Autodesk Open Clip Creator Utility – Working with Maya

The Autodesk Open Clip Creator Utility is a standalone utility that can be used by a Maya artist to prepare their rendered images for use in Autodesk Flame, Flame family products, or other DCC (Digital Content Creation) applications that support the Open Clip (.clip) pointer format.

Open Clips are .XML readable and editable pointers that can refer to multiple multi EXRs or multiple single EXRs, and can also contain references to multiple versions of the above.
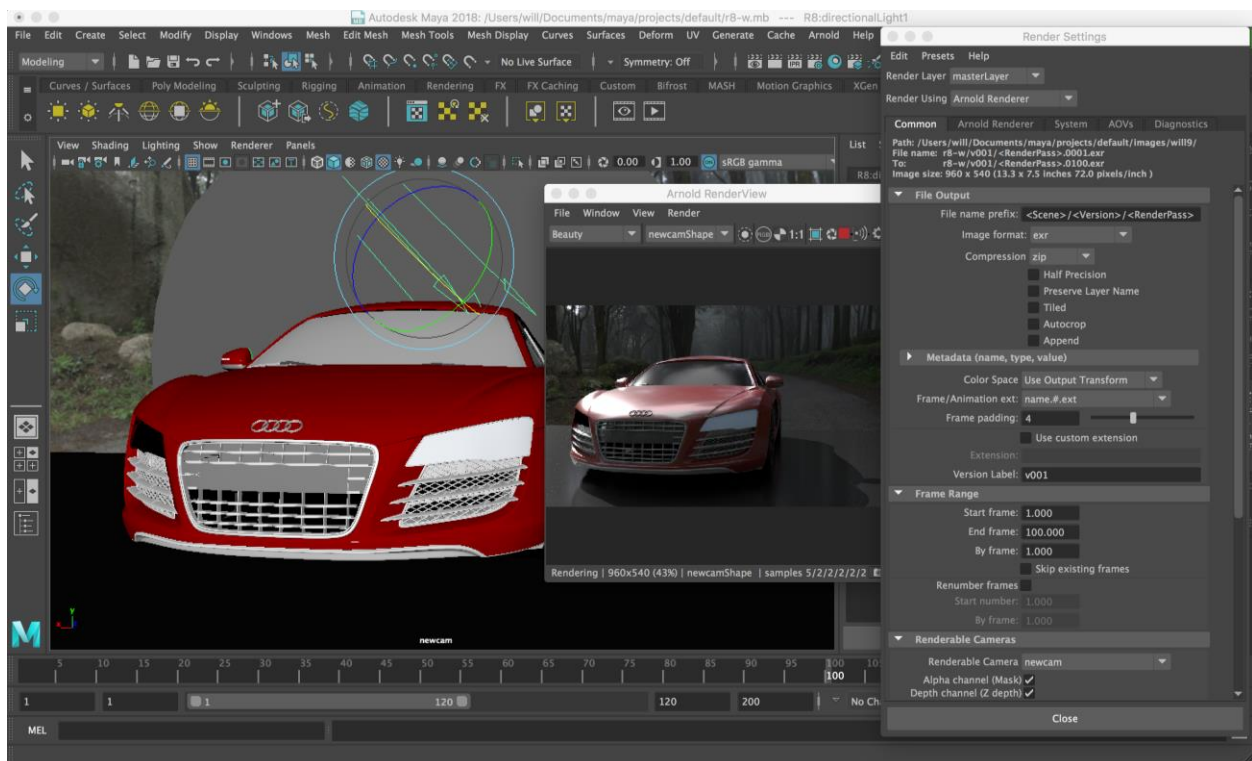
The Open Clip (.clip) is therefore a single pointer to multiple versions of multiple media essence files spread across a folder structure.

For more information:
- [Open Clip Creator](#)
- [Open Clip Reference](#)

Autodesk Open Clip Creator runs on standard CentOS 7.x Linux and Mac OS X 10.11 and higher.

