# May9 Pro 3.0 User Guide

What is May9 Pro

May9 Pro is an alternative user experience for *Autodesk Maya*, is designed to improve the daily workflow and minimize the needed to learn the native position of commands.

The main 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 this *Marking Menu* (*MM* form now):
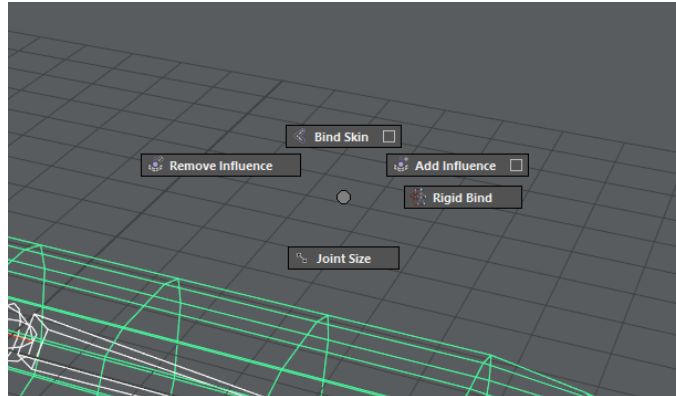
In addition to the contextual workflow describe above, *May9 Pro* contain custom preferences, layouts and hotkeys.

May9 Pro is targeted to anyone, from beginner to expert, from schools to studios.

May9 Pro is an open source project based on MEL and released under MIT license. In addition, *May9 Pro* contains Andrey Menshikov' s *MMtoKey* to manage Marking Menus.

Installation

Windows
1) If is open close Maya
2) Copy folder 2017 or 2018 of this archive in: *\Users\<username>\Documents\maya*
3) Do one of the following action
    a. Run: *source May9.mel*
    b. Or enable under *Windows > Settings/Prefereces > Plug-in Manager*: *May9_Pro.py* and *MMtoKey.py*

OS X
1) If is open close Maya
2) Copy folder 2017 or 2018 of this archive in: */Users/<username>/Library/Preferences/Autodesk/maya/*
3) Do one of the following action
    a. Run: *source May9.mel*
    b. Or enable under *Windows > Settings/Prefereces > Plug-in Manager*: *May9_Pro.py* and *MMtoKey.py*
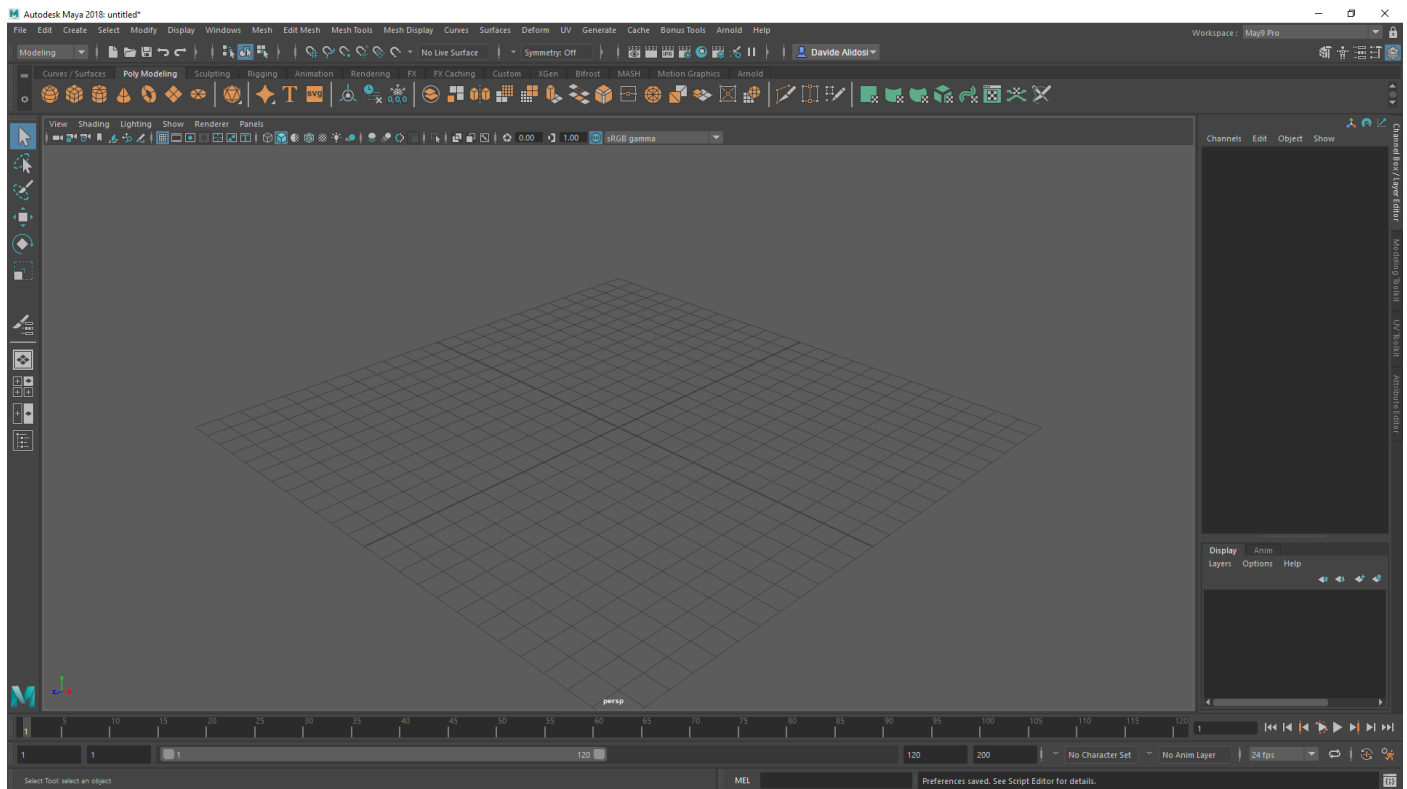
Linux
1) If is open close Maya
2) Copy folder 2017 or 2018 of this archive in: *~<username>/maya/*
3) Do one of the following action
    a. Run: *source May9.mel*
    b. Or enable under *Windows > Settings/Prefereces > Plug-in Manager*: *May9_Pro.py* and *MMtoKey.py*

Basic usage

May9 Pro Workspace

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

An important note: *the feature set of May9 Pro work only inside of it's workspace*.
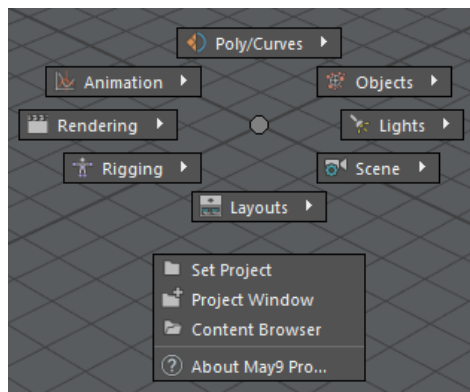
May9 Pro Layouts

