

# Octane Sketchup Exporter

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## Installation

Extract the files from the **Octane\_1022g.zip** file into the ../Sketchup../Plugins/ folder, keeping the sub-folder structure for the files.

There should be the following:

In folder ../Plugins/

**Octane\_loader.rb**                      The file that loads the current script below

**win32ole.so**                          A file needed by the PC version of the tool.

In folder ../Plugins/Octane/

**Octane\_1022.rb**                      The script that sets up the **Octane Sketchup Exporter** tool

**OctaneDialog.html**                  The file that is used to make the webdialog for that tool

**OctaneDialogStrap.png**              The logo image for the above html file

**OctaneHelp.pdf**                      This Help file

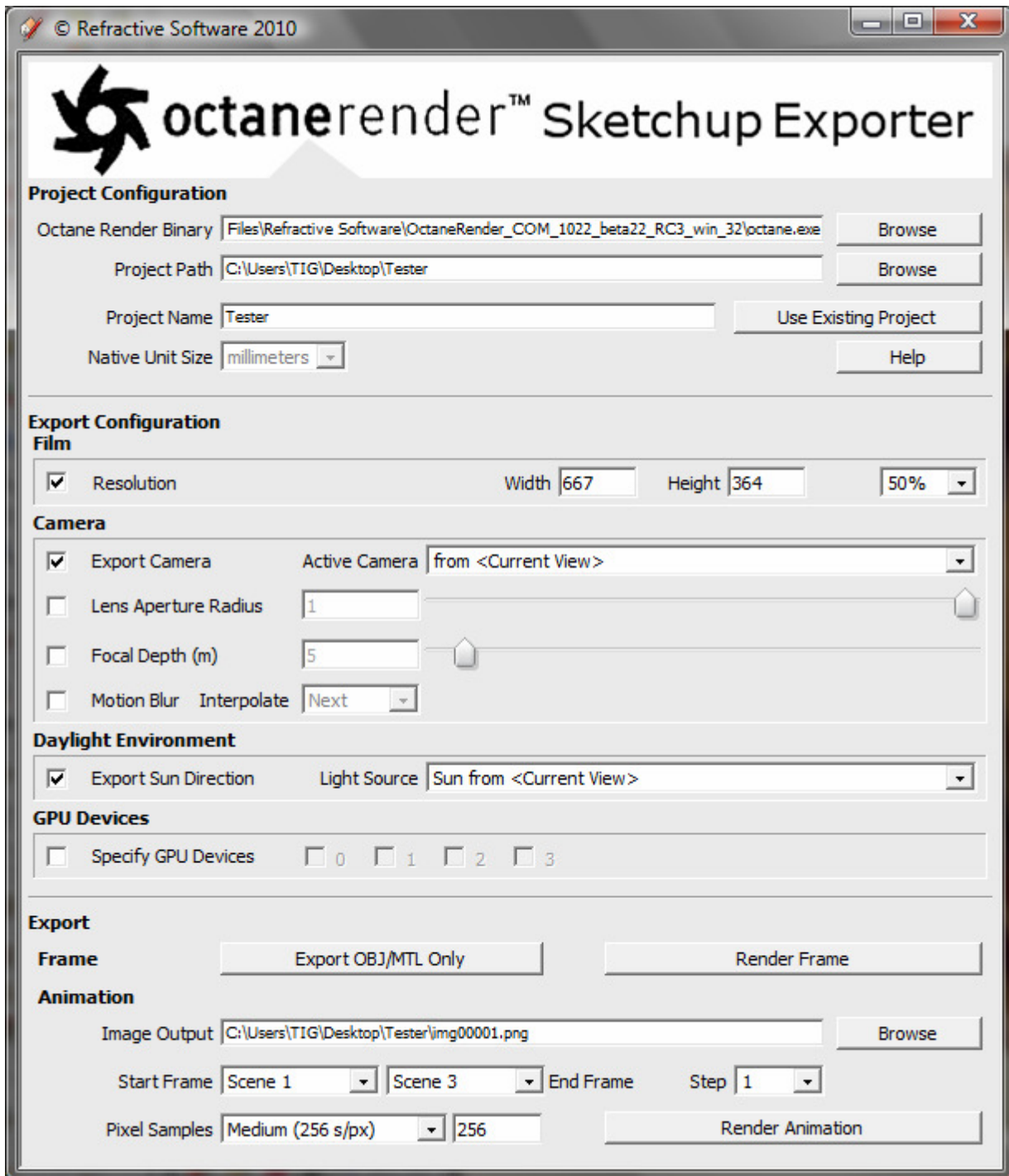
## Usage

After installation and the restart of Sketchup you should have an additional menu item to run the tool

