

# MAY 9 PRO 3

USER GUIDE

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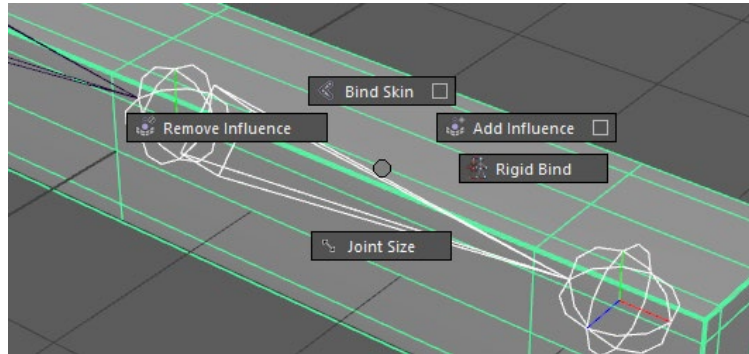
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## What is May9 Pro

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

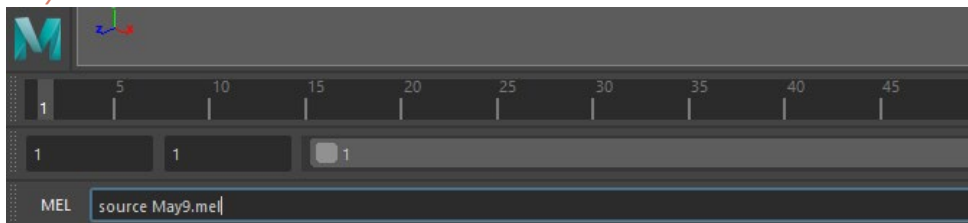
The concept of *May9 Pro* is streamline useful commands into a single keyboard button (**Z**), by predicting them from the context. For example, if you have in selection a mesh and a joint by pressing **Z + Left Mouse Button** (**MMB** from now) it's appear the follow **Marking Menu** (**MM** form now):



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.

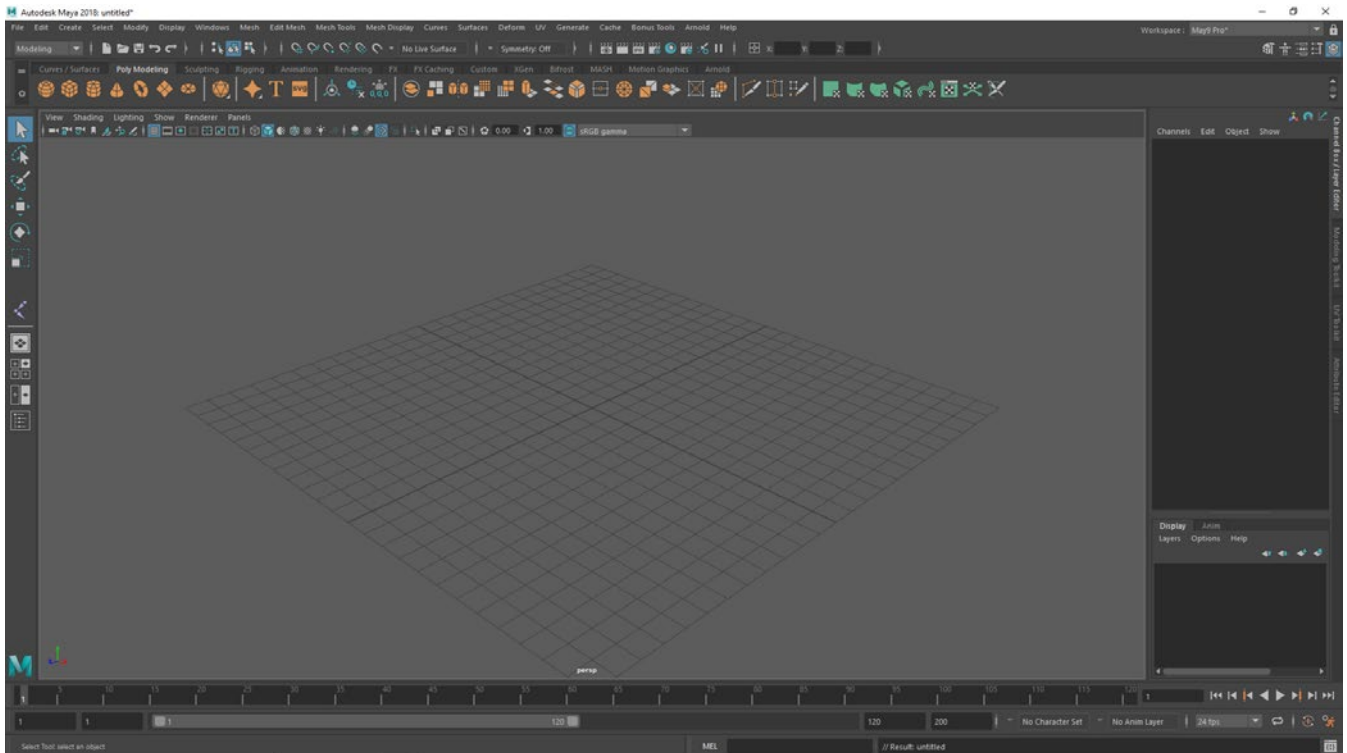
## Update from May9 Pro 1.0 or 2.0

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.

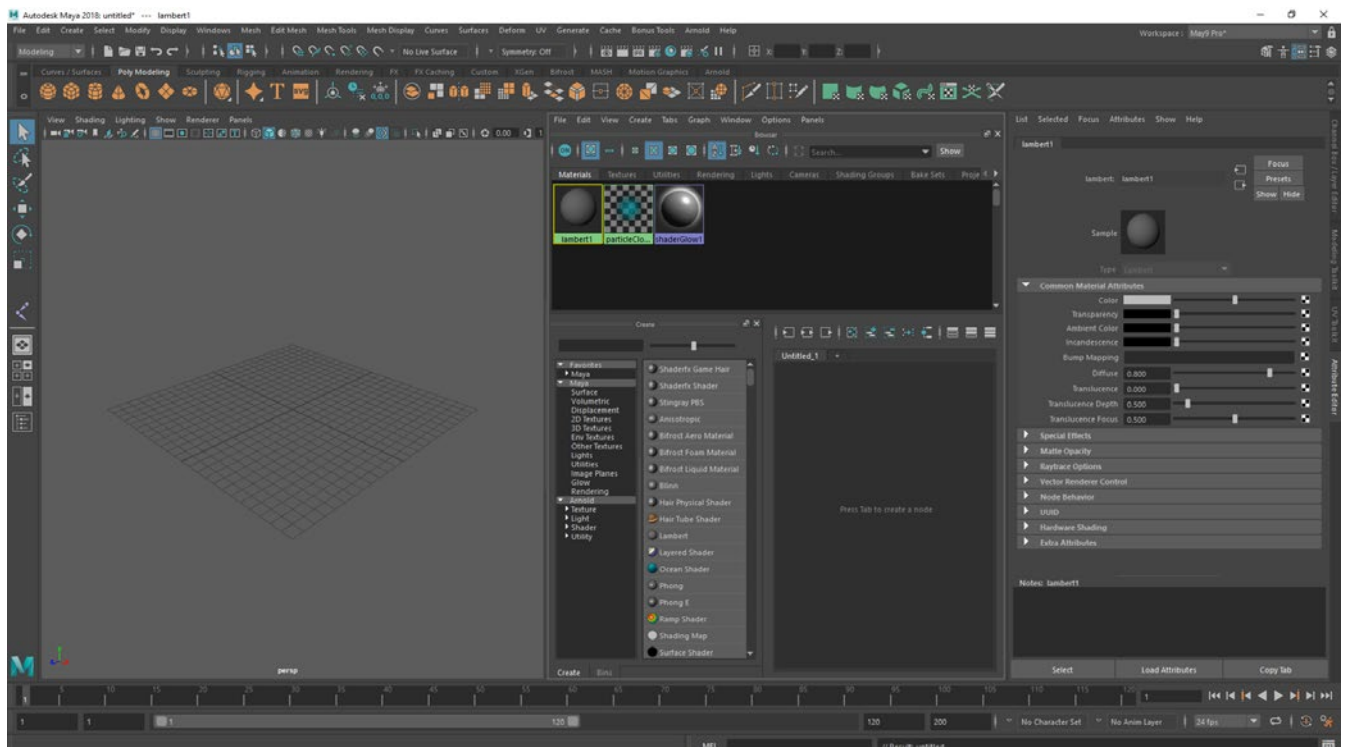


### Note

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

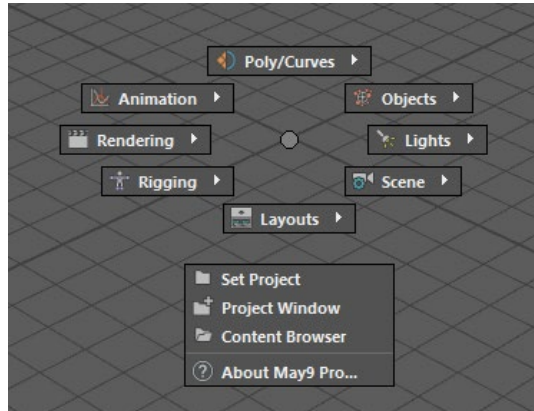
### May9 Pro Layouts

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**:



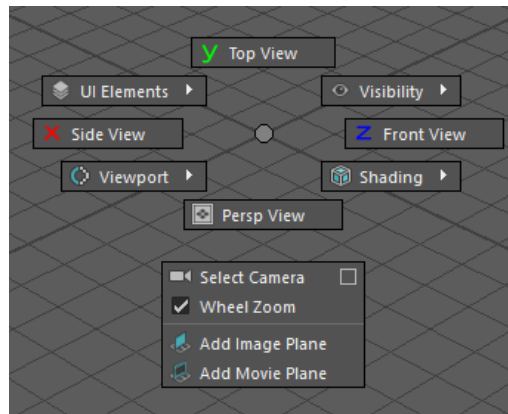
## All MM

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**:



