

Octane Sketchup Exporter

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Installation

Extract the files from the **Octane_1022c.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



At first run you will be prompted 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 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 within the tool are automatically set to the required units – '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 next section, **Export Configuration** lets you choose what settings to use with the export [if any].

Film

Resolution	Initially disabled, if enabled you can change the following
Width	The image width, defaults to the screen width
Height	The image height, defaults to the screen height
Percentage	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

Camera

Export Camera	Initially enabled, you can change the following settings
Active Camera	This defaults to <i>from <Current View></i> Other options in the drop-down are <i>from <Current Scene></i> and then any available 'Camera' from the ' <i>Scenes</i> ', listed in their order. If this option is enabled and Render Animation is invoked then this Camera is ignored and each frame's Scene's Camera is used
Lens Aperture Radius	Initially disabled, default=1, you can enter a value between 0 and 1 – e.g. 0.25, or use the slider to change it
Focal Depth (m)	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
Motion Blur	Initially disabled, default= <i>Next</i> , choose <i>Next/Previous</i> – to blur between scenes in animations If the Active Camera = <i>from <Current View></i> then Motion Blur is inoperable in the Render Frame mode If there is no 'next' scene then the first scene is used, if there is no 'previous' scene then the last scene is used If this option is enabled and Render Animation is invoked then the next or previous Scene's camera will be used in each frame, if it is available

Daylight Environment

Export Sun Direction	Initially disabled, you can choose the following setting
Light Source	This defaults to <i>Sun from <Current View></i> Other options in the drop-down are <i>Sun from <Current Scene></i> and then any available 'Sun' from the ' <i>Scenes</i> ', listed in their order. If this option is enabled and Render Animation is invoked then in each frame the Scene's Sun will be used, ignoring the settings here that are for a single Frame Render only

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***
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The next section, **Export** lets you choose 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** units 'meters', triangulated etc...

Render Frame

Click this button to export the OBJ/MTL as above, then open **Octane** and start to render the file using the settings selected as detailed above

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 for various setting or type in a Custom value in the box to the right – it must be at ≥ 1 , but 8 is tiny!

Render Animation

Click this button to start the rendering of the frame set specified; the selected Scenes' Cameras are used, but other checked configurations can also be used.

The button title changes to *'Rendering Animation, Please Wait...'*.

And it is then disabled during the rendering loop [*this is currently inoperable on Mac*]: to stop the rendering loop part way through close the 'cmd' [command' on Mac] window early... On completion of the set of animation frames, or early cancellation the button becomes 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 implement yet [always = 1].

All settings now remembered with Model.

Known Issues:***

The 'Octane Render Binary' not found is trapped, and it is saved with Sketchup, also the 'Project Path' and 'Project Name' are trapped and saved with the Model: all other values are now saved with the Model but some 'volatile' values – e.g. Scene-names that are found no longer to exist when Octane is rerun later will revert to their default settings.

If the 'Project Name' [project].ocs file does not exist, it is made and a temporary Octane window flashes up momentarily.

The Start/End/Step options are now linked to ensure that the Start is before the End and that the Step is sensible
[**but** the Step is not yet implemented, always =1];

The 'octane.cmd' and 'octane_anim.cmd' files [and also '_new_' files to make the ocs's if needed [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 not yet tested on Mac [as of version-1022.c].

Feedback welcome...

TIG