

# MAY 9 PRO 3

USER GUIDE

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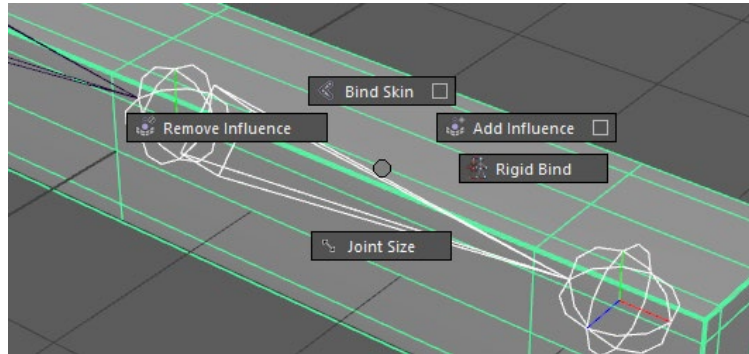
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## What is May9 Pro

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

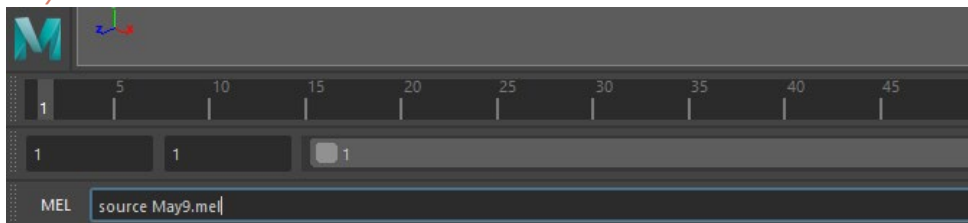
The concept of *May9 Pro* is streamline useful commands into a single keyboard button (**Z**), by predicting them from the context. For example, if you have in selection a mesh and a joint by pressing **Z + Left Mouse Button** (**MMB** from now) it's appear the follow **Marking Menu** (**MM** form now):



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.

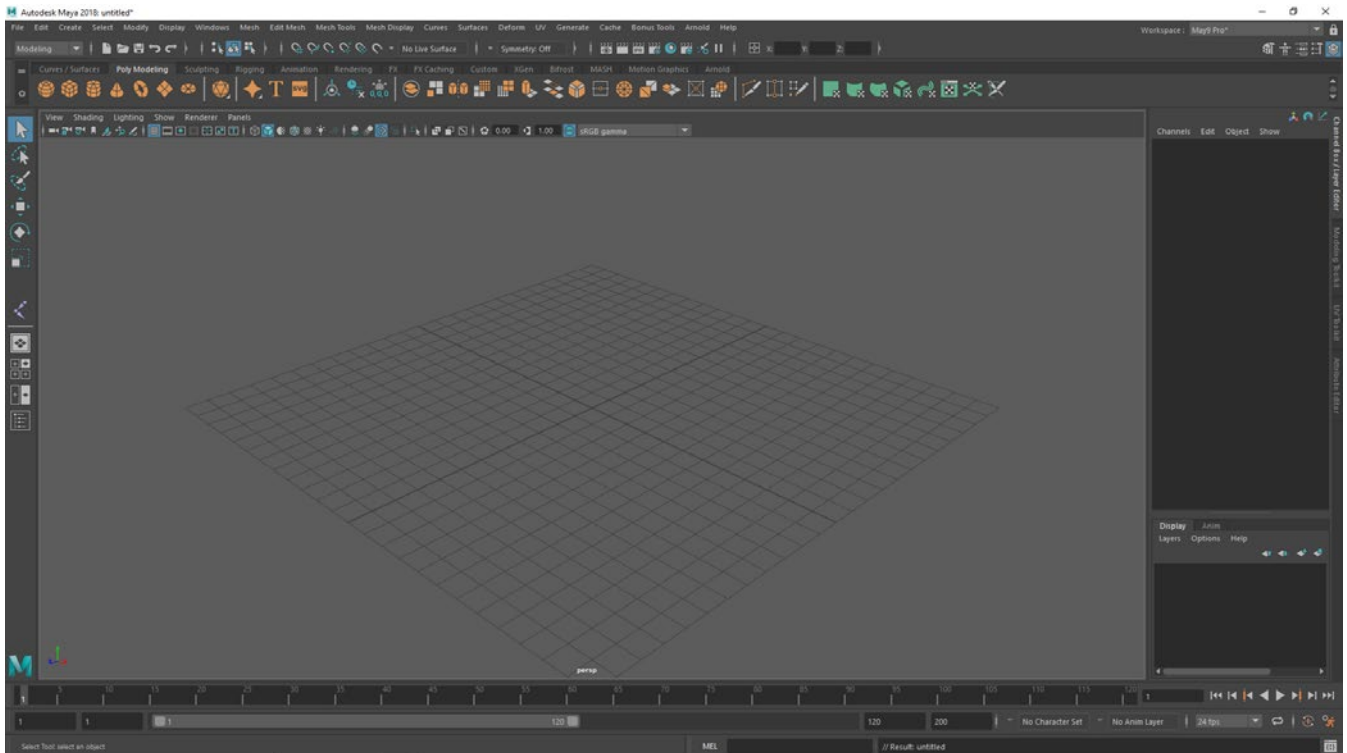
## Update from May9 Pro 1.0 or 2.0

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.

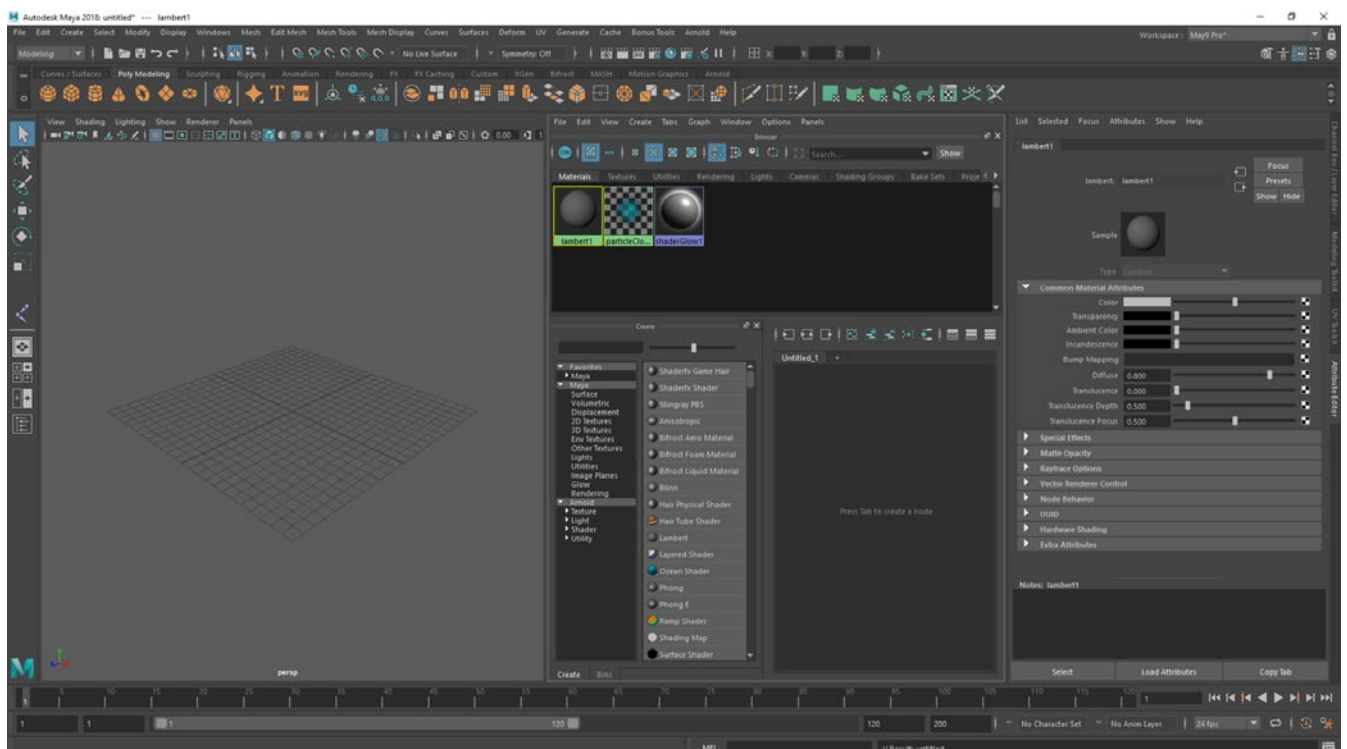


### Note

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

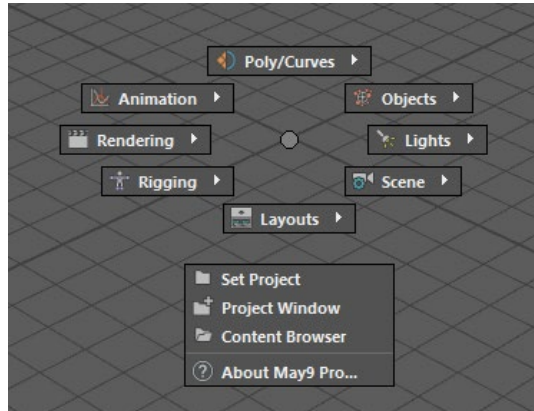
### May9 Pro Layouts

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**:



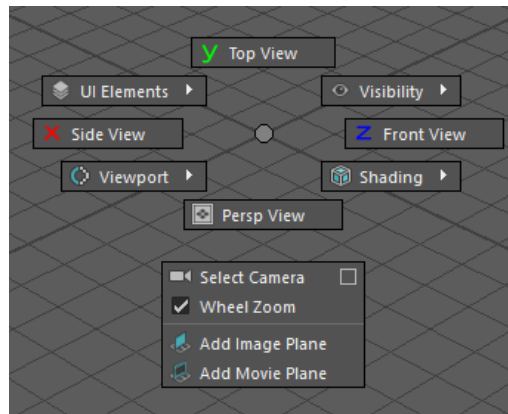
## All MM

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**:



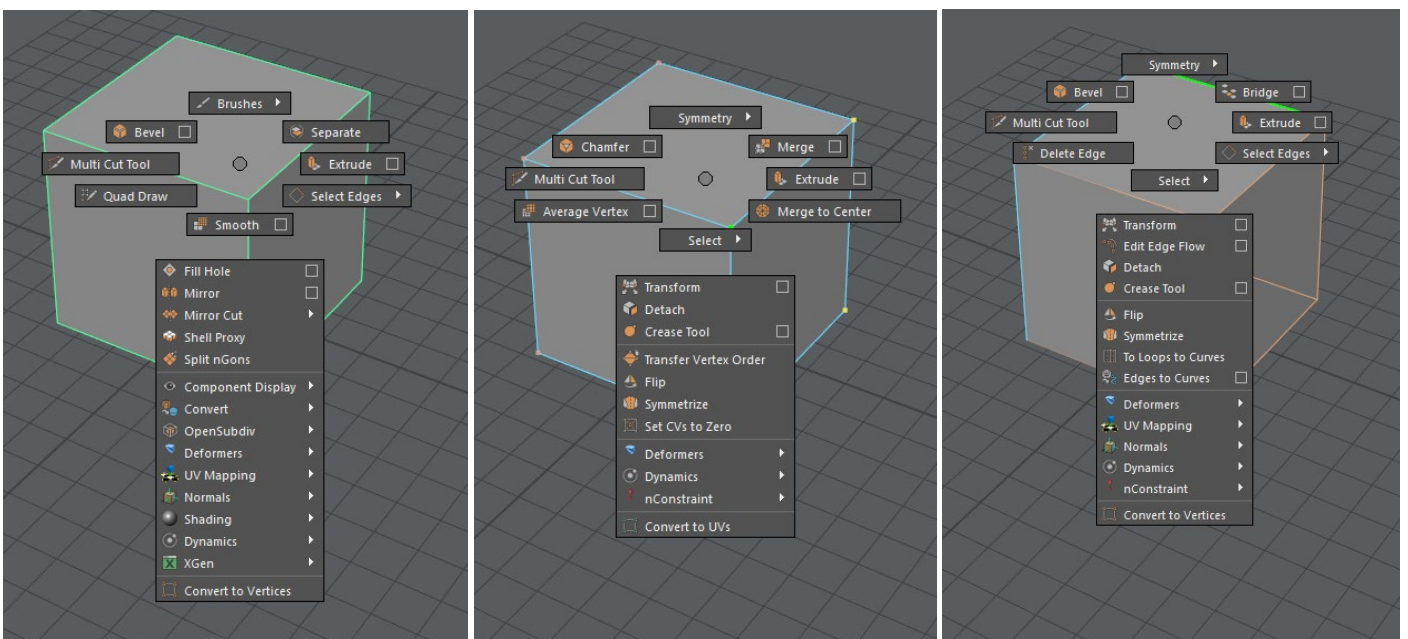
## Maya Window MM

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

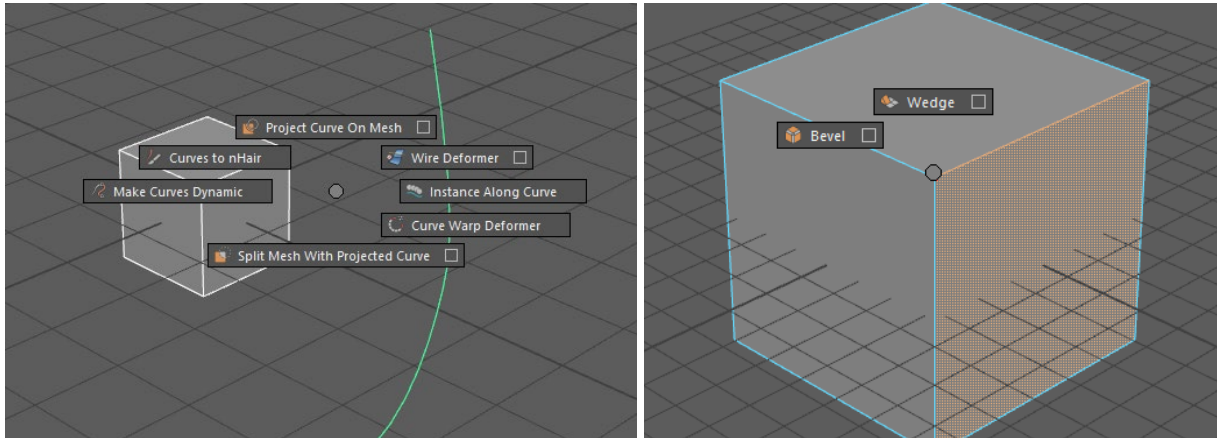
When a single object or component type is selected is possible enable the relative contextual MM by pressing **Z + LMB**:





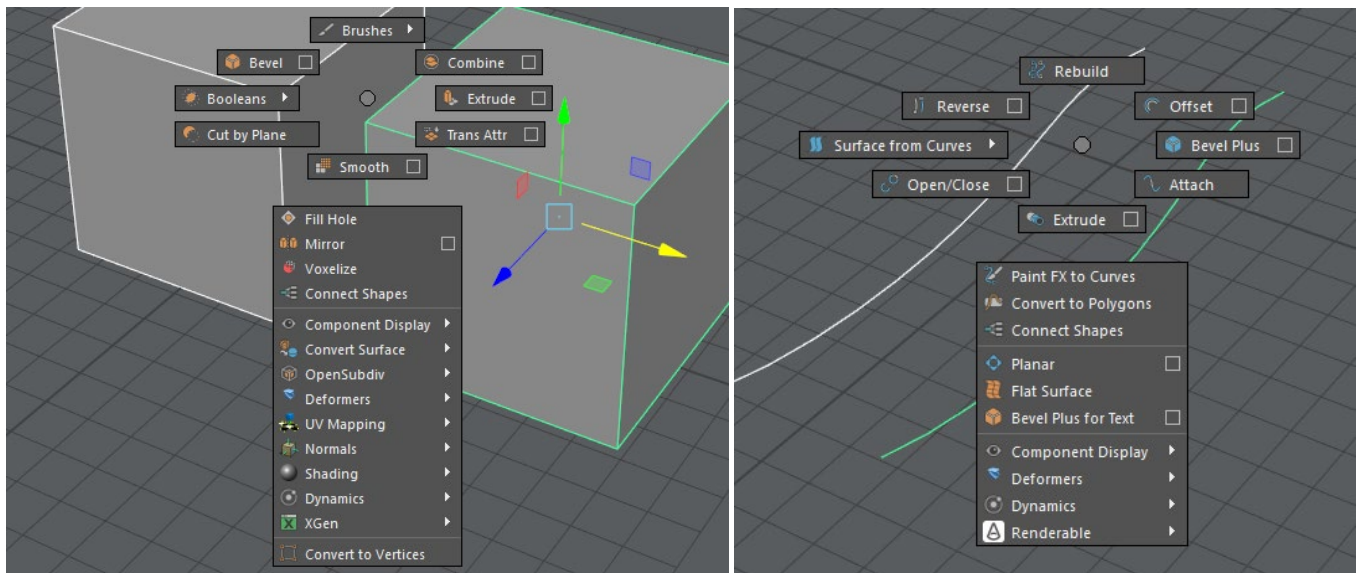
## Contextual multi selection MM

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



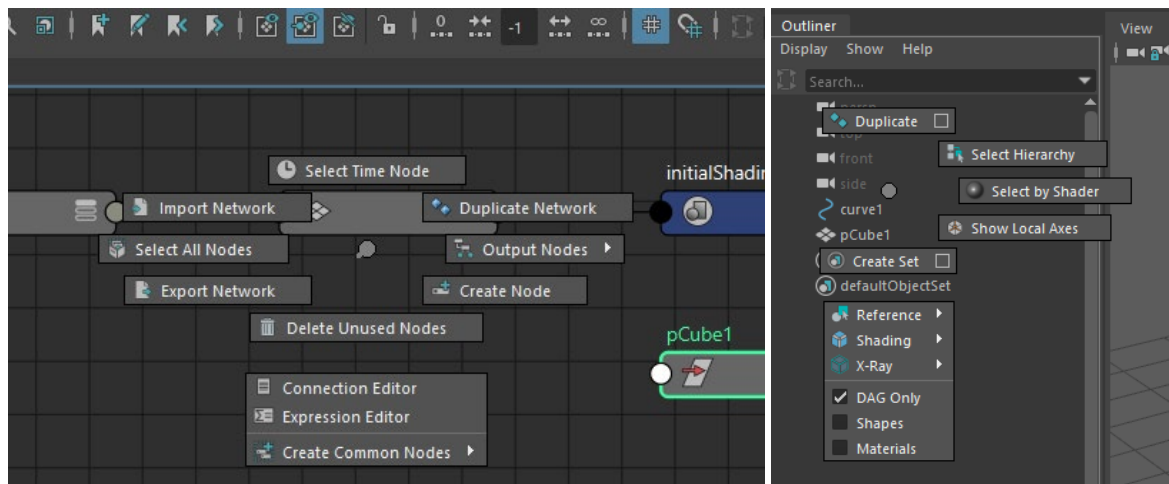
## Contextual multi selection of the same object type MM