**File > Octane...**

Alternatively typing ***octane*** into the Ruby Console will also work...

## The Dialog



The first section is "**Project Configuration**".

On the first run you will be pressed to choose an **Octane Render Binary** file – the application that the tool will use to process the render. It will be remembered with Sketchup for any future sessions.

Should the specified Octane application become unavailable between sessions you are prompted for an alternative.

After the set up you can change to another Octane application by clicking the *Browse* button.

The **Project Path** initially defaults to the current model's folder – you can change this by clicking the *Browse* button at any time.

[because of the limitations of the Sketchup API you must select a file within the desired folder to choose that folder – or you can type in a valid path]. If you save the model when you close it, then this path is remembered with the model.

The **Project Name** initially defaults to the model's name, with any spaces replaced with an underscore: *my\_model.skp* gives *my\_model* for the Octane *my\_model.ocs* file], you can type in another name if required; if the .ocs file doesn't exist then it will be made if you run the rendering parts of the tool. Alternatively, you can click on *Use Existing Project* button to find an existing .ocs file... then the **Project Path** and **Project Name** will be changed to suit that selection.

The dialog also shows the model's units settings – **Native Unit Size** – this is non-editable and is for information only [and to keep consistency with other exporters' UIs], since all dimensions used within the tool are automatically set to the units required by Octane – 'meters'.

To the right of this is a **Help** button that opens this file [**OctaneHelp.pdf**] - if it is found in the ../Plugins/Octane/ folder.

The second section - "**Export Configuration**" - lets you choose what settings to use with the export [if any].

## Film

<b>Resolution</b>	Initially disabled, if enabled you can change the following
<b>Width</b>	The image width, defaults to the screen width
<b>Height</b>	The image height, defaults to the screen height
<b>Percentage</b>	The standards are <i>100%</i> , <i>75%</i> , <i>50%</i> and <i>25%</i> which are applied to the current width and height settings The other drop-down's option is <i>Reset</i> with reverts to the model's screen width and height
<b>Camera</b>	
<b>Export Camera</b>	Initially enabled, you can change the following settings
<b>Active Camera</b>	This defaults to <i>from &lt;Current View&gt;</i> Other options in the drop-down are <i>from &lt;Current Scene&gt;</i> and then any available ' <i>Camera</i> ' from the ' <i>Scenes</i> ', listed in their order. Note that if this option is enabled <i>and</i> <b>Render Animation</b> is invoked then this selected Camera is ignored and each animation frame's Scene's Camera is used instead
<b>Lens Aperture Radius</b>	Initially disabled, default=1, you can enter a value between 0 and 1 – e.g. 0.25, or use the slider to change it
<b>Focal Depth (m)</b>	Initially disabled, default=5, you can enter any value >0, or use the slider for values up to 100, if >100 type in a value
<b>Motion Blur</b>	Initially disabled, default= <i>Next</i> , choose <i>Next/Previous</i> – to blur between scenes in animations If the <b>Active Camera</b> = <i>from &lt;Current View&gt;</i> then <b>Motion Blur</b> is inoperable in the <b>Render Frame</b> mode as it has no 'next/previous scene' If there is no ' <i>next</i> ' scene then the first scene is used, if there is no ' <i>previous</i> ' scene then the last scene is used Note that if this option is enabled <i>and</i> <b>Render Animation</b> is invoked then the camera for the Scene next or previous to the animation frame's Scene will be used in each frame, if it is available
<b>Daylight Environment</b>	
<b>Export Sun Direction</b>	Initially disabled, you can choose the following setting
<b>Light Source</b>	This defaults to <i>Sun from &lt;Current View&gt;</i> Other options in the drop-down are <i>Sun from &lt;Current Scene&gt;</i> and then any available ' <i>Sun</i> ' from the ' <i>Scenes</i> ', listed in their order.