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*:
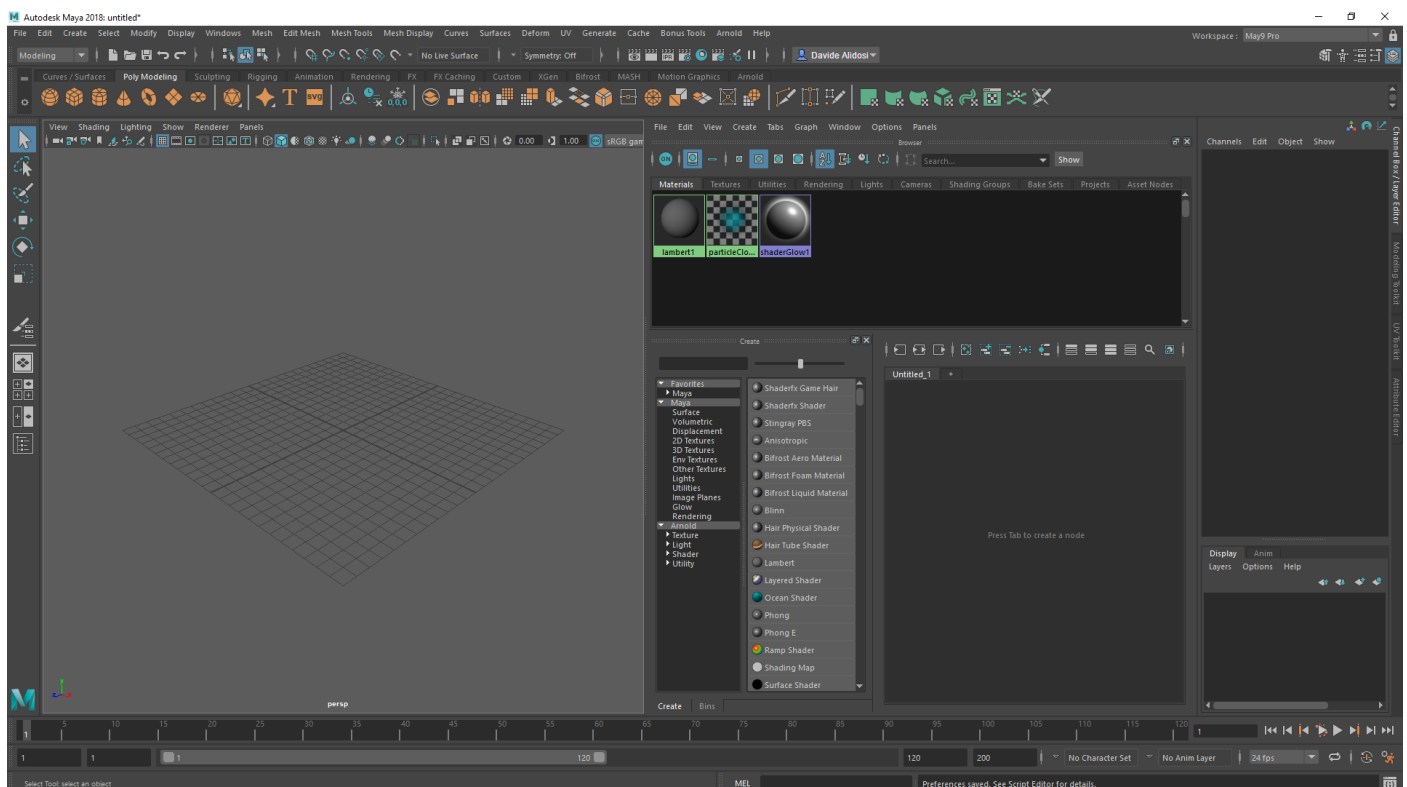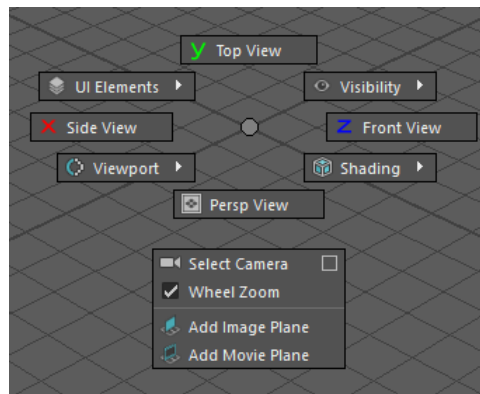
All MM

The *All Marking Menu* (menu_All_MM.mel) is the foundation of *May9 Pro*, is available if there aren't supported Tools active by press *Z + Middle Mouse Button* (from now *MMB*):
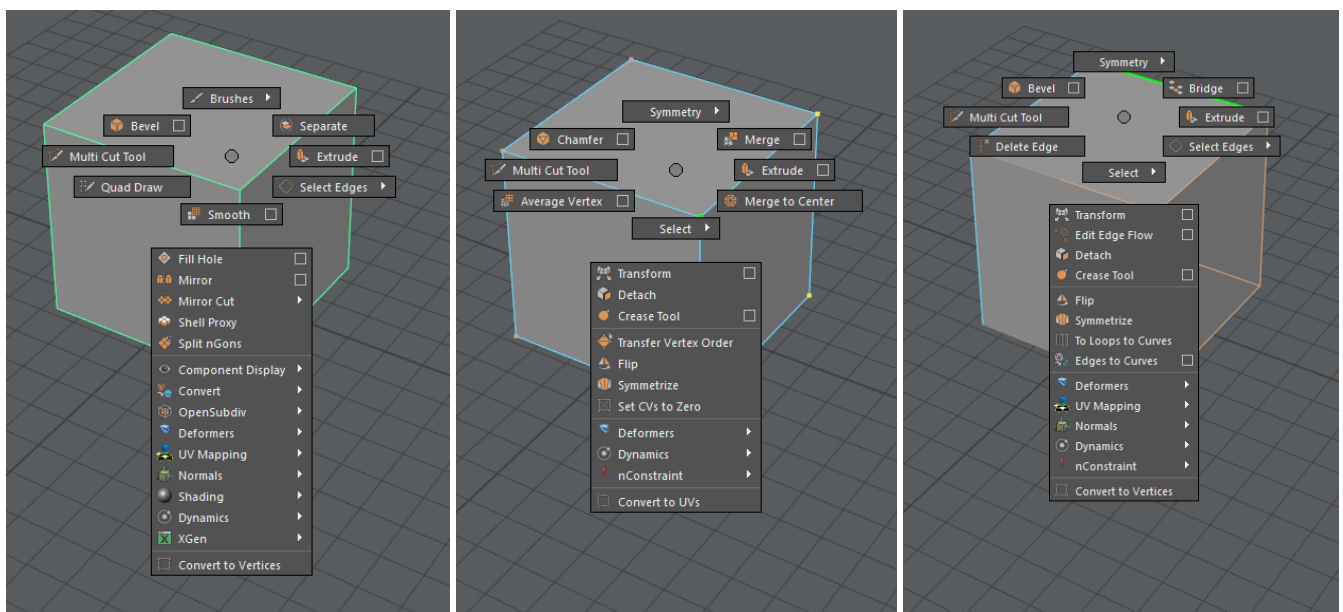

Maya Window MM

The *Maya Window Marking Menu* (menu_MayaWindow_MM.mel), is available when mouse is over the Viewport and there is no selection scene by press *Z + LMB*:
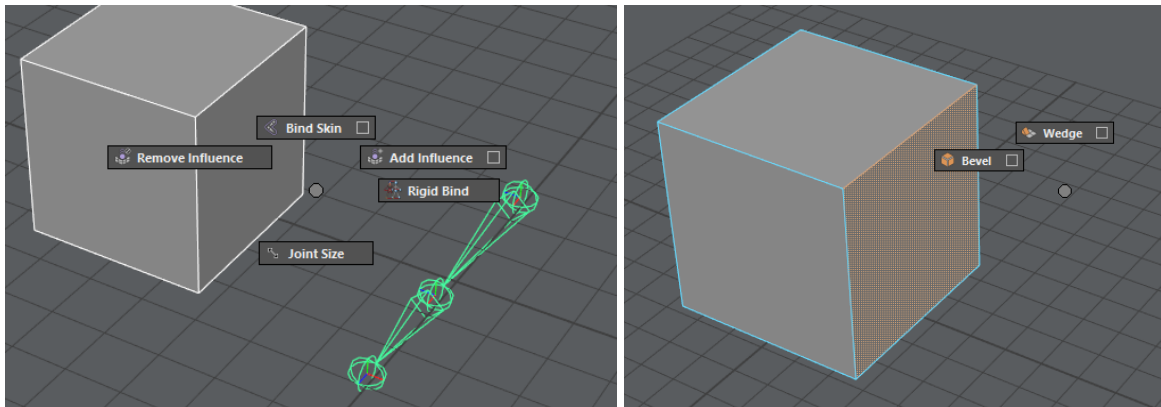

