Render Queue by ManFriday

Render Queue by ManFriday is a new plugin for Daz Studio 4.10 and 4.11. It allows you to render many scenes in sequence without having to sit next to your computer all night to start the next render when the previous is done.

What is different from other batch render scripts you may know?

- 1) This restarts Daz after every render to make sure we don't run out of memory after many scenes. It is thus possible to feed dozens of scenes to the Render Queue.
- 2) We wait ten seconds after loading each scene before starting the render to allow the scene to settle, e.g. for smoothing modifiers. (You can change the number of seconds in the settings.)
- 3) You can open and close the queue dialog as many times as you would like before starting the renders, adding more scenes and changing the order in which scenes will be processed.
- 4) For each scene in the queue, you can set the target file name of the rendered image before the queue is processed.
- 5) You can add the currently open scene to the queue. This allows for a new work flow:

work on your scene, save the scene file where you normally save your scenes, then open the render queue dialog, press "Add current scene". Save and close the queue dialog without starting the queue, and open the next scene. Then, when all the scenes have been saved and added to the queue, start the queue.

- 6) You can cancel each render if you think it has enough iterations, and the render queue will still keep going (unless you cancel the entire render queue in its progress window as well).
- 7) There is a progress window while the queue is being processed to show you what's going on.
- 8) After rendering each scene, the scene is kept in the queue but marked "Rendered" with the time it took to render so you can look up what happened hours later, when all the scenes have been processed.
- 9) At this time, the plug-in works on Windows only.
- 10) This is Iray only.

Installation

The plugin consists of a single DLL that you need to copy to your Daz Studio's "plugins" directory, e.g. C:\Program Files\DAZ 3D\DAZStudio4\plugins\. (You might need to be a Windows administrator to copy the file there.)

In the worst case, if everything breaks, you can delete the DLL again and all should be OK.

After copying, restart Daz Studio.

There are three ways to enable the plugin's functionality:

- a) If you're lucky, Daz has added a new menu item for "Render Queue by ManFriday" to the "Render" menu automatically after detecting the plugin. This doesn't always work though.
- b) To add the menu item manually, go to Window -> Workspace -> Customize (F3 hotkey by default) to bring up Daz Studio's actions and menu customization. In the tree on the left, you should see a new item "Render Queue by ManFriday" with an action of the same name under it. (If not, maybe the plugin probably wasn't loaded correctly; check "Help" => "About Installed Plugins" for whether "Render Queue by ManFriday" is in the list.)

In the right half of the window, click on the "Menus" tab and expand the "Main Menu Bar" item at the top. You should see the items for File, Edit, Create, Render, etc. Drag the "Render Queue by ManFriday..." sub-item from the left into a menu of your choice to the right (e.g. "Render"), press "Apply" and "Accept", and you should have that action in Daz Studio's menu.

c) Alternatively, in the main menu, select "Window" -> "Workspace" -> "Update and merge menus". On my system that added "Render Queue by ManFriday" to the "Render" menu, but I'm not sure that works everywhere. THAT MIGHT ALSO DESTROY YOUR OTHER CUSTOM MENU ITEMS if you have any.

Usage

After the menu item has been added, you can select "Render" -> "Render Queue by ManFriday", and the Render Queue dialog should pop up. Here you can add and remove scenes for rendering and select the directory where the rendered PNG files should be written to.

When you press "OK" at the bottom right, Render Queue by ManFriday will start loading the first file from the queue and render it, then restart Daz Studio, then the second, and so on.

A couple of notes to make sure the Render Queue works well:

- -- For each scene, the plug-in will render through the current camera (the camera that the scene was saved with). So for this to work optimally, you should save your scene files accordingly.
- -- Test loading your scenes first before adding them to the queue. If Daz Studio reports errors during scene load (e.g. because assets are missing), there is no way for the Render Queue to detect the "Missing items" dialog, and the Render Queue will stall until the dialog is dismissed manually.

Hope you like! ManFriday

Ideas for future versions

- -- Have automatic options for output file names, like date & time of render.
- -- Render animations.

Change log

Version 1.0.0 (Mar 22, 2019):

- -- Added a 32-bit Windows DLL.
- -- Cosmetic fixes to queue layout in dialog.
- -- Version bump to 1.0.0.

Version 0.6.3 (Mar 13, 2019):

- -- second version submitted to Daz 3D
- $\mbox{--}$ Added a warning when adding a scene file and the default output directory was not set yet (which would try to render to the root directory).
 - $\ensuremath{\mathsf{--}}$ Added missing tool tips for two buttons in the queue configure dialog.

Version 0.6.2 (Mar 13, 2019):

-- Private Build.

Version 0.6.1 (Mar 12, 2019):

- -- first version submitted to Daz:
- -- Fixed a Unicode conversion problem with scene file names.
- -- Add "Reset state" button to queue config dialog.

Version 0.6.0 (Feb 19, 2019):

- -- Add check box to shut down computer after queue has been processed.
- -- Remember config dialog window position.
- $\,$ -- Fix crash in render progress dialog when closed while scene was being opened.
 - -- Fix crash in config dialog when removing all queue items at once.

Version 0.5.0 (Feb 14, 2019):

- -- Fixed a bug in that smoothing modifiers were never applied before rendering started. This workaround helped.
- https://www.daz3d.com/forums/discussion/269326/mesh-smoothing-disabled-in-scene-opened-by-script-help-solved#latest
- -- Keep scenes in the queue after rendering and set their state to "Rendered" with the time it took to render (for inspection after the dialog is done).
- -- Add "Set target file" button to config dialog to allow for changing each image target file from the auto-suggested name before the queue is processed.
- -- Change "Apply" button to "Save" and disable it if there is nothing to save. Also rename "Cancel" to "Close" in that case.
- -- Added an "Open scene" button to the config dialog to allow for opening a scene file from the queue in Daz Studio.
- -- Added confirmation before processing the queue if the currently opened scene has unsaved changes.

Version 0.4.0 (Feb 12, 2019):

- -- Added "Add current scene" button to scenes list dialog.
- -- Fixed wrong picture size when active camera in scene had "local dimensions" enabled.
 - -- Remember last directory in "add scene" file picker.
- -- Added target output file to each scene in the queue, allowing for saving each scene's render in different directories.
 - -- Add status column to scenes list dialog. (For future use.)
 - -- Add "skip" button to scene settle down phase in queue status window.
- $\mbox{--}$ Add "restart daz" phase in queue status window with delay and cancel button.
- -- Added a check whether the currently open scene needs saving before processing
 - the queue from the scenes list dialog.

Version 0.3.0 (Feb 10, 2019):

- -- Lots of GUI polish, added fly-over help everywhere, made things prettier.
- -- Made the "settle down" period after scene loading configurable in the seconds (was five seconds, default is now $10 \, \text{seconds}$, can go up to 60).