

MAY 9 PRO 3

USER GUIDE

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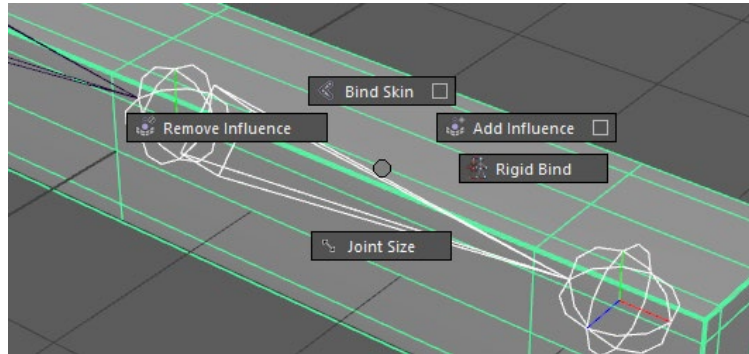
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What is May9 Pro

May9 Pro is plug-in aim to offer an alternative user experience for *Autodesk Maya* designed to improve the daily workflow and maximize learning.

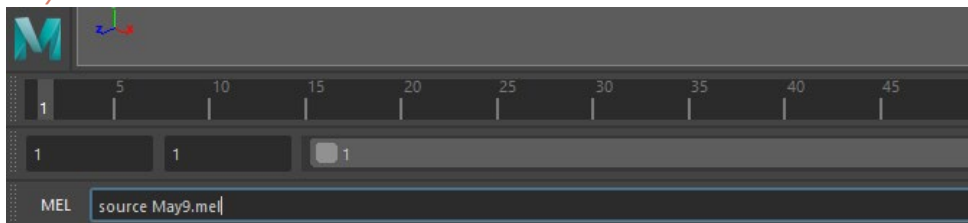
The concept of *May9 Pro* is streamline useful commands into a single keyboard button (**Z**), by predicting them from the context. For example, if you have in selection a mesh and a joint by pressing **Z + Left Mouse Button** (**MMB** from now) it's appear the follow **Marking Menu** (**MM** form now):



In addition to the contextual workflow describe above, *May9 Pro* offer [custom preferences](#), [layouts](#), [contextual hotkeys](#) and [standard hotkeys](#).

Installation [\(video\)](#)

- 1) If is open close *Autodesk Maya*
- 2) Copy folder 2017 or 2018 of this archive in
 - a. Windows: `\Users\<username>\Documents\maya\`
 - b. Mac OS: `/Users/<username>/Library/Preferences/Autodesk/maya/`
 - c. Linux: `~<username>/maya/`
- 3) Run *source May9.mel* as MEL command



Update from a previous May9 Pro 3.0 installation

If a previous version of *May9 Pro 3.0* is already installed on your system, close *Autodesk Maya* and copy folder 2017 or 2018 of this archive in your *Autodesk Maya* preferences folder and overwrite any existing files.

Important note: after the update any customization made to *May9 Pro* files by the user will be removed.

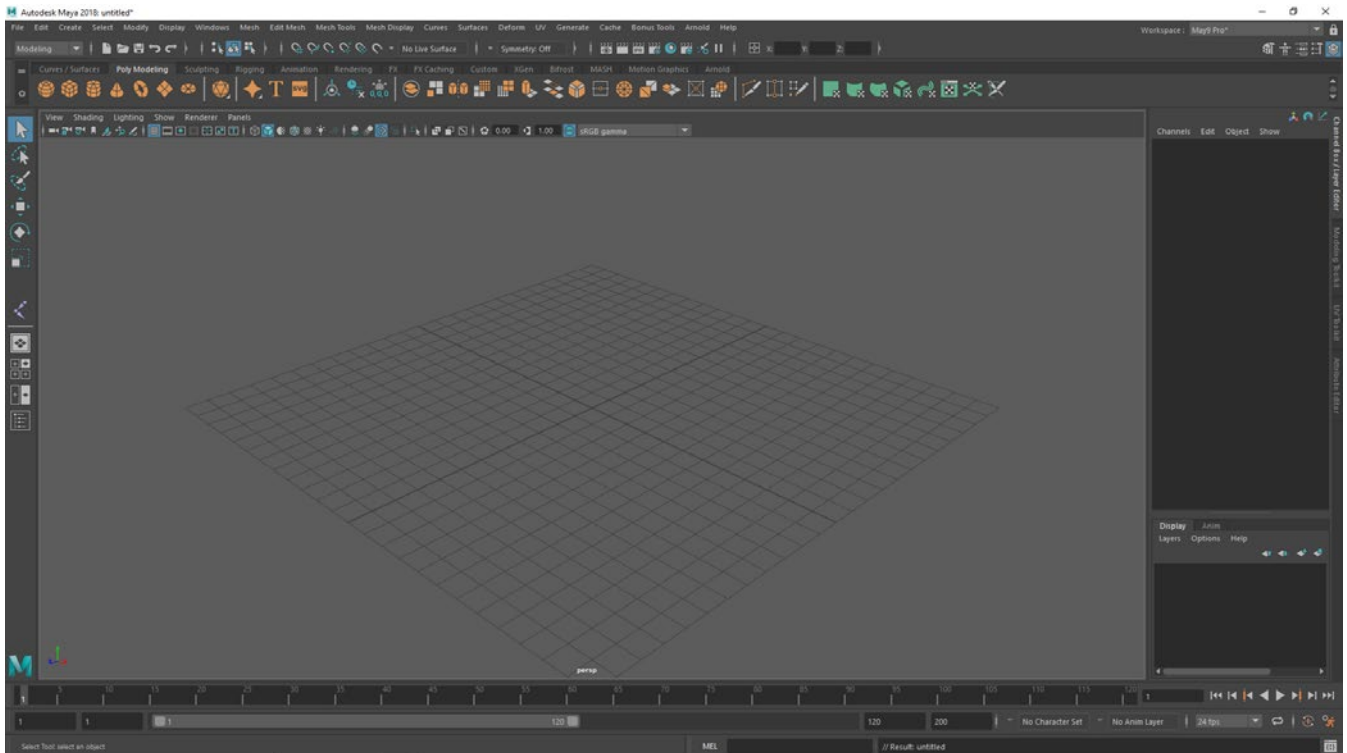
Update from May9 Pro 1.0 or 2.0

If a version 1.0 or 2.0 of *May9 Pro* is already installed on your system, to avoid conflict is recommended clean up the preferences for any version installed of *Autodesk Maya* before install *May9 Pro 3.0*.

Basic usage

May9 Pro Workspace

The *May9 Pro* Workspace is designed to maximize the Viewport area and optimize workflow on a single display.

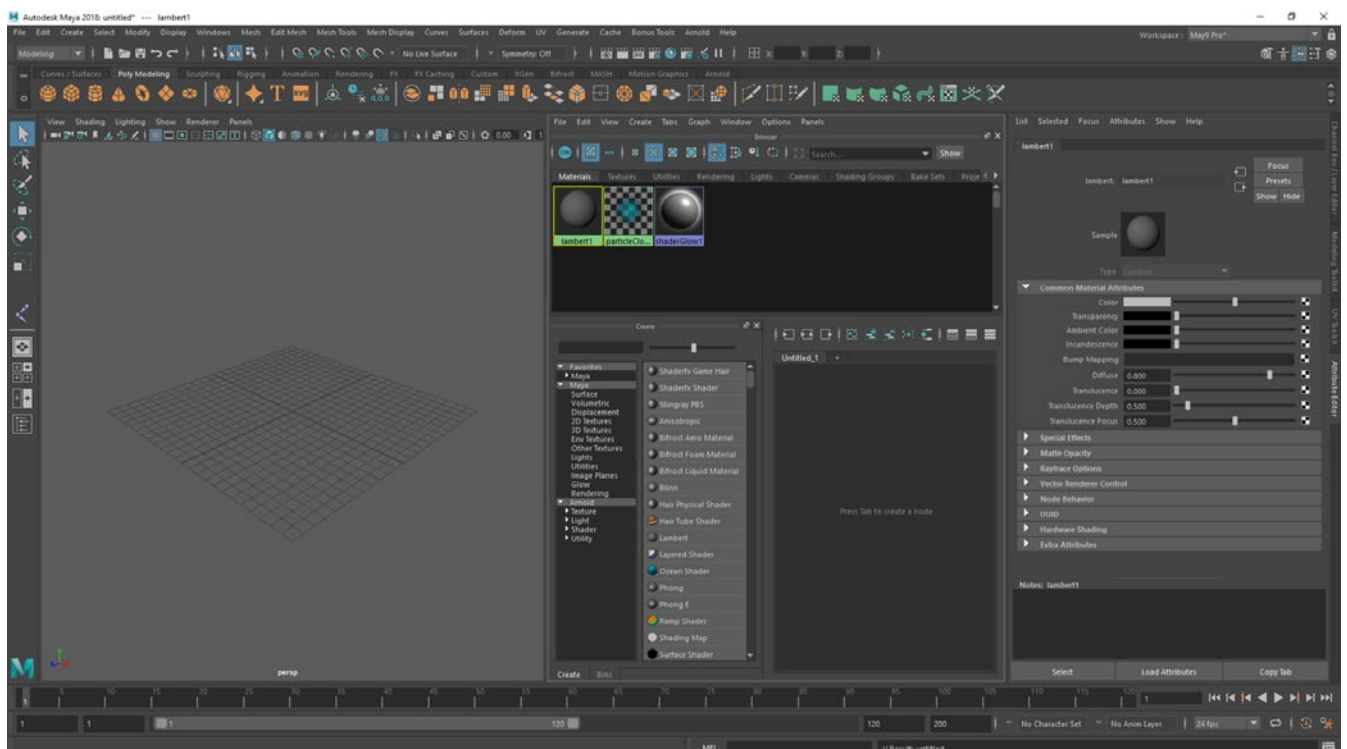


Note

The feature set of *May9 Pro* work only inside of it's workspace.