Example Workflow: How to use Open Clip Creator with Renders from Maya

When you're ready to render out a version 1, your Maya interface might look something like this – with render settings defined using tokens for <Scene>, <RenderPass> etc to create subfolders and define naming to distribute your rendered images directly into your server job structure.

In this example, we are using Arnold with its built in 'AOV' render passes, that produce sequences of separate EXR files that are intended to be used together in compositing.
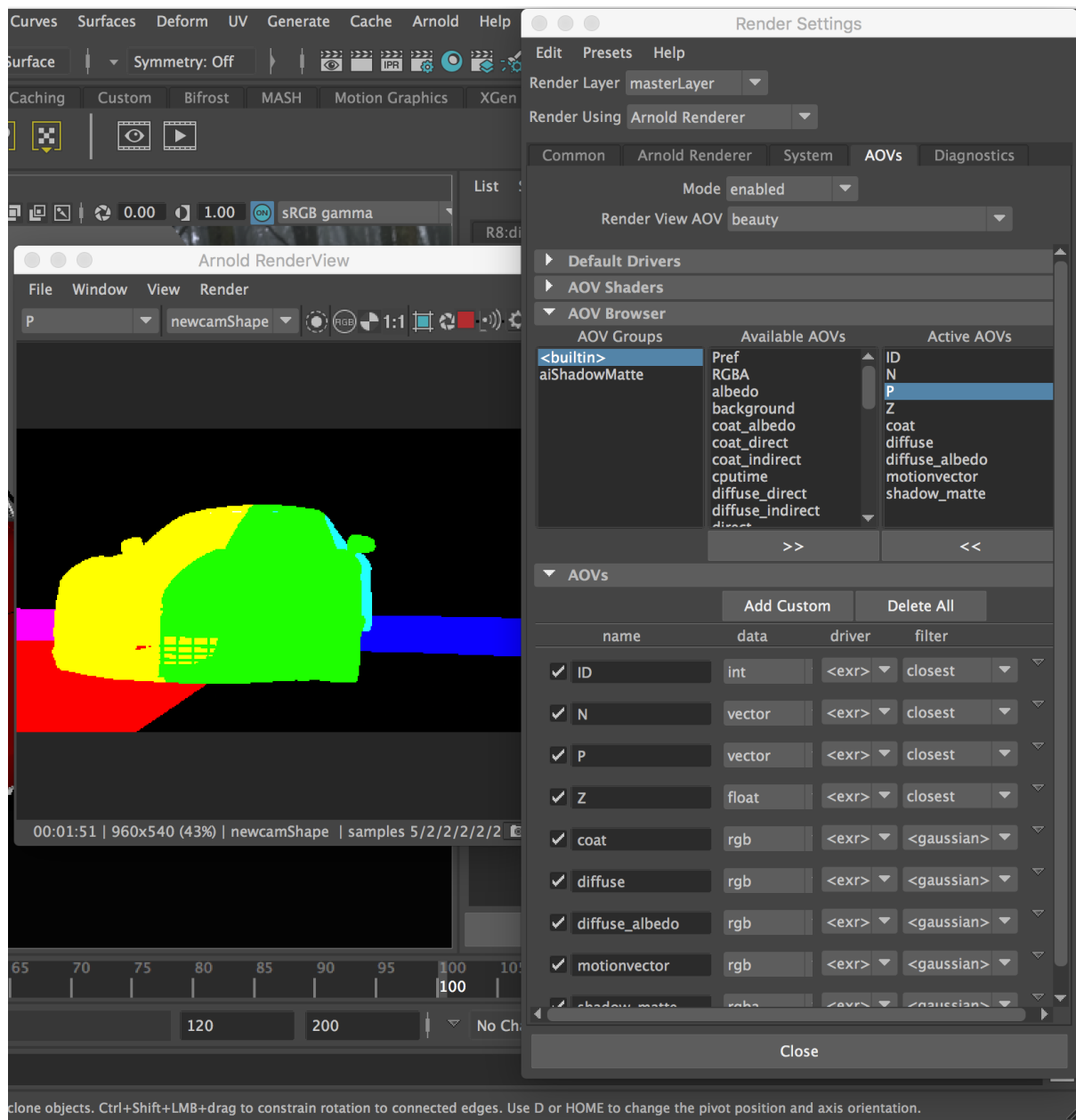

Once you've completed your v001 render, you'll end up with EXR image sequences in structured sub-folders - based on render settings.