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



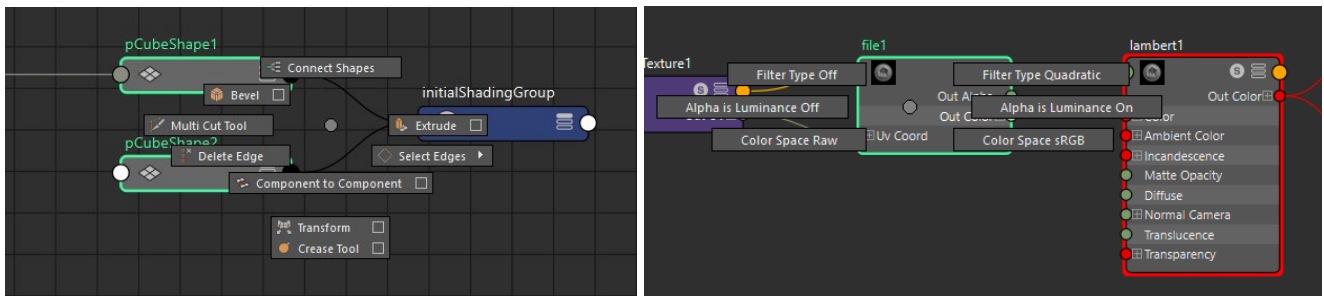
## Contextual panel MM

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



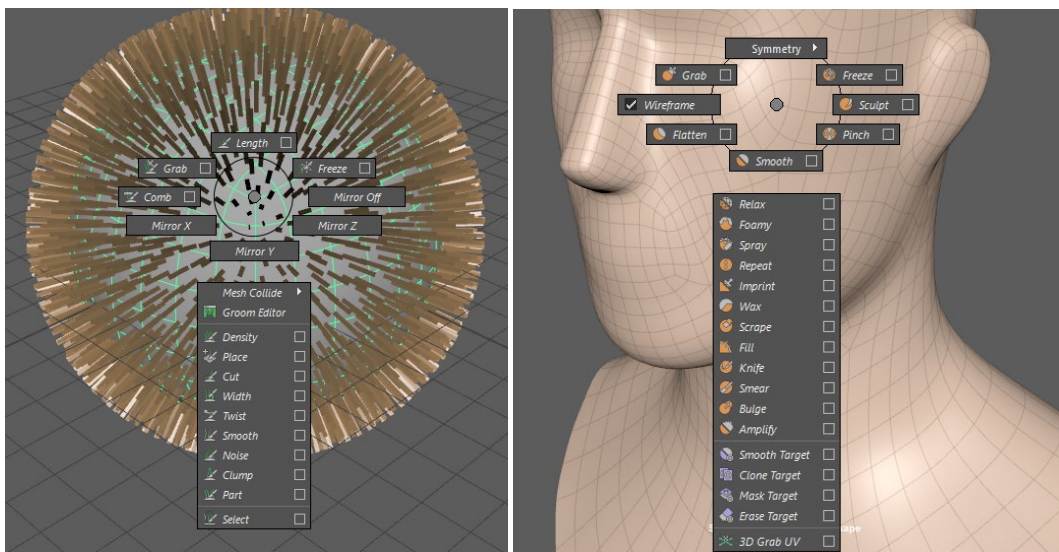
## Contextual node selection in editor panel

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 *Maya9 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

*CTRL + Enter* = Delete History and Freeze Transform

*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 + `* = 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

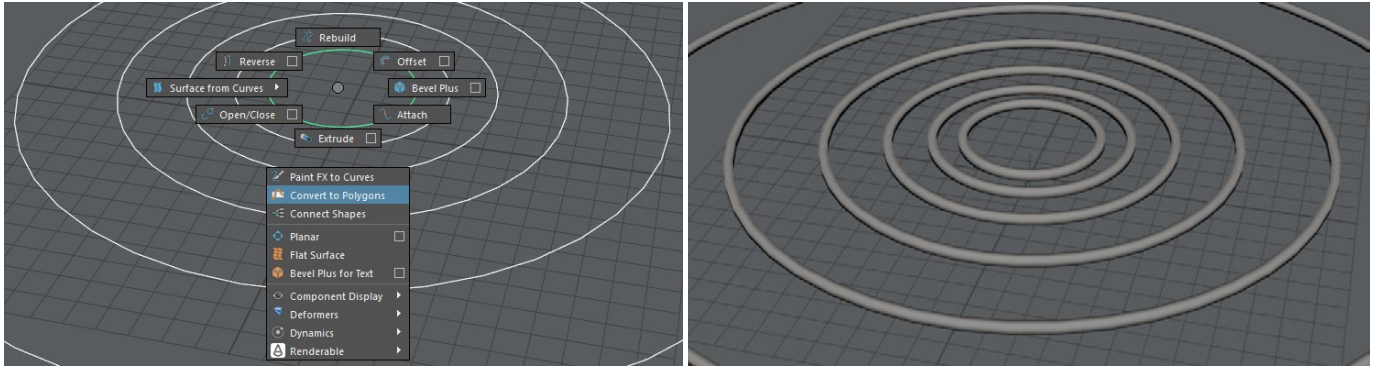
## Custom Script

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:

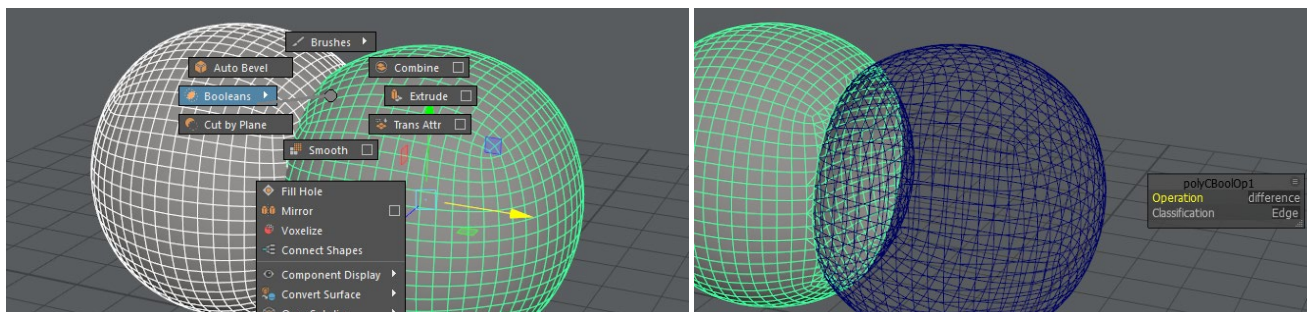
- 1) Select a curve or multiple curves
- 2) **Z + LMB > Convert to Polygons**



### da\_interactiveBooleans (video)

This script makes the Polygonal Boolean process more interactive:

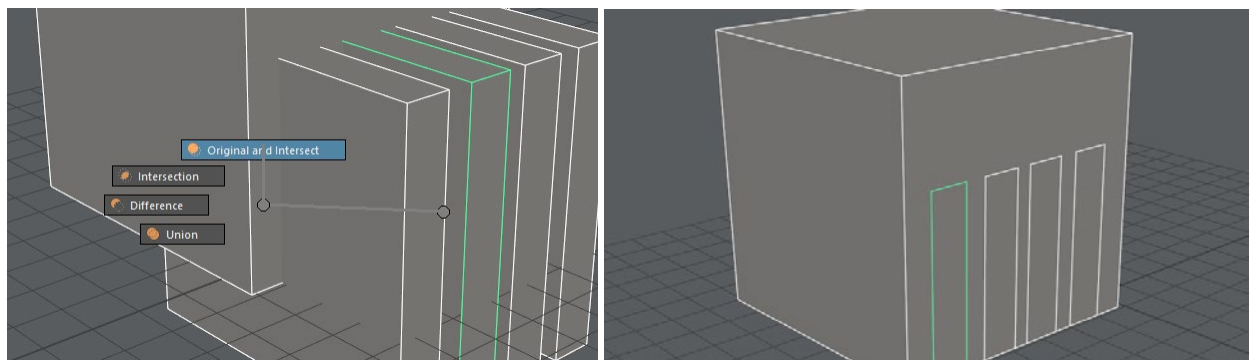
- 1) Select two or more polygons objects
- 2) **Z + LMB > Booleans**



### da\_BooleanFullIntersect (video)

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

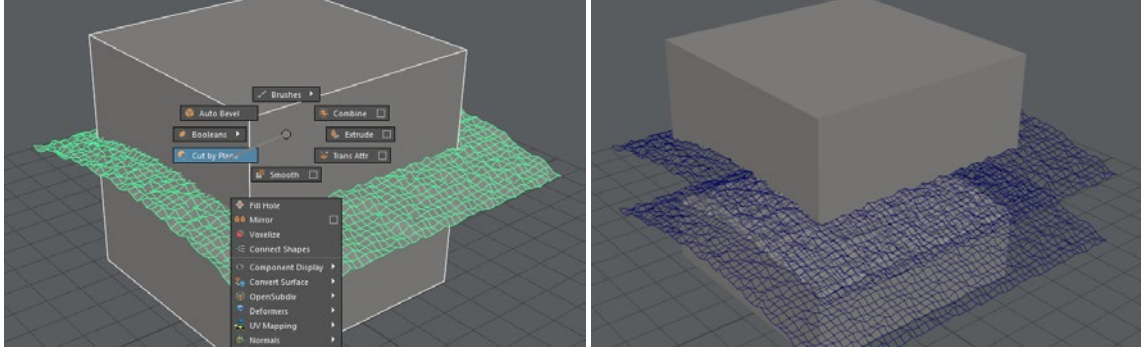
- 1) Select first the main object and after the cutters ones
- 2) **Z + LMB > Booleans > Original and Intersect**