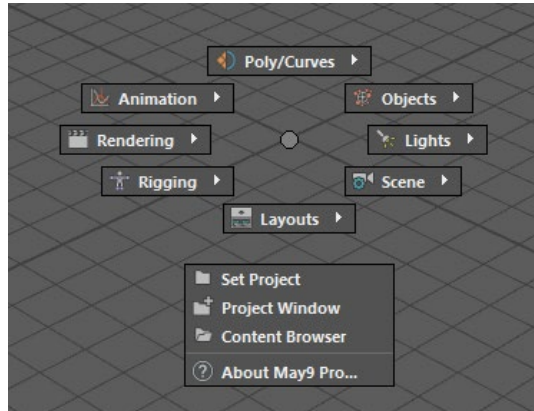
May9 Pro Layouts

The *May9 Pro* Layouts are designed to be integrated in the *May9 Pro* Workspace, for open one of the ten Layout available just use a Hotkey from **ALT + 1** to **ALT + 0**, or use the **All MM**:



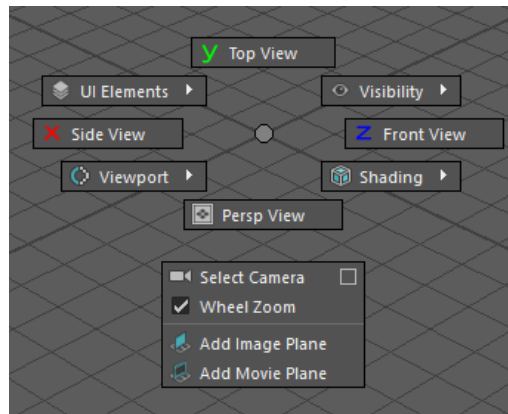
All MM

The *All MM* (menu_All_MM.mel) is the foundation of *May9 Pro* and available by pressing **Z + Middle Mouse Button** (from now **MMB**), this MM use **bold font style**:



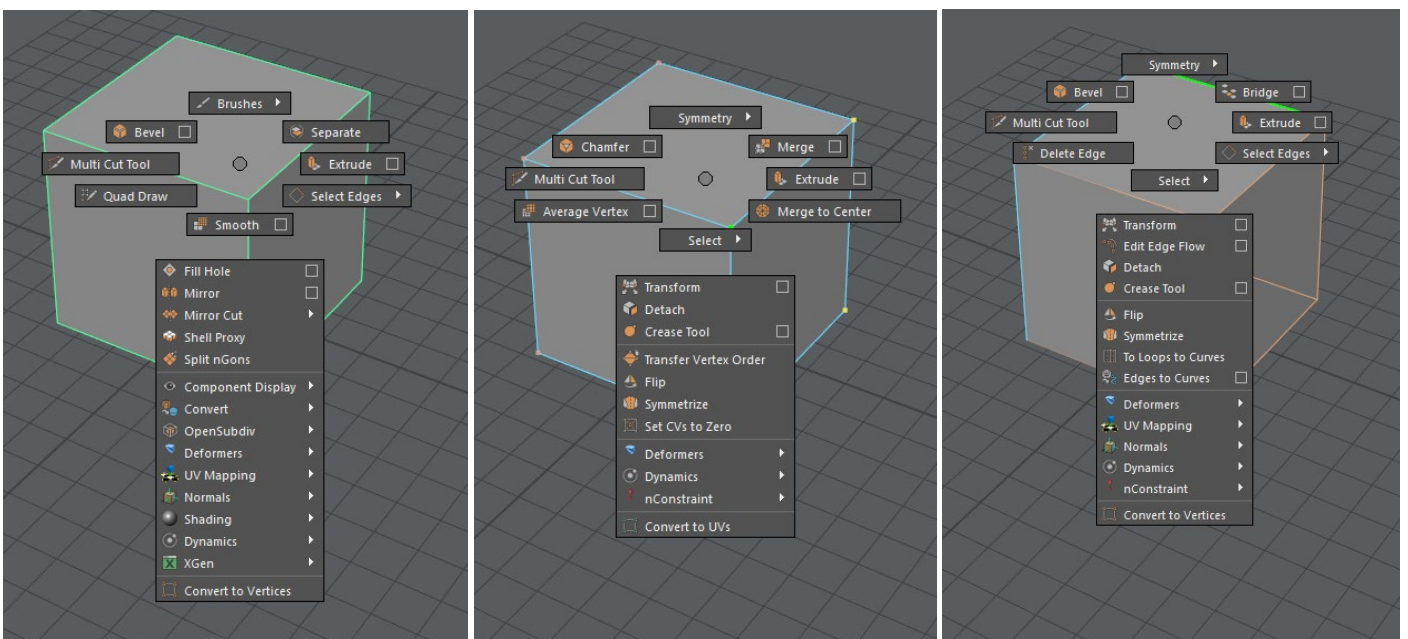
Maya Window MM

The *Maya Window MM* (menu_MayaWindow_MM.mel), is available over the Viewport and there isn't selection active by press **Z + LMB**:



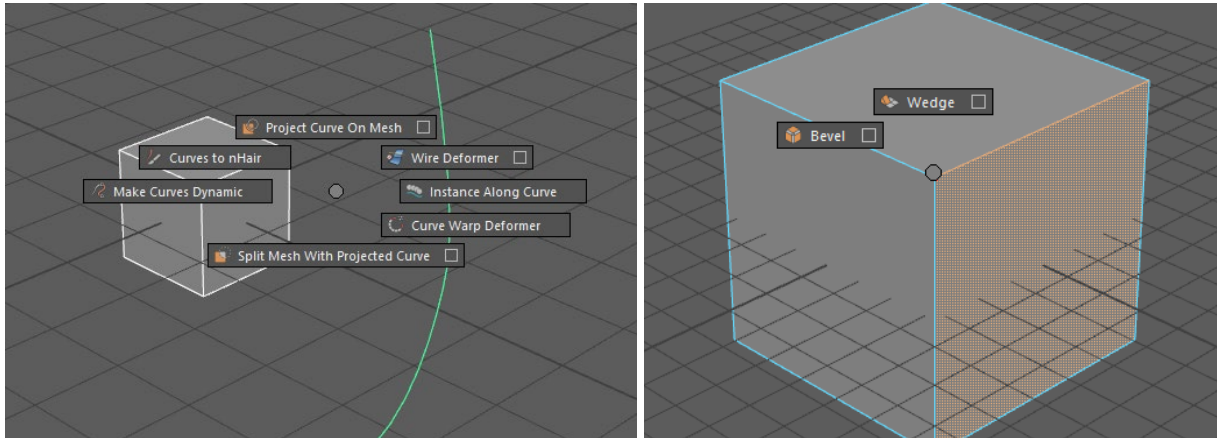
Contextual single selection MM

When a single object or component type is selected is possible enable the relative contextual MM by pressing **Z + LMB**:



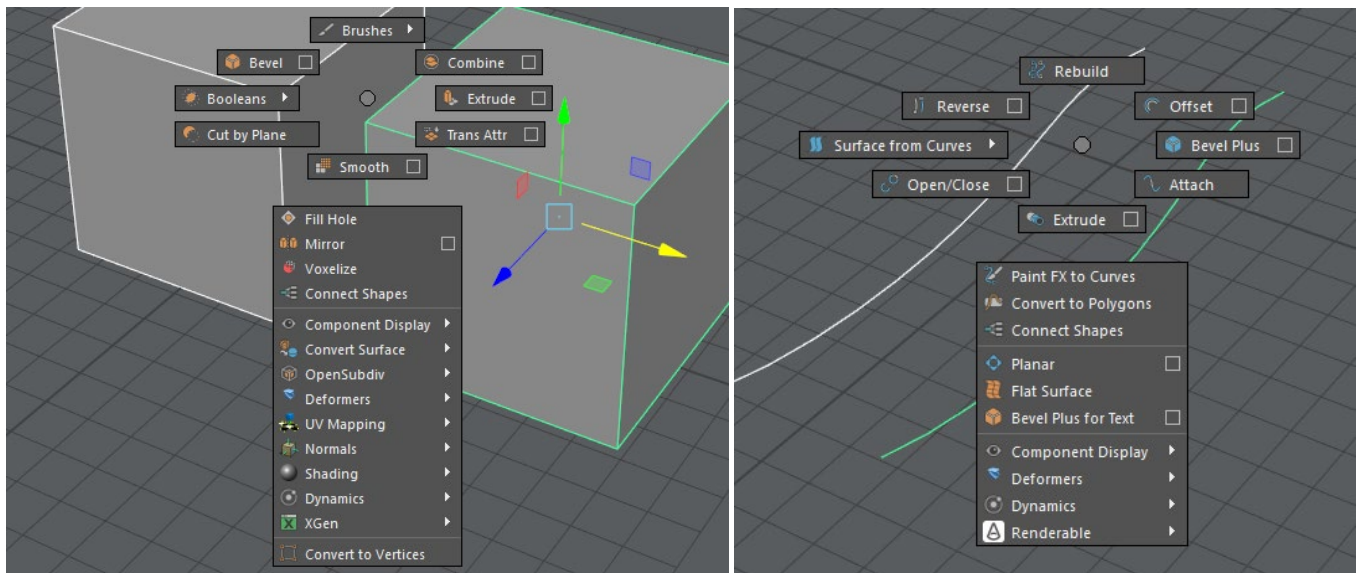
Contextual multi selection MM

When a multiple object type or component type is selected is possible enable the relative contextual MM by pressing **Z + LMB**:



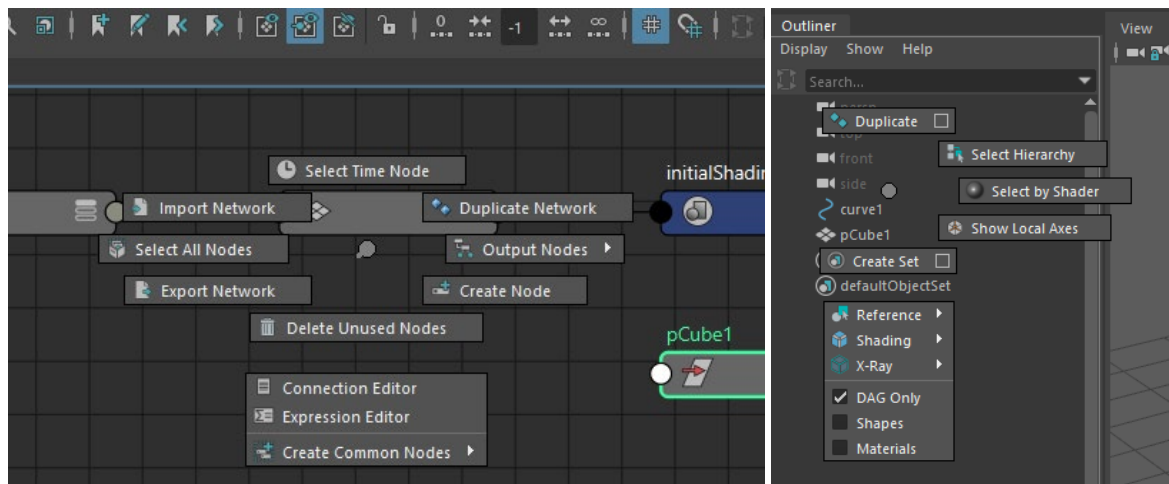
Contextual multi selection of the same object type MM

When a multiple object of the same type is selected is possible enable the relative contextual MM by pressing **Z + LMB**:



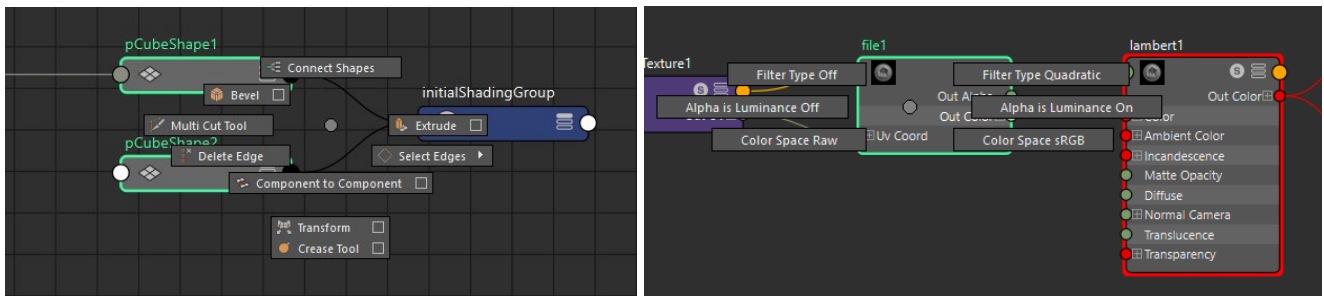
Contextual panel MM

When the mouse is over a panel is possible enable the relative contextual MM by pressing **Z + LMB**:



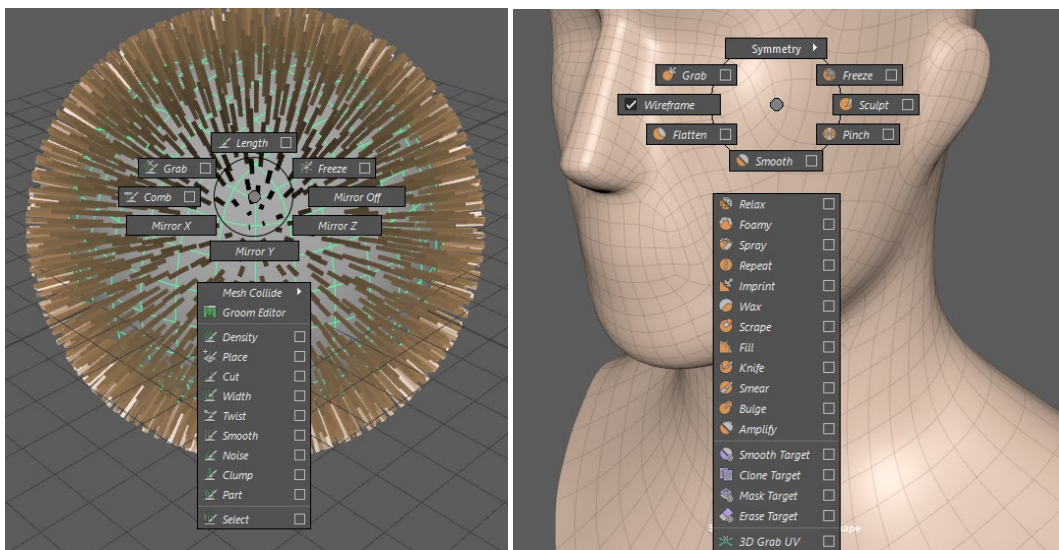
Contextual node selection in editor panel

When a single node, a combination of the same type nodes or a combination of different type nodes are selected in some editor panel is possible enable the relative contextual MM by pressing **Z + LMB**:



Contextual Tool MM

When a supported Tool is selected, is possible enable the relative contextual MM by pressing **Z + MMB**, this kind of MMs use *italic* font style:



These are the tool supported by Contextual Tool MM: *3D Paint tool, Paint Attribute, Paint Skin Tool, Legacy Artisan Sculpt tool, Create Particle tool, Paint FX tool, Grease Pencil tool, Multi Cut tool, Quad Draw tool, Poly Crease tool, Sculpt tools, XGen Groom Paint tools, Create Particle tool and UV Brushes.*

Contextual single selection Hotkey

If a single object or component type is selected is possible enable the relative contextual Hotkey by pressing and release **Z**.

Important note: almost every object types toggle to component mode by using *contextual hotkey*.

Contextual multi selection of the same object type Hotkey

If a multiple object of the same type is selected is possible enable the relative contextual Hotkey by pressing and release **Z**.

Contextual multi selection of different object type Hotkey

If a multiple object type or component type is selected is enable the relative contextual Hotkey by pressing and release **Z**.

Contextual panel Hotkey

If the mouse is over a panel is possible enable the relative contextual Hotkey by pressing and release **Z**.

Preferences change

The following are the *Autodesk Maya* preferences changed in *Maya 9 Pro*:

- Legacy Subdivision Surface exposed (only *Autodesk Maya 2017*)
- Membrane Deformer exposed
- Legacy Mirror Cut tool exposed
- Double variable warning is disabled
- Custom Hypershade layout
- In Status Line is hidden the IPM button and expose Input Field area
- Hidden attribute connections exposed
- Hotbox have no transparency

Custom Hotkeys

SHIFT + ALT + F = Freeze Transformation

SHIFT + ALT + R = Reset Transformations

SHIFT + ALT + C = Center Pivot

SHIFT + ALT + Z = Zero Transformations (move objects to world center)

SHIFT + ALT + M = Match Transform

SHIFT + ALT + W = Toggle Wireframe on Shaded

SHIFT + ALT + Space = Playback toggle

CTRL + ALT + R = Start IPR or Arnold Render View

CTRL + ALT + O = Edit and Graph Shader Based on Selection

CTRL + ALT + 8 = Paint Effects Panel

CTRL + ALT + X = Reverse to save

CTRL + ALT + Space = Interactive playback

CTRL + SHIFT + ALT + C = Copy selection to clipboard

CTRL + SHIFT + ALT + V = Paste selection to clipboard

CTRL + SHIFT + ALT + S = Save selection in to a Set

CTRL + SHIFT + ALT + D = Delete Static Channels

CTRL + SHIFT + ALT + M = Toggle Shelf

CTRL + SHIFT + ALT + R = Toggle Resolution Gate

CTRL + SHIFT + ALT + Z = MMtoKey Manager

CTRL + SHIFT + Return = Match Pivot

CTRL + Return = Delete Non-Deformer History and Freeze Transform

CTRL + ` = Show the last operation in AE

CTRL + F = Ignore the child and frame only the selected object

CTRL + P = Parent and position

CTRL + J = Context Connector

CTRL + K = Massive Attribute Editor

CTRL + L = List of Input Operation is mapped

ALT + 1 = Set Layout Single Perspective/Four View

ALT + 2 = Set Layout Node Editor

ALT + 3 = Set Layout UV Texture Editor

ALT + 4 = Set Layout Graph Editor

ALT + 5 = Set Layout Shape/Pose Editor

ALT + 6 = Set Layout Reference Editor

ALT + 7 = Set Layout Component Editor

ALT + 8 = Set Layout Relationship Editor

ALT + 9 = Set Layout Dynamic Relationship Editor

ALT + 0 = Set Layout Hypershade

ALT + C = Open Channel Box or toggle it if docked
ALT + A = Open Attribute Editor or toggle it if docked
ALT + M = Open Modelling Toolkit or toggle it if docked
ALT + U = Open UV Toolkit or toggle it if docked (CMD + U on OS X)
ALT + O = Open Outliner or toggle it if docked
ALT + T = Open Tools Preference Settings or toggle it if docked
*ALT + * = Reset May9 Pro Workspace

ALT + L = Color Picker
ALT + G = Toggle grid
ALT + K = Toggle Color Management
ALT + Enter = Toggle perspective to orthographic camera

SHIFT + UP = Side View
SHIFT + RIGHT = Front View
SHIFT + DOWN = Top View
SHIFT + LEFT = Persp View
SHIFT + T = Assign shader if an object is selected or open create node window if not

A + LMB = SOuP Smart Connect (need SOuP installed)
 \sim = Orient Manipulators Toggle
K + Drag = Smooth playback mode
CMD + Space = Toggle Full Screen (Mac OS only)

Changed hotkeys

CTRL + ALT + D = Toggle Displacement
CTRL + ALT + ~ = SmoothingDisplayShowBoth
CTRL + ALT + ` = SmoothingDisplayToggle
ALT + - = ToggleColorFeedback
ALT + I = Toggle Wireframe in Artisan
ALT + P = Color Picker
SHIFT + N = Full Hotbox Display

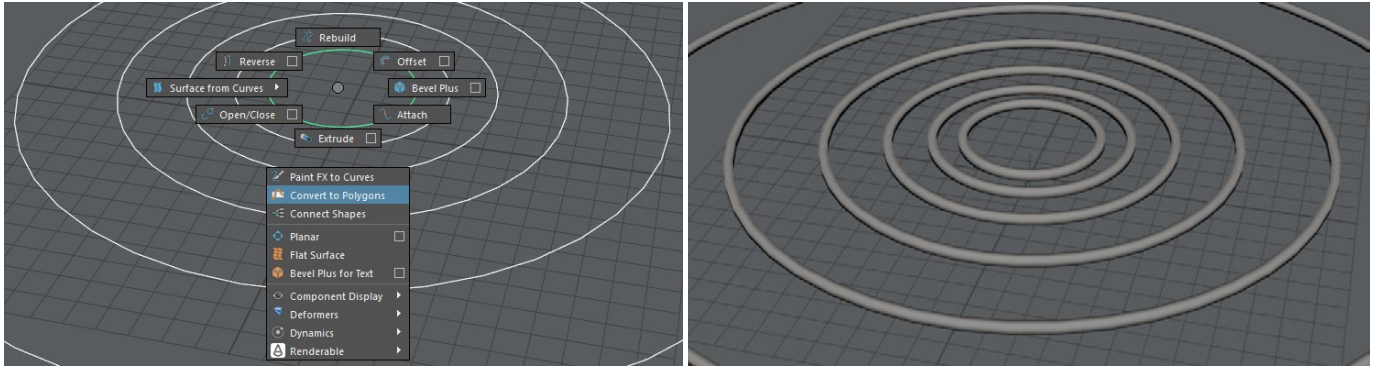
Custom Script

Under the hood of *May9 Pro* there are hundreds of MEL scripts that's support the contextual workflow, but there's also some ones that add new features to *Autodesk Maya*.

da_curveToPoly (video)

This script makes possible the conversion of curves in polygons:

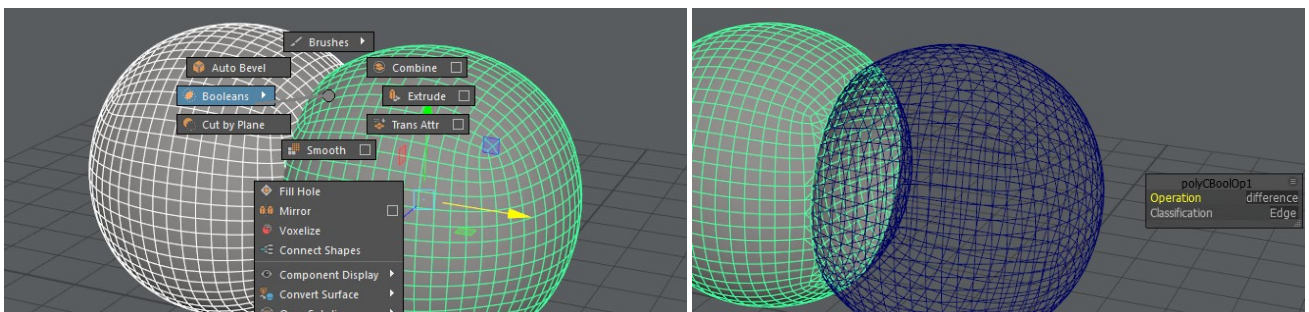
- 1) Select a curve or multiple curves
- 2) **Z + LMB > Convert to Polygons**



da_interactiveBooleans (video)

This script makes the Polygonal Boolean process more interactive:

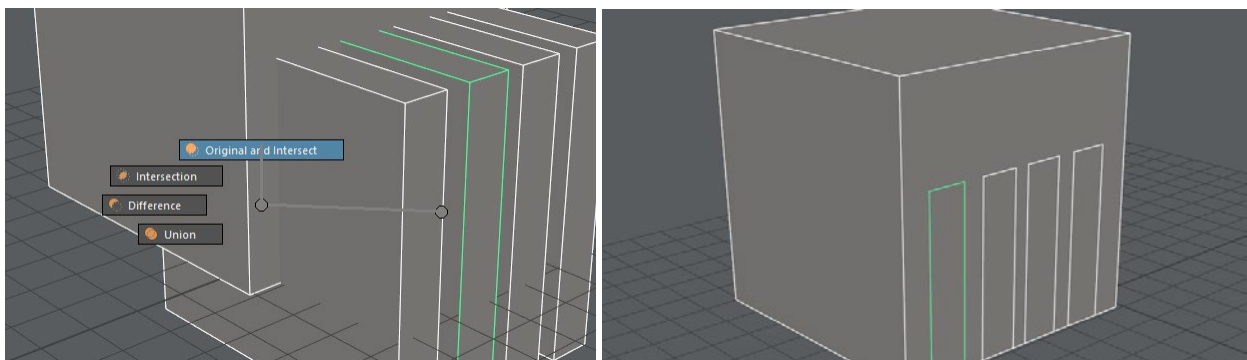
- 1) Select two or more polygons objects
- 2) **Z + LMB > Booleans**



da_BooleanFullIntersect (video)

This script makes a full intersect, so this execute a mesh subtraction but maintain subtracted part as separate object:

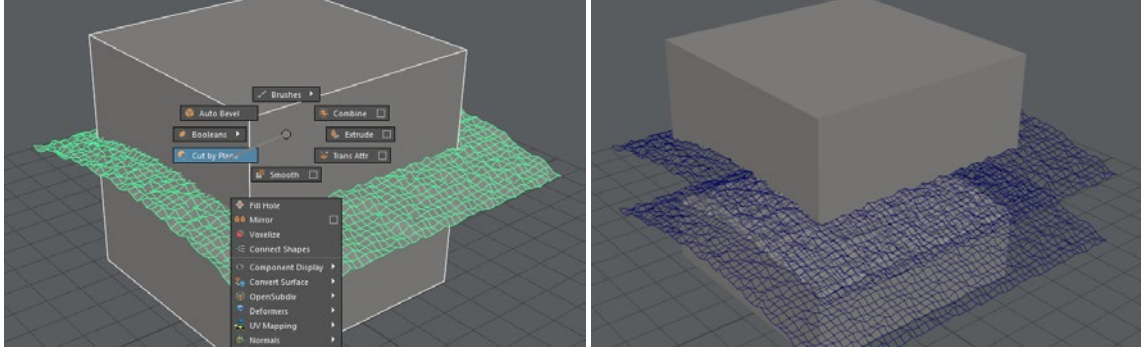
- 1) Select first the main object and after the cutters ones
- 2) **Z + LMB > Booleans > Original and Intersect**



da_PlaneCutter (video)

This script cut a mesh by using a flat mesh, this can be useful for simulate surface cracks:

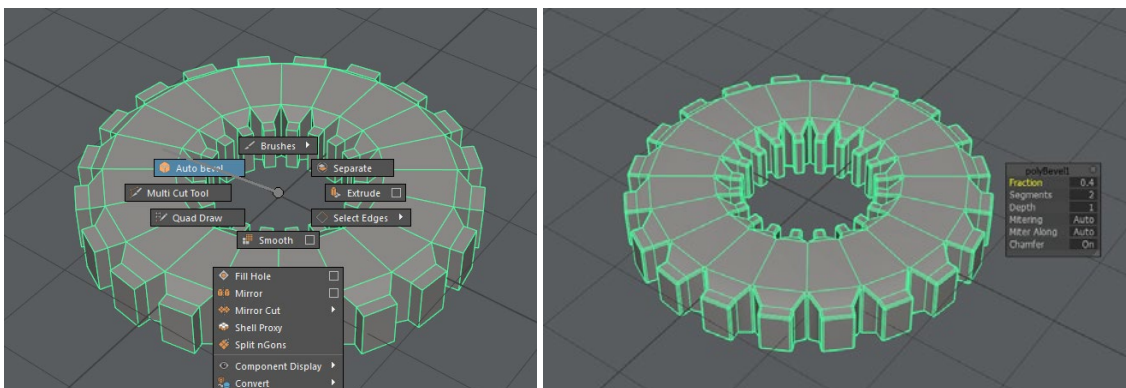
- 1) Select first the main object and after the cutter ones
- 2) **Z + LMB > Cut by Plane**
- 3) Select the single or double operator
- 4) Move the cutter or the cutters plane



da_AutoBevel (video)

This script analyses the angle between faces and try to add a Bevel node only on needed edges:

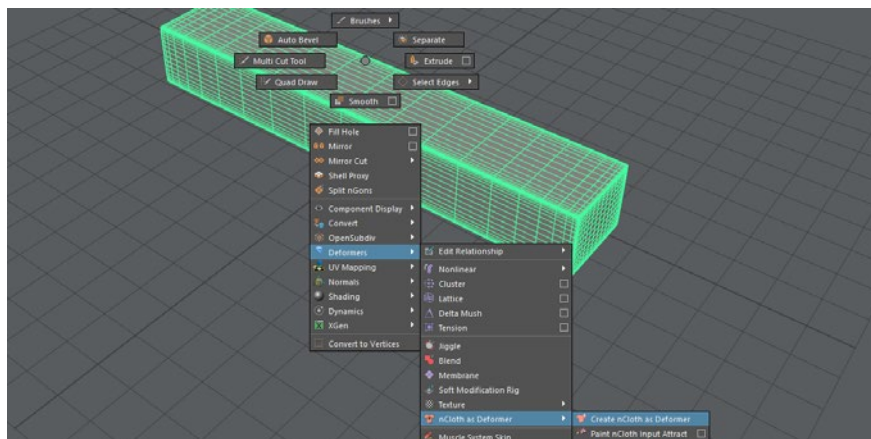
- 1) Select a Polygon
- 2) **Z + LMB > Auto Bevel**



da_ClothAsDeformer (video)

This script set up the current mesh to be deformed by nCloth solver, this can be useful for simulate character self-collision skin or muscle dynamics:

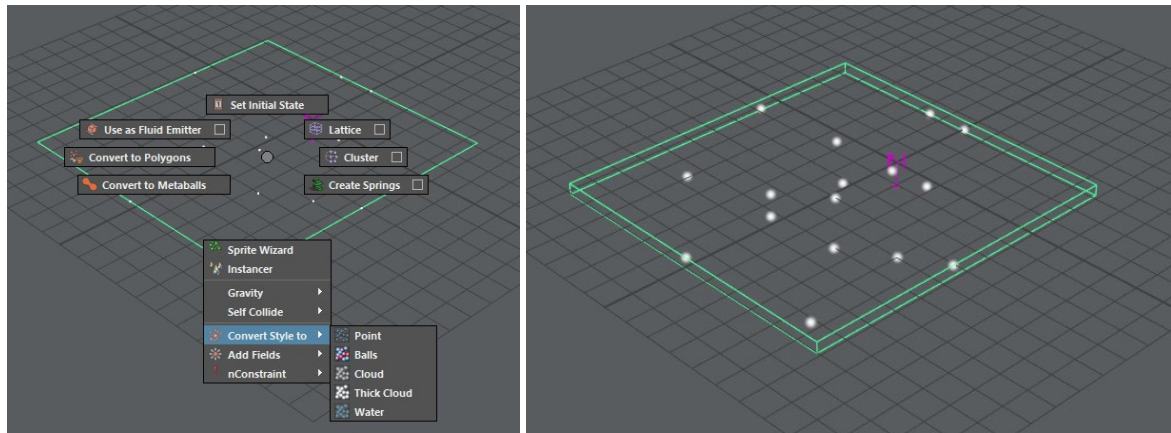
- 1) Select the polygons to deform, it can be the character skin
- 2) **Z + LMB > Deformers > nCloth as Deformer > Create nCloth as Deformer**



da_nParticleConverter [\(video\)](#)

This script adds the ability to convert particle to a specific type after their creation:

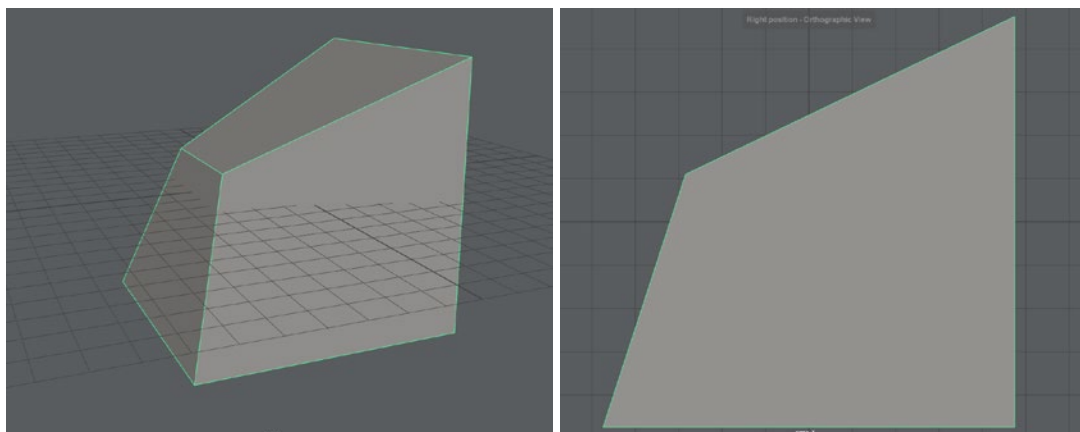
- 1) Create some particle
- 2) **Z + LMB** > *Convert Style to*



da_perspToggle [\(video\)](#)

This script converts the current persp view to the closest ortho, and vice versa:

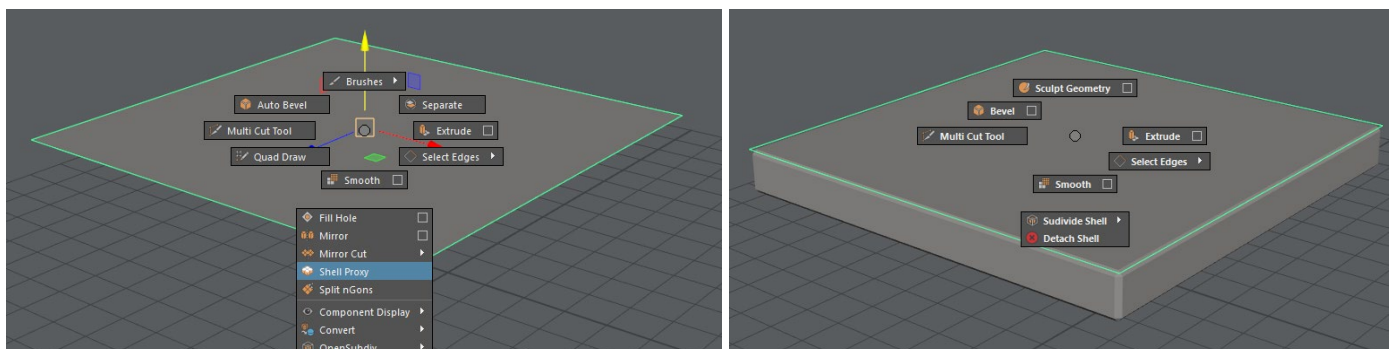
- 1) Move camera
- 2) **Press ALT + Enter**



da_shell [\(video\)](#)