Contextual single selection MM

When a single object or component type are selected is possible enable the relative Marking Menus by pressing *Z + LMB*:
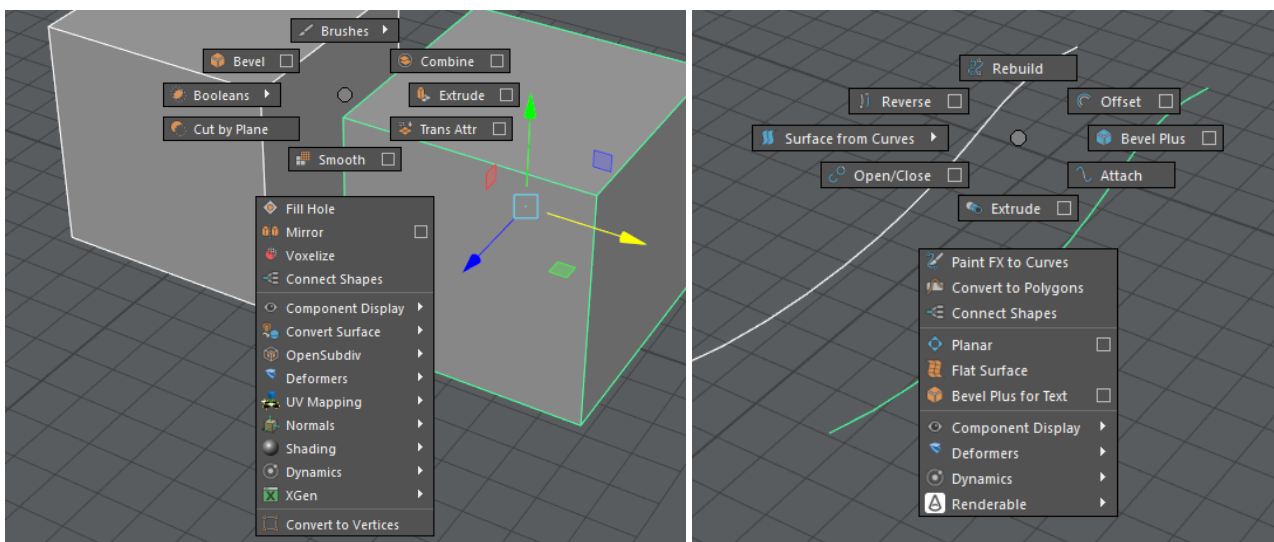
Contextual multi selection MM

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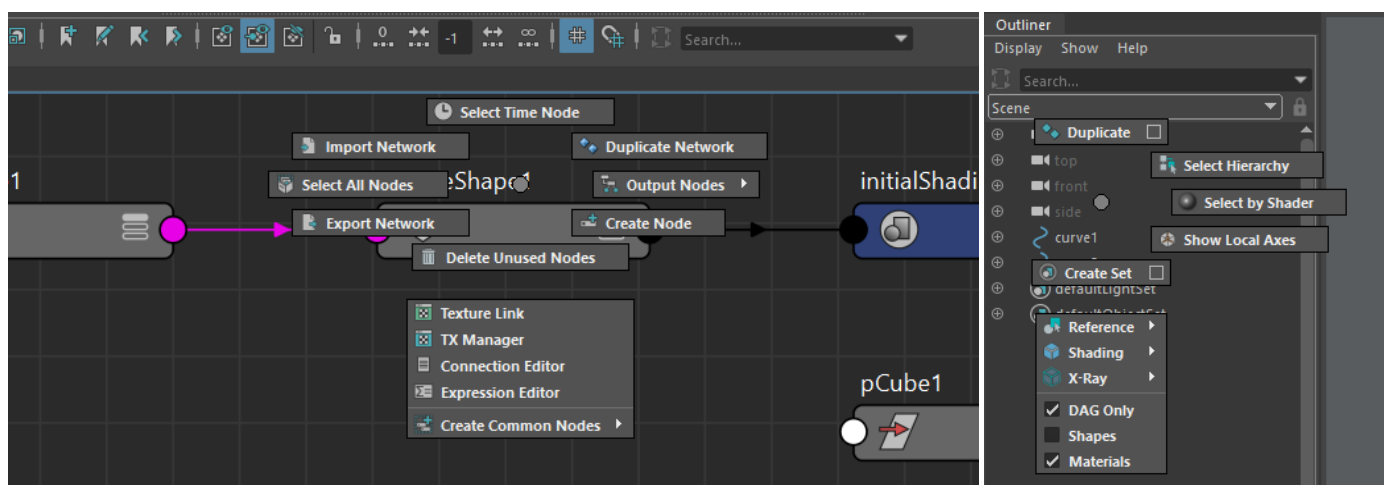

Contextual multi selection of the same object type MM

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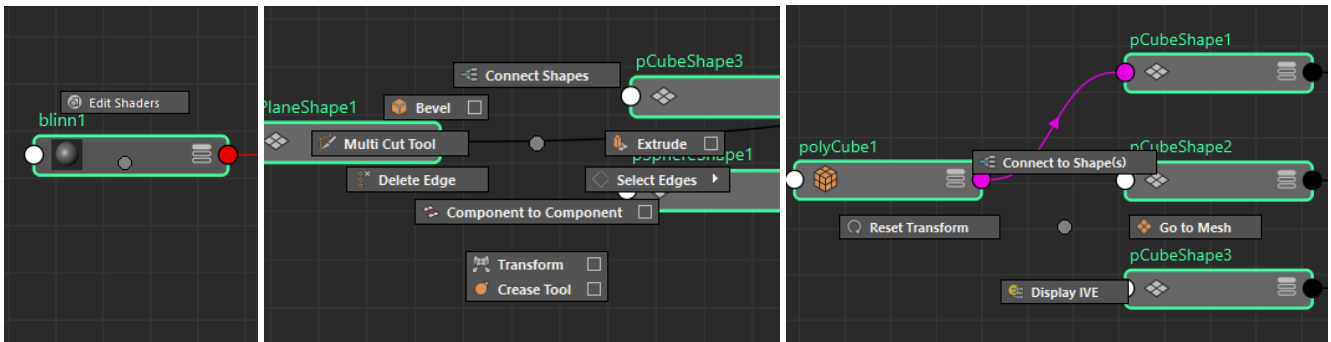

Contextual panel MM

When the mouse is over a panel is possible enable the relative Marking Menus by pressing *Z + LMB*:
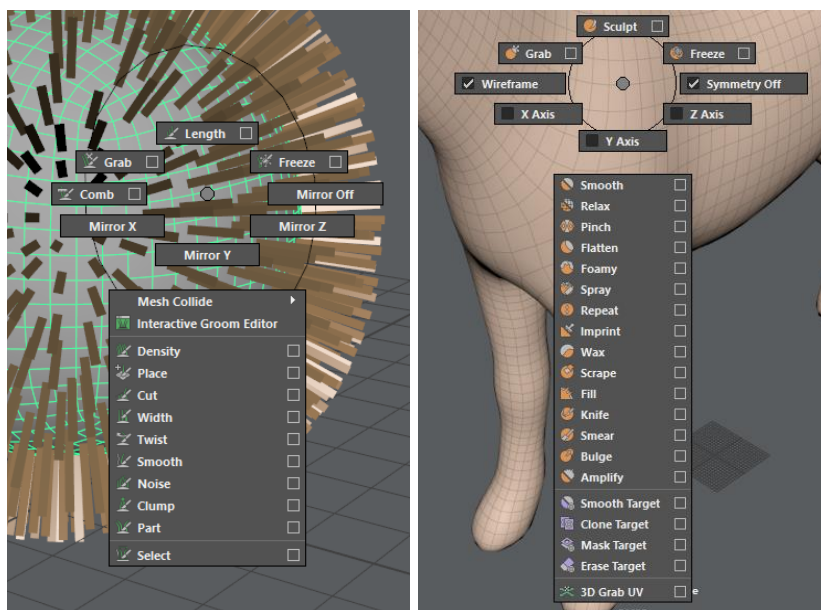
Contextual node selection in Node Editor MM

When a single node, a combination of the same type nodes or a combination of different type nodes are selected in the Node Editor is possible enable the relative Marking Menus by pressing *Z + LMB*:

Contextual Tool MM

When a supported Tool is selected, is possible enable the relative Marking Menus by pressing *Z + MMB*:

These are the tool supported: *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 Hotkey by pressing and release *Z*.