### da\_PlaneCutter (video)

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

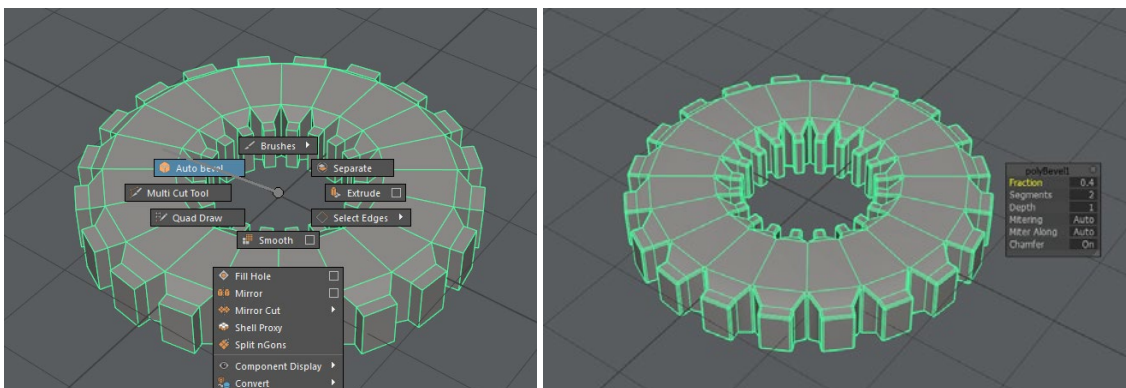
- 1) Select first the main object and after the cutter ones
- 2) **Z + LMB > Cut by Plane**
- 3) Select the single or double operator
- 4) Move the cutter or the cutters plane



### da\_AutoBevel (video)

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

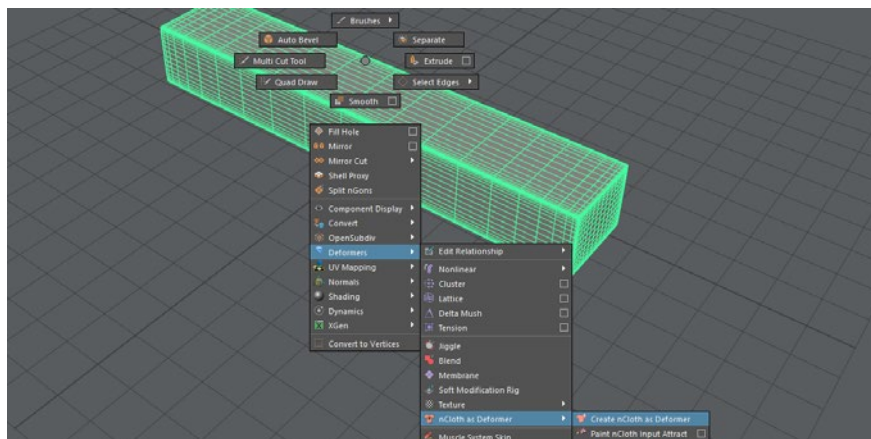
- 1) Select a Polygon
- 2) **Z + LMB > Auto Bevel**



### 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**

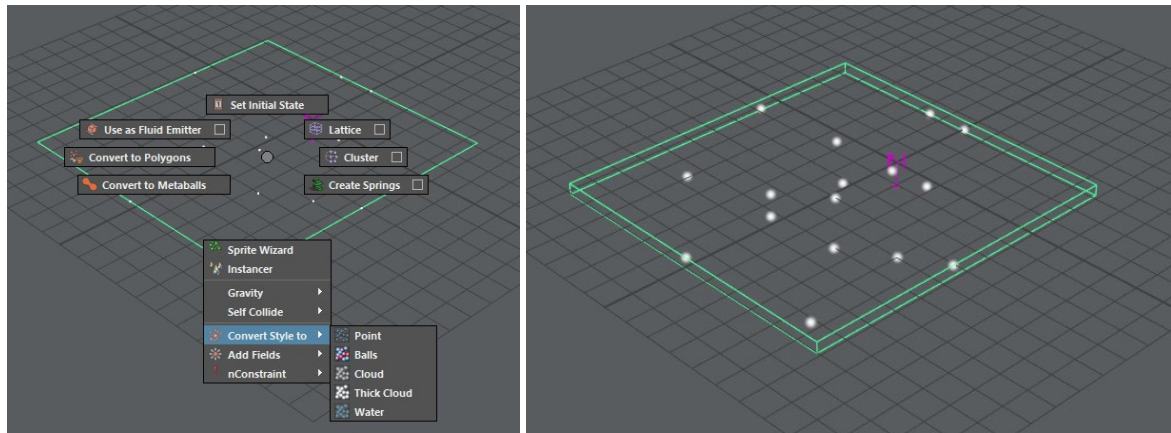




### da\_nParticleConverter [\(video\)](#)

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

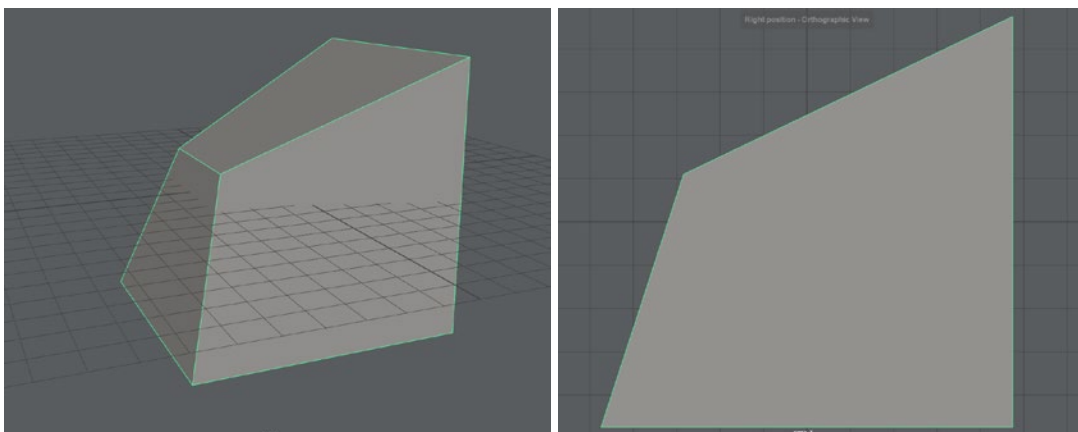
- 1) Create some particle
- 2) **Z + LMB** > *Convert Style to*



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

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

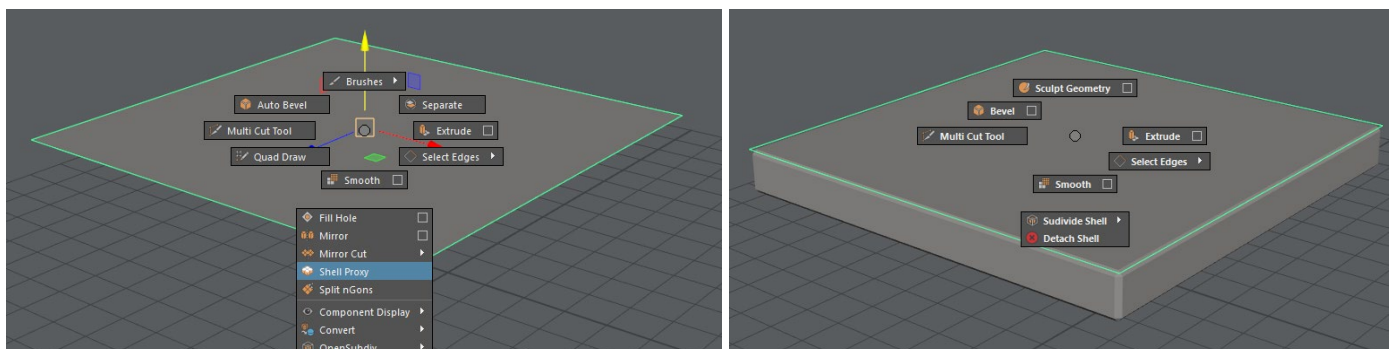
- 1) Move camera
- 2) **Press ALT + Enter**



### 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**

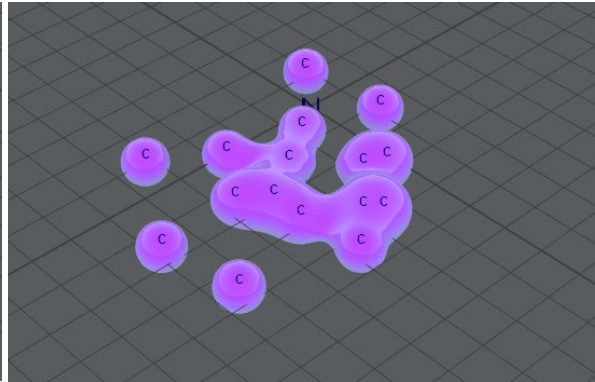
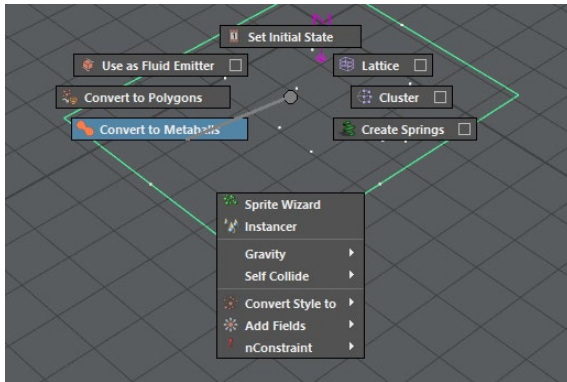