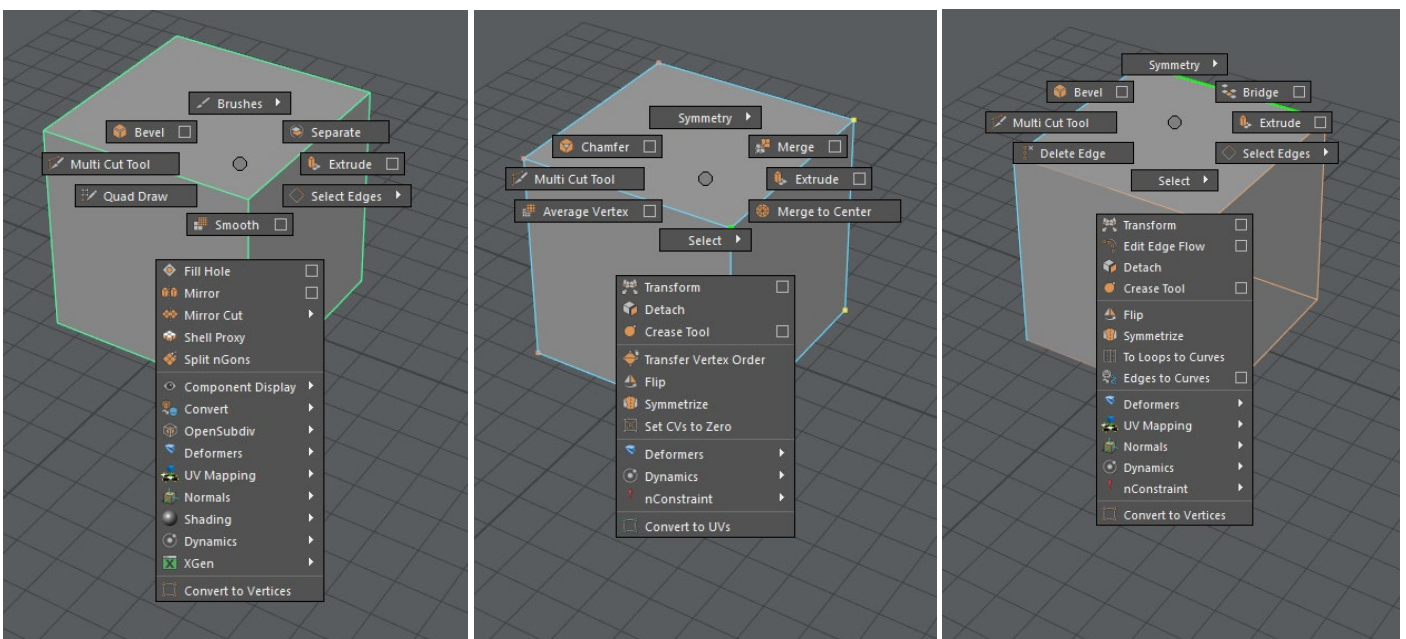
## Maya Window MM

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

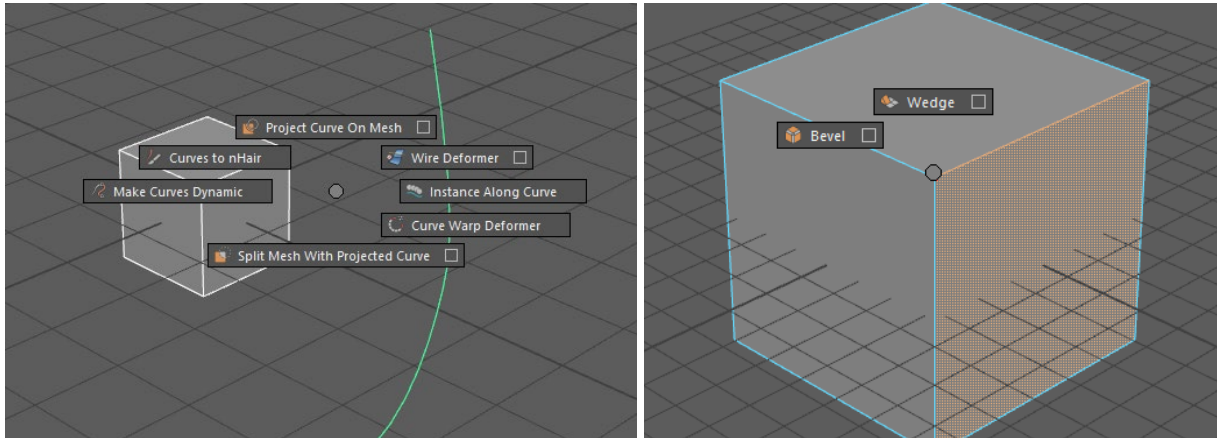
When a single object or component type is selected is possible enable the relative contextual MM by pressing **Z + LMB**:





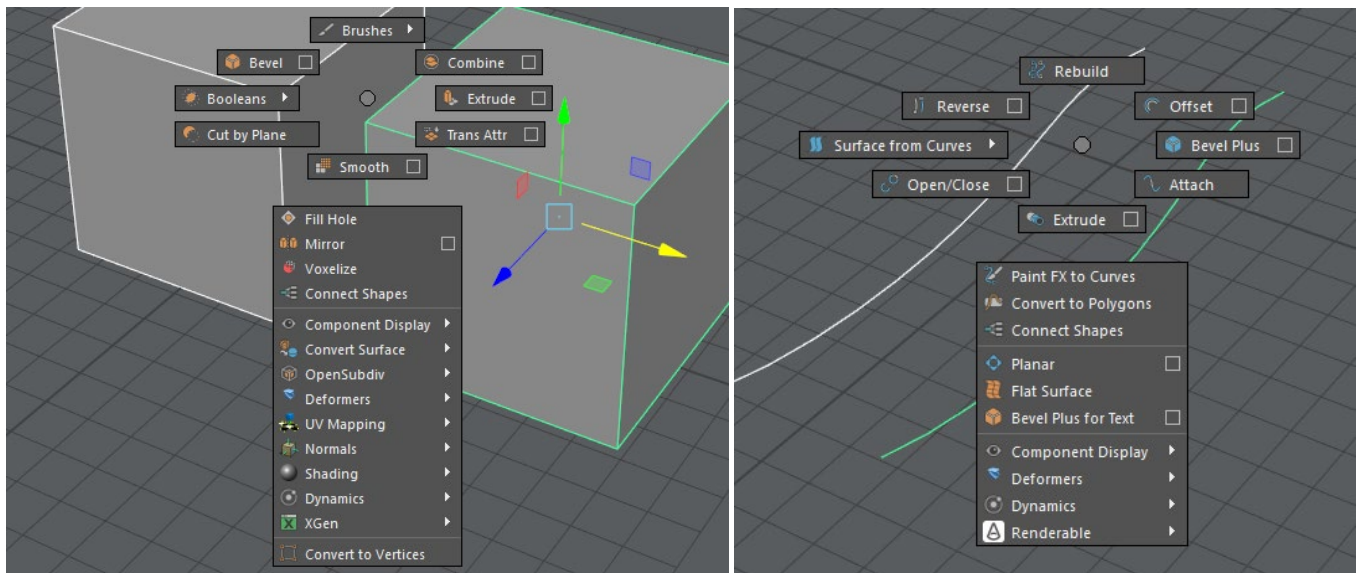
## Contextual multi selection MM

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



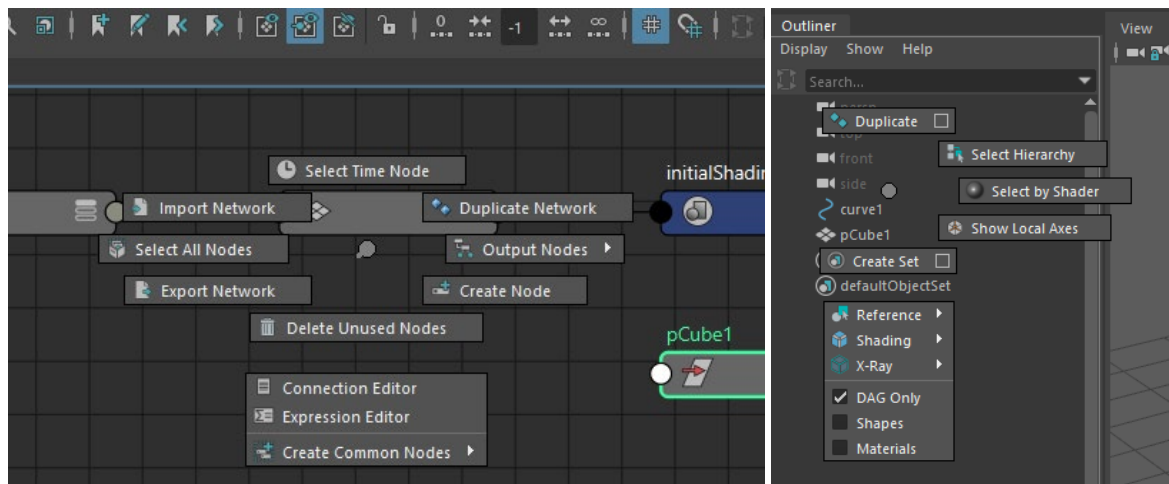
## Contextual multi selection of the same object type MM