Subsequent renders should follow a similar folder structure and will probably get more AOV passes added based on what's needed / requested post-render.
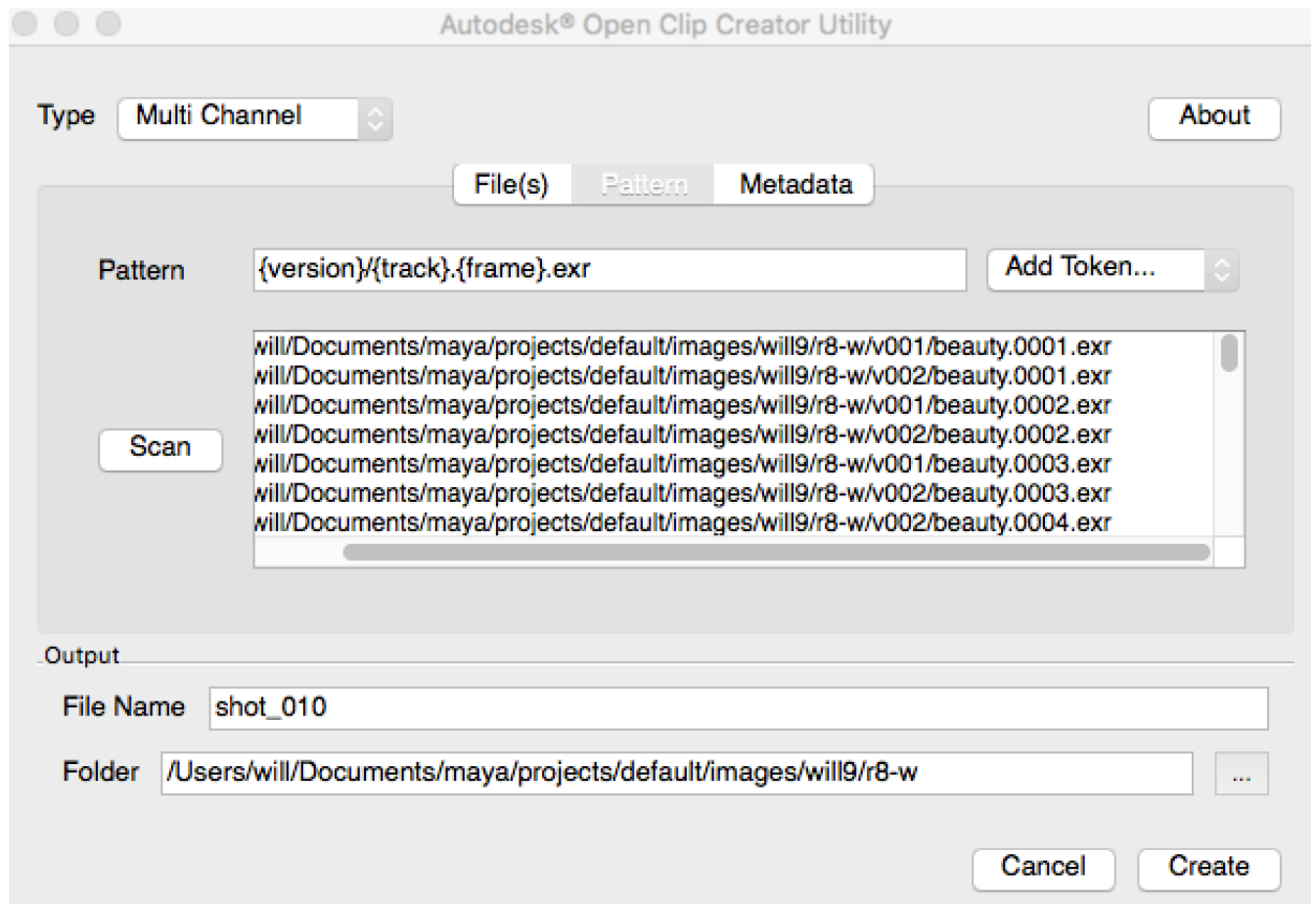
Once you have multiple versions rendered (and probably more still to get created) – this is the stage at which the Open Clip Creator can be very useful as a single 'virtual' clip that points to all versions of renders for a shot.

