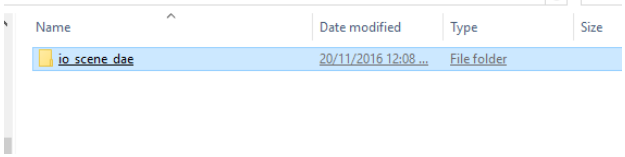
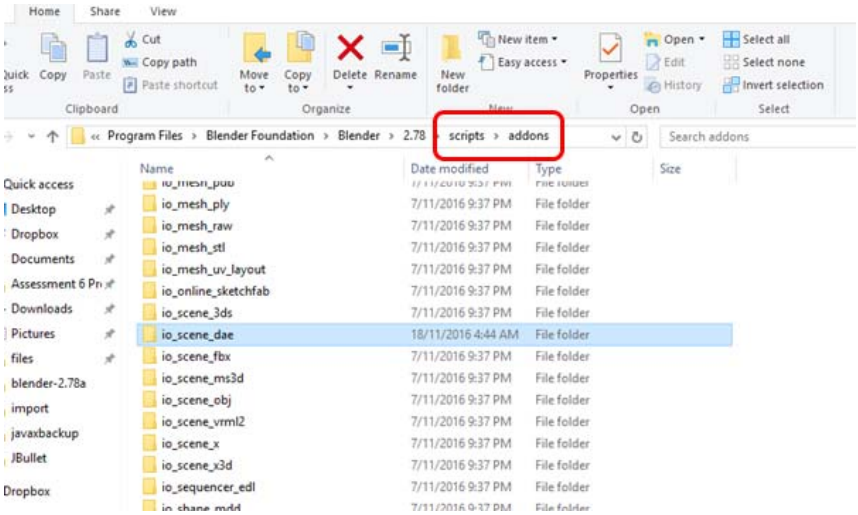
Quick Start Guide
Python Collada Export for Blender

Installation

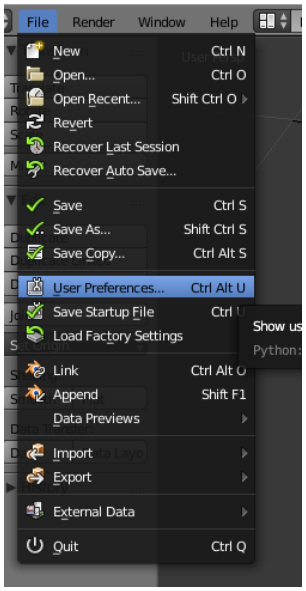
Extract the zip file:



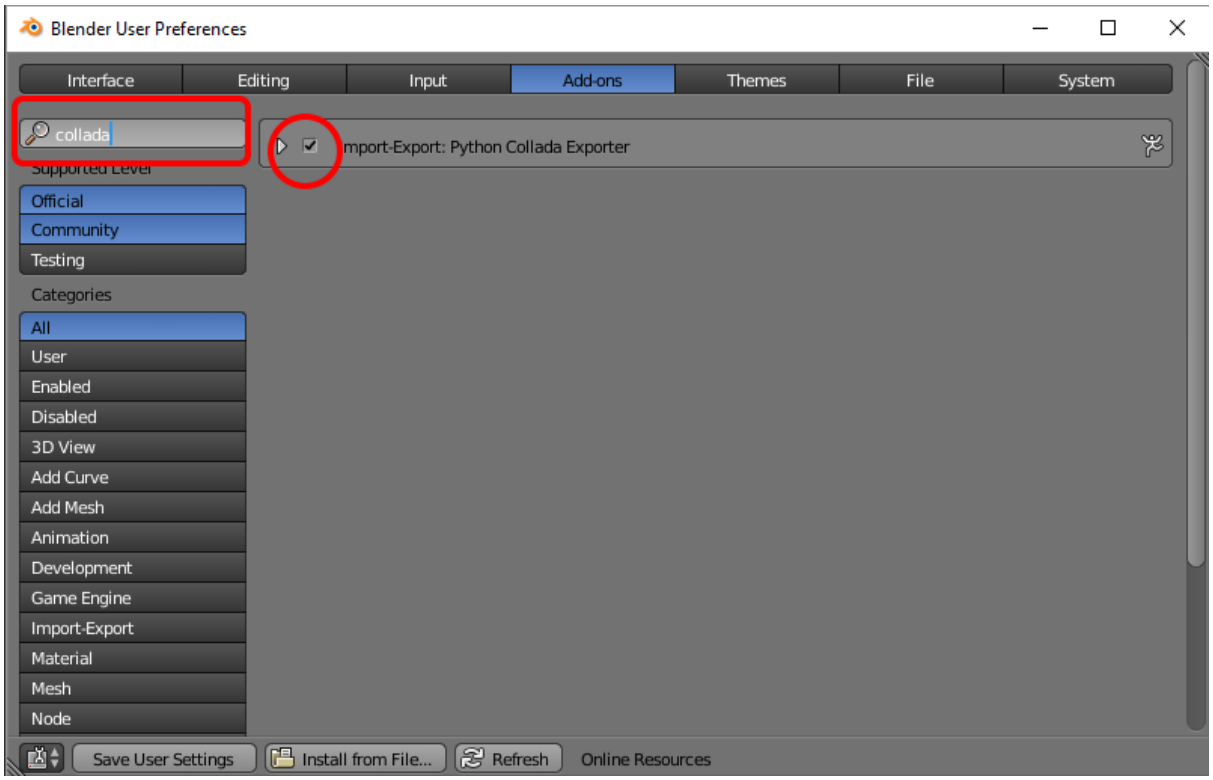
Copy the ‘io_scene_dae’ folder to the Blender scripts/addons folder:



Start Blender and navigate to File -> User Preferences

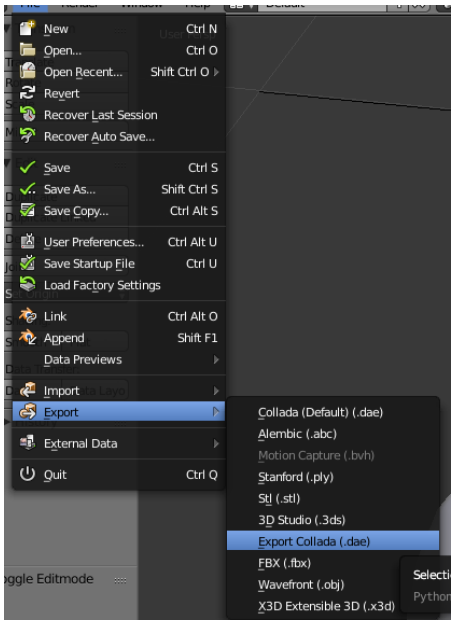


Type ‘collada’ into the search box then tick the checkbox next to “Import-Export: Python Collada Exporter”. Then click ‘Save User Settings’.

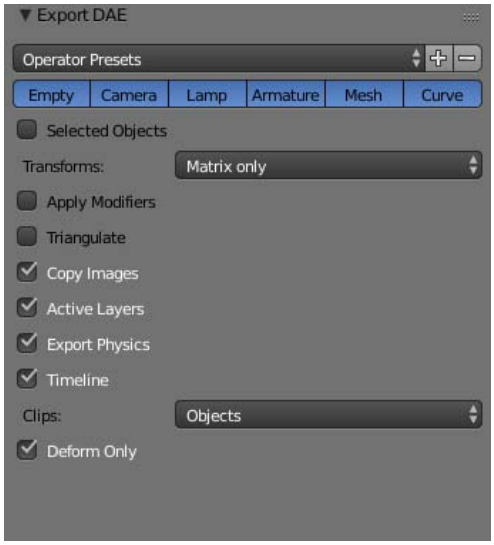


Exporting

Put the 3D View into object or pose mode. Navigate to File -> Export and select ‘Export Collada (.dae)’



Adjust settings for your project’s needs:

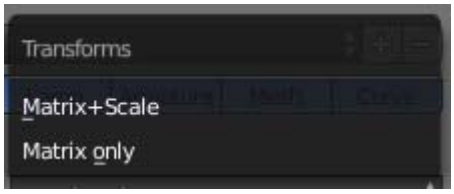


Review the exported file in a Collada viewer. Autodesk FBX Reviewer or ASSIMP Viewer are some options.