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



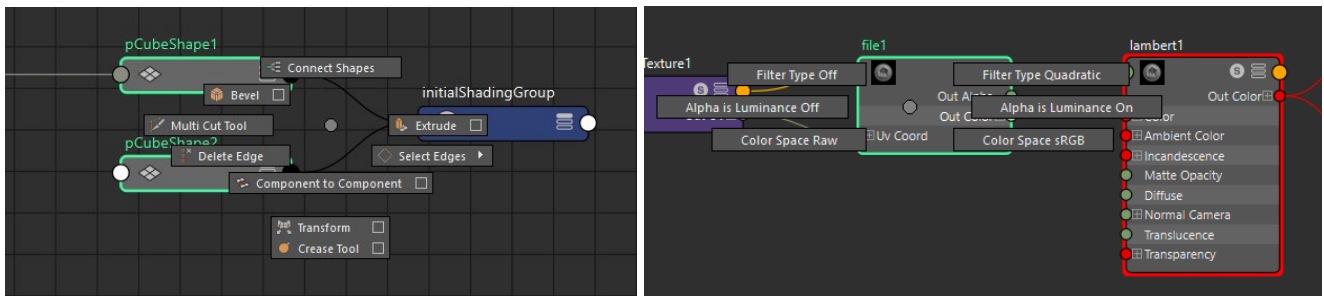
## Contextual panel MM

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



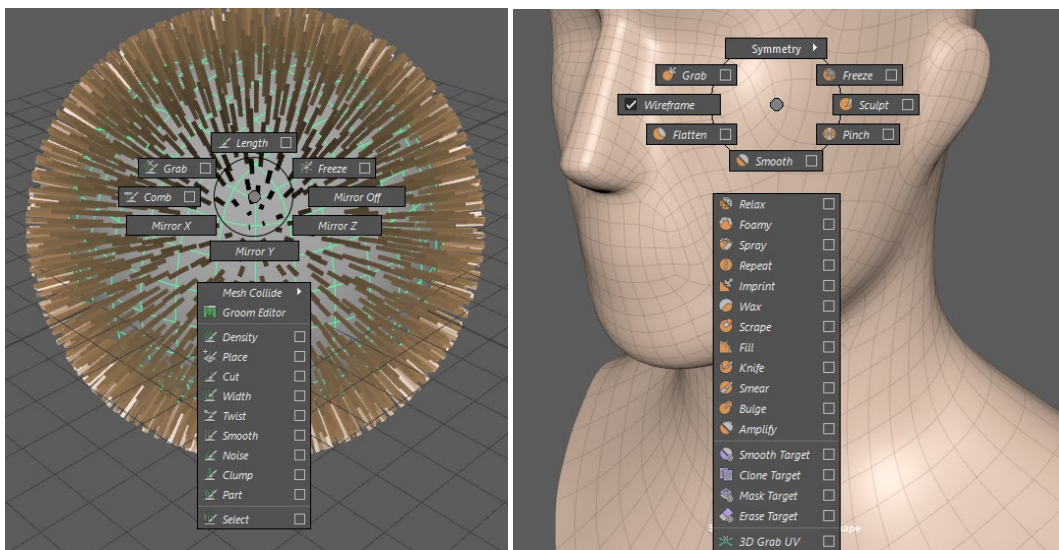
## Contextual node selection in editor panel

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

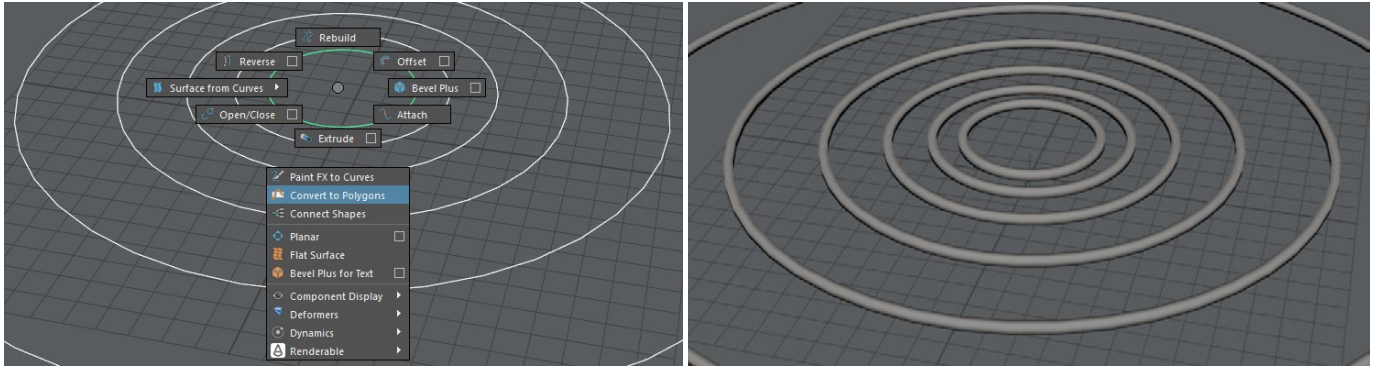
## Custom Script

Under the hood of *May9 Pro* there are hundreds of MEL scripts that 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:

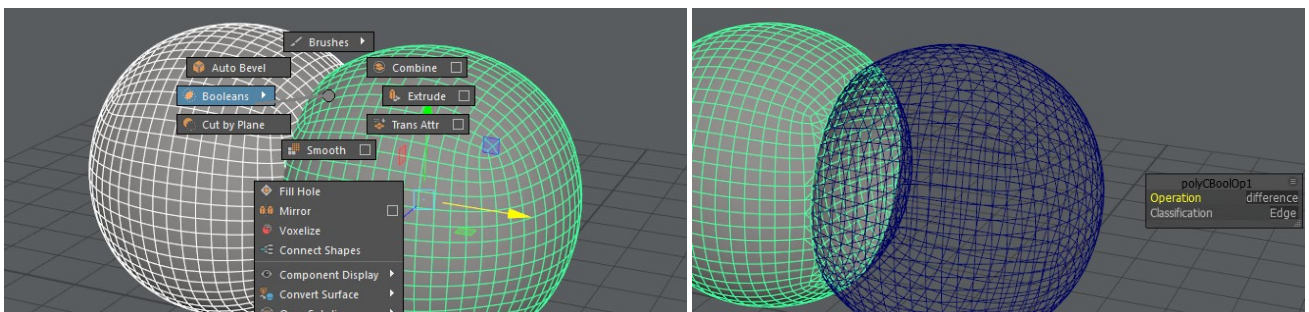
- 1) Select a curve or multiple curves
- 2) **Z + LMB > Convert to Polygons**



### da\_interactiveBooleans (video)

This script makes the Polygonal Boolean process more interactive:

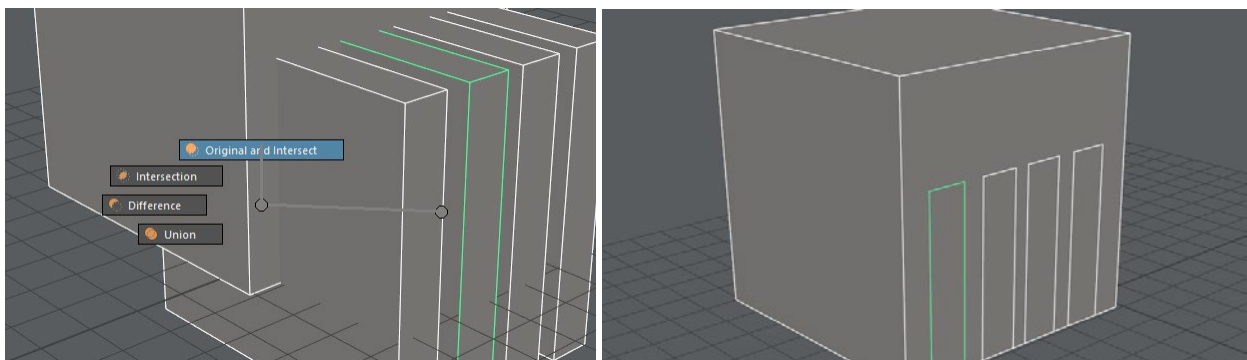
- 1) Select two or more polygons objects
- 2) **Z + LMB > Booleans**



### da\_BooleanFullIntersect (video)

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

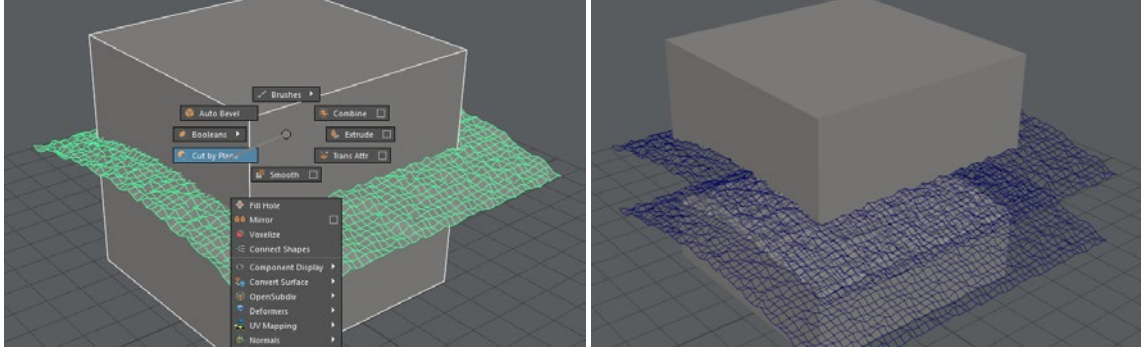
- 1) Select first the main object and after the cutters ones
- 2) **Z + LMB > Booleans > Original and Intersect**