Make an Open Clip via Command line / shell script functions (see documentation), or by using the GUI tool – Autodesk Open Clip Creator Utility:
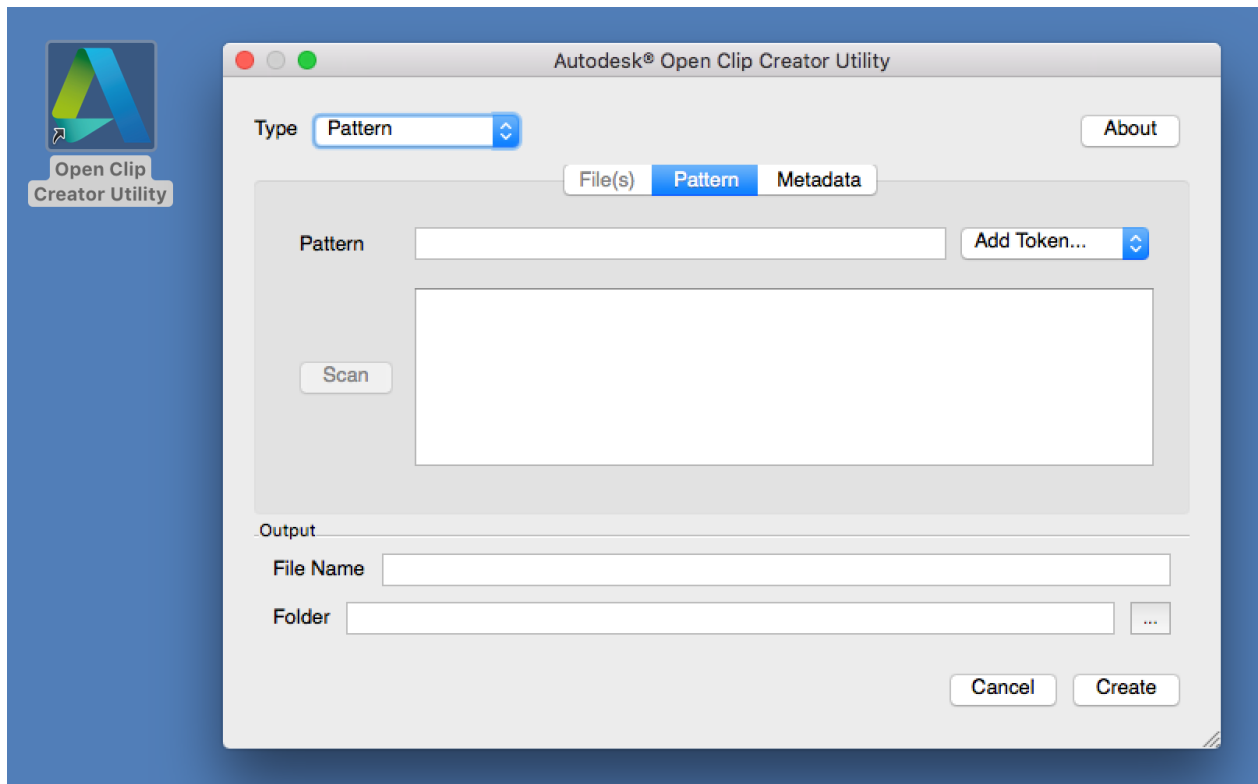
The Pattern detection mode uses a token system similar to Maya's render tokens to locate versions of image sequences in their structured sub-folders. Other modes can be used to add specific metadata, and deal with special cases, such as incomplete numbered sequences (partial renders) – See the documentation for full details.

