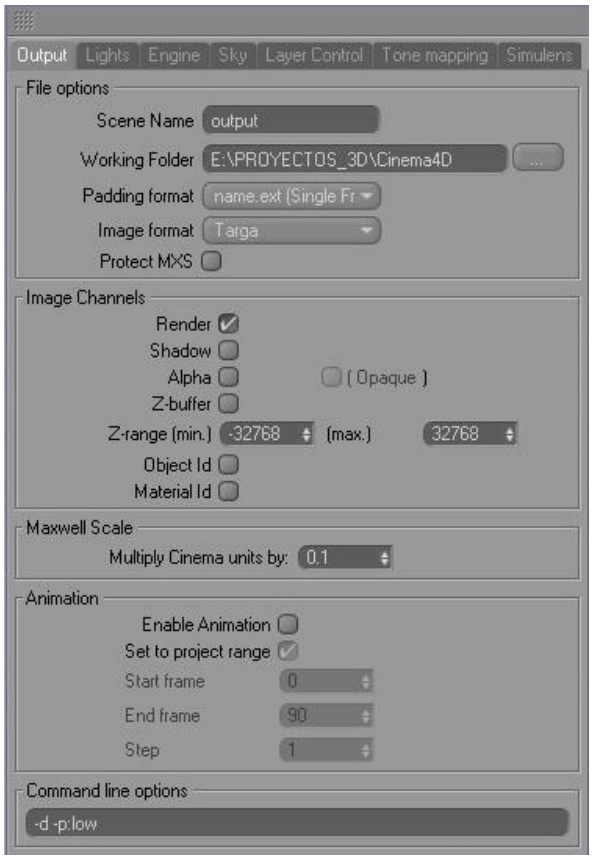


Maxwell default options

In this panel you will find the following tabs:

- Output
- Lights
- Engine
- Sky
- Layers control
- Tone Mapping
- Simulens

Output



- **Scene Name** – Specify the name of the Maxwell Render scene file which will be saved as *.MXS when output from the render control panel.

- **Working folder** – Enter the full path of the location the MXS file will be generated at render time. Alternatively, there is a file requestor button that can be used to set the desired location of the MXS file.
  If you want to render a sequence (animation), Maxwell will save a sequence of MXS files adding 5 number characters to the file name. i.e.: scene0000.mxs, scene00001.mxs, scene00025.mxs, and so on.

- **Padding format** – Select either single frame (single MXS file) or multiple frames (multiple MXS files) mode. To render a single frame select “name.ext (Single Frame)”. To render an animation sequence select “name#.ext”. After selecting “name#.ext”, the animation area becomes editable. See below for more information.
- **Image Format**- Select the image format.
- **Protect MXS**: Disable the possibility to export an obj file from Maxwell Studio.

- **Image Channels** – Click on the boxes to select the image channels to create for the MXS file on export from the plug-in. More than one channel can be selected at a time.
- Available channels are: ***RGB; Alpha; Z-Buffer; Id Object; Id Material; Velocity; and Coverage.***

- Note: The z-buffer requires two additional distance values that define a positive and negative distance from the focal point (z-buffer near and far). Both values must be positive.

For explanation of Image channel outputs from Maxwell Render see the Maxwell Render manual.

- **Maxwell Scale** – Maxwell Render works with real physical scale units. This system of units is based on the metric system. One unit in Maxwell Render is usually one meter. To set the units appropriately, compare by adjusting the "Multiply Cinema units by" option; this multiplier alters the system of units currently being used by Cinema 4D so that one Cinema 4D unit is equal to exactly one meter for Maxwell Render.
  It is important to work in real physical units because Maxwell calculates the light attenuation and other parameters of real scale in meters.
    - i.e.: 0.01 will export 100 Cinema 4D units as 1 meter in Maxwell Render.

- **Animation** – Cinema 4D animation settings can be used in Maxwell Render to set project range in frames. By clicking on the box next to "Set to project range", settings from Cinema 4D can be used to control the animation start, end, and step range. To use ranges different from those set from within the Cinema 4D animation system, make sure that the "Set to project range" is not selected. Set the "Start frame" and "End frame" and "Step" as desired. These settings are similar to those found in the Cinema 4D animation system.

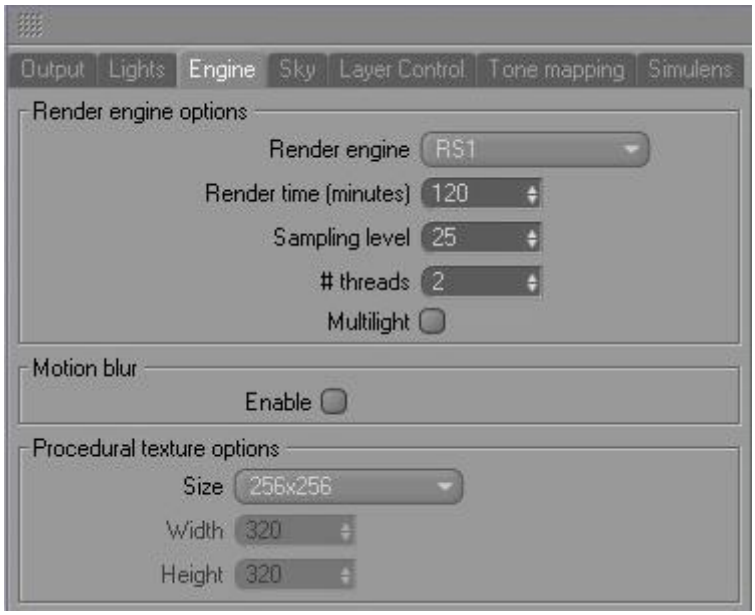
- **Command Line Options** – **This** text field area allows the addition of options to the internal command line interface to the **MXCL** (Maxwell Standalone Render Engine) for further control of the render process after the **MXS** file is generated by the plug-in.
  There is additional information about the command line in the maxwell_mxcl.pdf.

Lights:

Some lights in Cinema are converted into geometry with an assigned default emitter material (although, if you prefer, you can assign one that you made yourself).

- **Omni Light Segments** – **Omni** lights are converted into a sphere; this parameter sets the number of subdivisions used to create the sphere.
- **Omni Light Radius** – The sphere radius in Cinema units
- **Round Spotlight Segments** – the number of sides to create the cone from a spot light
- **Hide to Camera** – hides the source of the light in the rendered image
- **Hide To Secondary Rays** – reflected or refracted objects are hidden (seen in specular materials or those with low roughness, like a vampire in a mirror)

Engine:



- **Render Engine Options** – There are two options for the render engine, RS1 and Preview. Preview is a faster implementation of Maxwell Render. The preview engine does not allow motion blur.