### da\_PlaneCutter (video)

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

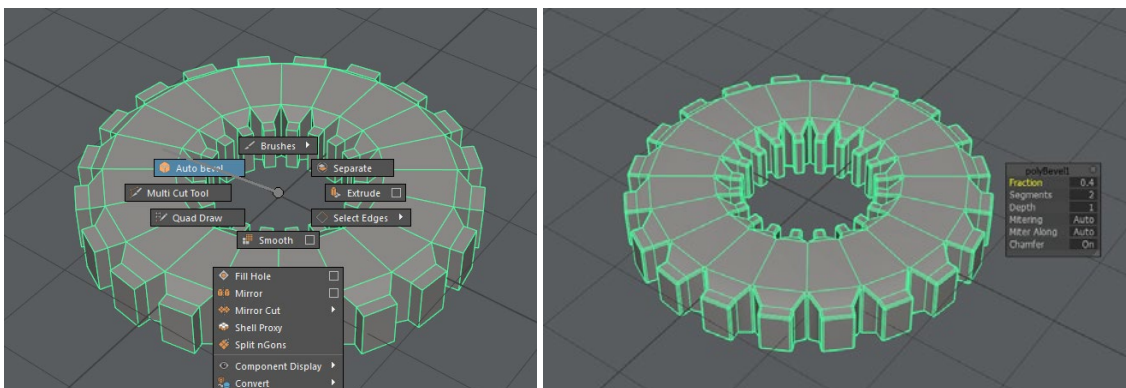
- 1) Select first the main object and after the cutter ones
- 2) **Z + LMB > Cut by Plane**
- 3) Select the single or double operator
- 4) Move the cutter or the cutters plane



### da\_AutoBevel (video)

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

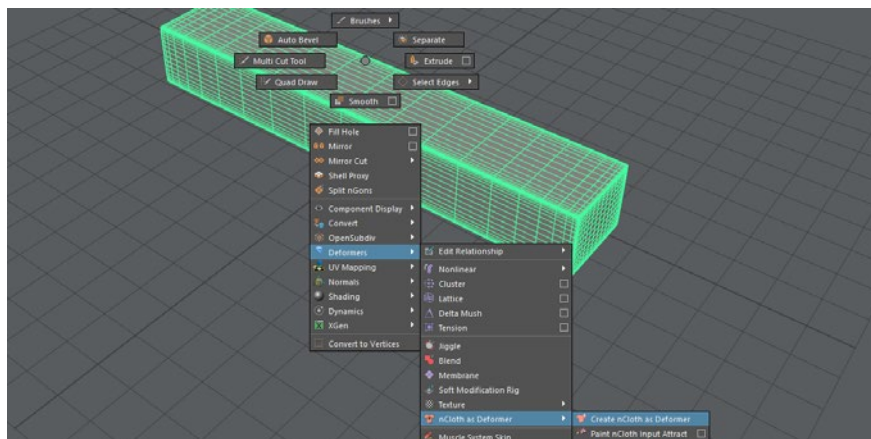
- 1) Select a Polygon
- 2) **Z + LMB > Auto Bevel**



### 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**

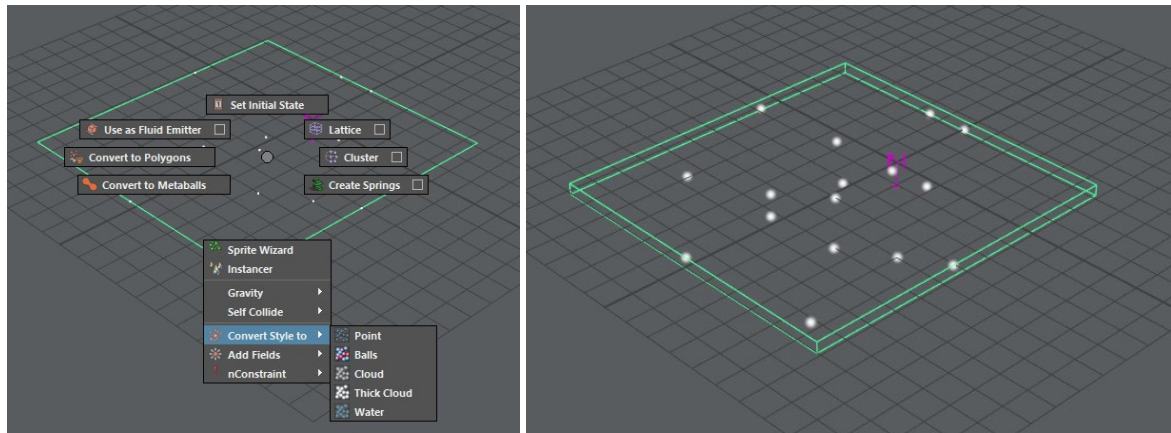




### da\_nParticleConverter [\(video\)](#)

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

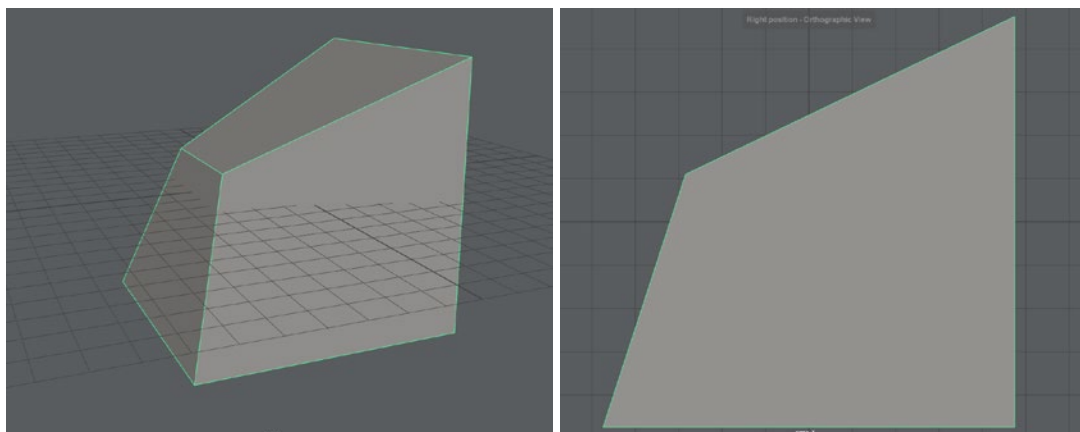
- 1) Create some particle
- 2) **Z + LMB** > *Convert Style to*



### da\_perspToggle [\(video\)](#)

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

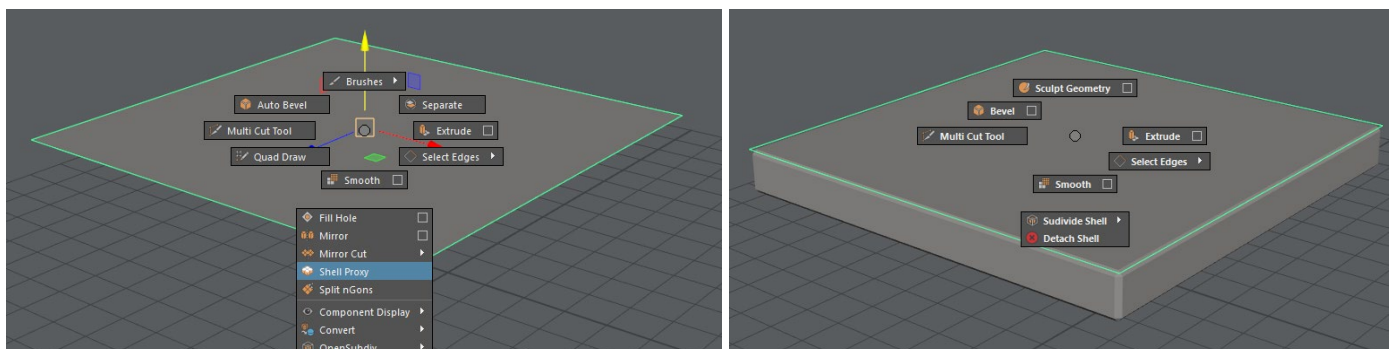
- 1) Move camera
- 2) **Press ALT + Enter**



### 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**

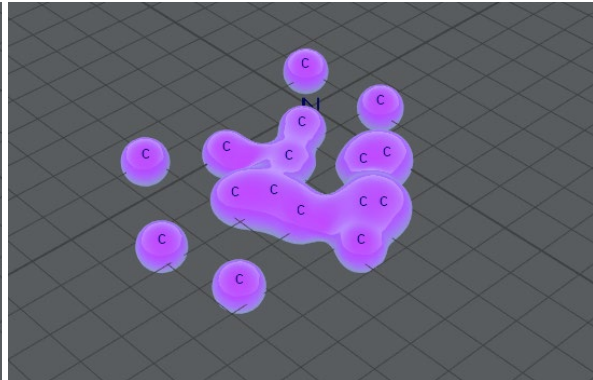
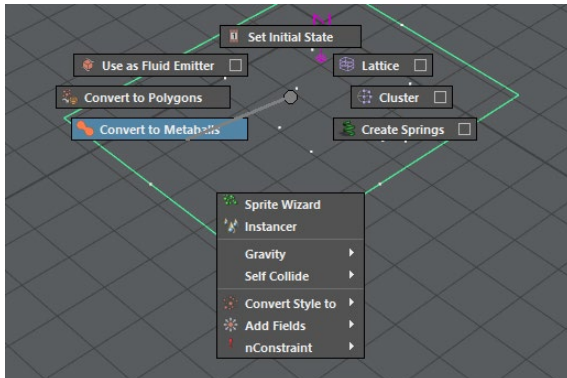




### da\_ConvertToMetaballs [\(video\)](#)

This script converts particles to polygonal Metaballs:

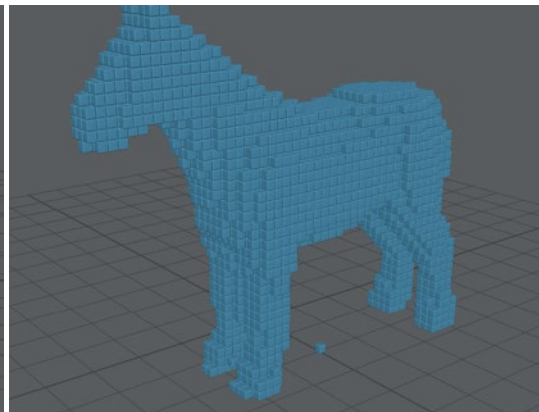
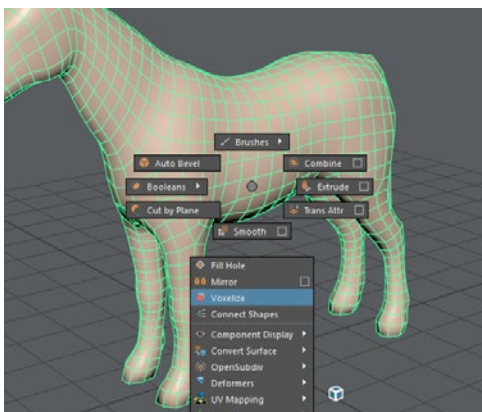
- 1) Select some particles
- 2) **Z + LMB > Convert to Metaballs**
- 3) Move single metaballs by selecting relative cluster



### da\_MashVoxelizer [\(video\)](#)

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

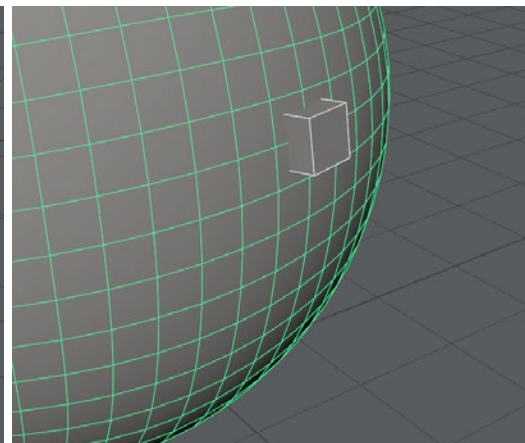
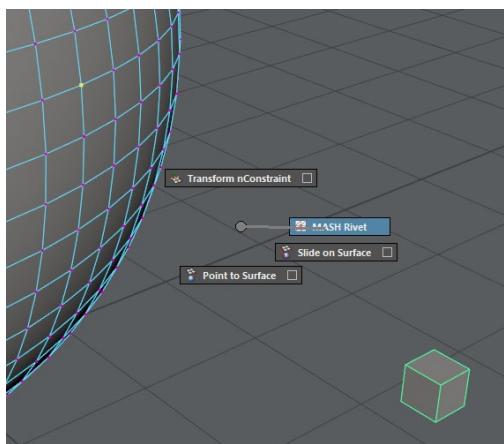
- 1) Select first the filler mesh then the volume mesh
- 2) **Z + LMB > Voxelize in a Volume**



### da\_RivetMash [\(video\)](#)

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

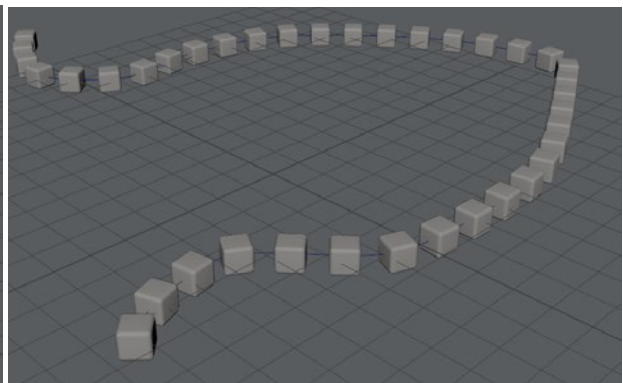
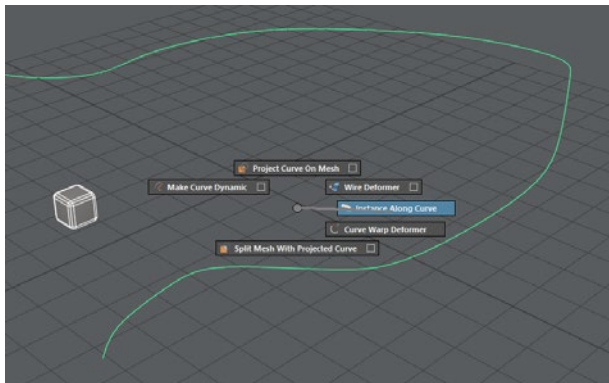
- 1) Select single or multiple components then a polygon
- 2) **Z + LMB > Rivet**



### da\_CurveDistributionMash (video)

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

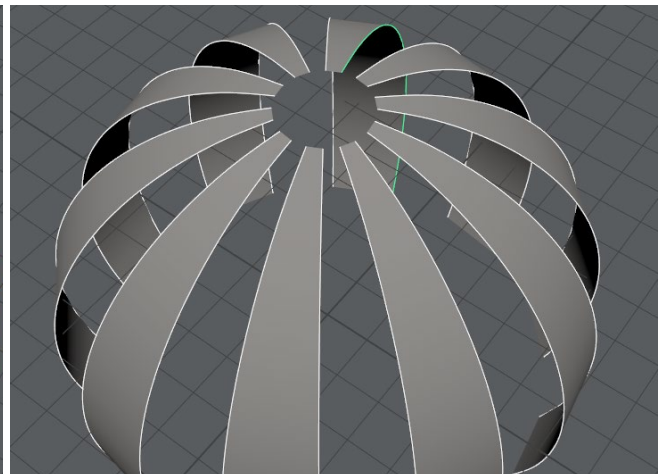
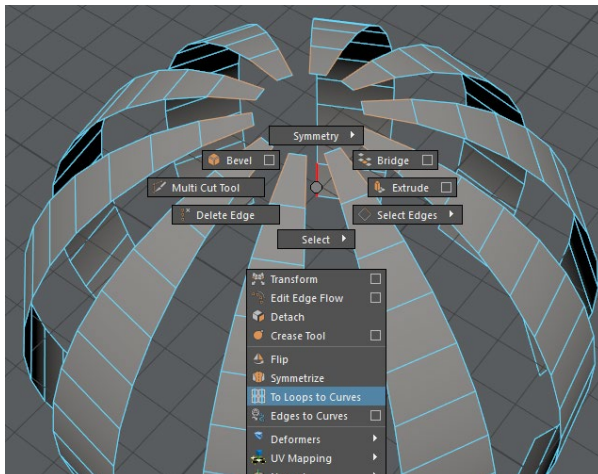
- 1) Select a polygon and then a curve
- 2) **Z + LMB > Instance Along Curve**



### 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:

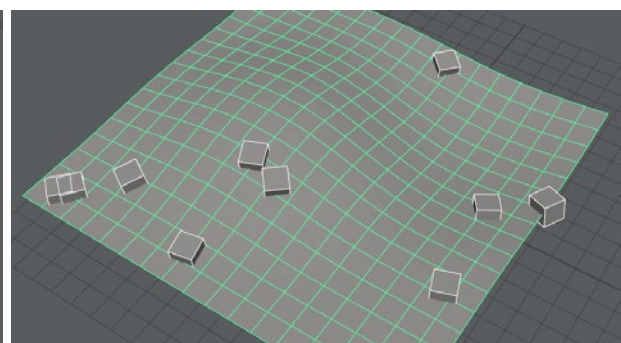
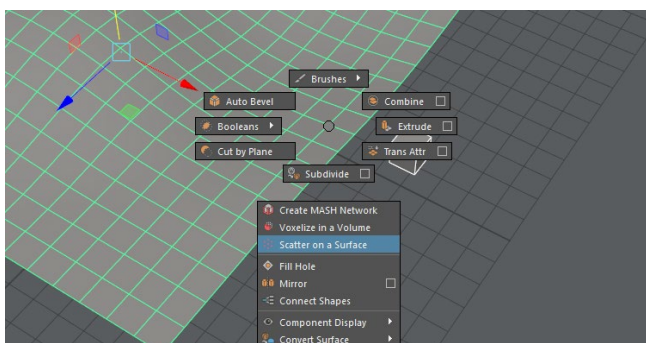
- 1) Select an edge for loop, sometimes this is easier to do in UV texture editor
- 2) **Z + LMB > To Loops to Curves**