This script emulates Shell deformer of *Autodesk 3D Studio Max*, by adding a thickness to flat polygons:

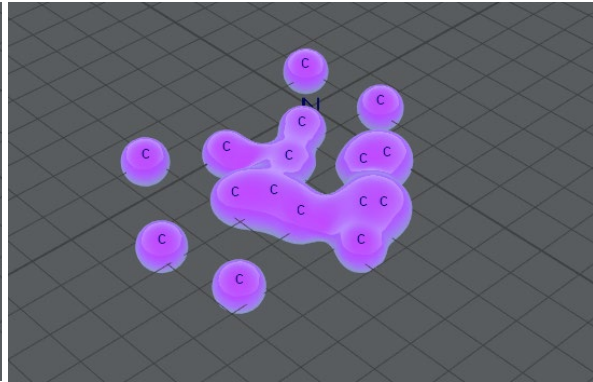
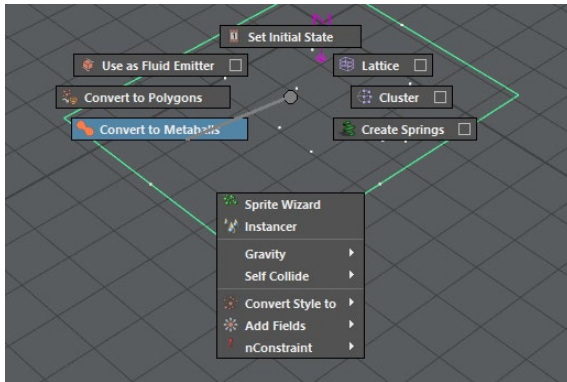
- 1) Select a flat polygon
- 2) **Z + LMB** > *Shell Proxy*
- 3) Continue to model or open tool option by using **Z + LMB**



da_ConvertToMetaballs [\(video\)](#)

This script converts particles to polygonal Metaballs:

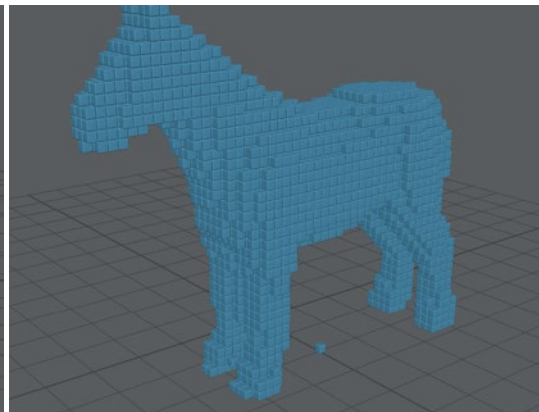
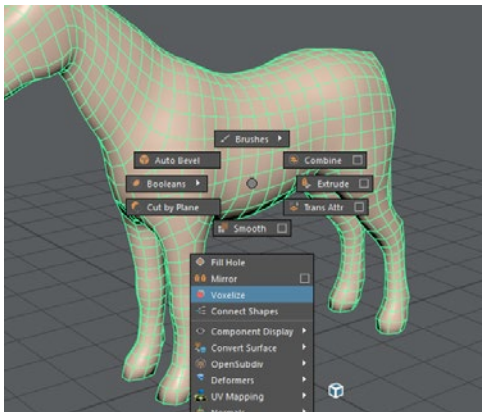
- 1) Select some particles
- 2) **Z + LMB > Convert to Metaballs**
- 3) Move single metaballs by selecting relative cluster



da_MashVoxelizer [\(video\)](#)

This script use MASH to voxelize an arbitrary mesh in the volume of another mesh:

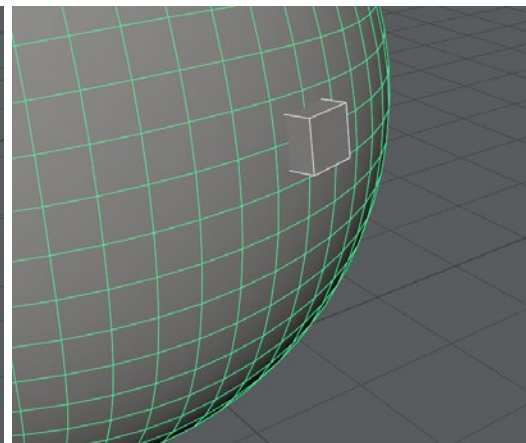
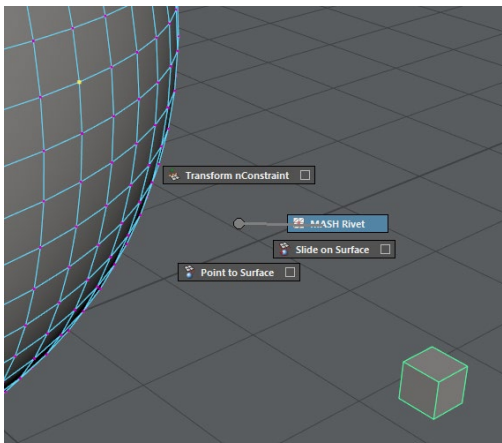
- 1) Select first the filler mesh then the volume mesh
- 2) **Z + LMB > Voxelize in a Volume**



da_RivetMash [\(video\)](#)

This script constraint the pivot of a polygon to a component of another polygon:

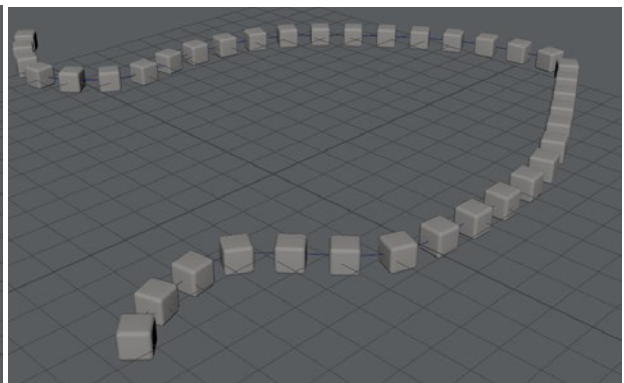
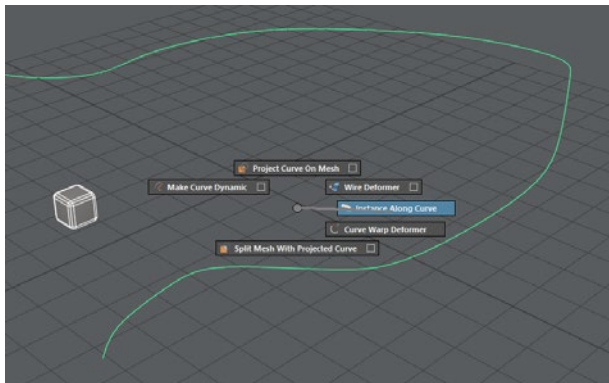
- 1) Select single or multiple components then a polygon
- 2) **Z + LMB > Rivet**



da_CurveDistributionMash (video)

This script scatter and constrain a polygonal object along a curve:

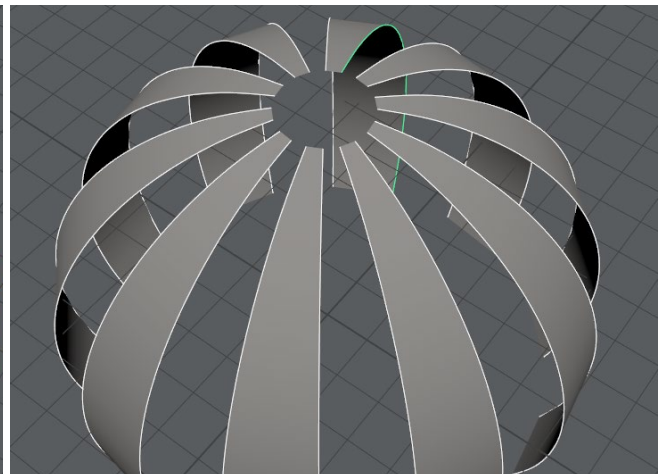
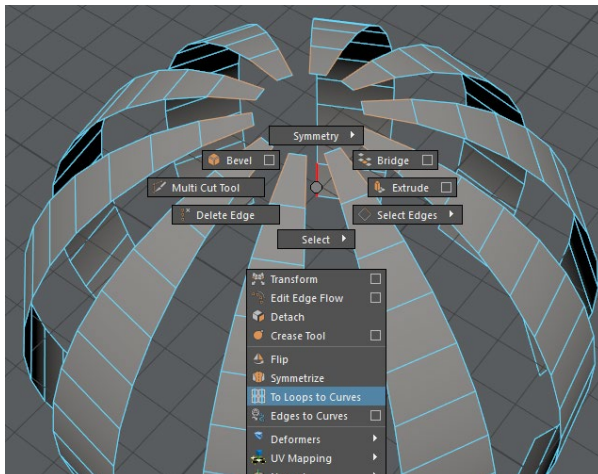
- 1) Select a polygon and then a curve
- 2) **Z + LMB > Instance Along Curve**



da_EdgeToLoopToCurve (video)

This script converts edge selection to loop and then make a batch conversion to curves, this is useful for converting polygonal hair to curve hair:

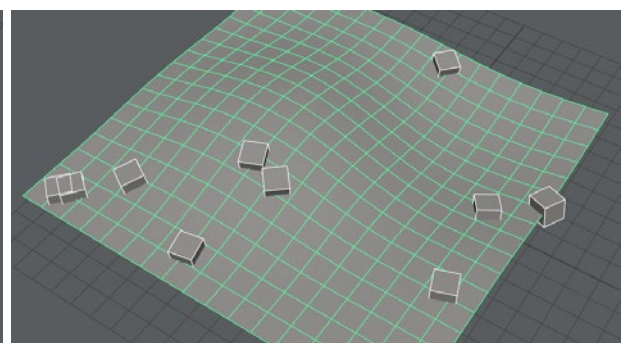
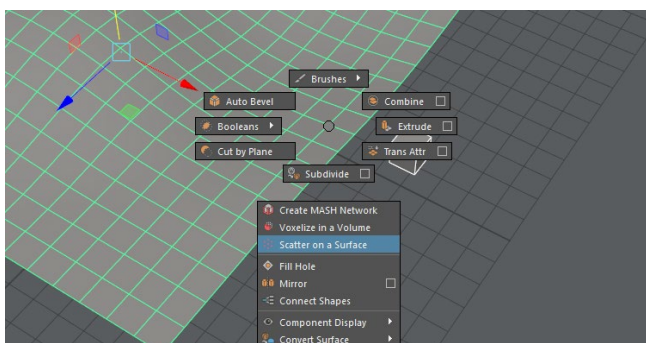
- 1) Select an edge for loop, sometimes this is easier to do in UV texture editor
- 2) **Z + LMB > To Loops to Curves**



da_SurfaceScatterMash

This script scatter and constrain a polygonal object on a mesh:

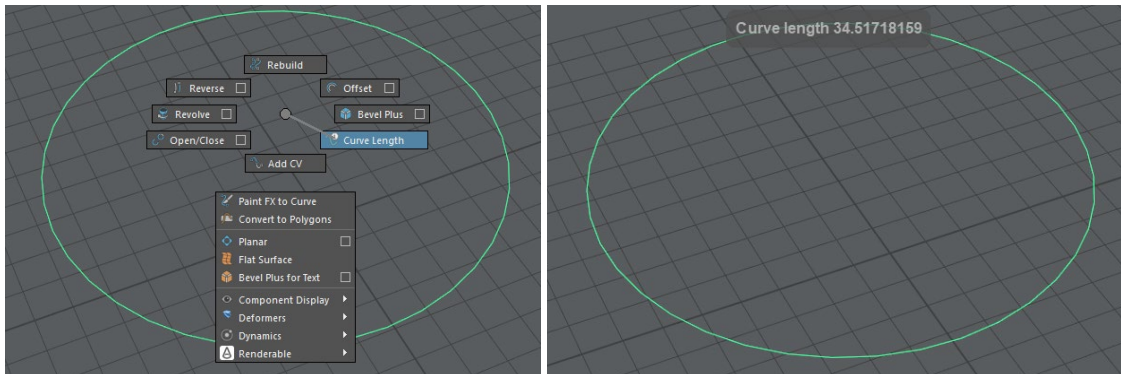
- 1) Select a mesh object then a mesh surface
- 2) **Z + LMB > Scatter on a Surface**



da_CurveLength

This script returns the length of a curve in Maya unit:

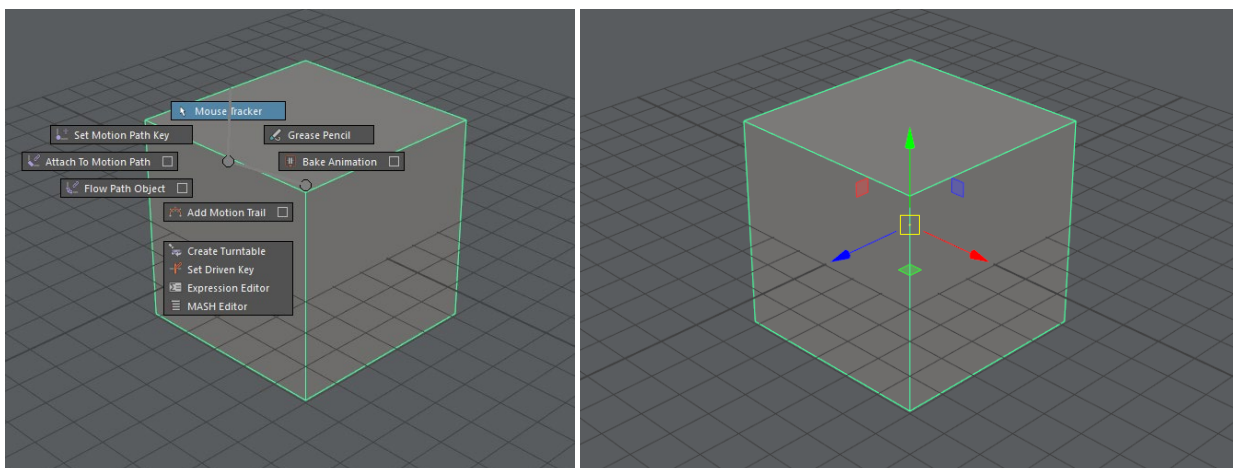
- 1) Select the curve you want to measure
- 2) **Z + LMB > Curve Length**



da_MouseTrack

This script tracks the mouse movement and create an animation:

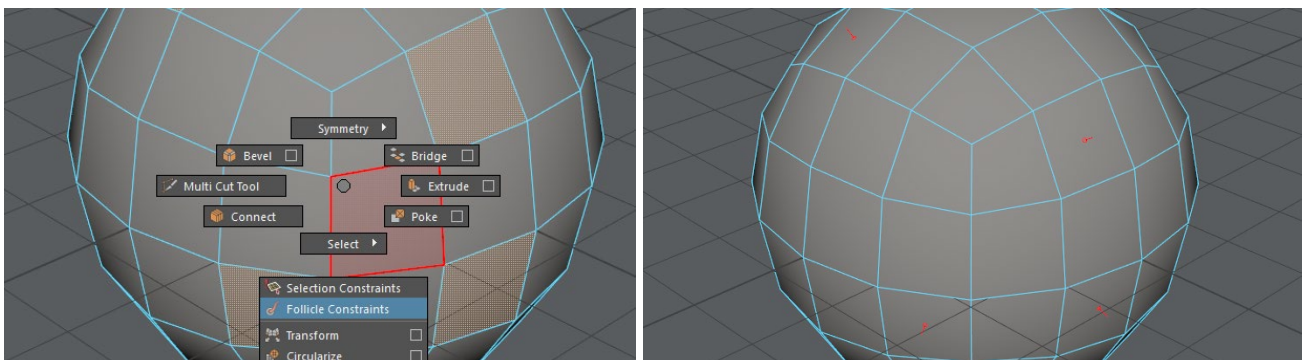
- 1) Select an object
- 2) **Z + MMB > Animation > Mouse Tracker**
- 3) Manipulate the object by using manipulators
- 4) Press **Esc** for stop the tracking



da_FacesFollicles

This script creates a follicle in the centre of selected faces:

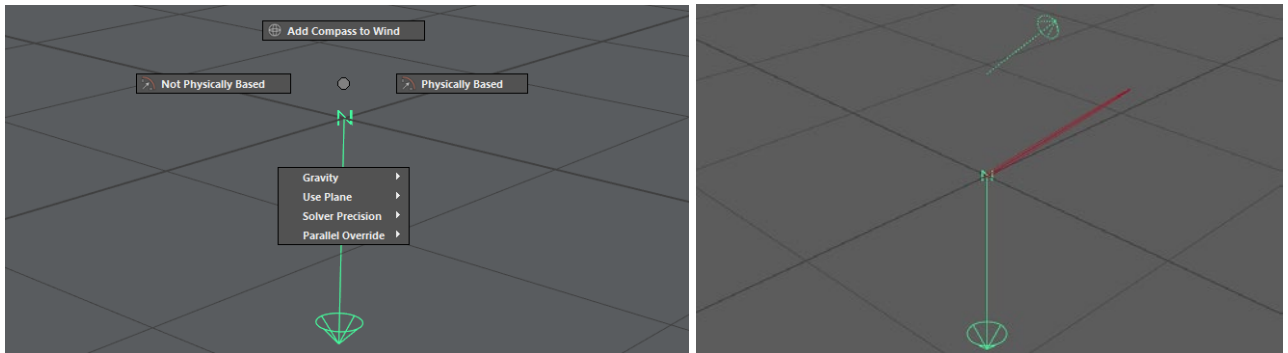
- 1) Select one or more faces
- 2) **Z + LMB > Follicle Constrains**



da_Compass

This script converts Euler angle into a XYZ vector, for drive wind direction in Nucleus and Air Filed:

- 1) Select Nucleus icon or Air Filed icon
- 2) **Z + LMB > Compass to Wind**

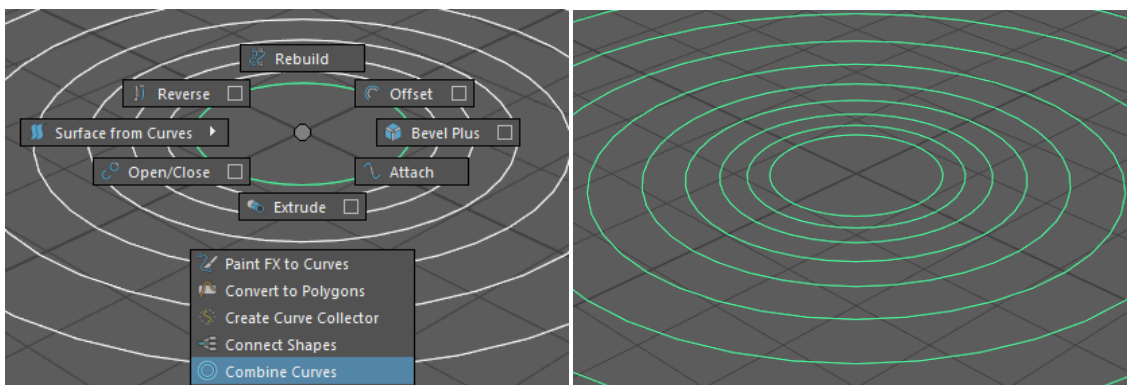


Alternatively, is possible generate a standalone compass by using **Z + MMB > Compass**

da_CombineCurves

This script combines two or more curves in one transform node:

- 1) Select two or more curves
- 2) **Z + LMB > Combine**

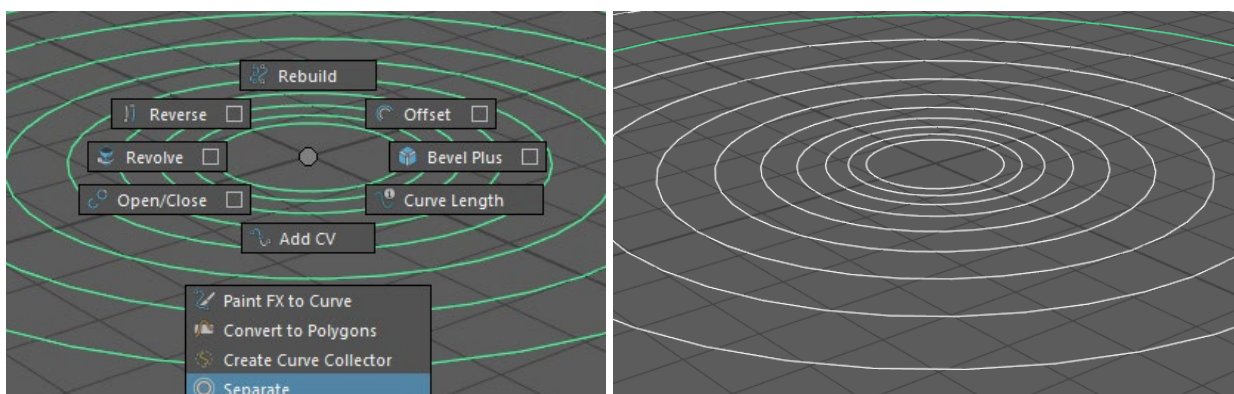


Note: do not combine already combine curves, always first separate the combined curves then combining the curves again.

da_SepareCurves

This script separate combined curves:

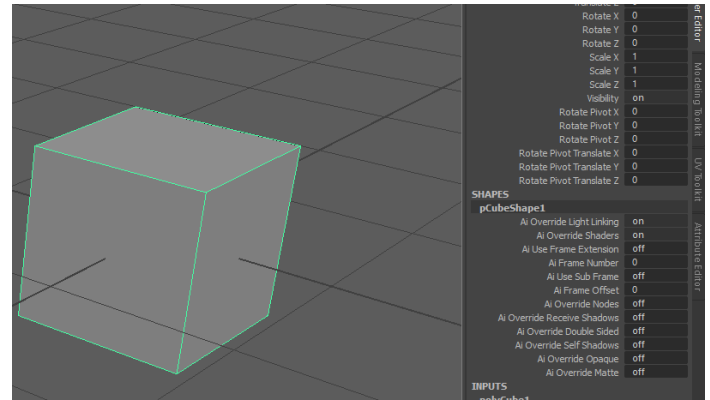
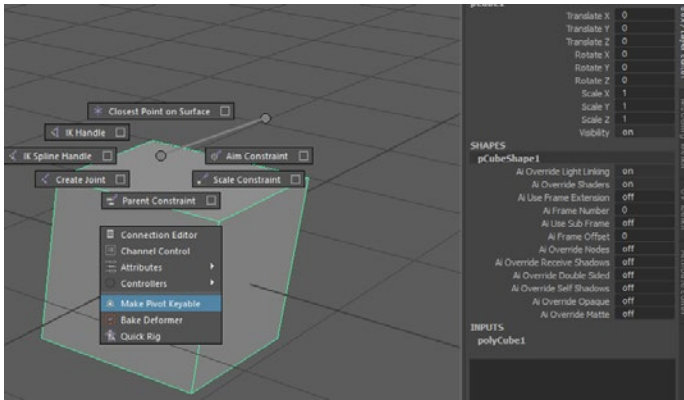
- 1) Select combined curves
- 2) **Z + LMB > Separate**



da_pivotKeyable

This script expose pivot position value to make possible animate it by using **S** hotkey:

- 1) Select an object
- 2) **Z + MMB > Rigging > Make Pivot Keyable**
- 3) Animate the object as usual



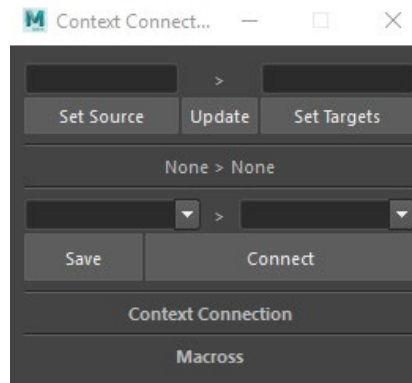
Third-party plug-ins

May9 Pro support some of the best third-party plug-ins available, some are included other need separate install due to license.

Context Connector [\(Video\)](#)

Context Connection is an advance tool for automate and manage single and multiple node connection, enable it under *Windows > Settings/Preferences > Plug-in Manager: ContentConnectr.py*

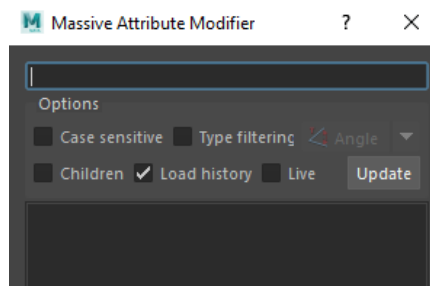
For open Context Connection UI use *CTRL + J* shortcut or *Z + MMB > Rigging > Context Connector*



Massive Attribute Editor

Massive Attribute Editor is an advance tool simply wrap all the common attributes between the selected objects and display them in a list, enable it under *Windows > Settings/Preferences > Plug-in Manager: mass_attr.py*

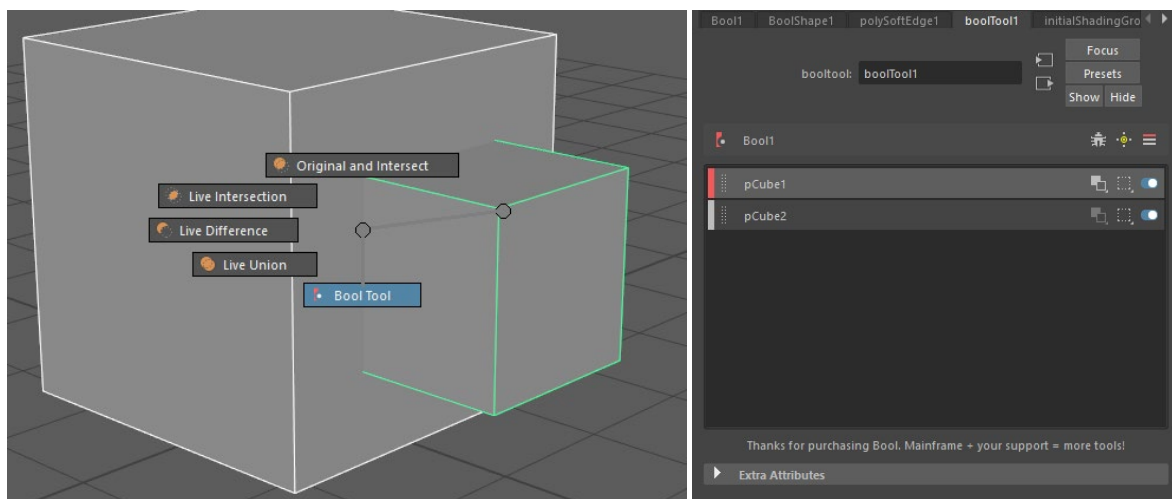
For open *Massive Attribute Editor* UI use *CTRL + K* shortcut or *Z + MMB > Rigging > Massive Attribute*



Bool [\(Video\)](#)

Bool is a live boolean plug-in that's interactively adjust multiple boolean operations, is available to buy [here](#).

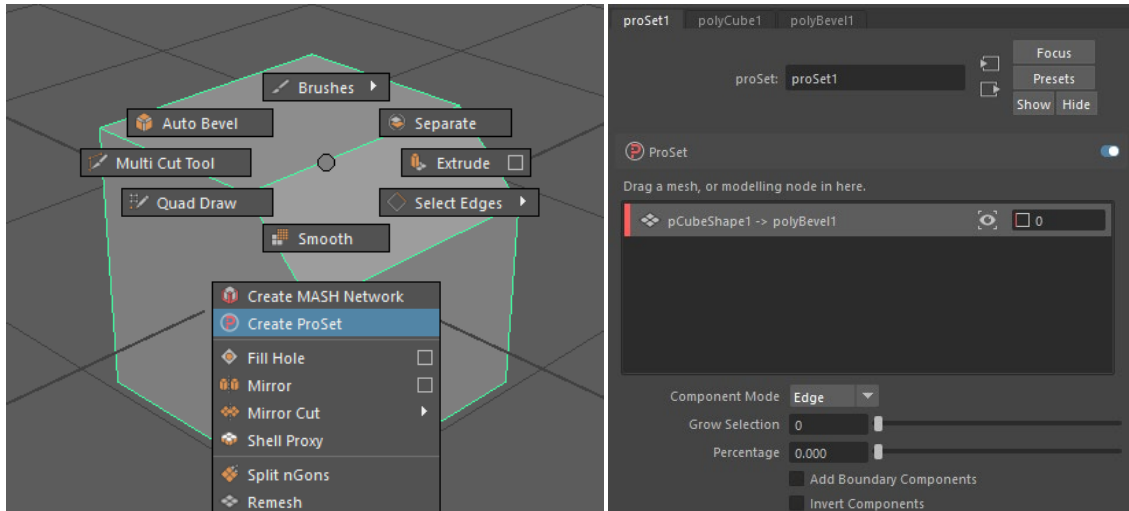
For use *Bool*, select two or more meshes and *Z + LMB > Booleans > Bool Tool*



ProSets (Video)

ProSets power up modelling workflow by using procedural components sets, is available to buy [here](#).

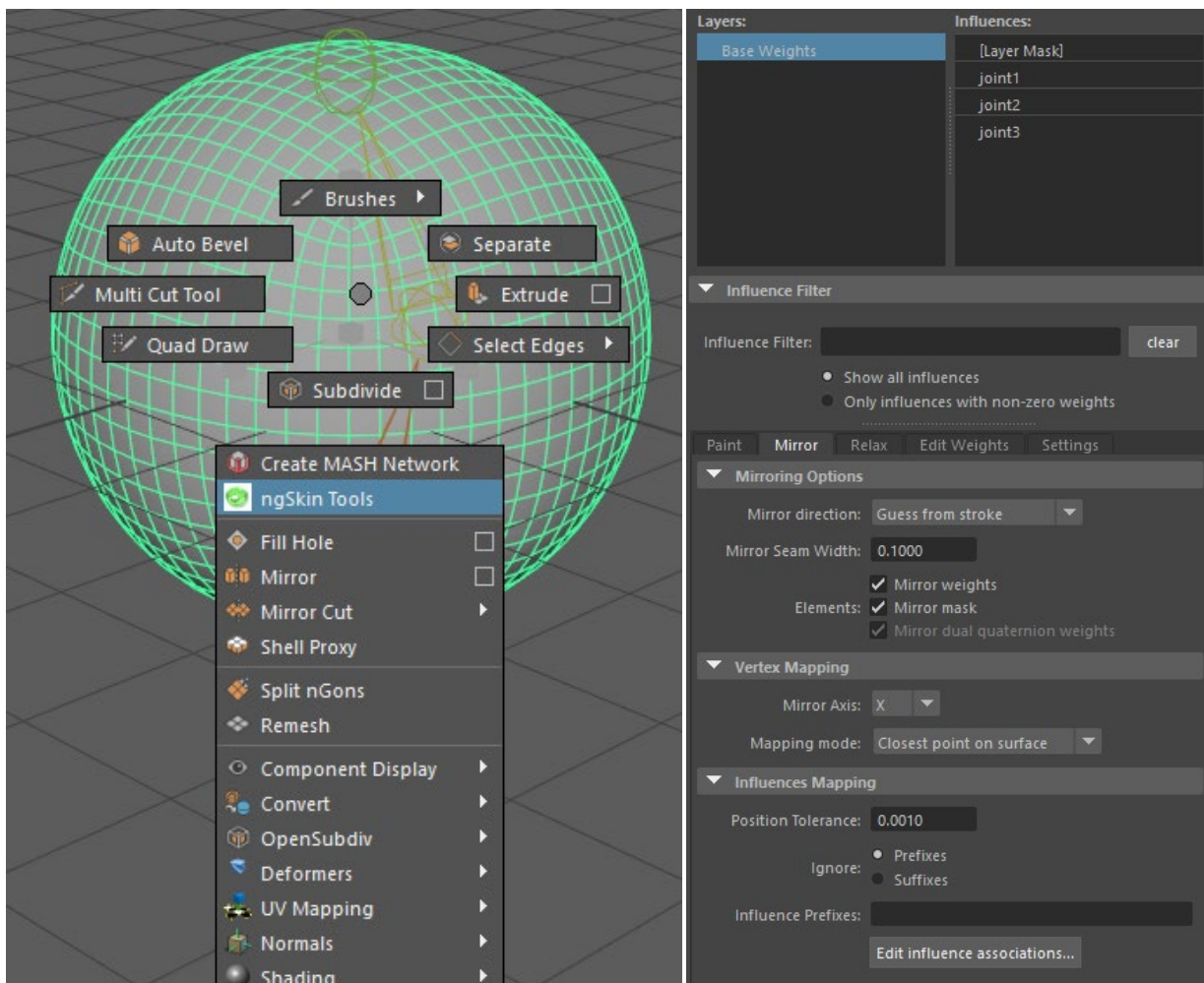
For use *ProSets*, select a mesh and **Z + LMB > Create ProSets**



ngSkinTools (Video)

ngSkinTools allows flexible and artistic workflow, while providing all the necessary tools for precision, is available to download or buy [here](#).