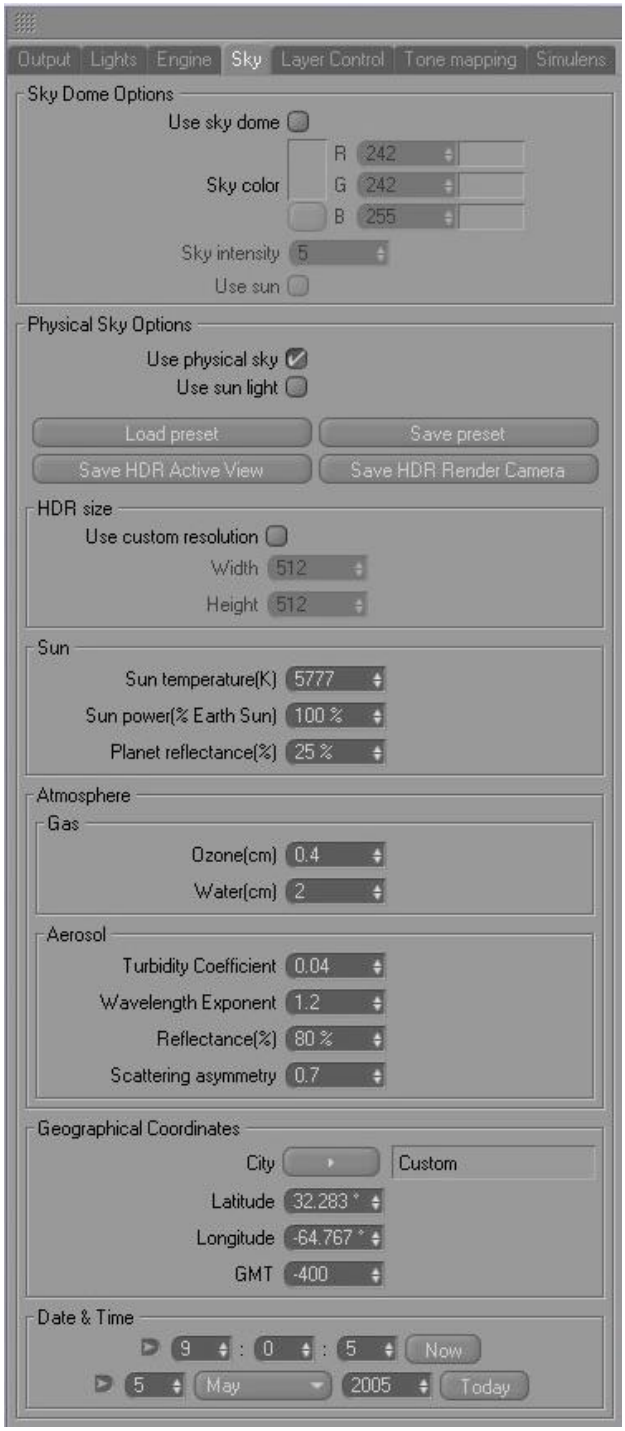
- **Render Time (minutes)** – Use this parameter to set the time within which you want the render to be finished (in minutes). Maxwell will automatically optimize its internal calculus to obtain the best result in this render time.
  During the rendering process, Maxwell will refresh the frame buffer window to let you see the render result as it progresses to a resolved solution.
  The first iterations are faster and allow for a quick preview of the scene. The iterations will gradually become longer and longer until they take up to a few minutes, in order to achieve better processor performance.
- **Sampling Level** – This value establishes the quality level for the render. This value is useful when you want to render a sequence of frames from different hardware configurations while obtaining uniform rendering solutions in a network or non-networked computers.
  If the quality level is reached before the "maximum render time", then the render ends. On the other hand, if the maximum render time is reached before the sampling level, the render engine will stop the calculation and end the render process.
  Each increment of the sampling level value is an increment of 50% in the overall quality of the image. To get an idea of the image quality during the render process you can take a look at the command line window of the Maxwell Render Viewer, where the sampling level is updated during the render process.
  # threads ***– Maxwell Render runs the render calculus in parallel and distributes the workload between all the available system processors. With this option you can limit the render to a number of threads. In the case of Hyper threading processors, each CPU will represent two threads.***

- **Motion blur** – To get motion blur for an object, apply the Cinema4D Motion Blur tag to an object and set its strength to a value changing the amount of blur. Select the "Enable" box to activate motion blur on a per object basis. Objects without this tag do not get motion blur.

- **Procedural Textures Options** – This is the size of the procedural textures that will be converted to file textures in order to be rendered in Maxwell.

Sky:

Only one sky system can be used at a time for a particular scene. The sky systems that are available are: ***Sky Dome*** **and** ***Physical Sky.***



Sky Dome Options

- **Use Sky Dome** - Use this check button to activate the sky dome. The sky dome is a uniform sky color; in this model the light comes in equal intensity from all directions.
- **Sky Color** – This sets a uniform sky color.
- **Sky Intensity** – This parameter sets the intensity of the sky emission.
- **Use Sun** – Use sun from Physical Sky settings.

Physical Sky Options

- **Physical sky** – This sky model simulates the real Earth sky. To activate, check the "Use physical sky" button.

- **Use Sun light –** This parameter activates and deactivates the Sun. To get the proper illumination bear in mind that you must use a large horizontal surface (editable Cinema 4D plane object) to simulate the ground.

- Load presets - Loads a preset for Physical Sky.

- Save preset - Saves your presets for Physical Sky.

- Save HDR Active View - Saves an HDR file baking the Maxwell Physical Sky with the active view resolution.

- Save HDR Render Camera - Saves an HDR file baking the Maxwell Physical Sky with the resolution of the selected camera.

  HDR Size
  - Use custom resolution - Choose the resolution for the HDR file.

  Sun
  - Sun temperature(K) - Temperature of the sun's spectral radiation. The default value of 5777 is the most common value measured outside the Earth's atmosphere.

  - Sun power(% Earth Sun) - A multiplier that controls the amount of light emitted from the sun. Higher values than the default 1 will make the sun emit more light, lower values will emit less.
  - Planet reflectance - Controls the percentage of light reflected from the planet surface back into the atmosphere.

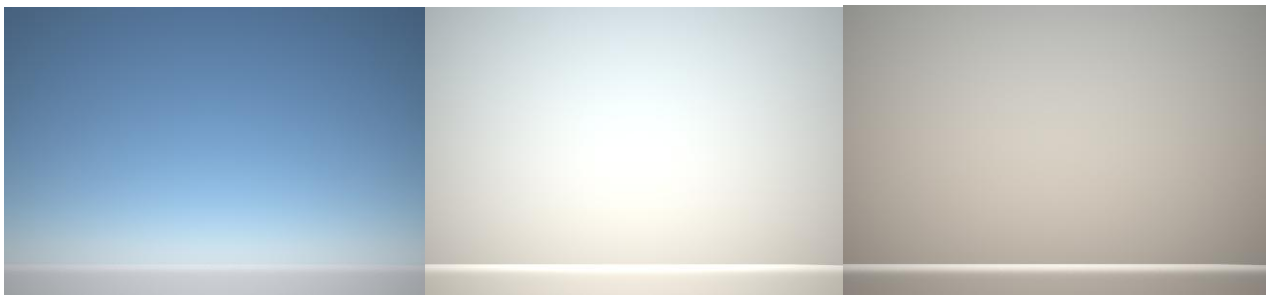
  Atmosphere

  Gas
  - Ozone: the amount of ozone gas in the atmosphere. The default value is 0.4
  - Water: The amount of water vapor in the atmosphere. It is measured in centimeters, in the same way as ozone.

  Aerosol

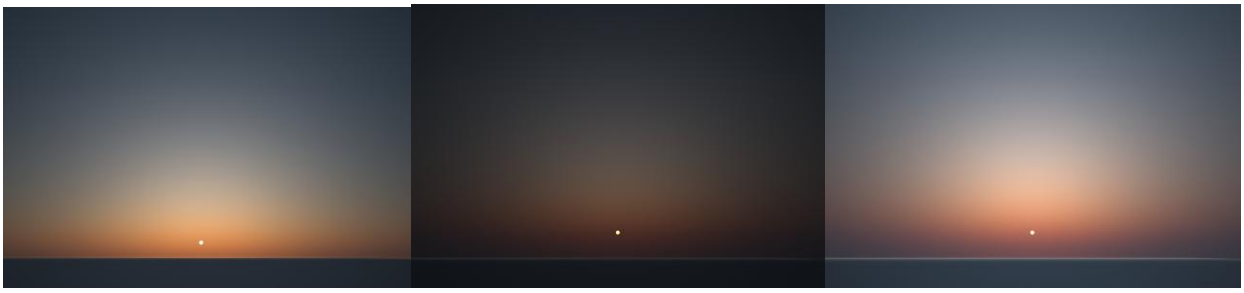
  Turbidity Coefficient: Defines the concentration and amount of particles in the atmosphere. A value of 0 means a perfectly clear sky (in which case the

next three parameters won't have any effect). 0.01 is a good value for low turbidity, e.g. a sky containing very few aerosols, which will appear almost clear. 0.04 is a good medium value and 0.1 is a high value.



Default settings (0.04) Turbidity 0.65, Scatt. Asymmetry 0.7 Turbidity 0.65, Scatt. Asymmetry -0.7

Raising the Turbidity Coefficient in sunset situations will darken the sky. Remember that you can also raise the ISO of the camera in these cases, which can create an interesting sky:



Default settings (0.04) Turbidity 0.18, ISO 150 Turbidity 0.18, ISO 1000

- Wavelength Exponent: Defines the average size of the particles in the atmosphere. The particle size influences which wavelengths of light are absorbed and which are scattered. Higher values than the default will increase the saturation of the sky, until gradually it turns first green and then orange:

Wavelength Ex. 1.2 (default) Wavelength Ex. 10 Wavelength Ex. 30

- Reflectance: Refers to the albedo of the aerosols, or the rate of energy scattered and absorbed by the aerosols.