### 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**

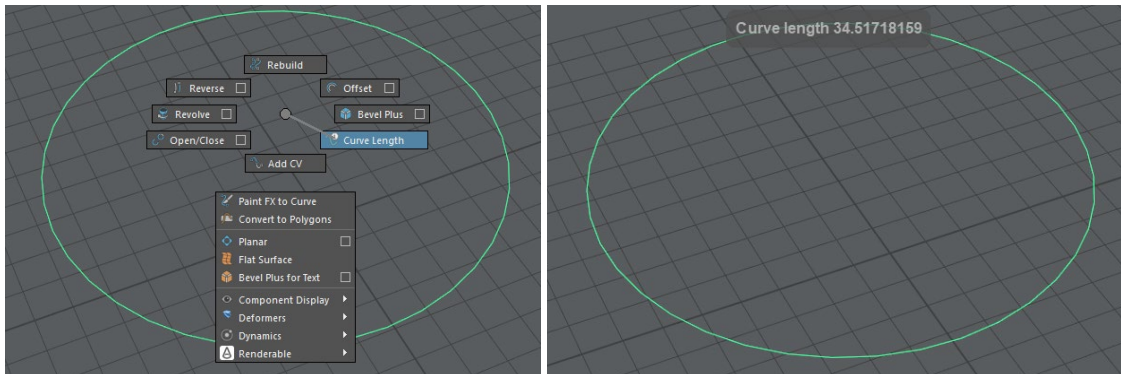




## da\_CurveLength

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

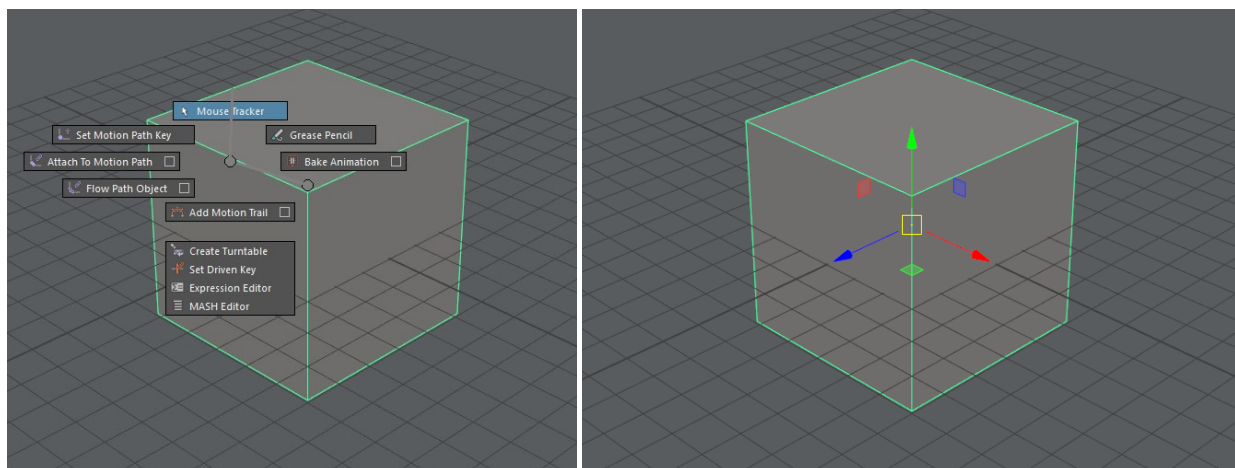
- 1) Select the curve you want to measure
- 2) **Z + LMB > Curve Length**



## da\_MouseTrack

This script tracks the mouse movement and create an animation:

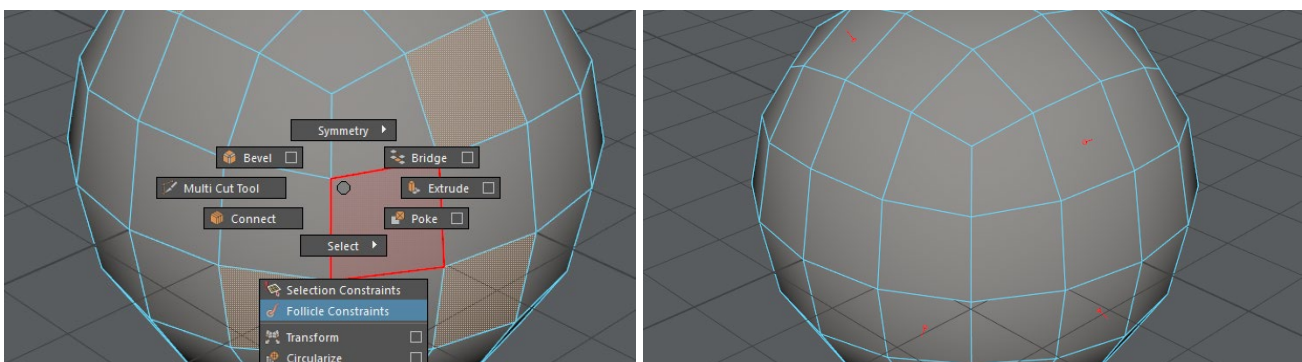
- 1) Select an object
- 2) **Z + MMB > Animation > Mouse Tracker**
- 3) Manipulate the object by using manipulators
- 4) Press **Esc** for stop the tracking



## da\_FacesFollicles

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

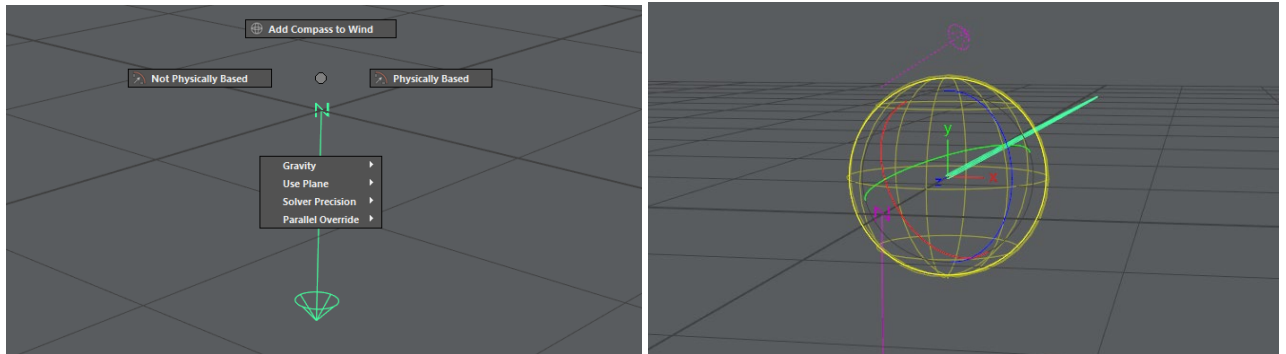
- 1) Select one or more faces
- 2) **Z + LMB > Follicle Constrains**



## da\_Compass

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

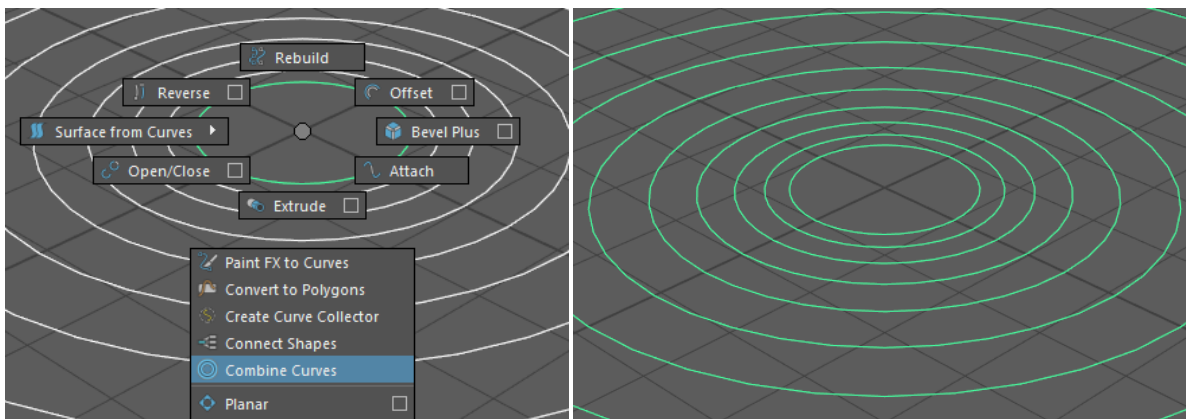
- 1) Select Nucleus icon or Air Filed icon
- 2) **Z + LMB > Compass to Wind**



## da\_CombineCurves

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

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

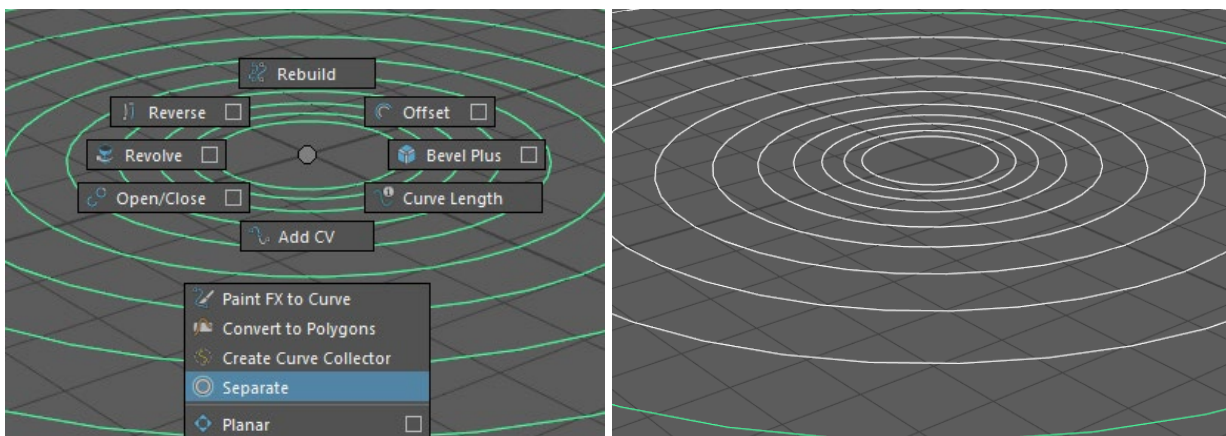


Note: do not combine already combine curves, always first separate the combined curves then combining the curves again.