### da\_ConvertToMetaballs [\(video\)](#)

This script converts particles to polygonal Metaballs:

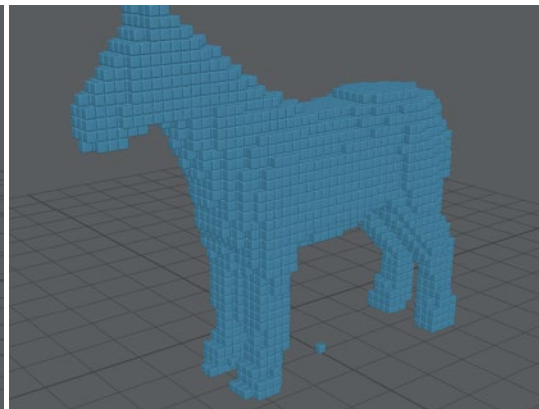
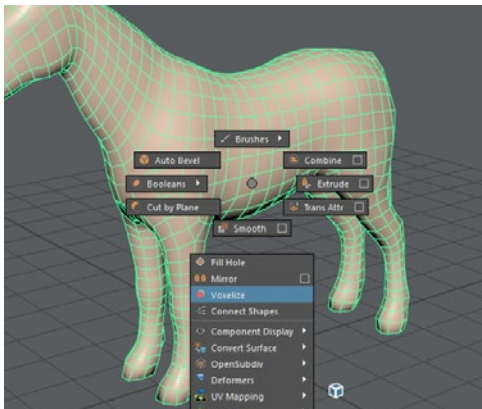
- 1) Select some particles
- 2) **Z + LMB > Convert to Metaballs**
- 3) Move single metaballs by selecting relative cluster



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

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

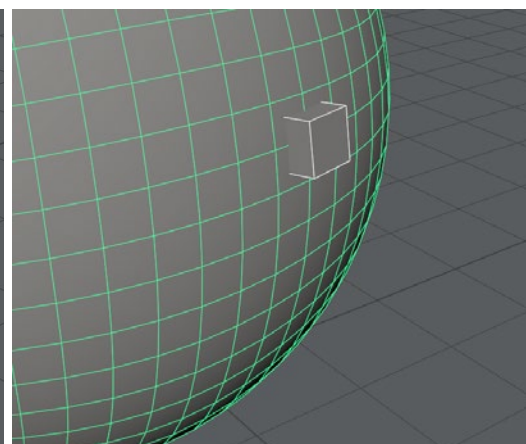
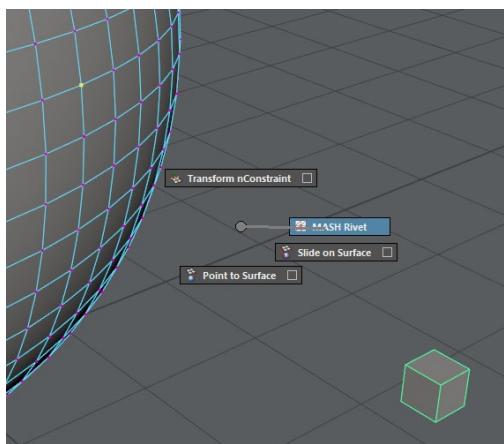
- 1) Select first the filler mesh then the volume mesh
- 2) **Z + LMB > Voxelize in a Volume**



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

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

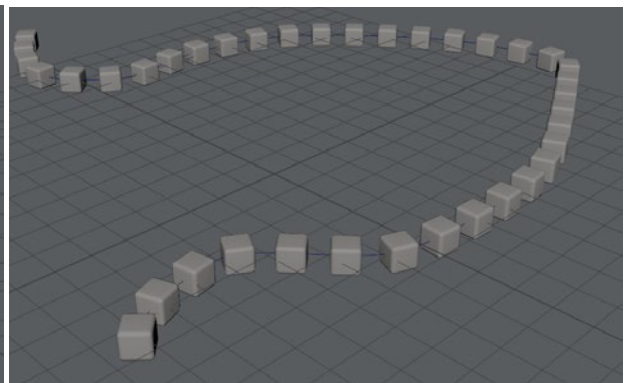
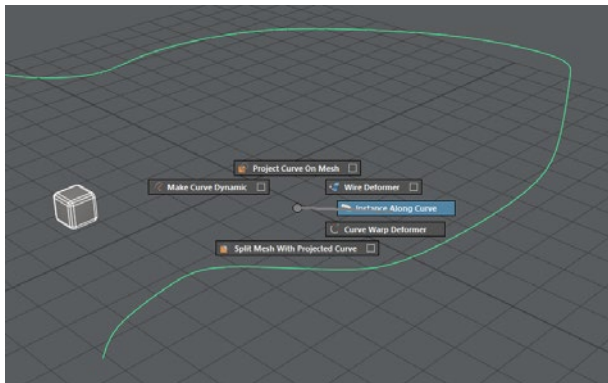
- 1) Select single or multiple components then a polygon
- 2) **Z + LMB > Rivet**



### da\_CurveDistributionMash (video)

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

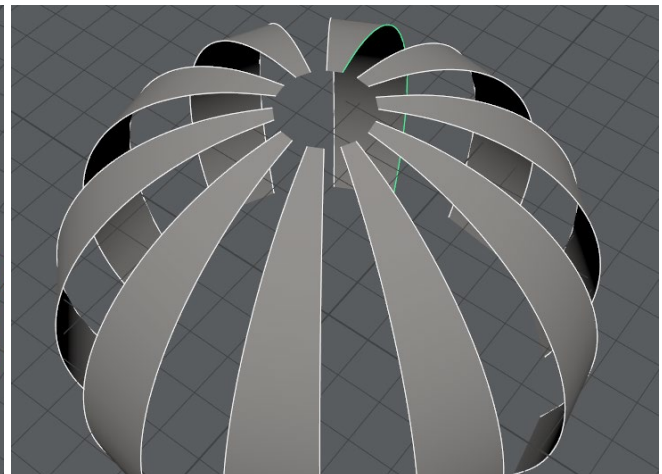
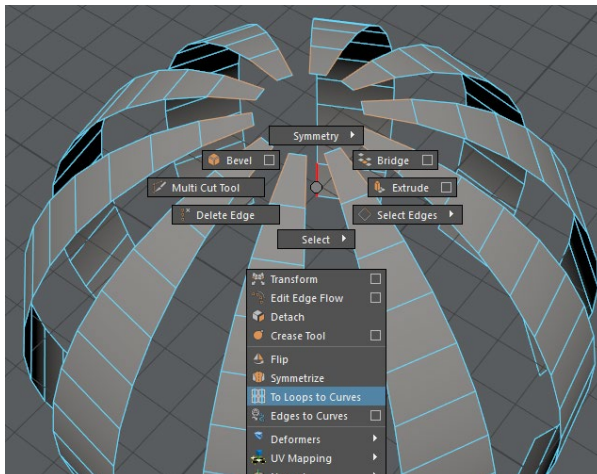
- 1) Select a polygon and then a curve
- 2) **Z + LMB > Instance Along Curve**



### 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:

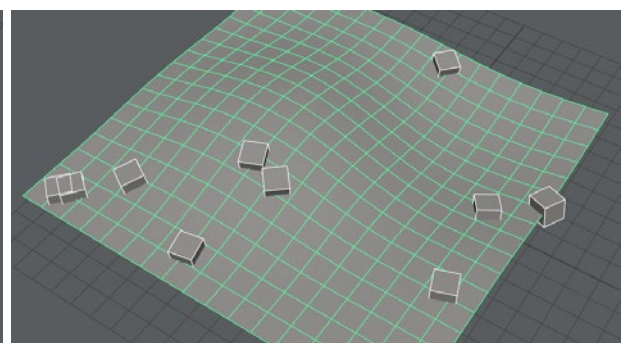
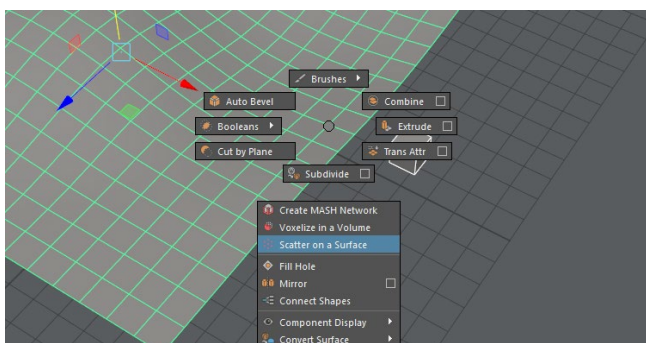
- 1) Select an edge for loop, sometimes this is easier to do in UV texture editor
- 2) **Z + LMB > To Loops to Curves**