- Scattering Asymmetry: This factor controls the anisotropy of the particles, that is, in which direction most of the light will be scattered. Positive values will produce a halo effect around the sun, brightening the area around it:

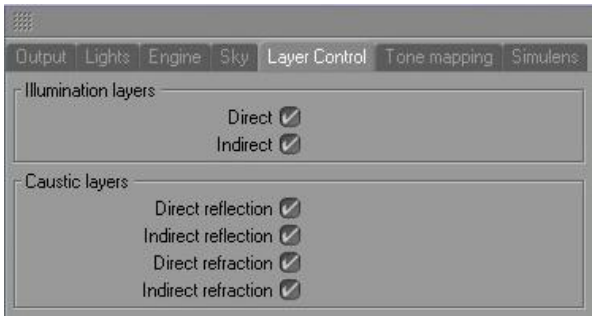
Scattering Asymmetry 0.7 (default) Scattering Asymmetry 0

- **Geographical Coordinates –** This parameter establishes the coordinates for the camera in Maxwell Render on the Earth. You can also select some cities in the city list to automatically obtain the coordinates. More cities will be included in this list soon.

- Note: The Maxwell Render Studio application can accept **KMZ** coordinates which can easily be output from Google Earth software for an exact location.

- **Date and Time –** These values tell the render engine the hour, GMT, month, and day of the particular moment of physical sky to simulate. The render uses these parameters to calculate the Sun's position for this specific time. The **GMT** parameter is the same offset value for your location from Greenwich Mean Time. For example: Madrid, GMT +100, San Francisco GMT -800, etc.

Layer control:



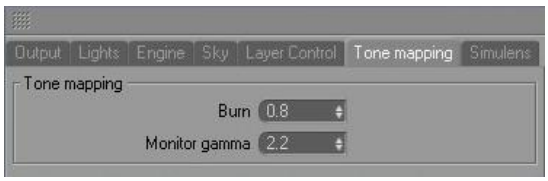
Illumination Layers – Consists of Direct and Indirect light rays

- **Direct layer** – Select the checkbox to activate or deactivate all the light rays coming directly from the light emitters.

- **Indirect layer –** Select the checkbox to activate or deactivate all the light rays coming indirectly from the light emitters. This option is oriented to diffuse materials.

- **Caustic Layers –** These are all the light rays coming from the surfaces, reflected or refracted. The direct caustics are the ones formed by light bouncing directly from the surfaces. The indirect caustics are the same, but in this case the light is coming from secondary bounces. The available layers are: direct reflection caustic layer, direct refraction caustic layer, indirect reflection caustic layer, and indirect refraction caustic layer.

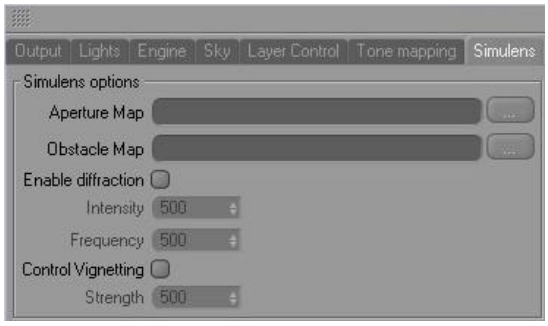
Tone Mapping:



- **Burn –** Burn is a tone-mapping parameter that controls how fast the image is overexposed.

- **Monitor Gamma –** Monitor Gamma is a tone-mapping parameter that controls the monitor gamma of the output image.

Simulens:



- Aperture maps: The shape of the diaphragm will model the pattern of light that reaches the film. For example, a circular diaphragm will create circular patterns; a hexagonal diaphragm will create 6 light streaks. You can set the diaphragm shape using a black and white (or color) map called the aperture map. Note that the examples on the left show a larger white area for clarity - in practice the white area should be smaller than the black area.
- Obstacle Maps: water drops, eyelashes, dirt, etc on the camera lens will also cause diffraction effects. Again, a black and white map is needed. If you don't want to use an obstacle map, you can leave this path blank; you only need an aperture map for diffraction to work. However, if you want to use an obstacle map, be aware that you also need to have an aperture map loaded.
- Enable diffraction:Switch on/off the diffraction effect.
- Intensity: Controls diffraction/glare intensity
- Frequency: Controls the frequency of coloring in the diffraction effect. Higher values will make the patterns denser.

- Control Vignetting: Switch on/off the vignetting effect.

Strength: Vignetting is an artifact darkening the image through the edges due to camera optics, now you can partially or completely remove it by dragging the slider from 1000 to 0.

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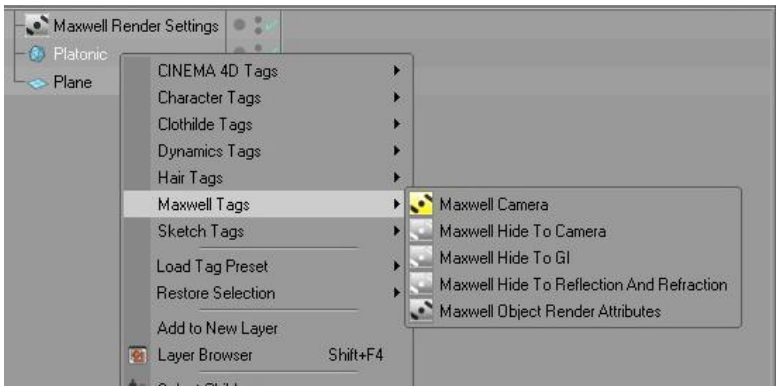
Maxwell Tags

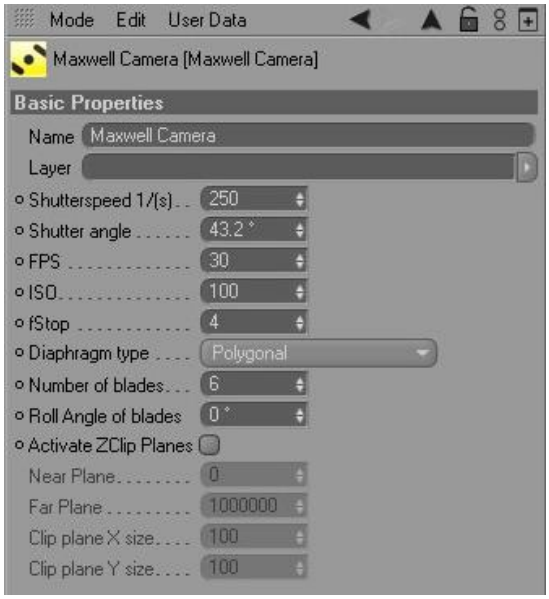
- Camera
- Hide To Camera
- Hide To GI
- Hide To Reflection And Refraction
- Maxwell Object Render Attributes



Maxwell Camera tag

How Cameras Work

Maxwell Render uses a camera model that differs from Cinema4D's camera model. Maxwell Render simulates a real camera with the associated lens set, diaphragm, etc. In this sense, the Maxwell camera has specific parameters that are reached through the plugin; however, there is still some information from the Cinema4D camera model that is useful to fully define the way the camera will behave in Maxwell Render.



- Shutter Speed: specified 1/n of a second.
- Shutter angle and Shutter Speed: They are interrelated, you can change one of them but not both at the same time, so if you change one the other will change automatically based on this formula:

  Shutter Speed 1/(s) = Shutter Angle / (FPS*360)
- FPS: Frame per second in your animation.
- ISO: the film's light- sensitivity, a higher ISO is more sensitive.
- F-Stop: controls the aperture of the lens.
- Diaphragm Type: Controls the shape of the 'bokeh' effect seen in out-of-focus highlights.
- Number of Blades: The number of blades of 'Polygonal' cameras.
- Roll Angle of Blades:
- Manual Focus Distance: Changes Focus Distance manually.
- Active ZClip Planes: Defines the Z-Clip by the Far Clipping Plane, Near Clipping Plane and size.

The camera used to render is the selected view camera, whether it is the editor camera or a 'real' camera.
The projection must be perspective. Orthographic or non-perspective cameras or views are not supported at this time by Maxwell Render.
Film Offset X and Film Offset Y is a camera option present in Cinema 4D that is not supported at this time by Maxwell Render.
Cinema 4D camera depths of field camera options and post-effect options have no effect in Maxwell Render. See Maxwell Render manual for controlling depth of field through the CineMaxwell4D tag or through Maxwell Render studio.
See the Maxwell Render manual for explanation and options of f-Stop, Shutter, Film Width, Film Height, ISO, Diaphragm Type, Diaphragm Roll Angle of Blades, and FPS.