Note that if this option is enabled *and* **Render Animation** is invoked then in each animation frame that Scene's Sun will be used instead

## GPU Devices

### Specify GPU Devices

Initially disabled, you can choose the following settings  
Default is 0 – choose from 0, 1, 2, 3 as the GPU[s] to use:

*NOTE: it currently can cause Octane to hang on startup if enabled AND any number is checked 0-3 at all. \*\*\**

*Temporary Solution: try an if it hangs next time don't try to specify the GPU using these settings...*

The third section - "**Export**" - lets you choose the type of render - **either**

## Frame

### Export OBJ/MTL Only

Click this button to export the current model as OBJ/MTL to the path defined earlier [and if appropriate, any Textures into a folder with the same name + *\_Textures*]. The OBJ file is set to **Octane's** required units 'meters', triangulated etc...

### Render Frame

Click this button to export the OBJ/MTL as above, and then automatically open **Octane**.

It starts to render the file using the various export settings you have selected – the s/px is automatically set to 'Very High' 4096. but you can stop the rendering at any time and/or change other Octane settings manually too.

or

## Animation

### Image Output

This defaults to the **Project Path** set above, plus *img00001.png*, you can enter an alternative, or click the *Browse* button to select an existing file/folder.

### Start/End Frames

These are listed in pull-downs from all of the available Scenes [Cameras], but only those Scenes marked in the Sketchup 'Scene Manager' to be 'included in animation'...

### Start Frame

Defaults to the first Scene, it can be any of the available Scenes except the last one.

### End Frame

Defaults to the Scene after the Start Frame's Scene [typically the second Scene], it can be any Scene later than the Start Frame's Scene.

### Step

Defaults to '1', the available Steps are listed in a pull-down determined from the Start/End Frames selected. *Not yet implemented – always taken as '1'.*

### Pixel Samples

Defaults to *Medium (256 s/px)*, choose from various setting, or type in a Custom value in the box to the right – it must be at  $\geq 1$ , but 8 is tiny !

### Render Animation

Click this button to start the rendering of the frame-set specified  
Note that the selected Scenes' Cameras, Motion-Blur and Light-Source are used if the respective **Export Configuration** options are 'checked' - their **Frame Render** specific Scene/Light-Source settings are ignored for this animation.

Other 'checked' configurations will also be used, e.g. 'Focal Depth'.

This button's title changes to say 'Rendering Animation, Please Wait...', and it is then disabled during the rendering loop.

To abort the rendering loop part way through close the 'cmd' window early ['command' on Mac]... On completion of the set of animation frames, or its early cancellation, the button becomes re-enabled and its title reverts to 'Render Animation'.

\*\*\*See 'Known Issues' below...

## Version:

1022.

a 20100611 First beta release.

b 20100613 Second beta release. Camera location swap y/z fixed.

Sun location swap y/z fixed.

Animations start-frame/end-frame/step from pull-down lists of available Scenes [i.e. without those 'excluded from animation' in the Scene Manager].

c 20100614 Help button added to open OctaneHelp.pdf in Octane folder.

Animation Start/End/Step pull-downs linked and animation cmd methods fixed. 'Step' not implemented yet [always = 1].

All settings now remembered with Model.

d 20100614 Step now implemented in animation.

e 20100615 UI messages improved. Animation typo error corrected.

f 20100615 Naming of exported texture files now always mimics SUP's tw output.

g 20100616 Mac feedback addressed, somewhat.

## Known Issues:\*\*\*

Selecting more GPUs that you have on your system can cause Octane to hang on startup.

The 'octane.cmd' and 'octane\_anim.cmd' files [and also '\_new\_' files to make the ocs's if needed] and [suffixed '.command' on Mac] are not currently auto-deleted from the Project's Folder after execution - this is for debugging.

These files can currently be edited to view/change the contents/actions.

This tool is now part beta tested on Mac [as of version-1022.g].

More feedback welcome...

TIG