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 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 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 *100%, 75%, 50%* and *25%* which are applied to the current width and height settings
		The other drop-down's option is *Reset* 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 *from <Current View>*
		Other options in the drop-down are *from <Current Scene>* and then any available 'Camera' from the '*Scenes*', 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=*Next,* choose *Next/Previous* – to blur between scenes in animations
		If the **Active Camera**=*from <Current View>* 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 *Sun from <Current View>*
		Other options in the drop-down are Sun f*rom <Current Scene>* and then any available 'Sun' from the '*Scenes*', 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***

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.
d 20100614 Step now implemented in animation.

Known Issues:***

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 not yet well tested on Mac [as of version-1022.d].

Feedback welcome...

TIG