Note: Open Clip Creator works with other tools/renderers. It doesn't matter what render process (local, batch, render farm, other renderers) created the files, this process works with a wide range of file structures.

Autodesk® Open Clip Creator Utility

Type [Multi Channel ⇅]   [About]

[File(s)]   Pattern   [Metadata]

Pattern [{version}/{track}.{frame}.exr]   [Add Token... ⇅]

will/Documents/maya/projects/default/images/will9/r8-w/v001/beauty.0001.exr
will/Documents/maya/projects/default/images/will9/r8-w/v002/beauty.0001.exr
will/Documents/maya/projects/default/images/will9/r8-w/v001/beauty.0002.exr
[Scan]   will/Documents/maya/projects/default/images/will9/r8-w/v002/beauty.0002.exr
will/Documents/maya/projects/default/images/will9/r8-w/v001/beauty.0003.exr
will/Documents/maya/projects/default/images/will9/r8-w/v002/beauty.0003.exr
will/Documents/maya/projects/default/images/will9/r8-w/v002/beauty.0004.exr

Output

File Name [shot_010]

Folder [/Users/will/Documents/maya/projects/default/images/will9/r8-w]   [...]

[Cancel]   [Create]

In our example, 2 renders have been completed and a 3rd is likely on the way.
You pick the name and folder location of your open clip and then 'Scan' for matching files based on your token structure. You can use relative file paths (as above from the r8-w folder location), or absolute file paths.
The newly created Open Clip can be Imported into Autodesk Flame products, and appear with the latest version (v002) selected, with the ability to roll back to earlier versions, if desired.
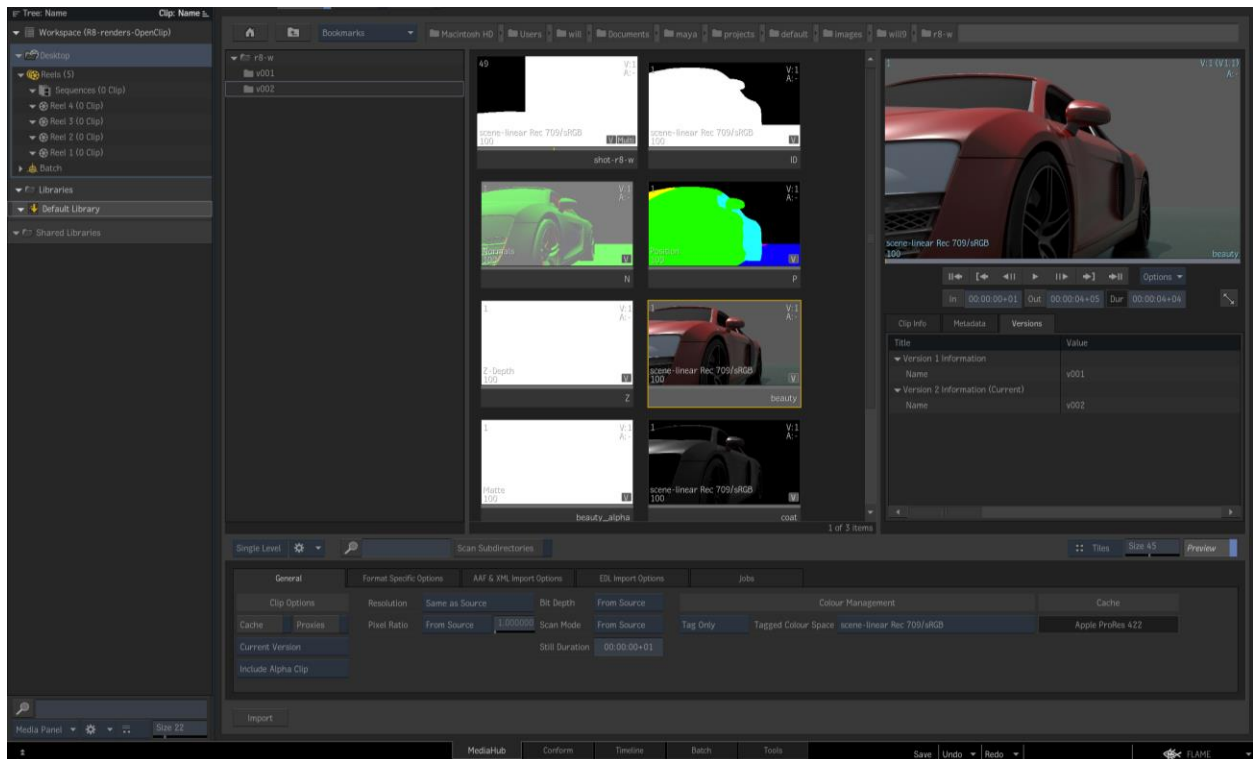
When another render version is produced – by Maya re-rendering locally or a render farm / file copy process…