### 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**

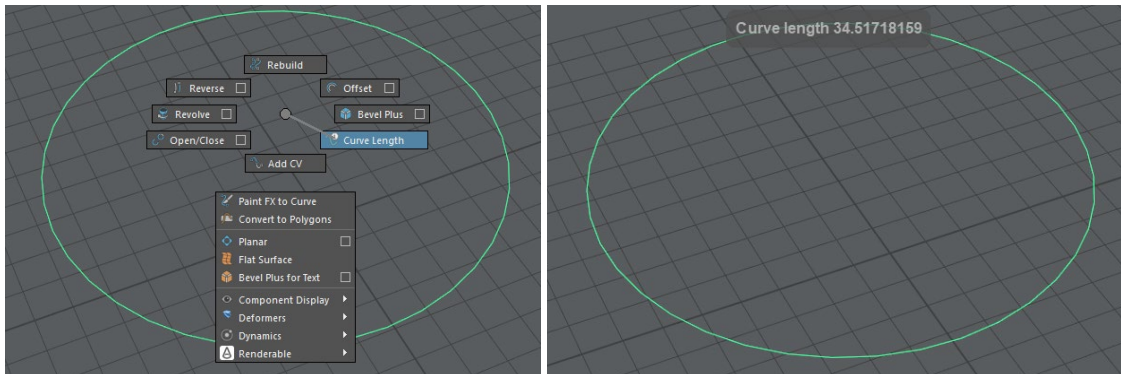




## da\_CurveLength

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

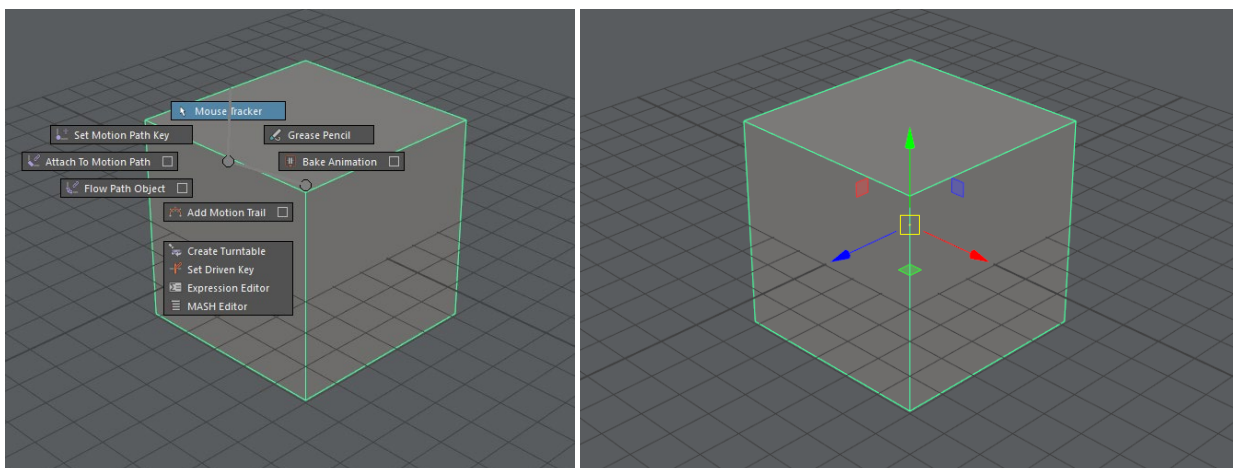
- 1) Select the curve you want to measure
- 2) **Z + LMB > Curve Length**



## da\_MouseTrack

This script tracks the mouse movement and create an animation:

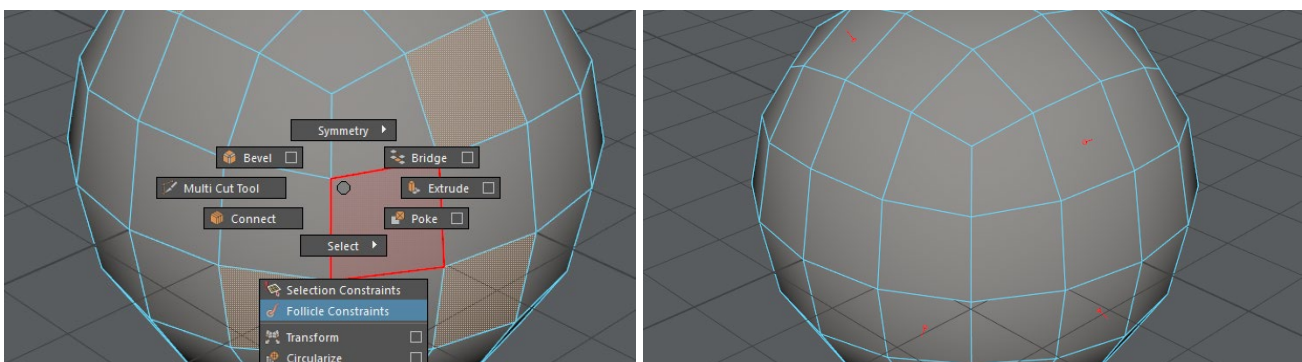
- 1) Select an object
- 2) **Z + MMB > Animation > Mouse Tracker**
- 3) Manipulate the object by using manipulators
- 4) Press **Esc** for stop the tracking



## da\_FacesFollicles

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

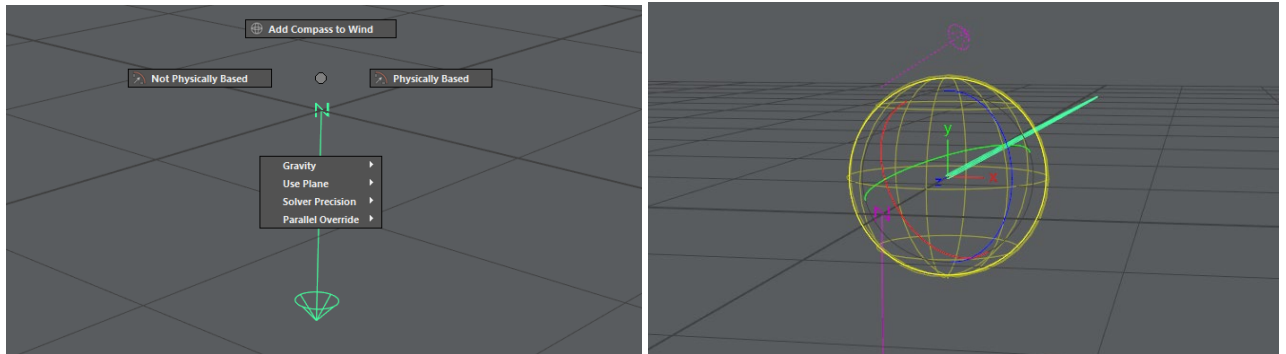
- 1) Select one or more faces
- 2) **Z + LMB > Follicle Constrains**



## da\_Compass

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

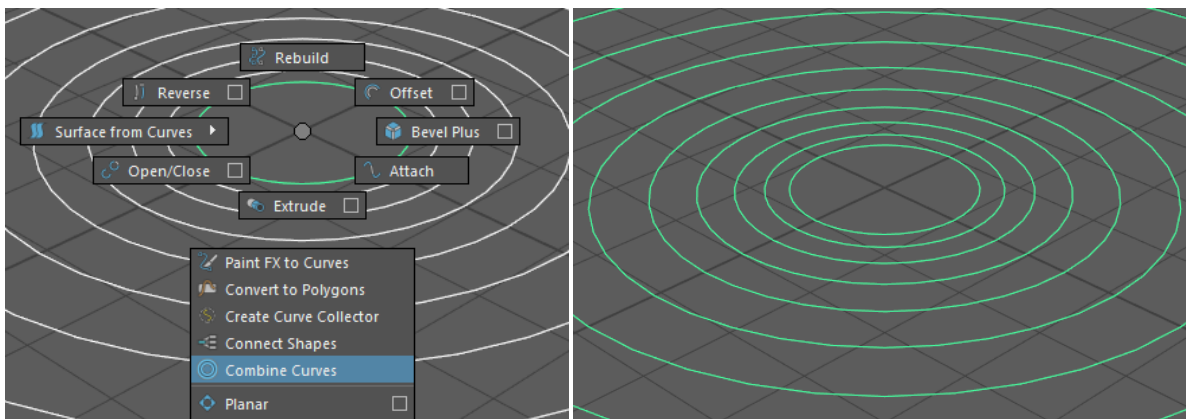
- 1) Select Nucleus icon or Air Filed icon
- 2) **Z + LMB > Compass to Wind**



## da\_CombineCurves

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

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

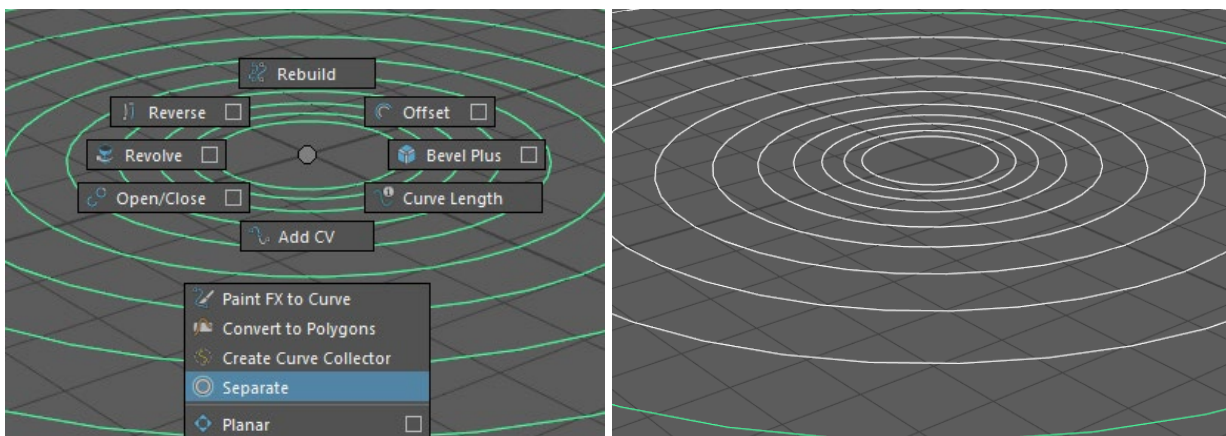


Note: do not combine already combine curves, always first separate the combined curves then combining the curves again.