Contextual multi selection Hotkey

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

Contextual multi selection of the same object type Hotkey

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

Contextual panel MM

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

Contextual node selection in Node Editor Hotkey

If a single node, a combination of the same type nodes or a combination of different type nodes are selected in the Node Editor is possible enable the relative Hotkey by pressing and release *Z*.

Preferences change

The flowing is the main standard *Autodesk Maya* preference changed in *May9 Pro*:

- Membrane Deformer exposed
- Legacy Subdivision Surface exposed (only Maya 2017)
- Legacy Mirror Cut tool exposed
- Double variable warning is disable
- Custom Hypershade layout
- Hidden attribute connections exposed

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 + 0 = Edit and Graph Shader Based on Selection
CTRL + ALT + 8 = Paint Effects Panel
CTRL + ALT + X = Reverse to save

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

~ = 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 small MEL scripts that's support the contextual workflow, but there's also some big ones that add new features to *Autodesk Maya*.

da_intPlay [(video)](video)

This script adds the interactive play button directly to Time Slider

da_curveToPoly [(video)](video)

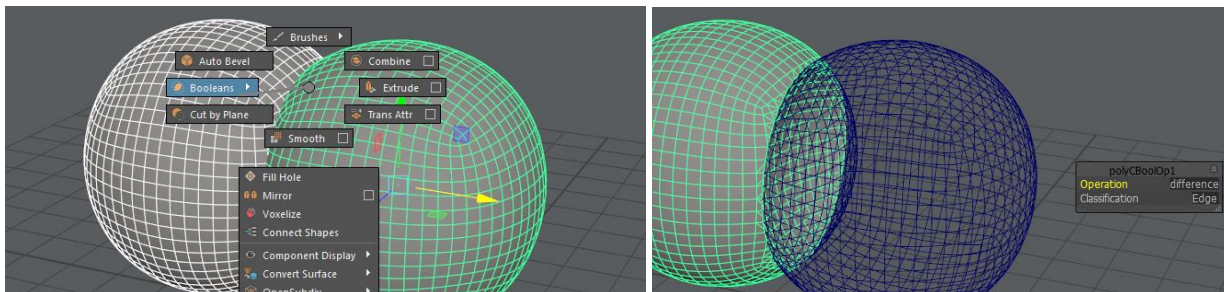This script makes possible the conversion of curves in polygons:

1. Select a curve or multiple curves
2. Z + LMB > Convert to Polygons
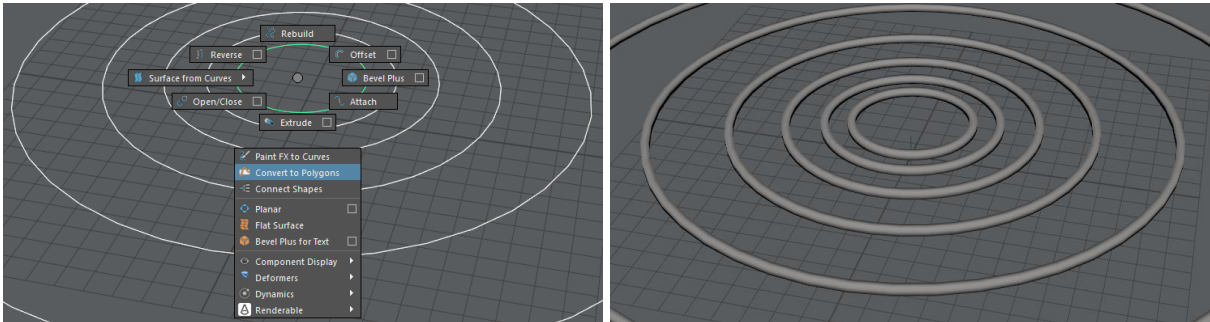
da_interactiveBooleans [(video)](video)

This script makes the Polygonal Boolean process more interactive:

1. Select two or more polygons objects
2. Z + LMB > Booleans

da_BooleanFullIntersect [(video)](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
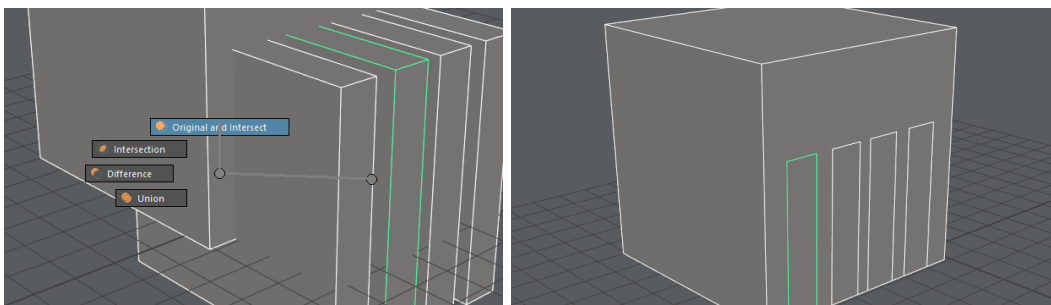
da_PlaneCutter [(video)](video)

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
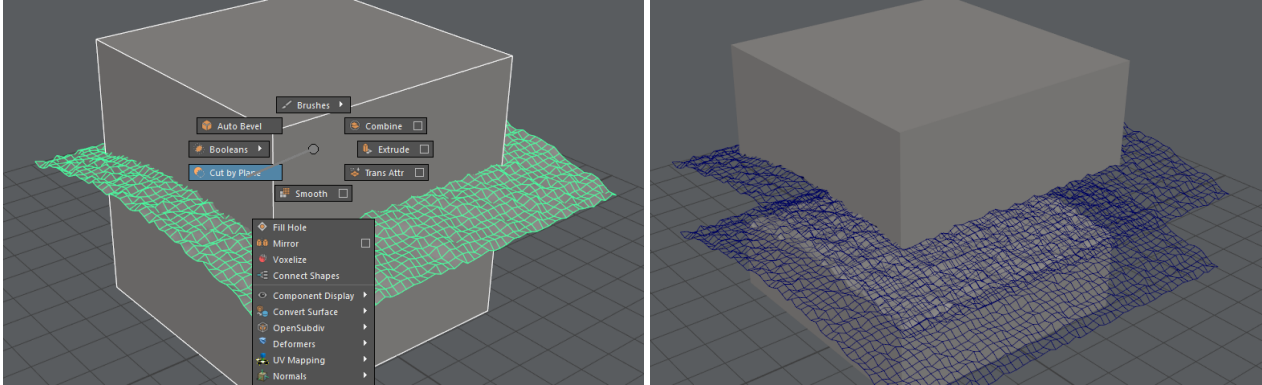
da_AutoBevel [(video)](video)