## da\_SepareCurves

This script separate combined curves:

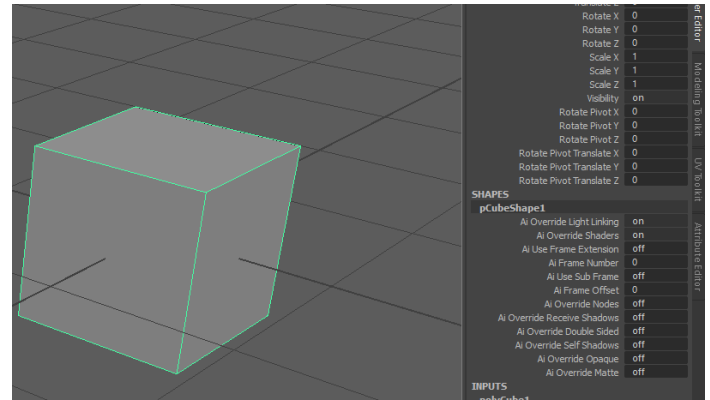
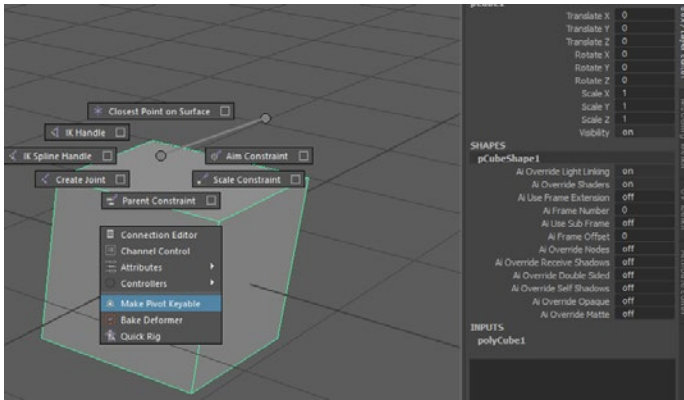
- 1) Select combined curves
- 2) **Z + LMB > Separate**



## 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





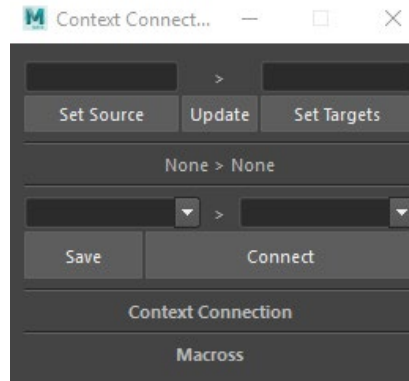
## Third-party plug-ins

*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*

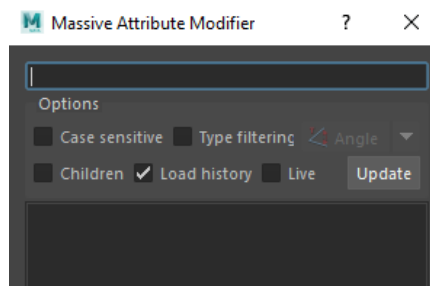
For open Context Connection UI use *CTRL + J* shortcut or *Z + MMB > Rigging > Context Connector*



### 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*

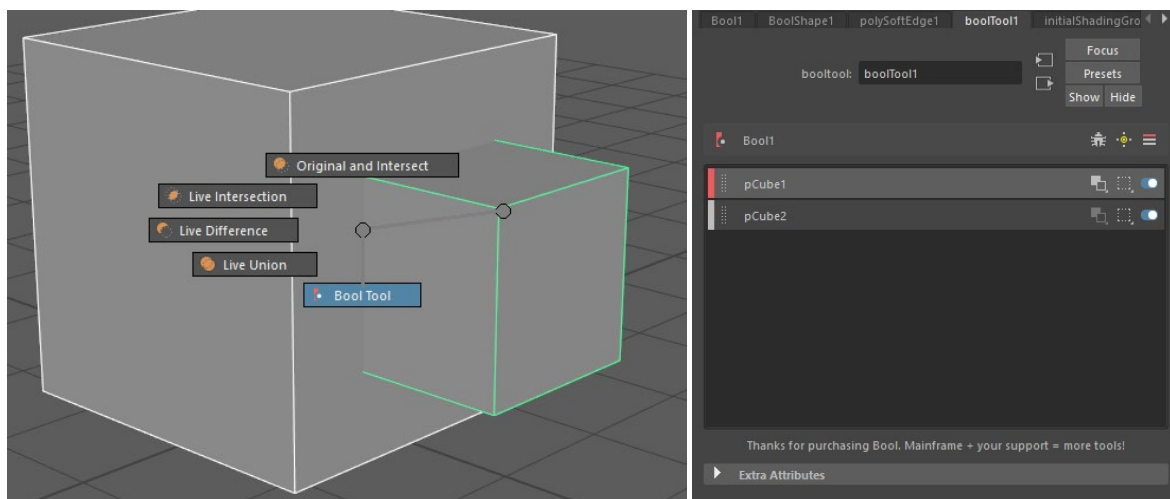
For open *Massive Attribute Editor* UI use *CTRL + K* shortcut or *Z + MMB > Rigging > Massive Attribute*



### Bool [\(Video\)](#)

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

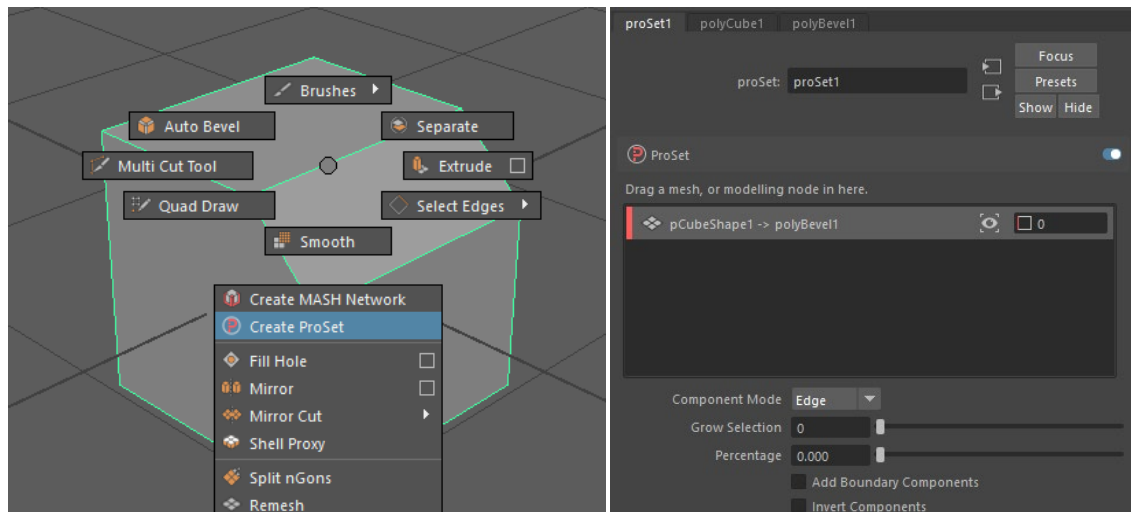
For use *Bool*, select two or more meshes and *Z + LMB > Booleans > Bool Tool*



## ProSets (Video)

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

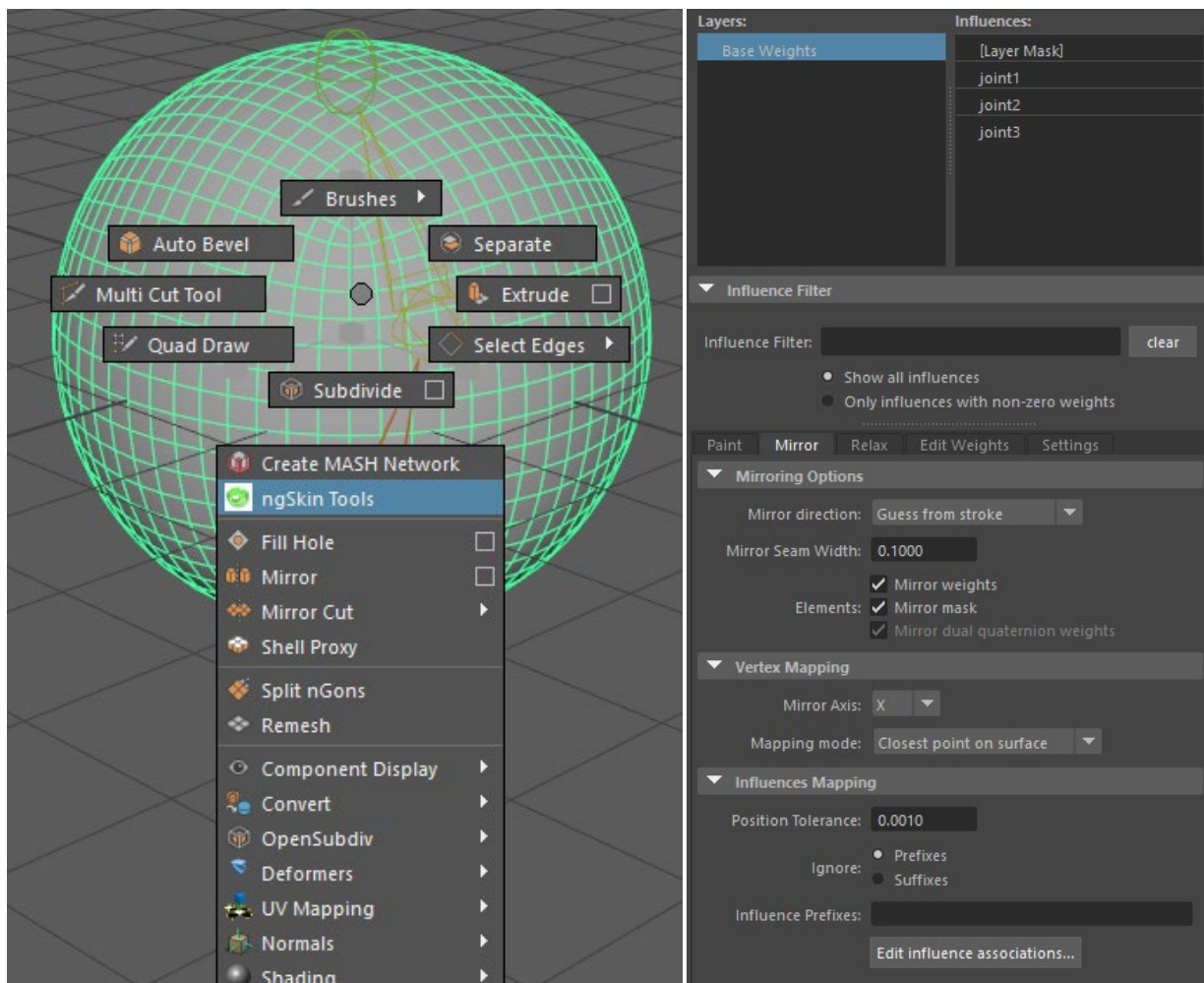
For use *ProSets*, select a mesh and **Z + LMB > Create ProSets**