## da\_SepareCurves

This script separate combined curves:

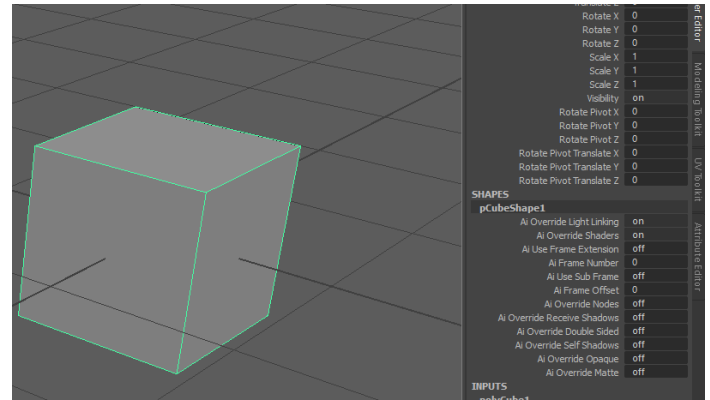
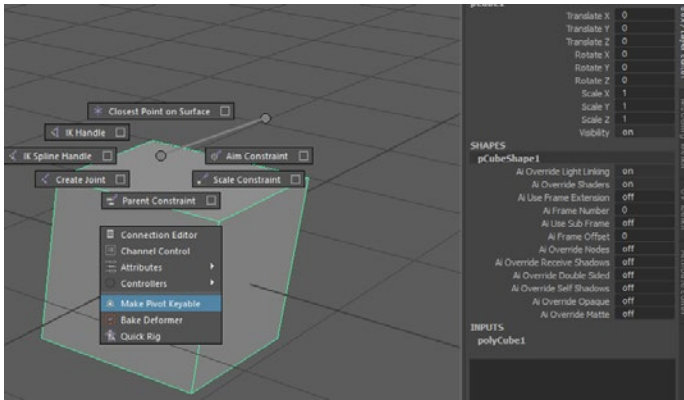
- 1) Select combined curves
- 2) **Z + LMB > Separate**



## 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





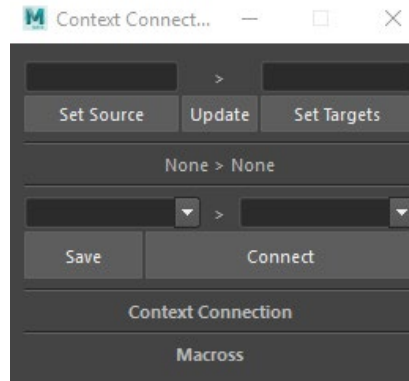
## Third-party plug-ins

*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*

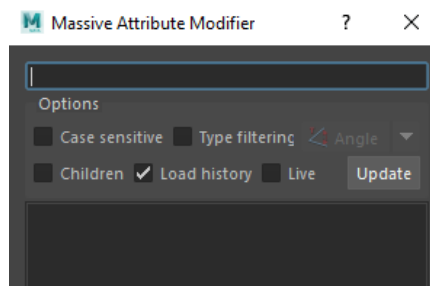
For open Context Connection UI use *CTRL + J* shortcut or *Z + MMB > Rigging > Context Connector*



### 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*

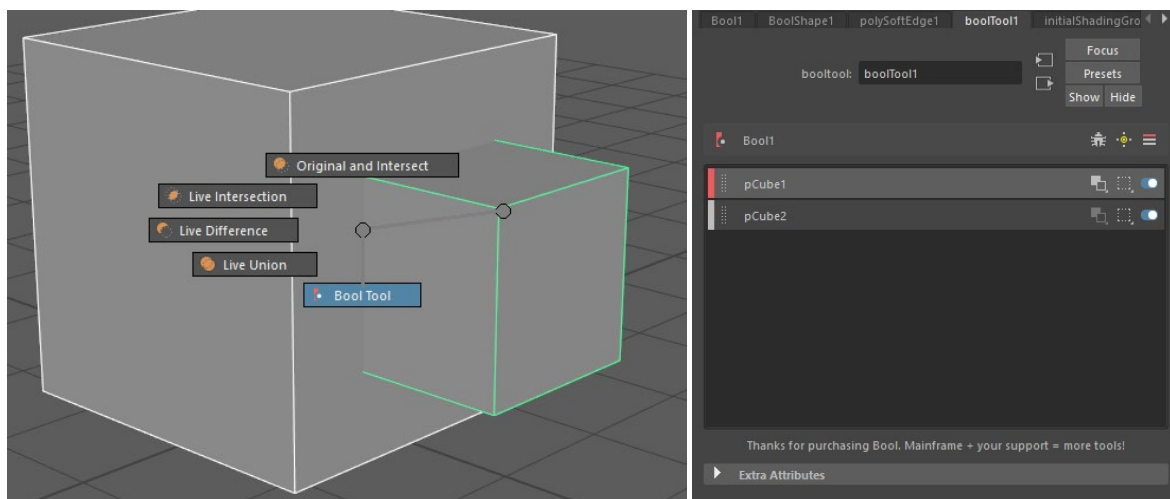
For open *Massive Attribute Editor* UI use *CTRL + K* shortcut or *Z + MMB > Rigging > Massive Attribute*



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

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

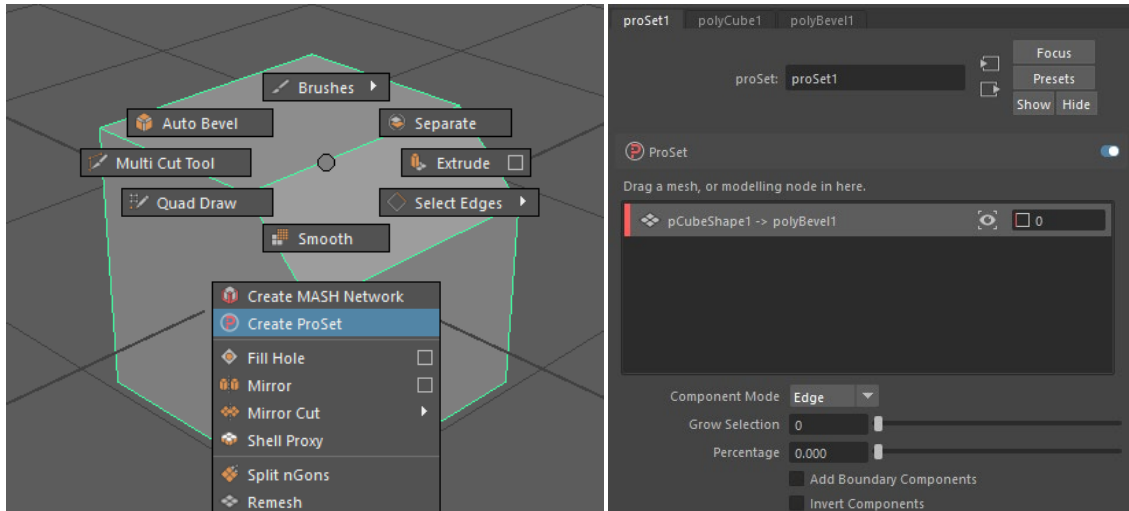
For use *Bool*, select two or more meshes and *Z + LMB > Booleans > Bool Tool*



## ProSets (Video)

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

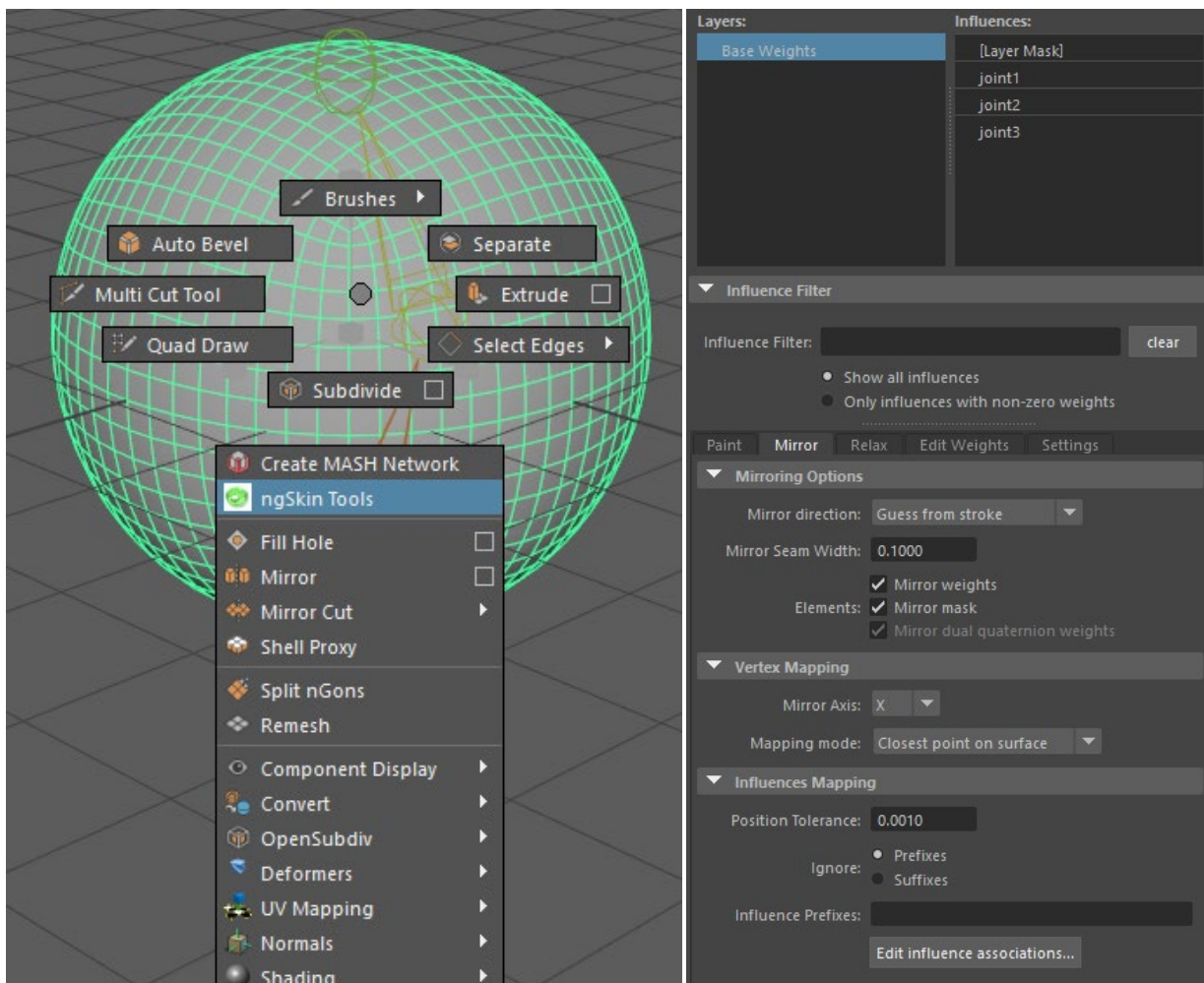
For use *ProSets*, select a mesh and **Z + LMB > Create ProSets**