…the Open Clip is rescanned by the Flame application to automatically see updated versions of your 'virtually assembled' source in your Composite.
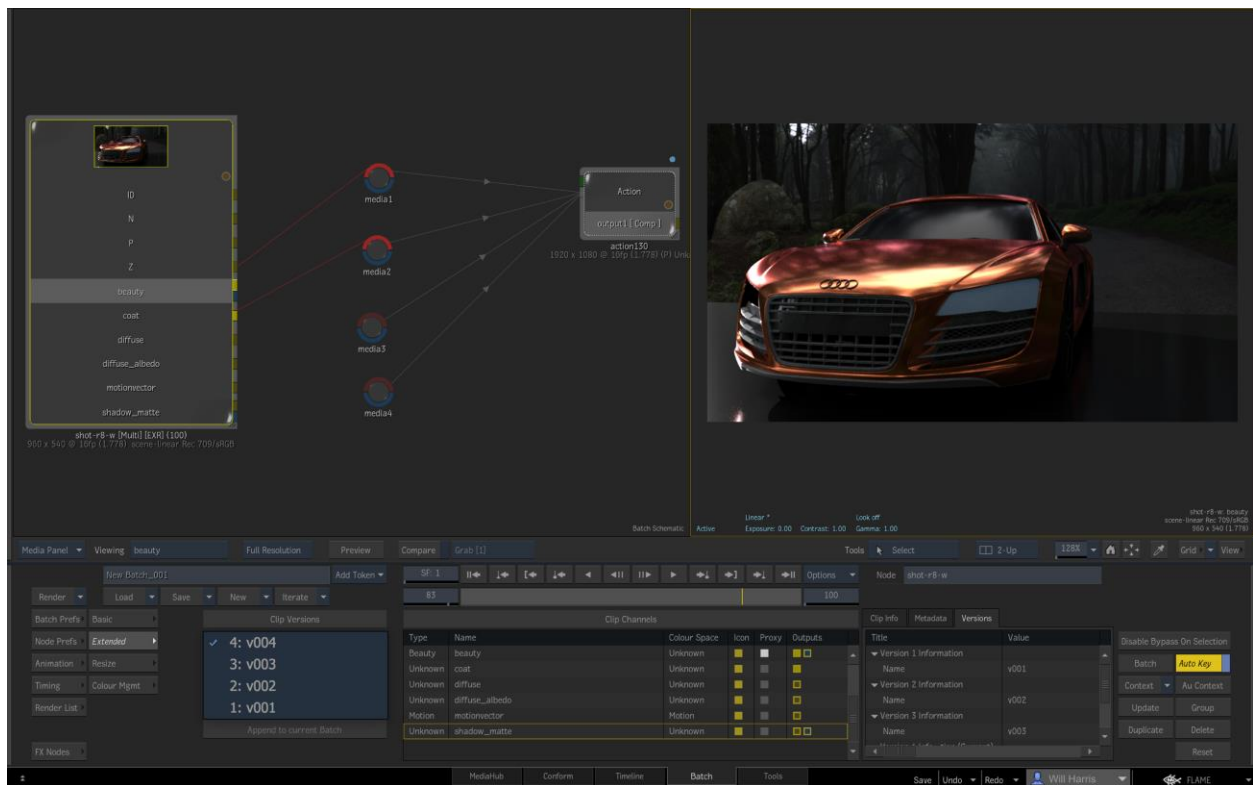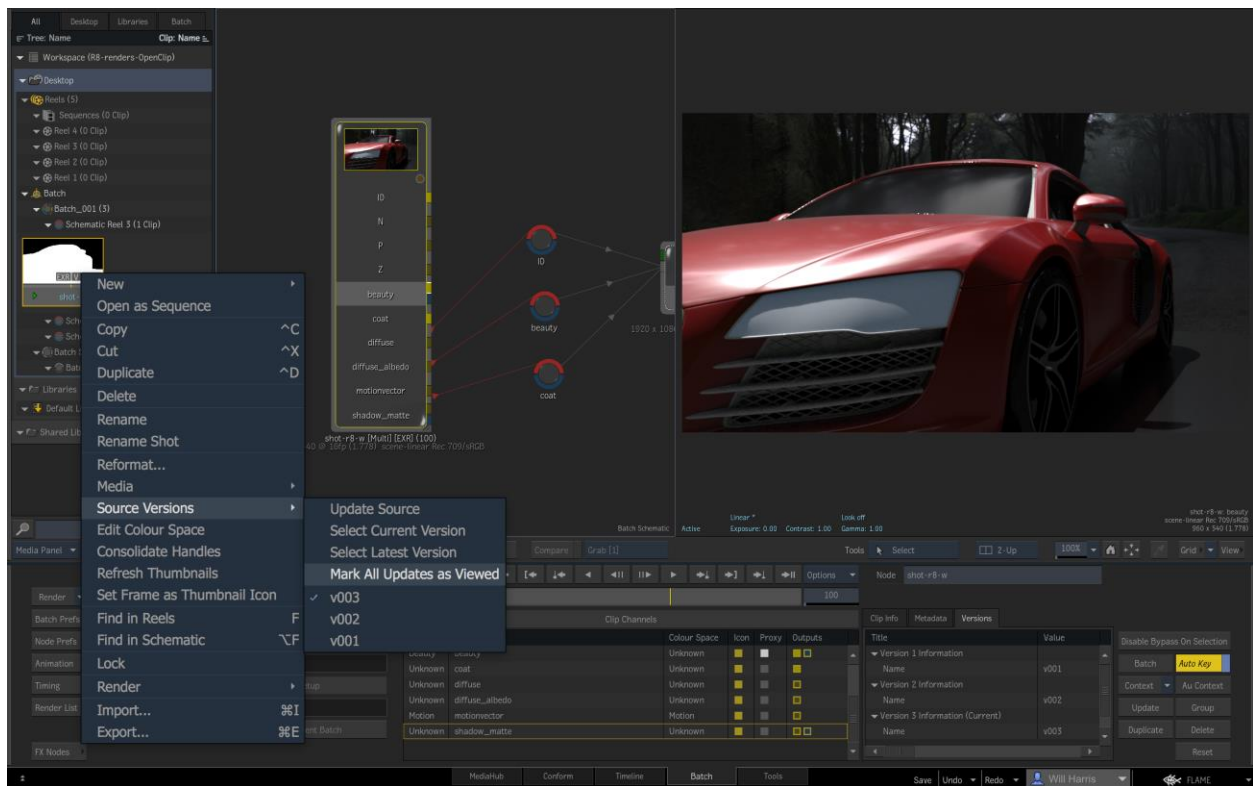
Summary:
Autodesk Open Clip Creator Utility is a simple GUI based tool and set of commands for scripting – that can assist a Maya artist or junior scripting technical person in creating versionable pointers to send multiple versions of renders to a Flame family product or any other application that supports Open Clip .XMLs.