This script analyses the angle between faces and try to add a Bevel node only on needed edges:
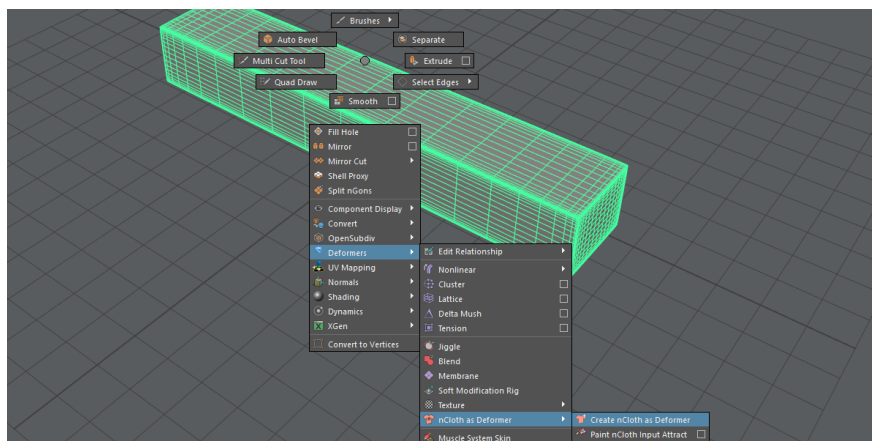
1. Select a Polygon
2. Z + LMB > Auto Bevel
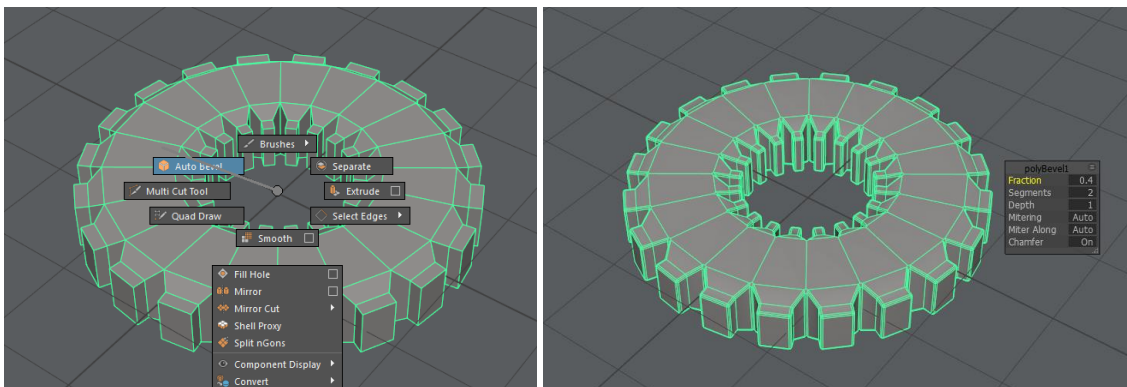
da_ClothAsDeformer [(video)](video)

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

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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
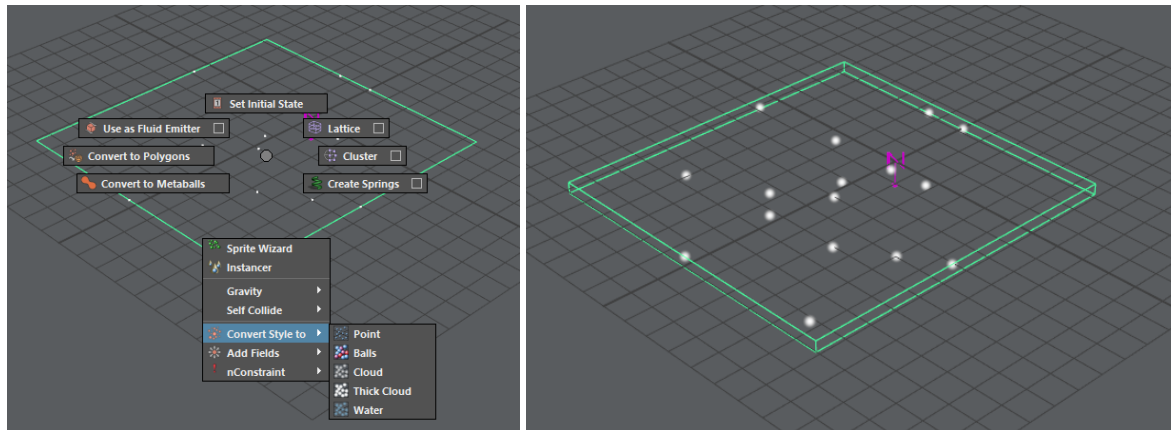
da_perspToggle [(video)](#)

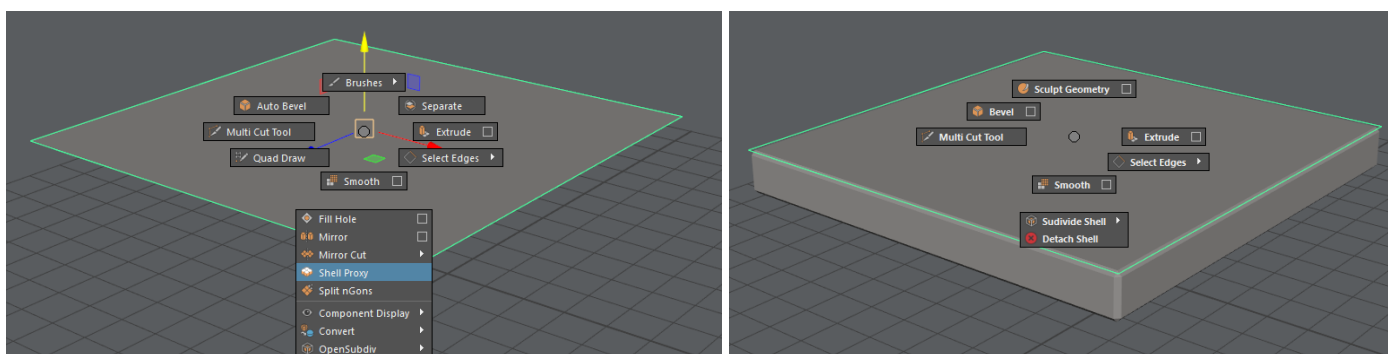This script convert the current persp view to the closest ortho, and vice versa:

1. Move camera
2. Press ALT + Enter
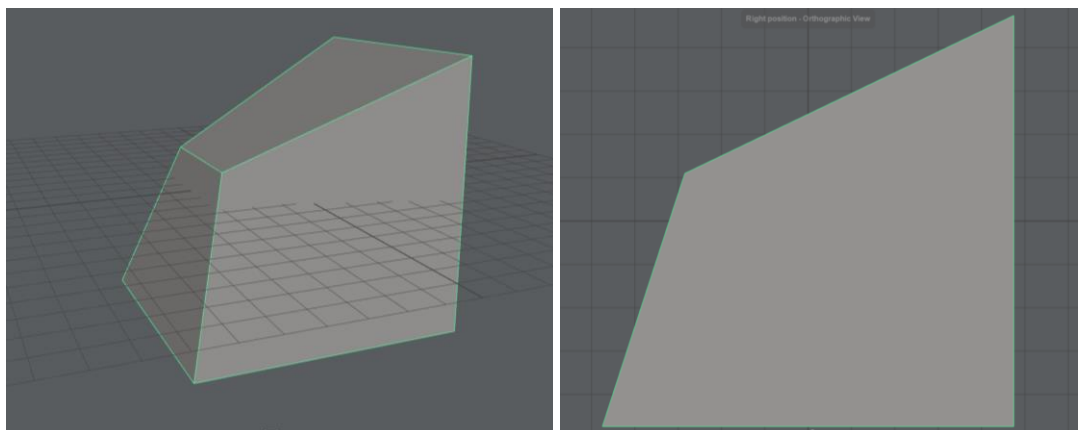
da_shell [(video)](#)

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
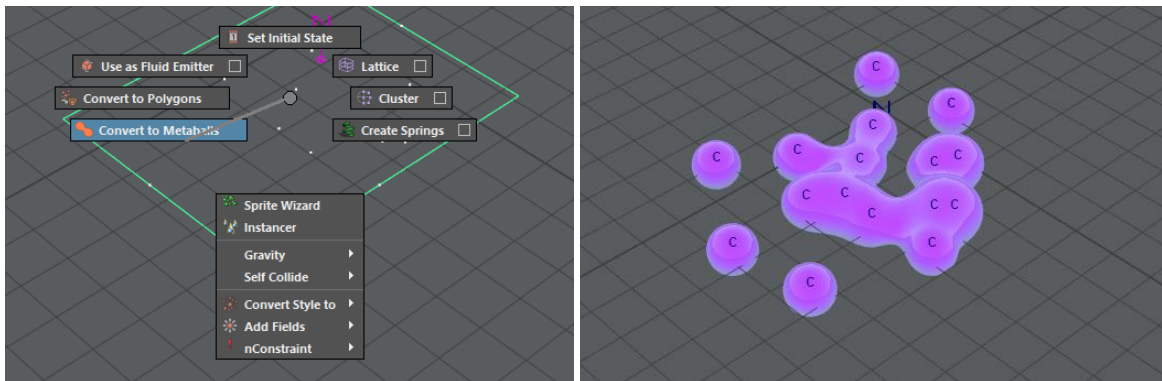
da_MashVoxelizer (video)

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
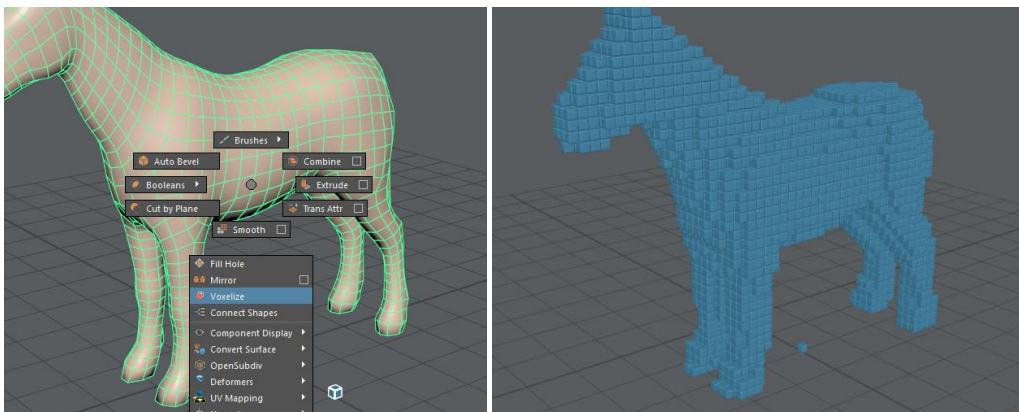
da_RivetMash (video)
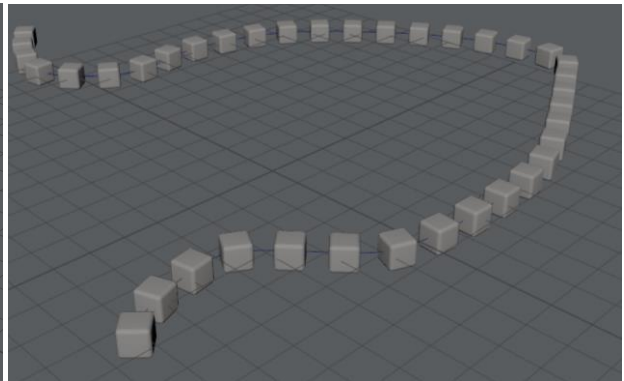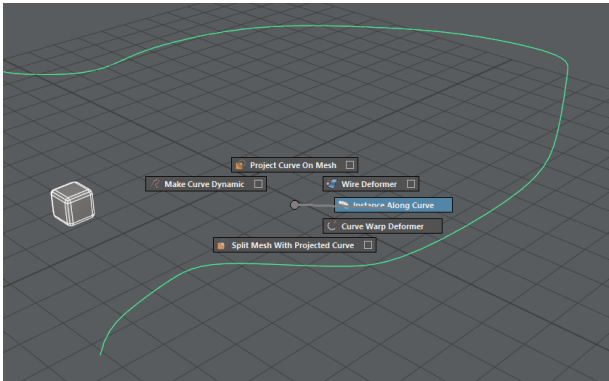
This script constraint the pivot of a polygon to a component of another polygon:

1) Select single or multiple components then a polygon
2) Z + LMB > Rivet
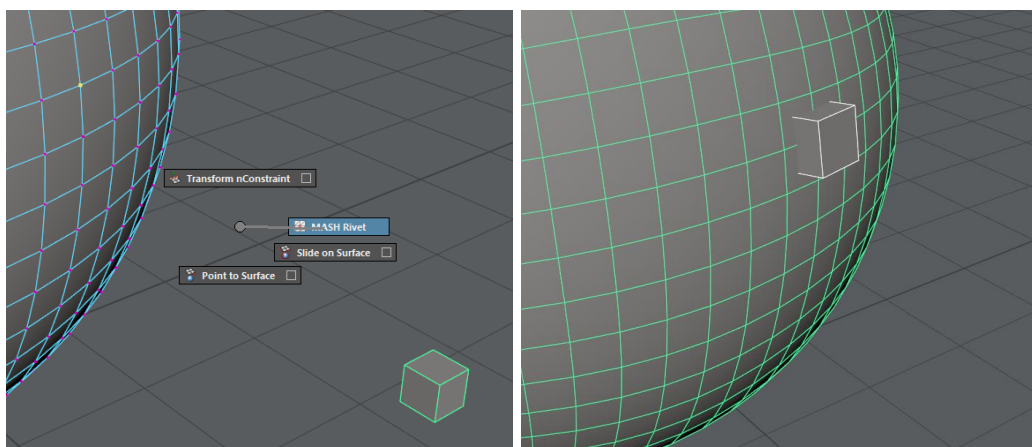
da_CurveDistributionMash [(video)](video)

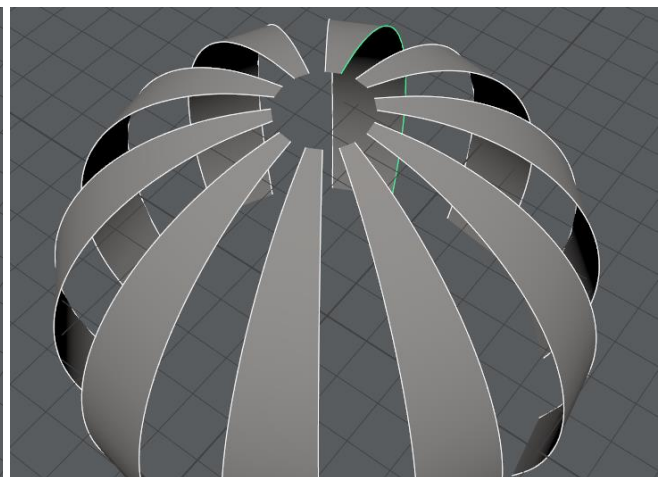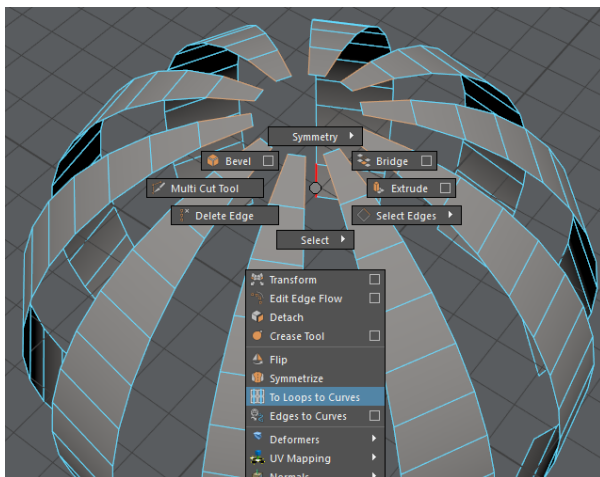This script scatter and constrain a polygonal object along a curve:

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

da_EdgeToLoopToCurve [(video)](video)

This script convert edge selection to loop and then make a batch conversion to curves, this is useful for converting polygonal hair to curve hair:
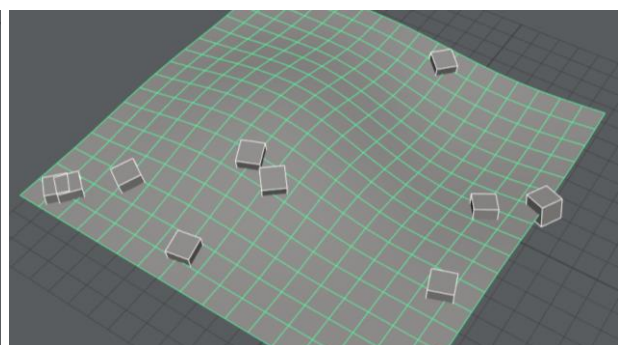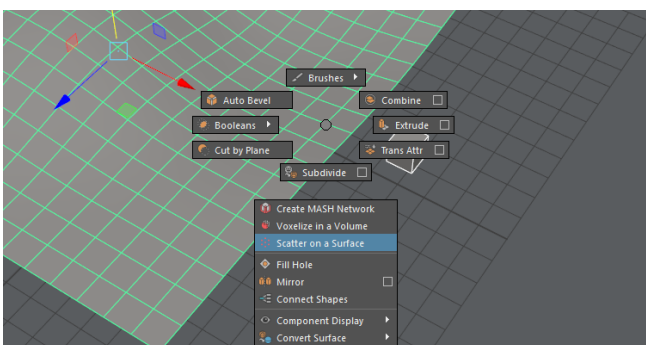
1) Select an edge for loop, sometimes this is easier to do in UV texture editor
2) Z + LMB > To Loops to Curves

da_SurfaceScatterMash

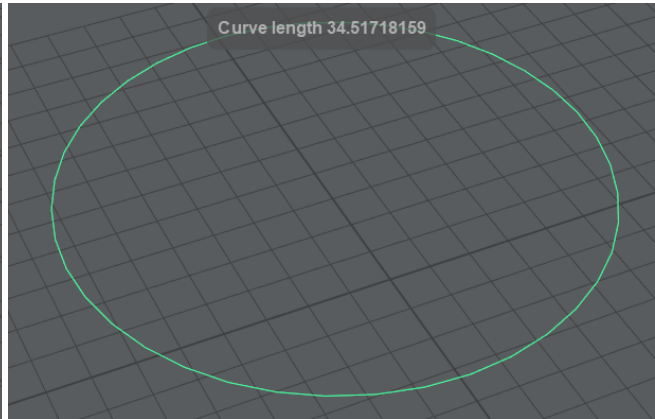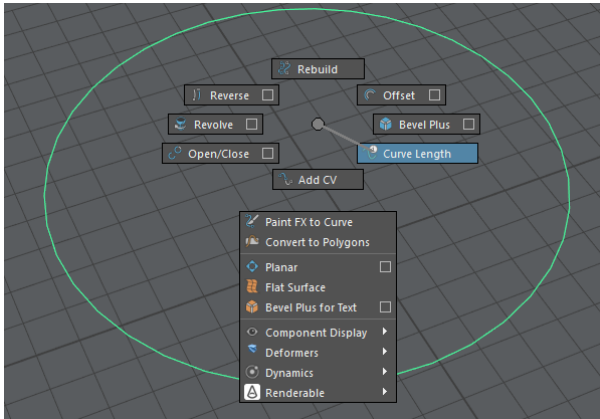This script scatter and constrain a polygonal object on a mesh:

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

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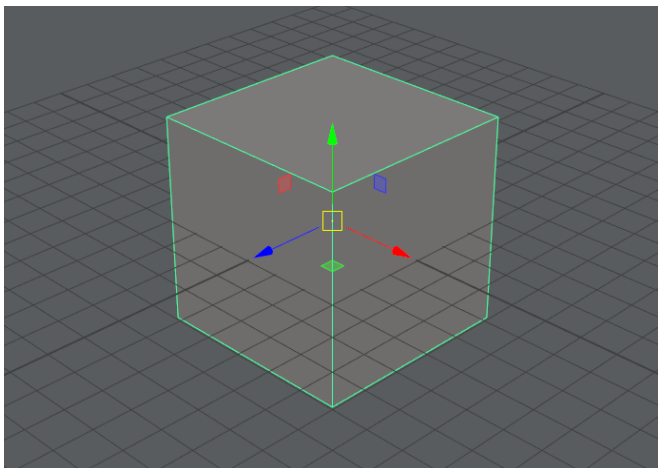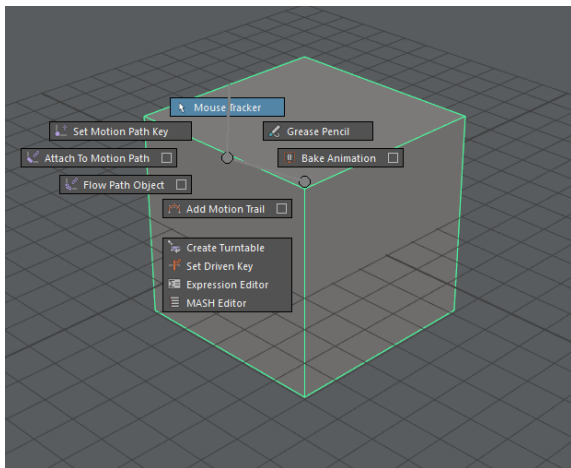
This script returns the length of a curve in Maya unit:

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

da_MouseTrack

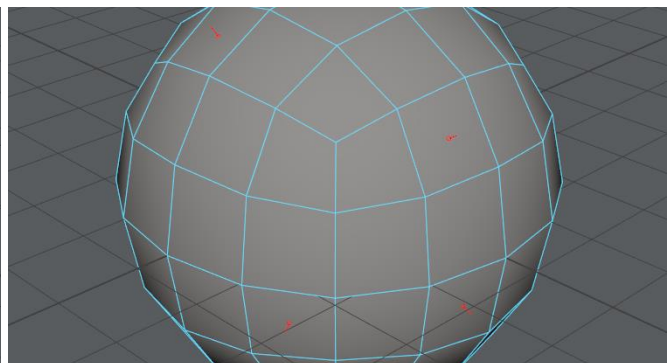This script tracks the mouse movement and create an animation:
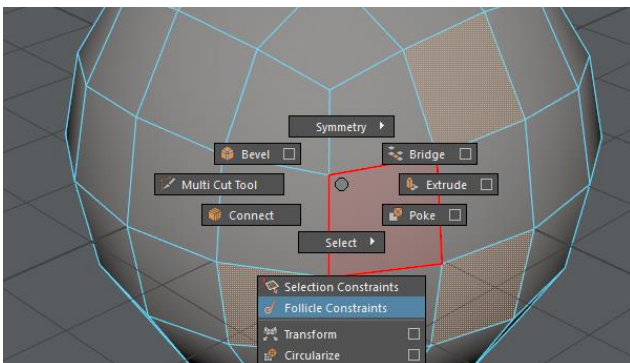
1) Select an object
2) Z + MMB > Animation > Mouse Tracker
3) Manipulate the object by using manipulators
4) Press Esc for stop the tracking