Note: With normal daylight and Film ISO 100 the values would be:

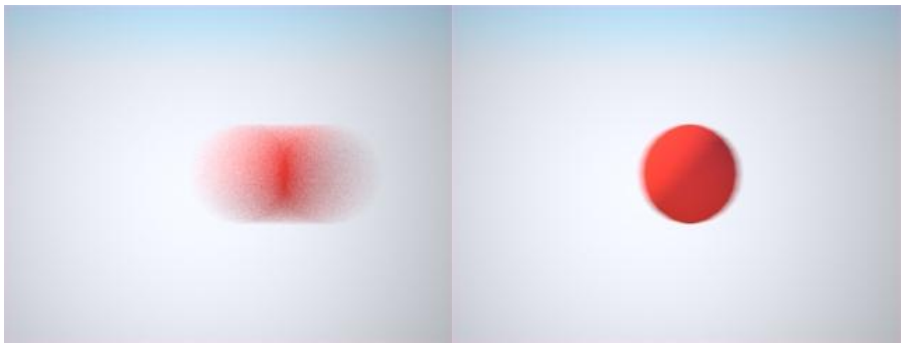
F-Stop	2.8	4	5.6	8	11	16	22
Shutter Speed	1000	500	250	125	50	25	10

Shutter speed with ISO 100									
Sun	4	5,6	8	11	16	22			F-Stop
Partially cloudy	2,8	4	5,6	8	11	16	22		
Cloudy		2,8	4	5,6	8	11	16	22	
Clouds Snowed landscape On the beach On the mountain	1/4000	1/2000	1/1000	1/500	1/250	1/100	1/50	1/25	Shutter Speed
Open view Horizon view Landscape with first plane	1/2000	1/1000	1/500	1/250	1/100	1/50	1/25	1/10	
Light colored buildings Landscape with dark first plane	1/1000	1/500	1/250	1/100	1/50	1/25	1/10	1/5	
Light streets and squares People in the light	1/500	1/250	1/100	1/50	1/25	1/10	1/5	1/2	
Dark streets and squares Dark buildings People in the shade	1/250	1/100	1/50	1/25	1/10	1/5	1/2	1	
Light wood People under thin foliage tree	1/100	1/50	1/25	1/10	1/5	1/2	1	2	

Dark wood People under thick foliage tree	1/50	1/25	1/10	1/5	1/2	1	2	4	
People in a room next to a light window	1/25	1/10	1/5	1/2	1	2	4	8	
People in a room next to a dark window	1/10	1/5	1/2	1	2	4	8	16	
Light interiors	1/5	1/2	1	2	4	8	16	32	
Dark Interiors Churches	4	8	16	32	60	120	240	480	

Shutter Speed, ISO and Shutter Angle

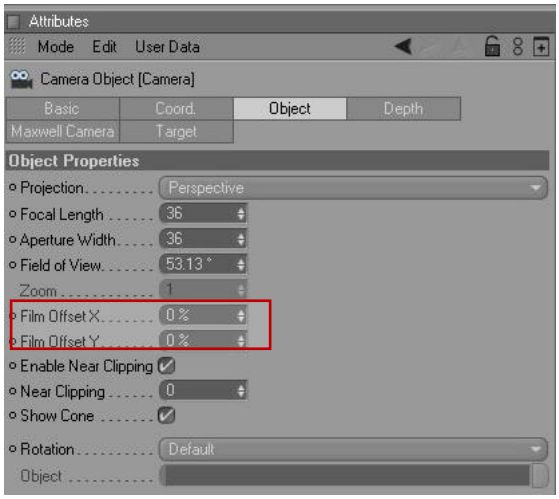
Shutter Speed and ISO of the Maxwell Camera Properties panel are used if Motion Blur is off on the Maxwel Render default options; otherwise Cinema4D's shutter angle is used.
The shutter speed is then adjusted to obtain the same exposure as you would get with the Maxwell ISO values. This means that you can play around with the motion blur strength to get the motion blur to look right without affecting your exposure.



Motion blur strength to 100% and to 10%.

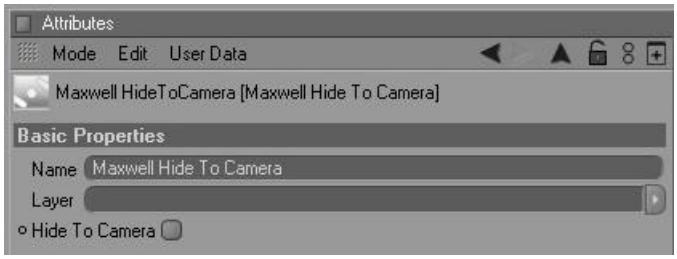
Shift Lens

The shift lens functionality of the Maxwell camera allows you to shift the lens of the camera in order to move the image that falls on the virtual film plane up/down, or left/right. This is useful for architectural-type renders where you want to keep some lines of the building parallel, making a two point perspective.



X offset: Defines the offset in X (side-side movement). Values can go from –100 to 100.
Y offset: Defines the offset in Y (up-down movement). Values can go from –100 to 100.

Maxwell Hide to Camera tag

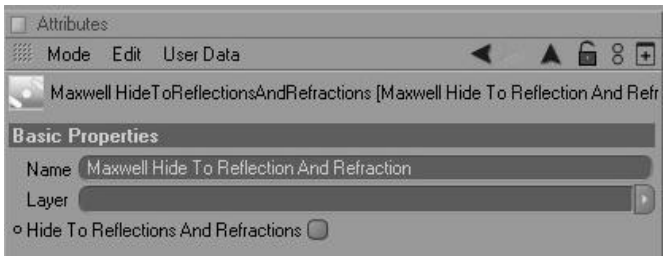


- Hides the object in the rendered image.

Maxwell Hide to GI tag

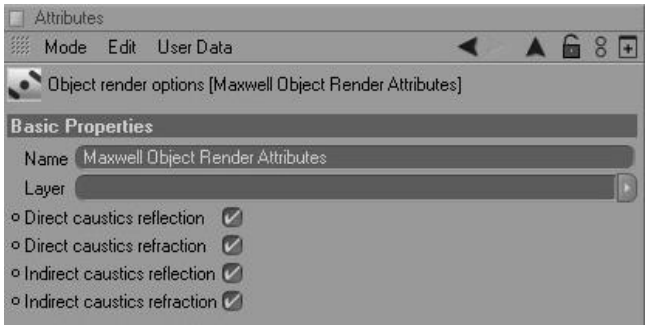
- Disables the object in the Global Illumination calculation process.

Maxwell Hide to Reflections and Refractions tag



- Hides the object in Reflections and Refractions.

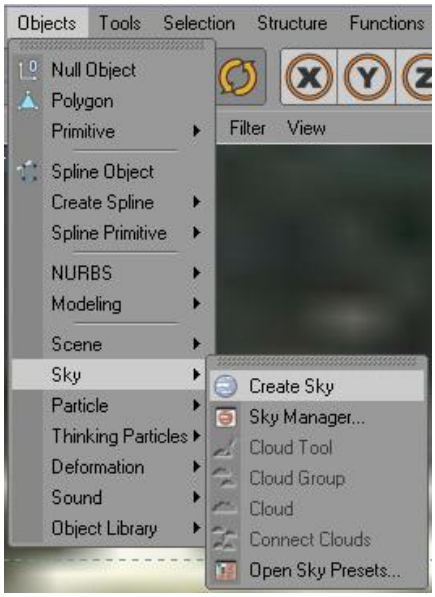
Maxwell Objects Render Attributes tag



- Disables the caustics produced by the object in the rendered image.

HDRI and Image Base Lighting

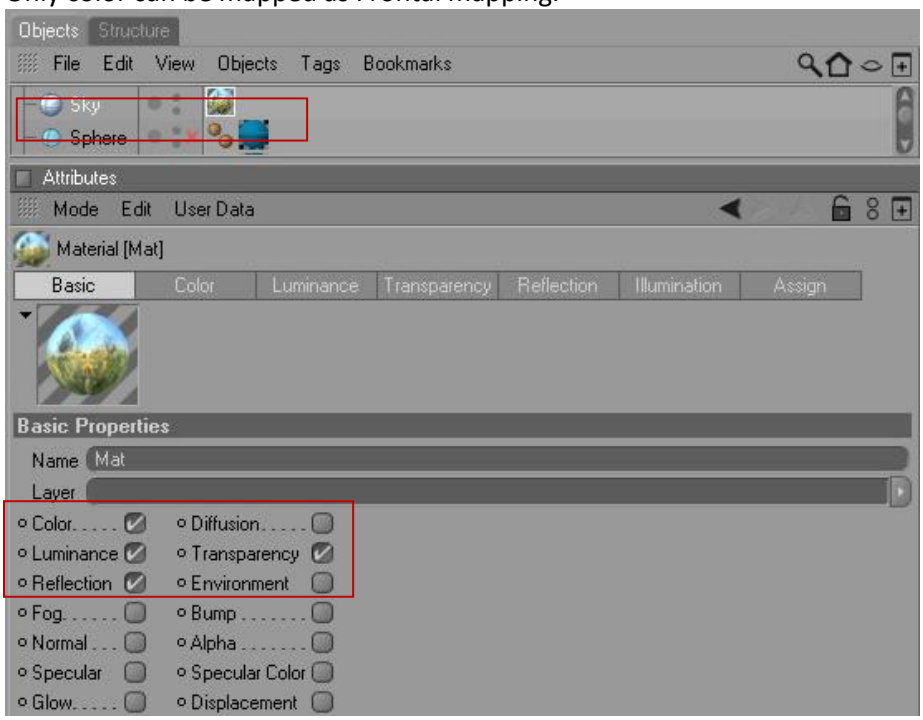
To use this option you have to create a Sky object from Cinema4D and then assign it a native shader.