Active Layers

To exclude some parts of the scene from being exported the easiest way is to move them to a layer then deactivate that layer.

Transforms setting

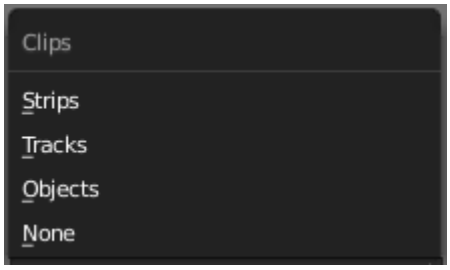


Matrix+Scale: Each node will have two transforms a 4x4 matrix and a XYZ scale.

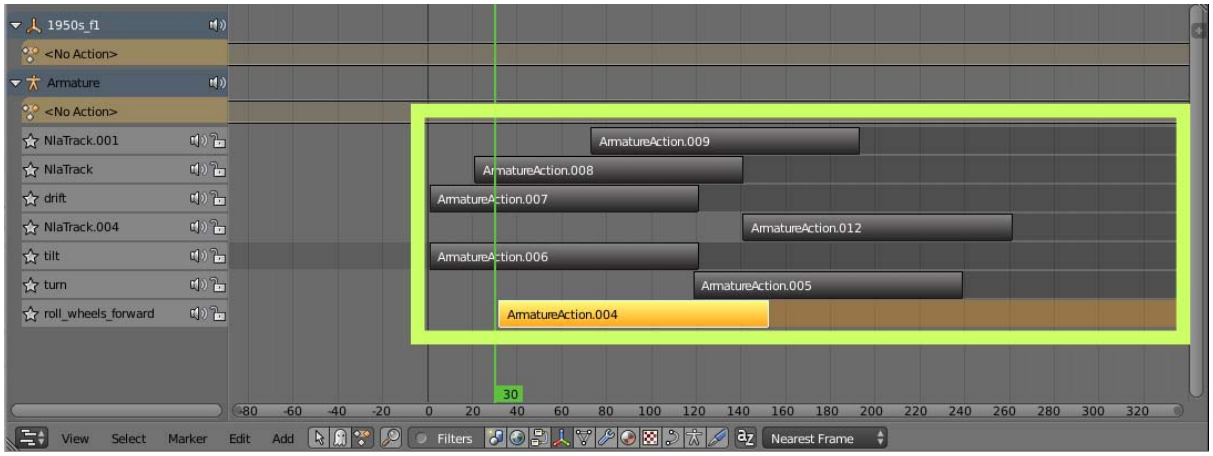
Matrix only: Each node will have its transform as a single 4x4 matrix.

Clips setting

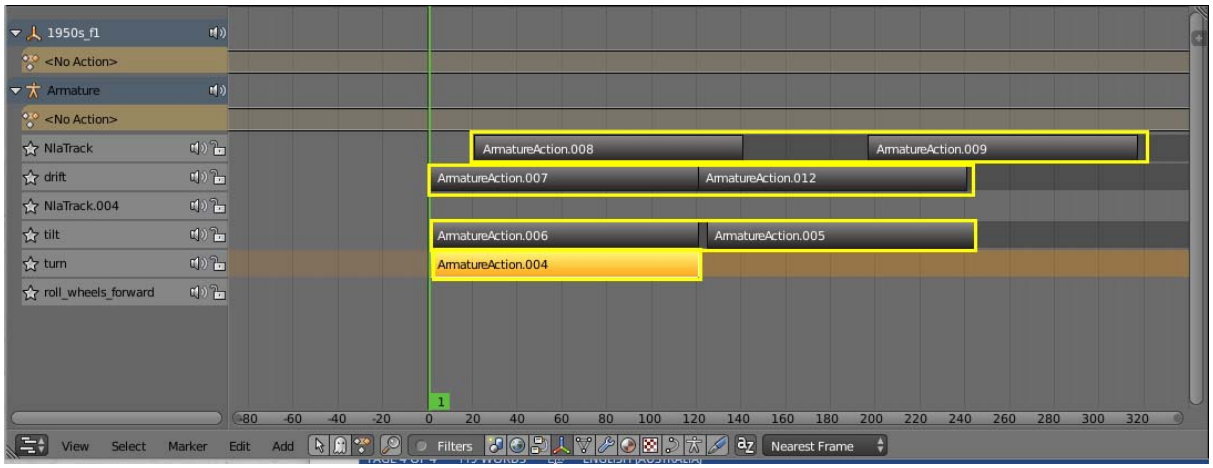
Controls the how the NLA editor will be exported to <animation_clip> nodes.