## 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**



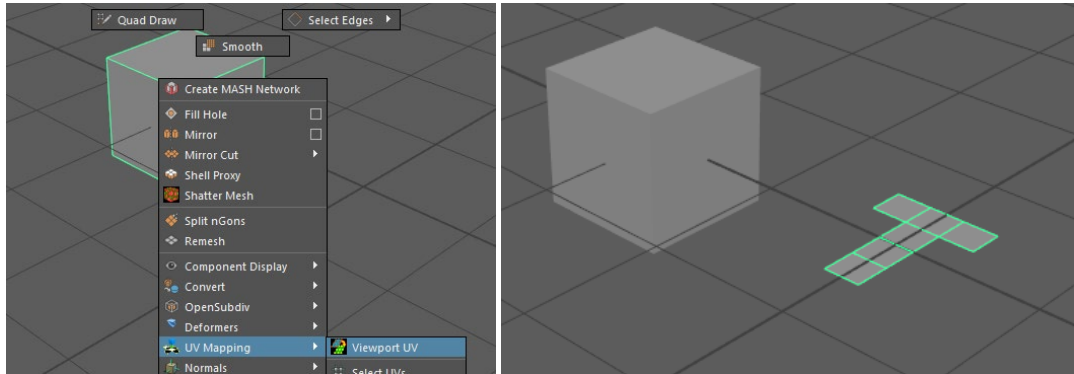
## SOuP

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:

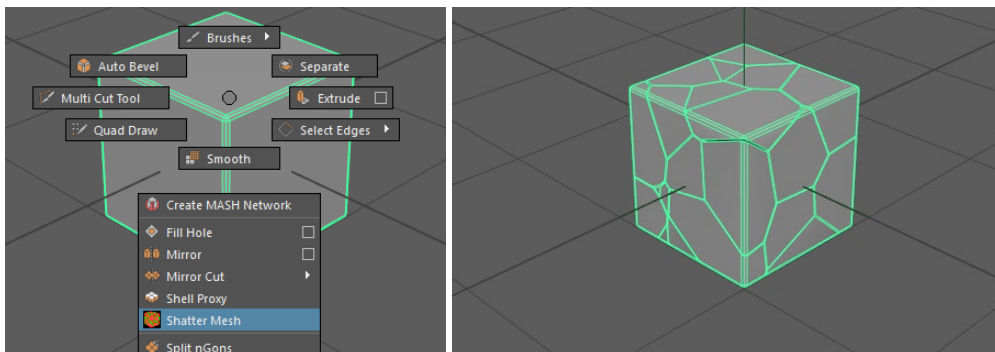
- 1) Select a mesh
- 2) *Z + LMB > UV Mapping > Viewport UV*



### da\_ShatterMesh

This script shatters a mesh:

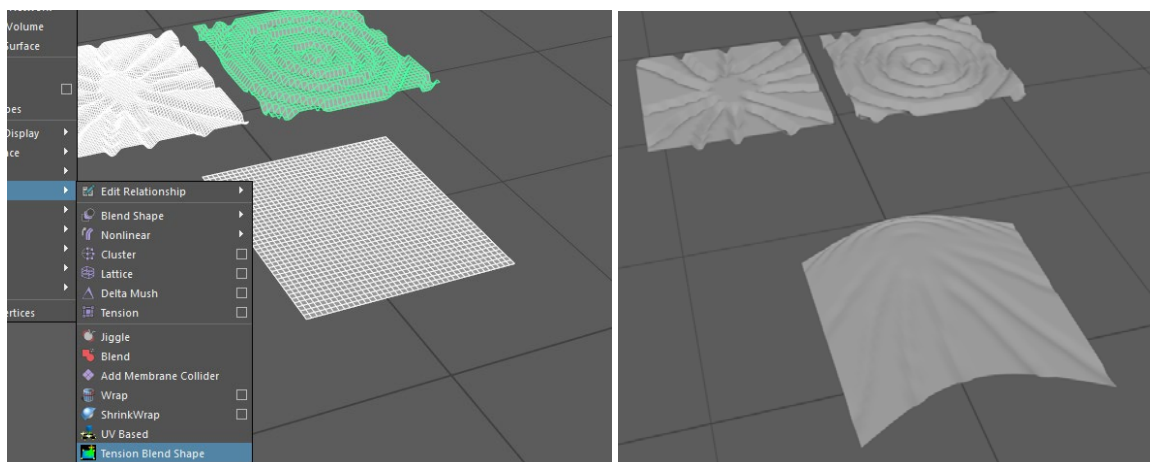
- 1) Select a mesh
- 2) *Z + LMB > Shatter Mesh*



### da\_TensionBlendShape

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

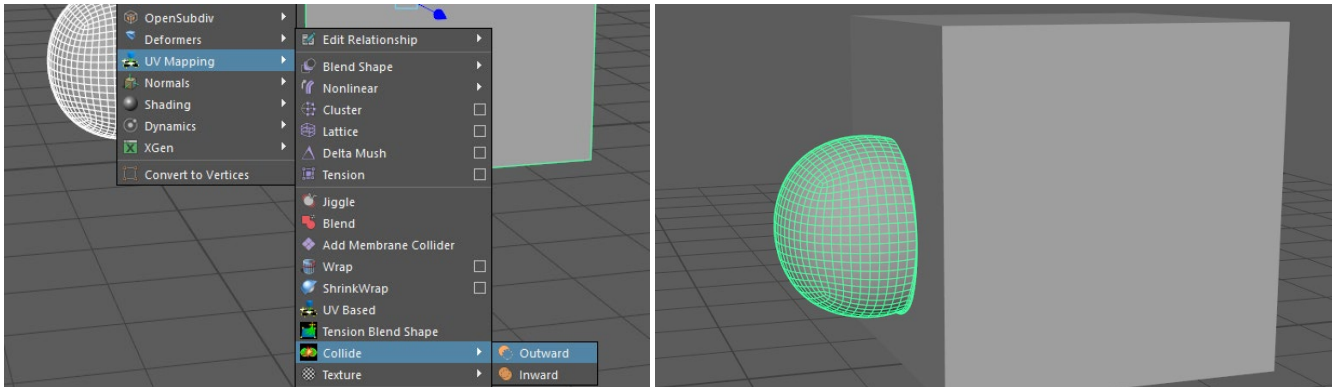
- 1) Select: a base mesh, a stretch one and a compress one
- 2) *Z + LMB > Deformers > Tension Blend Shape*



## da\_CollideOutward and da\_CollideInward

These scripts create a collision deformer between meshes:

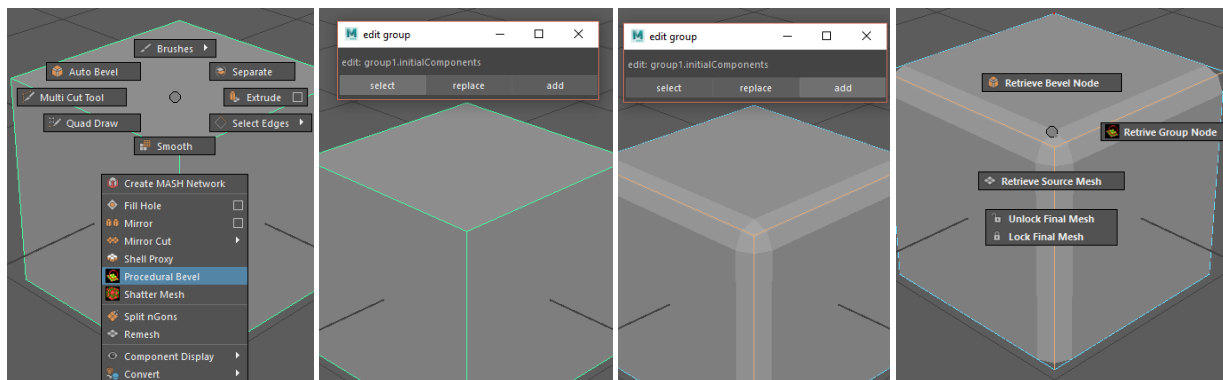
- 1) Select: a collide mesh and collision mesh
- 2) **Z + LMB** > *Deformers* > *Collide* > *Outward or Inward*



## 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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