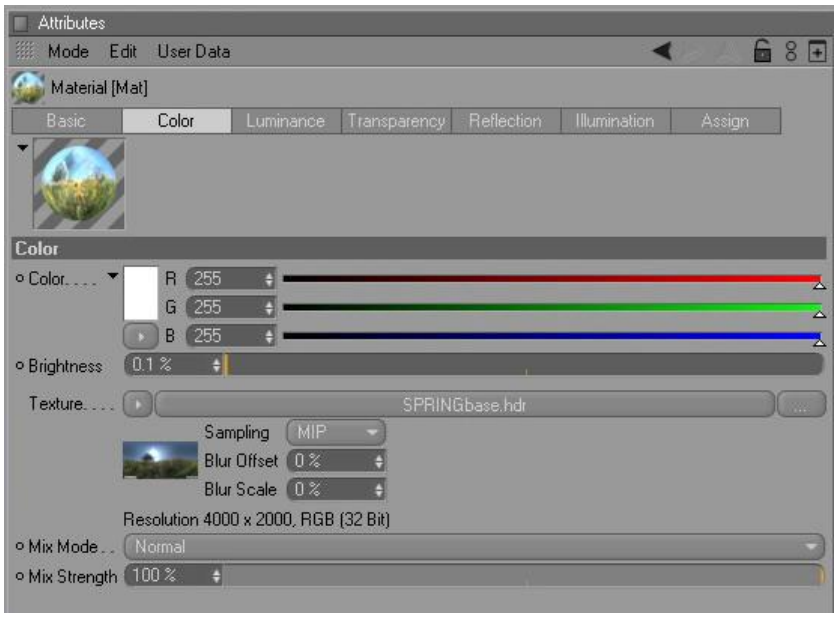
To understand how the Sky shader works, consider how Basic Properties from native shaders are mapped to Maxwell Environment Settings; look at the following list:

Color	Background	Spherical/Frontal
Luminance	Illumination	Spherical
Transparency	Refraction	Spherical
Reflection	Reflection	Spherical

Only color can be mapped as Frontal mapping.



The properties transferred are the Texture, where the HDR file is loaded, and the Brightness that will be the Intensity of the map. This last is mapped in a proportion of 10 to 1, so, if you want to set a value of 5, it must be set to 0.5.
Both frontal and spherical projections, with positive or negative scales, are transferred to mxstudio without problems. Only HDR and MXI formats are allowed to load in this case.



Materials

How are Cinema4D Materials translated?

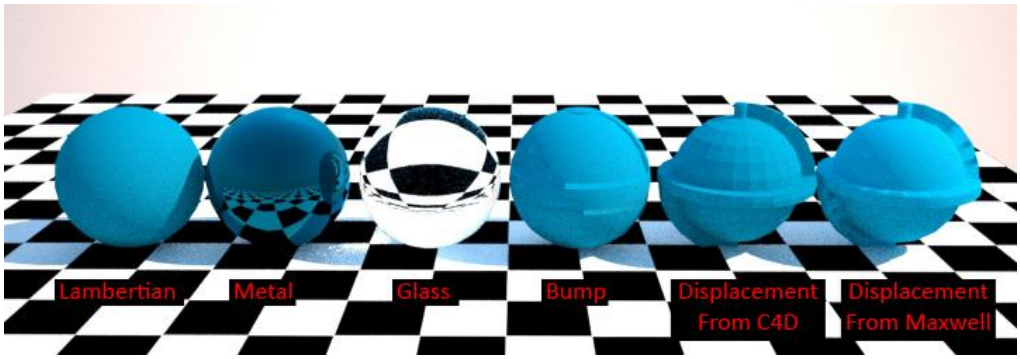
Some properties from native shaders can be converted into equivalent Maxwell properties. Native materials from C4D are converted internally to Maxwell Materials in the render process.

- Color
  - Color: Color RGB is transferred to Reflectance(0)
  - Brightness: To V in HSV mode.
  - Textures: All procedural textures are converted to files

- Luminance: This property is converted to an emitter layer.
  - Color RGB: To Color RGB.
  - Brightness: To Luminance in Lumens by m^2

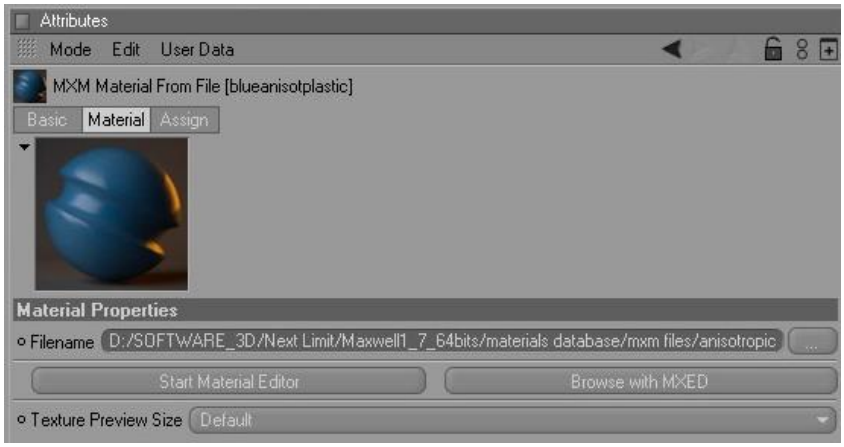
- Diffusion:
  - Brightness: To Roughness (100% is totally diffuse with no reflections, 0% is a mirror).
- Transparency: All dielectric materials are converted with the Attenuation parameter settled to 1 dm.
  - Color RGB: To Transmittance.
  - Brightness: To V in HSV mode
  - Refraction: To custom ior, index of refraction.
  - Textures: All procedural textures are converted to files and mapped to Transmittance channel.

- Specular Color
    - Color: Color RGB are transferred to Reflectance(90)
    - Brightness: To V in HSV mode.
    - Textures: All procedural textures are converted to files and mapped to Reflectance (90) channel.
- Alpha: This channel is used to create a clip map effect like the leaves in a tree, created with quad polygon as leaves. In this case ior is set to 1.
    - Invert: To invert the texture in the Transmittance
    - Texture: All procedural textures are converted to files and mapped in the Transmittance channel.
- Bump
    - Strength: To Bump.
    - Texture: All procedural textures are converted to files and mapped to bump channel.
- Displacement: When this channel is used the Smooth and Gain are settled to 1.0.
    - Height: Maps to Height in Maxwell.
    - Strength: Multiplies Height, and if negative, inverts the texture.
    - Type:
        - Intensity: The displacement start from the value 0 of the map.
        - Intensity Centered: The displacement is offset keeping the values from Strength and Height
    - Texture: All procedural textures are converted to files



Bear in mind that in some cases you will get more control over your materials if you use native Maxwell materials.