For use *ngSkinTools*, select a skinned mesh and **Z + LMB > ngSkin Tools > Initialize Skinning Layers**



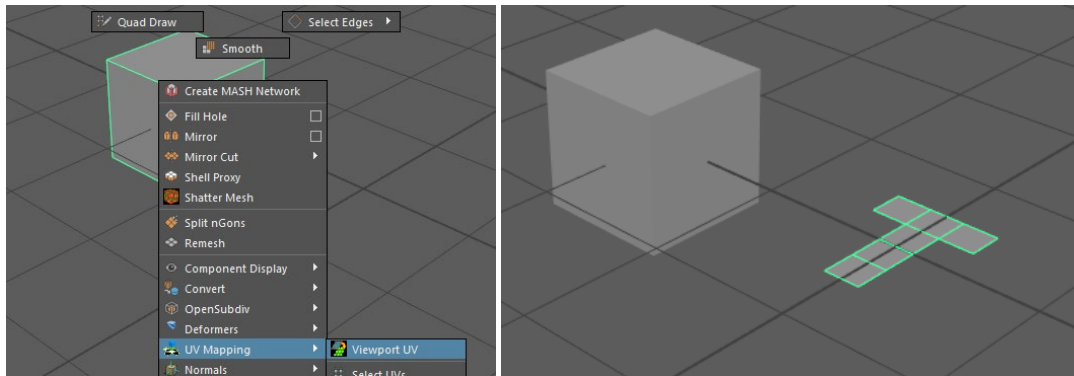
SOuP

SOuP is a vast framework that brings a tonne of new functionality to Maya, is available to download or buy [here](#).

da_ViewportUV

This script makes a UV projection mesh in the Viewport:

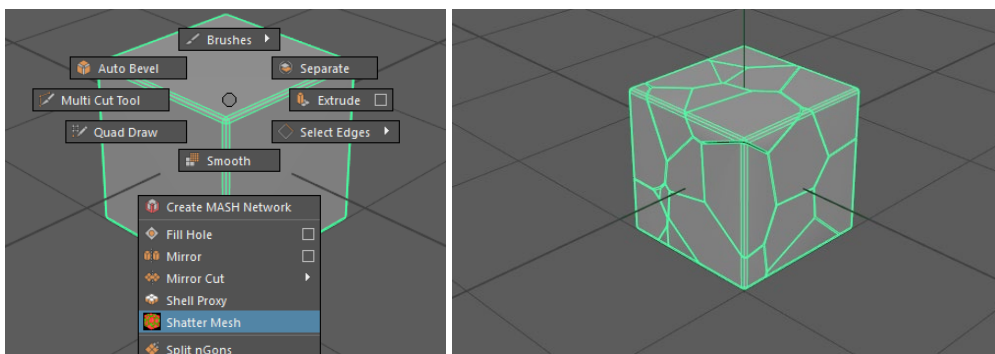
- 1) Select a mesh
- 2) *Z + LMB > UV Mapping > Viewport UV*



da_ShatterMesh

This script shatters a mesh:

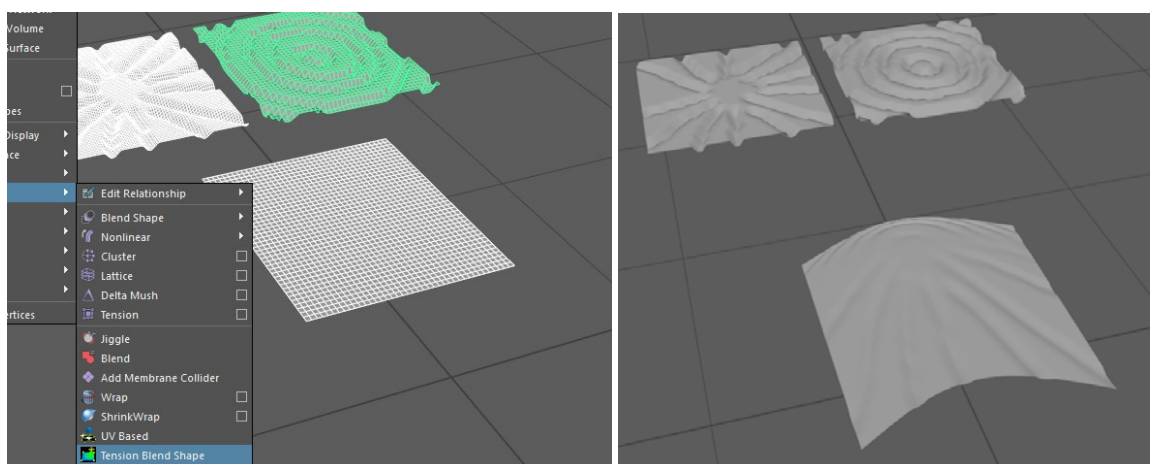
- 1) Select a mesh
- 2) *Z + LMB > Shatter Mesh*



da_TensionBlendShape

This script creates a blend shape deformer based on stretch and compression:

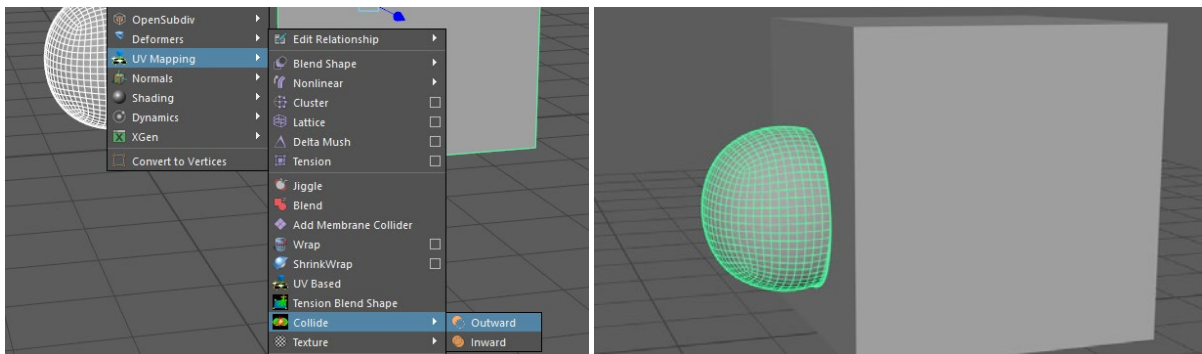
- 1) Select: a base mesh, a stretch one and a compress one
- 2) *Z + LMB > Deformers > Tension Blend Shape*



da_CollideOutward and da_CollideInward

These scripts create a collision deformer between meshes:

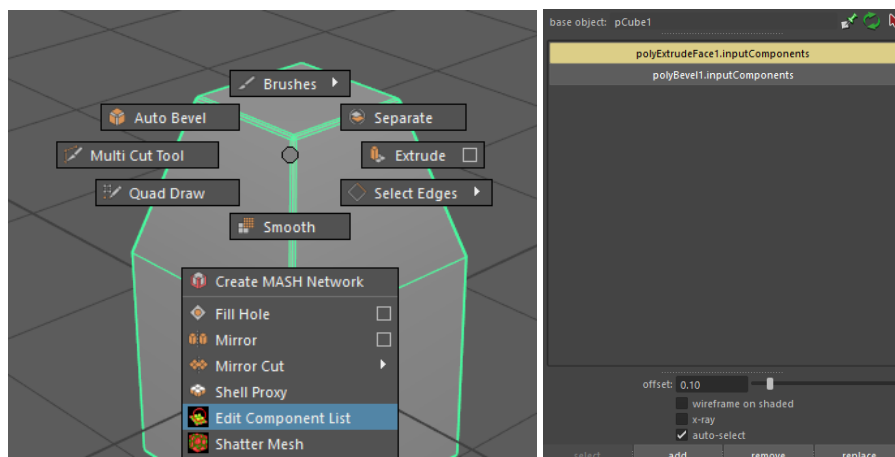
- 1) Select: a collide mesh and collision mesh
- 2) **Z + LMB > Deformers > Collide > Outward or Inward**



Edit Component List ([Video](#))

This tool makes modeling tools procedural:

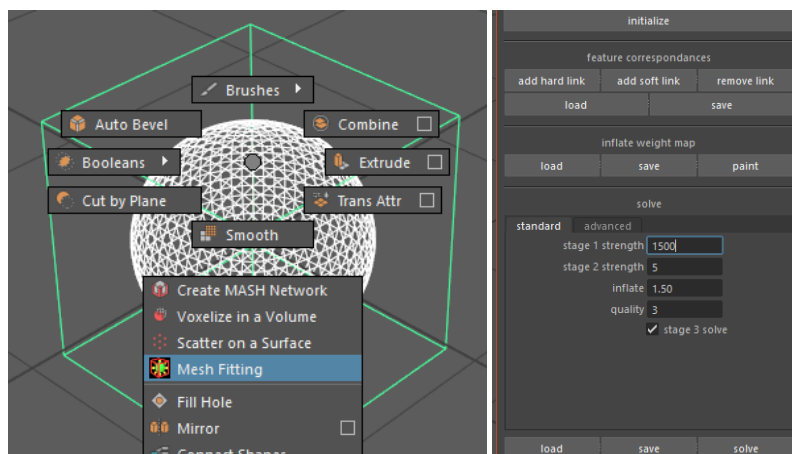
- 1) Select a mesh
- 2) **Z + LMB > Edit Component List**
- 3) Select one of the existing modeling operator and add or remove desired components



Mesh Fitting ([Video](#))

This tool fit a different topology mesh to another one:

- 1) Select two meshes, a source one and target one
- 2) **Z + LMB > Mesh Fitting**



Uninstall

May9 Pro do not override any of native *Autodesk Maya* files so for uninstall just disable the included plug-ins and set one of the standard workspace, or run this: *source May9_uninstall.mel*

Release notes

May9 Pro 3.0.5 is tested and develop on *Autodesk Maya 2018.2* and *Autodesk Maya 2017 Update 5* with *MtoA 2.1.0* installed.

May9 Pro workspace do not auto save, so is needed manually save the workspace changes.

Useful links

Facebook page: fb.com/May9Prefs

YouTube channel: youtube.com/c/May9

Credits and license

May9 Pro design, scripts and preferences are made by *Davide Alidosi* and licensed under MIT license.

MMtoKey is made by *Andrey Menshikov* and licensed under a custom non-commercial license.

Context Connector is made by *Pavel Korolyov* and licensed under MIT license.

Massive Attribute Editor is made by *Mehdi Louala* and licensed under Creative Commons Attribution 4.0.

Bool is made by *Mainframe North* and licensed under custom EULA.

ProSets is made by *Mainframe North* and licensed under custom EULA.

ngSkinTools is made by *Viktoras Makauskas* and licensed under custom license.

SOuP is made by *Peter Shipkov* and licensed under custom license.