## 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**



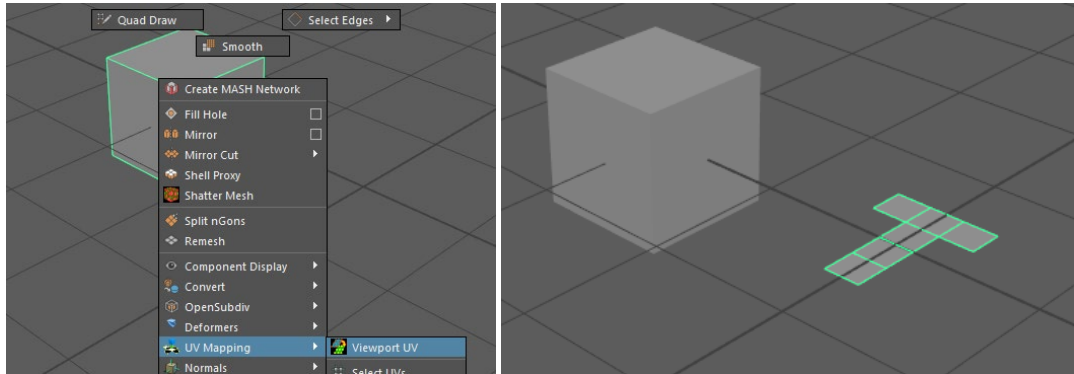
## SOuP

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:

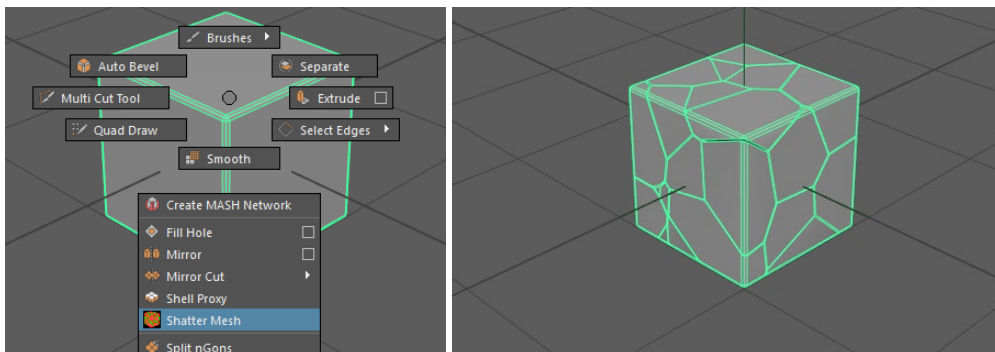
- 1) Select a mesh
- 2) *Z + LMB > UV Mapping > Viewport UV*



### da\_ShatterMesh

This script shatters a mesh:

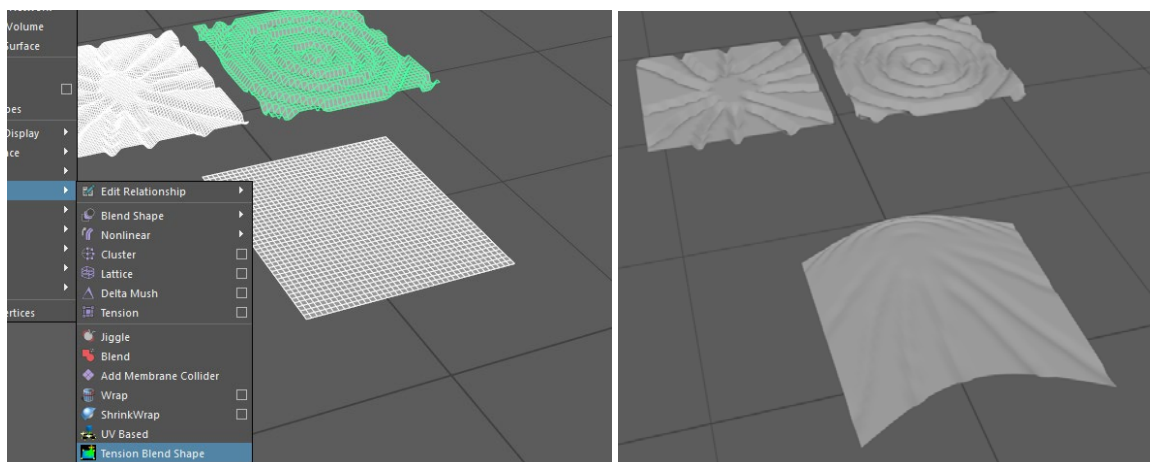
- 1) Select a mesh
- 2) *Z + LMB > Shatter Mesh*



### da\_TensionBlendShape

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

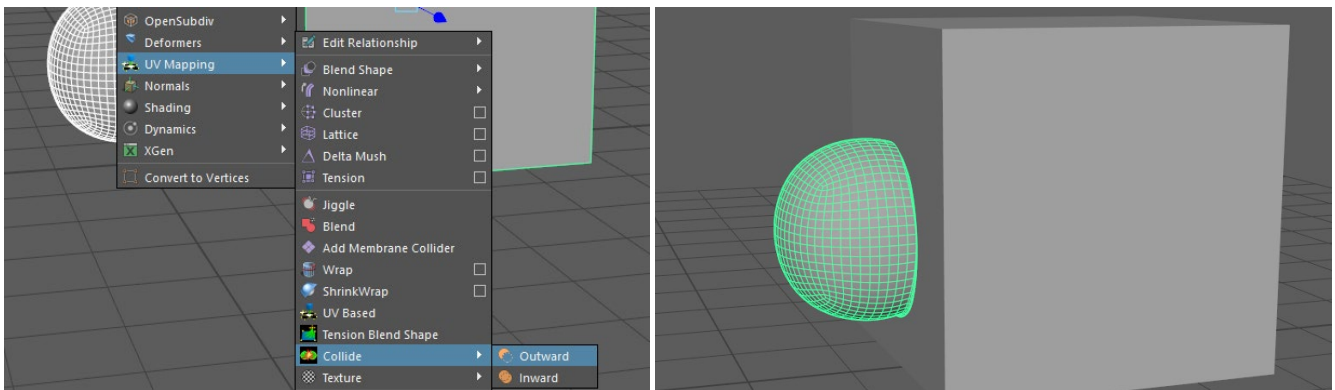
- 1) Select: a base mesh, a stretch one and a compress one
- 2) *Z + LMB > Deformers > Tension Blend Shape*



## da\_CollideOutward and da\_CollideInward

These scripts create a collision deformer between meshes:

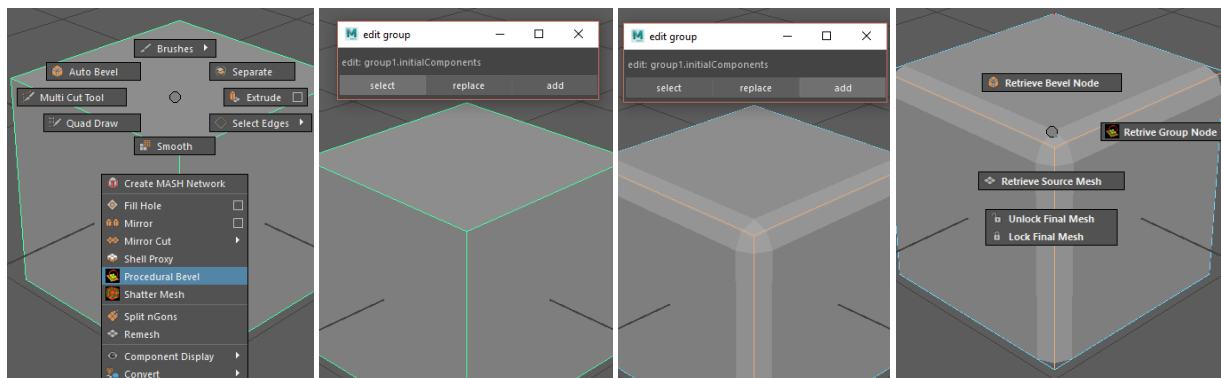
- 1) Select: a collide mesh and collision mesh
- 2) **Z + LMB** > *Deformers* > *Collide* > *Outward or Inward*



## da\_proceduralBevel

This script makes edges bevel procedural:

- 1) Select a mesh
- 2) **Z + LMB** > *Procedural Bevel*
- 3) Click on *Select* from *Edit group* window
- 4) Select edges and click on *Add* from *Edit group* window
- 5) For more option check *editGroupGeo* mesh is selected and **Z + LMB**



**Important note:** for avoid modeling problem *da\_proceduralBevel* create a copy of original mesh and reset position to world 0,0,0.

## 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 3.0.4* is tested and develop on *Autodesk Maya 2018* and *Autodesk Maya 2017 Update 4* 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](https://fb.com/May9Prefs)

YouTube channel: [youtube.com/c/May9](https://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.

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