Maxwell Material



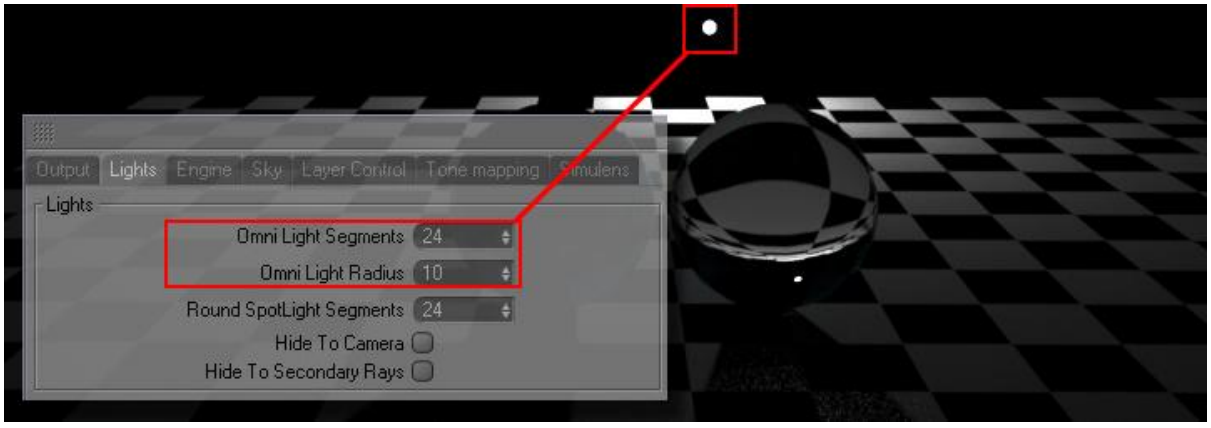
- Filename: Loads a Maxwell material using the browser.
- Start Material Editor: Calls the Maxwell Material Editor user interface to create new materials.
- Browse with MXED: Open the Maxwell material library.
- Texture Preview Size: Chooses the size for the preview in the Cinema4D interface.

For more information about the Maxwell Material Editor consult the manual on page 30.

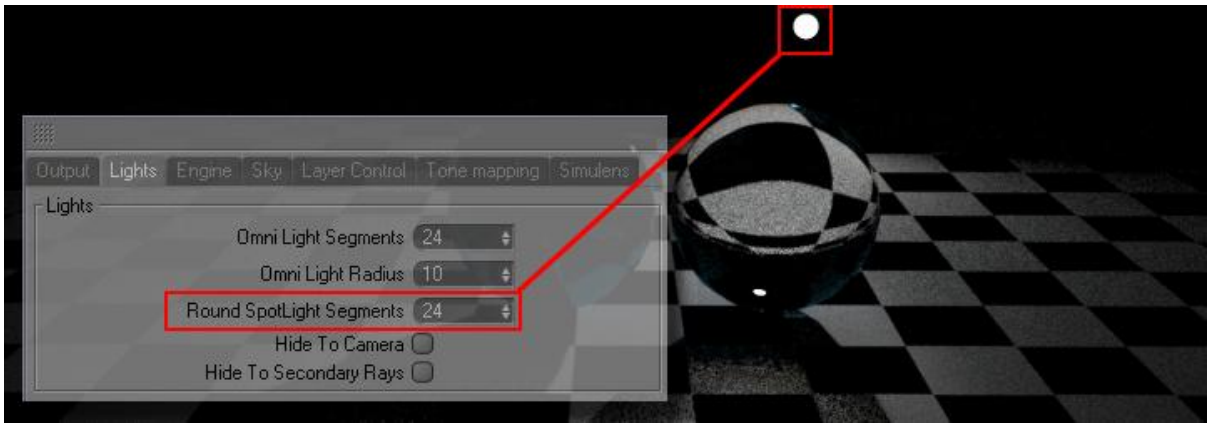
Lights and Emitter Materials

Most of the lights in Cinema4D are converted to objects with assigned Materials Emitters, depending on the light used it will be converted into one object or another. The geometry exported depends on the values set in the Maxwell Render Default Settings and the values from the light.

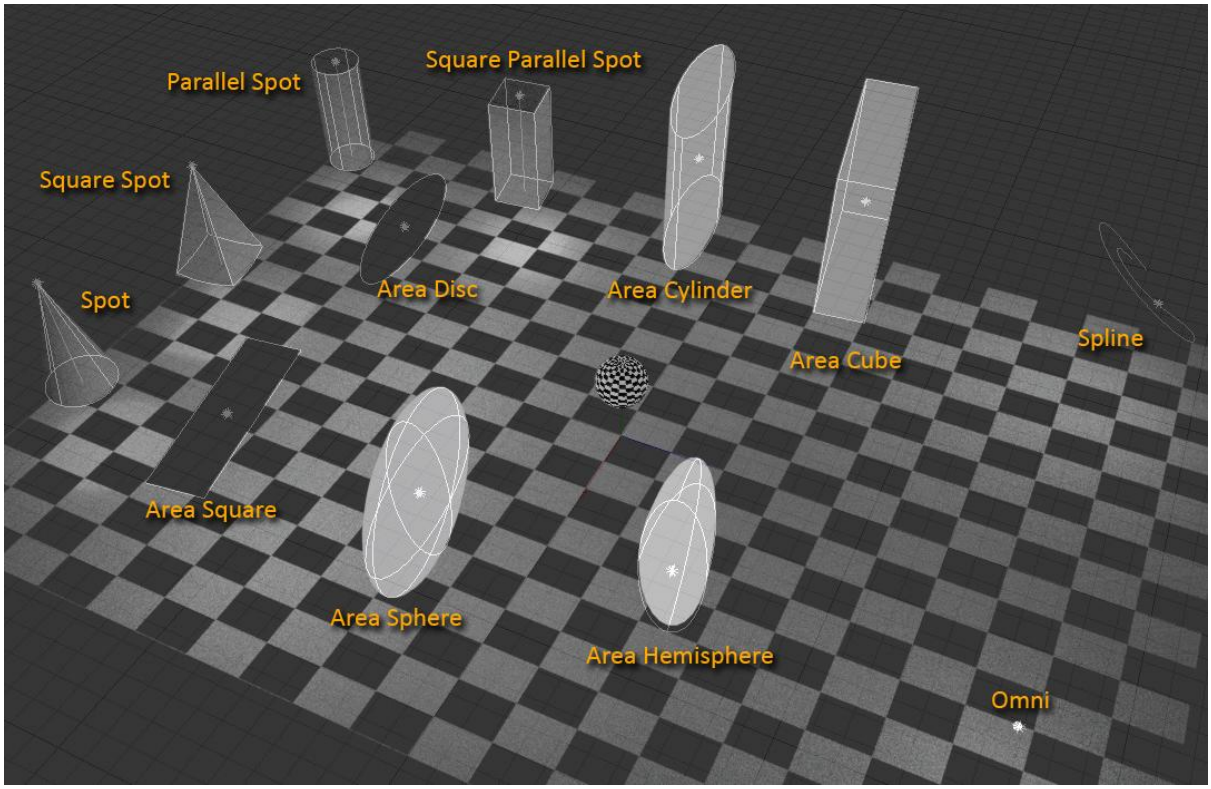
- **Omni Light**: These lights are converted to spheres with a number of segments and radius defined in the Render settings.



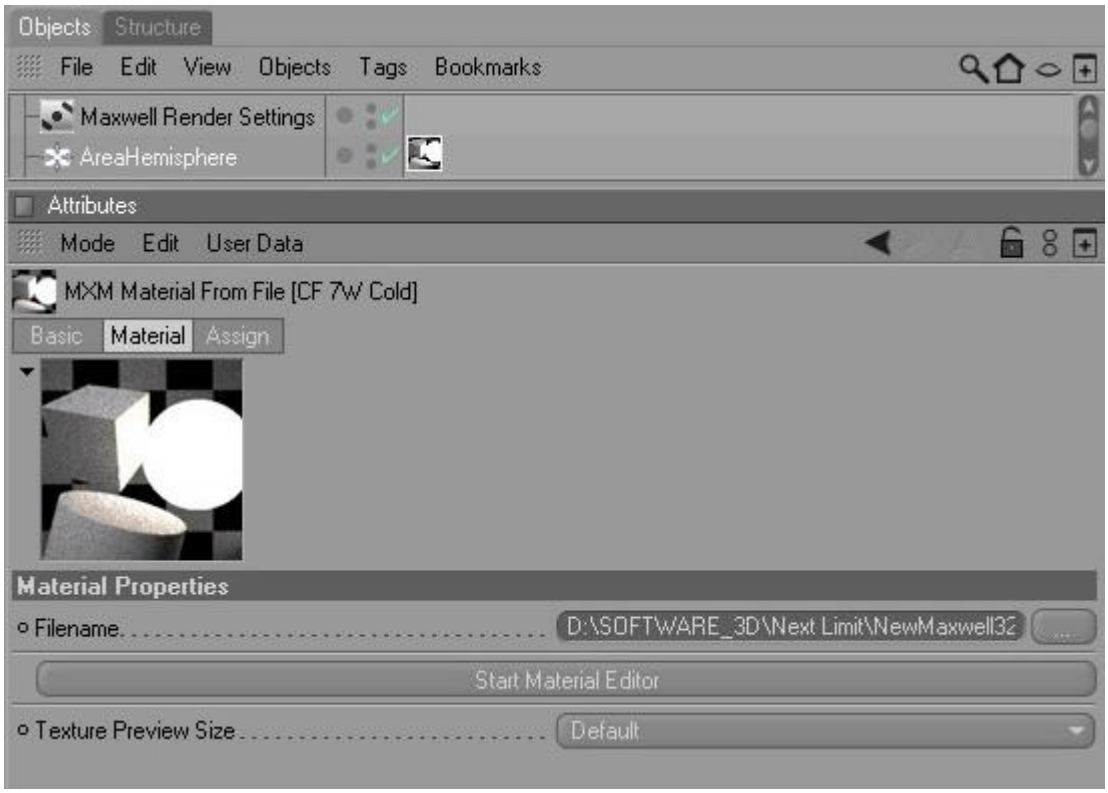
- **Spots and Target Light**: These lights are converted to cones with a number of sides; the radius is defined by the Outer Angle in the Light Details panel. In order to use the Inner Radius you must set the Falloff parameter to Linear, in this case the surface emitter is situated along the cone. This technique is used to create soft shadows**.**



- **Other types:** All parallels and area lights are translated to Maxwell objects with an assigned emitter.