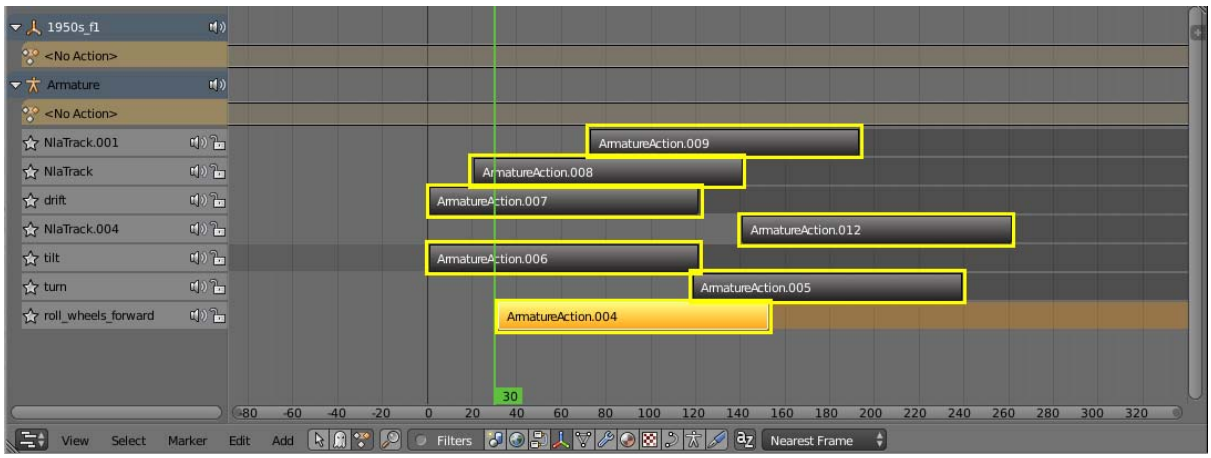
Objects: Each object will have a single animation clip with its tracks blended together.



Tracks: Each track will be given a separate animation clip in the XML document.



Strips: Each strip on the NLA timeline will be given a separate animation clip in the XML document.



Notes and Gotchas:

- The purpose of this exporter is to allow easier modification to meet project workflow requirements. The export script is written in Python so it can be redeveloped without having to compile Blender into a custom executable. If you don't need export script customisation then stick to using the default built in export tool.
- XML requires unique IDs for assets so avoid using duplicate names for Blender assets. This also goes for bone->mesh parenting if a bone named 'left_arm' controls a mesh named 'lef_arm' it will cause problems and one has to be renamed.
- Use either object constraints or bone constraints but don't mix both in the one scene. The matrices exposed to Python for mixed bone/object constraints can be corrupted.
- Don't import the file back into Blender using the default importer because Blender will likely crash.
- Animations are exported by sampling frames off the timeline. This means animations from drivers and python scripts can be also be used.
- Geometry is exported using the Render profile not Preview profile. So make sure any subdivision modifiers have the desired resolution set for the Render profile.
- The output is a human readable text file which can be manipulated in text or XML editing software.
- The output file is Collada version 1.5, some older Collada software can only handle version 1.4.