da_FacesFollicles

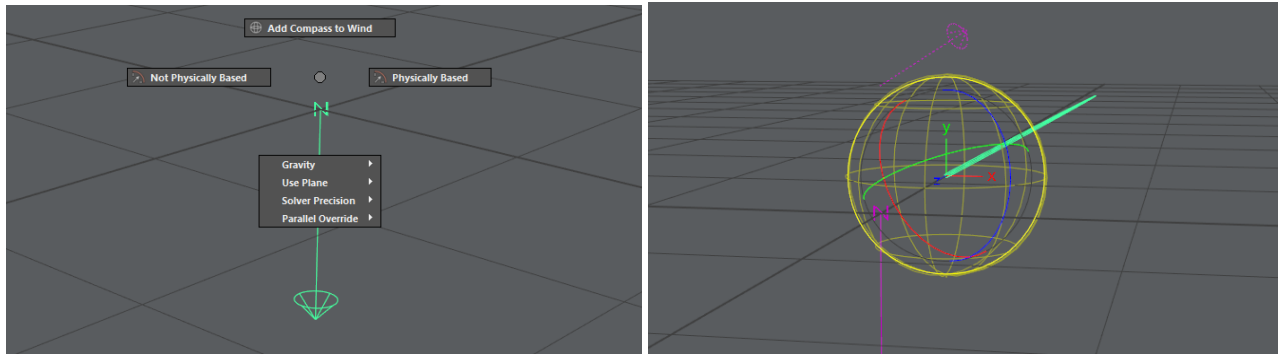This script creates a follicle in the centre of selected faces:

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

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 fast multiple attribute connecting, enable it under *Windows > Settings/Prefereces > Plug-in Manager*: *ContentConnectr.py*

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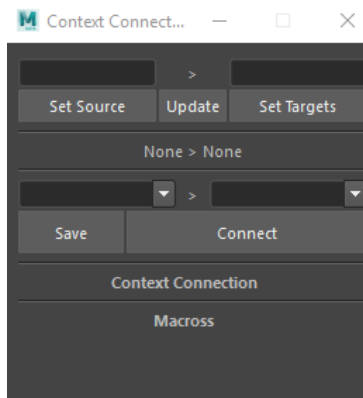
Massive Attribute Editor

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/Prefereces > Plug-in Manager*: *mass_attr.py*
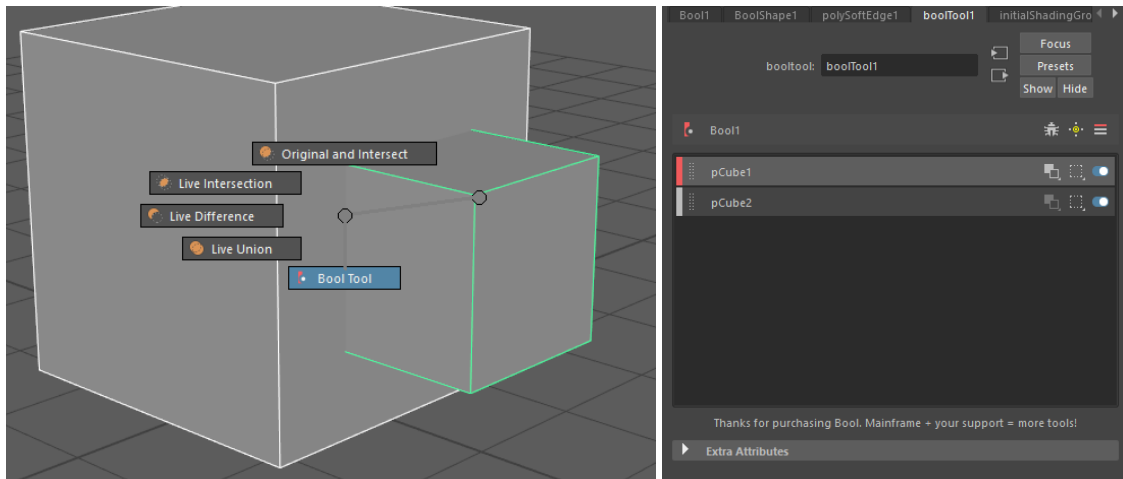
For open Massive Attribute Editor UI use *CTRL + K* shortcut or *Z + MMB > Rigging > Massive Attribute*

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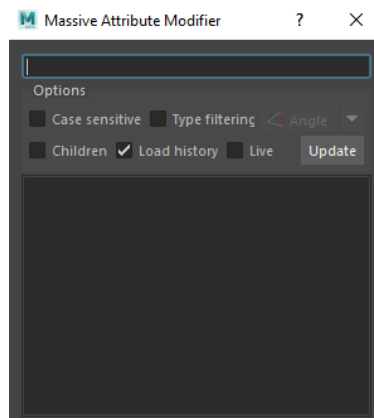
Bool

Bool is in a live boolean plug-in that's interactively adjust multiple boolean operations, is available to buy <u>here</u>.
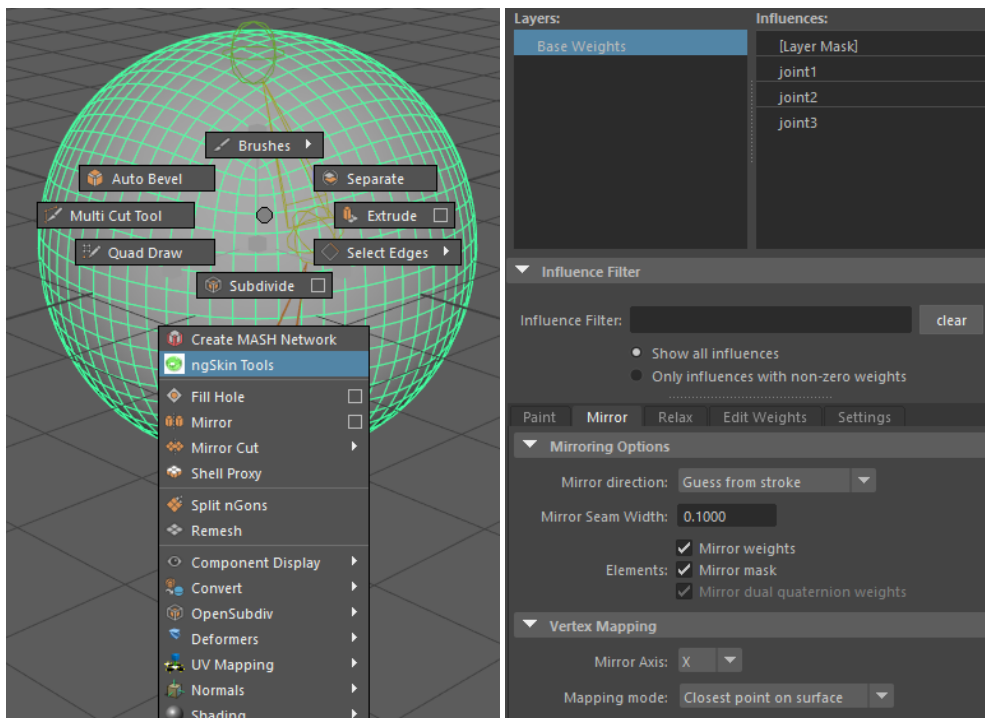
For use Bool, select two or more meshes and *Z + LMB > Booleans > Bool Tool*

ngSkinTools

ngSkinTools allows flexible and artistic workflow, while providing all the necessary tools for precision, is available to download or buy <u>here</u>.

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

Useful links

Facebook page: *fb.com/May9Prefs*

YouTube channel: *youtube.com/c/May9*

May9 Pro Git repository: *github.com/DavideAlidosi/May9*

Credits and license

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

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

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

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

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

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