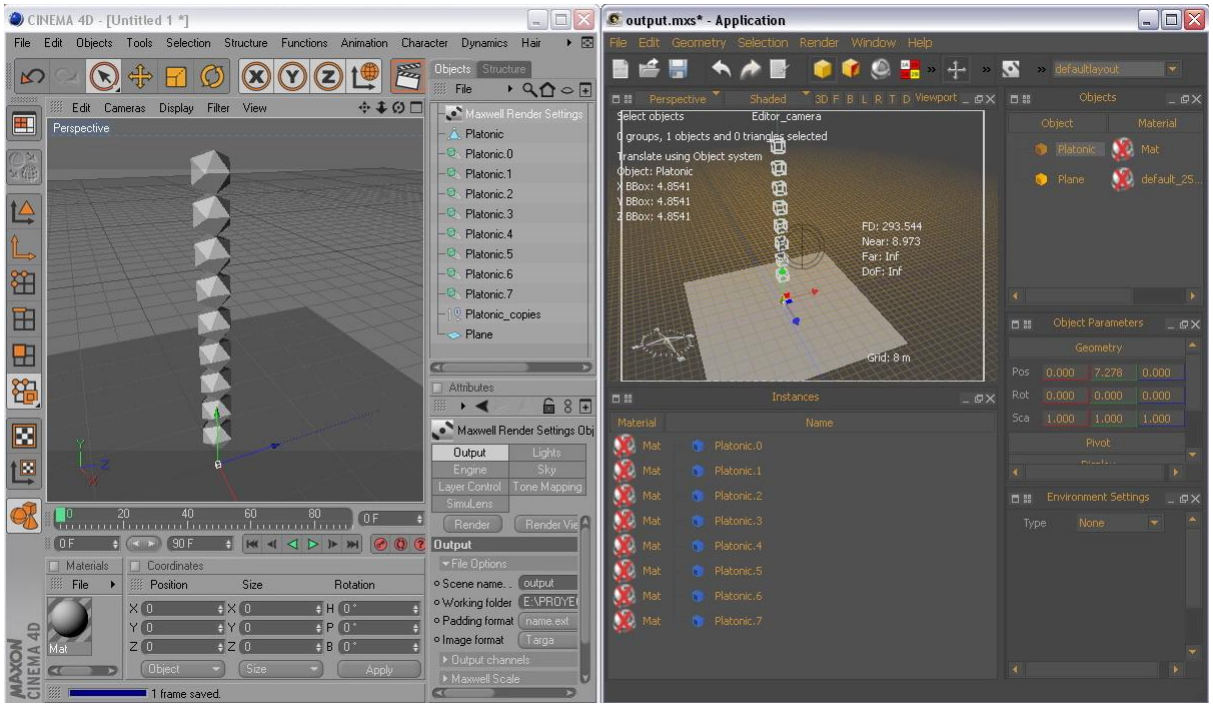


- Cinema4D lights can now be grouped under a null or any object, and, if the null or object is "switched off", the lights will be switched off too.
- **Maxwell Emitters:** You can create your own objects to illuminate the scene and assign a native Maxwell Material where you could create advance set up for lights. Furthermore, you can create your own Maxwell Emitter Materials and assign them to the light objects in order to get specific light configurations. For more information about Maxwell emitters have a look at page 30 of the help manual.



Instances

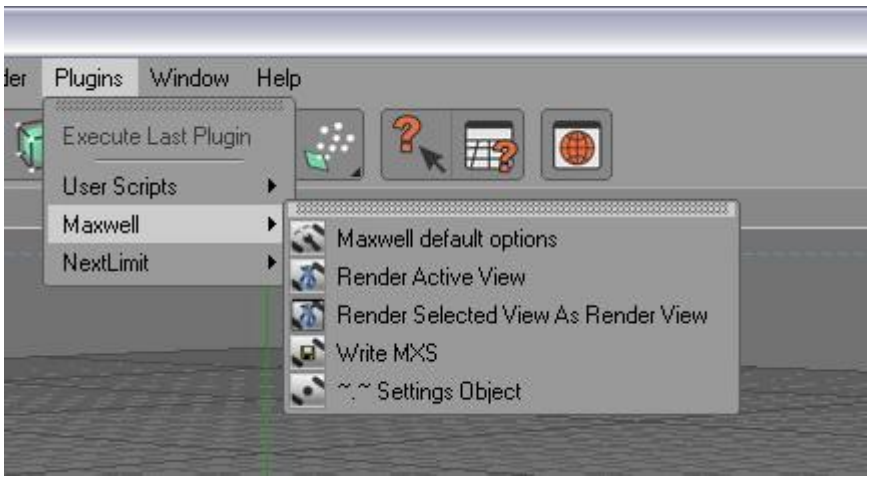
Instances support, at a very basic level. All Instances must hang from the hierarchy root (at the first level) and the objects they refer to must also hang from the hierarchy root. These referenced objects must not have any children hanging from them. The instance gets its material from the object it references.

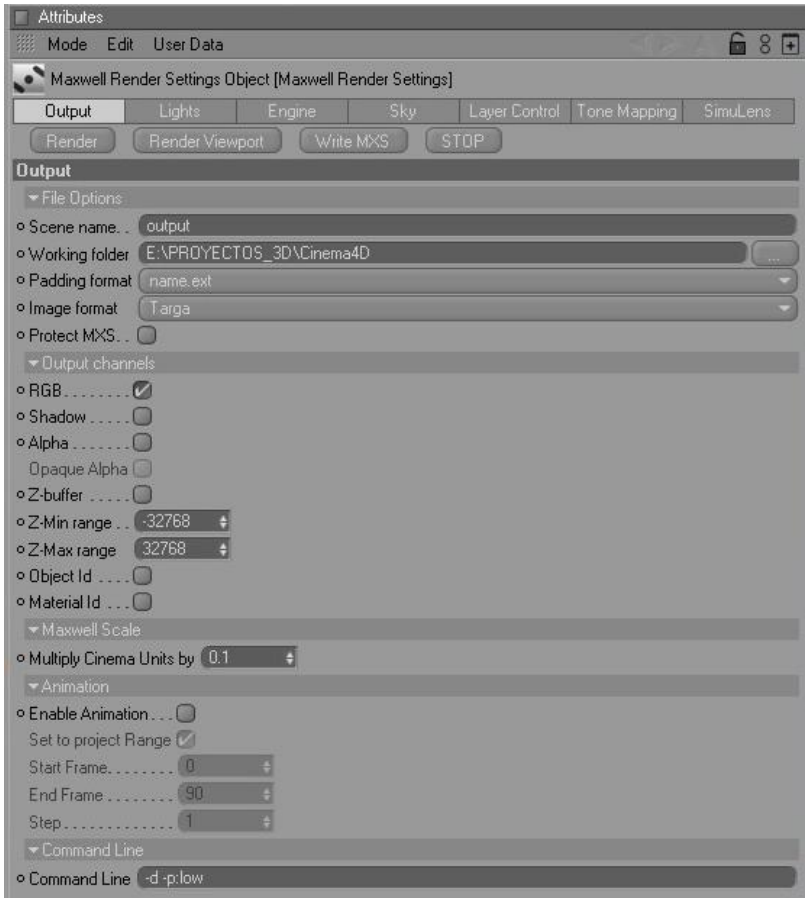


Rendering

Rendering stills and animations

To render stills simply select the option you want in the plugin menu, Active View or Selected View as Render View. Or, if you are using a Maxwell Render Setting Object, use the Render or Render viewport buttons already explained in previous sections.

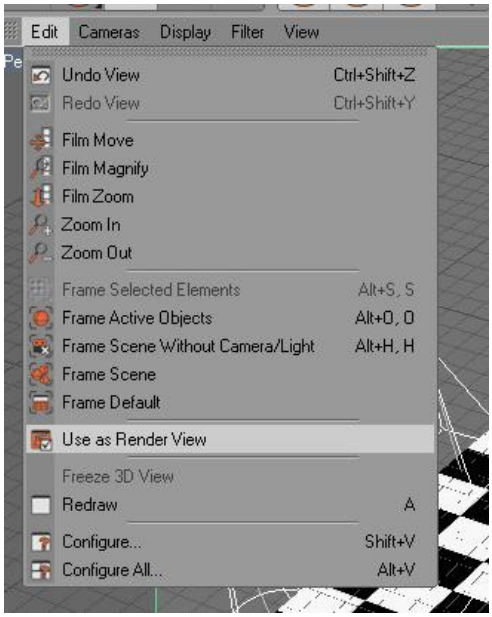




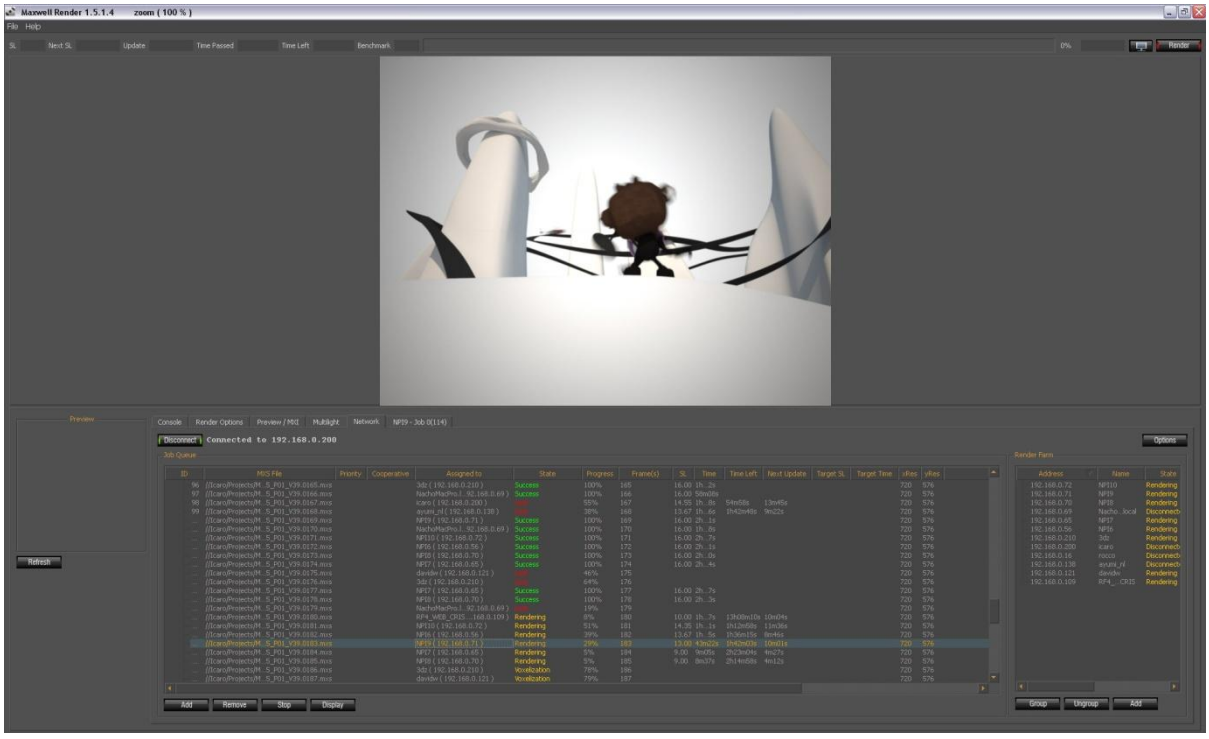
You can do this with the batch rendering function, where each frame is exported to a temporary MXS file and rendered by the MXCL app (when finished this file is deleted). You can see the process in the Script editor.

Another way is to write a sequence of mxs files and then render them with the MXCL application. To export MXS files go to Render settings, check the Enable Animation, set the range and press the Write MXS button.

- If you have several cameras in the scene, select the view you want to render in Edit> Use as Render View.



If you have a render farm have a look at the Maxwell Render manual to find out more about Networking Render to render sequences of MXS files.



FAQ Index:

ERROR: I always get the message:" Couldn't write MXS- file".

In some Mac systems you may get the error message "Couldn't write MXS- file". To fix it change your working folder in:

Plug-in > Maxwell Default Options > Output Tab > File Options > Working Folder.

How do you setup a Cinema 4D material to render displacement to Maxwell Render?

1. Create new Cinema 4D material.
2. From the material editor, activate the displacement channel.
3. Add a value to displacement height.
4. For texture, use Cinema 4D procedural noise. The default works well for this short test.
5. Activate Cinema 4D's sub-polygon displacement, and set subdivision level between 4 and 6.
6. Use a light source in your scene so you can see the object; follow the HDRI instruction below in Q002/A002 to quickly add HDRI and displacement to your test.
7. Render to Maxwell Render.

How does rendering to HDRI work for Cinema 4D and Maxwell Render?

1. Add Cinema 4D sky object to your scene.
2. Create New Cinema 4D Material.
3. Load an HDRI into the luminance channel of the material created from step 2.
4. Change the intensity of the luminance channel for the HDRI material to 0.1%.
5. Copy the luminance channel settings and past them into the color channel so that now the HDRI will show up in the render as background.
6. Assign the HDRI material to the Cinema 4D sky.
7. Change the mapping in the HDRI material tag to 'Spherical' mapping.
8. Render to Maxwell Render using the settings object.

I have a large Maxwell Render material library that I want to convert over to Cinema 4D Maxwell Render Materials. How should I do this?

The new Cinemaxwell Plug-in has been updated with a new plug-in to convert your Maxwell Render Materials to Cinema 4D Maxwell Render Materials. You can do this by going to the plug-in menu in Cinema 4D and selecting the plug-in "Import Maxwell Materials." You will see a popup for the directory of materials to convert. Please remember the following:

Large material databases (i.e. example 1000 Maxwell Render Materials) require time and memory to convert and display the material thumbnails in Cinema 4D.

In this case, convert your materials in smaller batches, as, when the process is done, all converted materials will show up in Cinema 4D's material manager. So if you do 2000 materials conversions in one go, you have to make sure you have the hardware and resources to display 2000 materials in Cinema 4D at one time.

What do I need to do to get motion blur to work with the cinemaxwell plug-in?

Motion blur works with Cinemaxwell 1.6 plug-in if you use the following steps and checklist:

1. Check that you have added your objects, camera, and most importantly the maxwell render settings object to your scene.
2. Go to the "Engine" tab of the Maxwell Render Settings Object and enable "Enable Motion Blur"" under the "Motion Blur" section.
3. Maxwell Render Settings Object "Output" tab and then under the "Animation" section ensure that "Enable Animation" is selected. Do not select "Set to Project Range." This is normally enabled if you intend to render out a range of frames to MXS.
4. Next set the "Start Frame" and "End Frame" to the middle frame of the sequence you have an object moving or changing its position or rotation state. You could put in any frame number here but do not put the first or last frame. Any frame in between will work just fine.
5. Next make sure you have a Cinema 4D motion blur tag on your object that is undergoing a change in state with respect to its position or orientation. Leave the default of 100% for this example.
6. You must do something to cause a change in state for the object you want motion blur to occur. For testing purposes, set a 20 frame animation. At frame 0, set the object at default zero for H, P, & B rotation values. Do not forget to set the key frame in Cinema 4D to record this state at frame 0. At frame 19 (0-19 is twenty frames), set the object rotation "B" [Remember X=H, Y=P, & Z=B] to 180. Again set a key frame in Cinema 4D at frame 19 for the change in B rotation of 180 degrees to be recorded.
7. Make sure you have your path for the generated MXS set correctly. [If it is not correct, you will get a render error because the file path is incorrect].
8. Add a light so that you can see the object and motion blur. Physical sun with sunlight, or a HDRI will work fine.
9. Render