



3D Animation

Animation Planning

Extreme and breakdown “Animator Survival kit”





The flow of doing animation

1st Pass (Blocking)

- Timing of Action
 - Main Poses (Strong silhouette)
 - Suggest Emotion (Include rough eye animation)

2nd Pass (Blocking +)

- Breakdown Poses
 - Add poses with Offset include into the breakdown poses
 - Successive breaking of joints
 - Suggest Overlap & Follow Through

3rd Pass (Refinement)

- In-between Poses
 - Finish offsetting body parts (Fingers / Toes /)
 - Check and adjust arcs
 - Finish Overlap and Follow Through
 - Finish Eye Animation
 - Foot Shuffles
 - Knees

4rd Pass (Refinement ++ and facial animation)

- Lip Sync Animation
- Muscle Animation (if available)
- Cloth Animation (if available)

Watch:

[EvolutionReel](#)

[IA3ComparisonReel](#)

[1_likeAMouse_BLOCKING](#)

[2_likeAMouse_ROUGH1](#)

[3_likeAMouse_FACIAL1](#)

[4_likeAMouse_CLEANUP1](#)

[5_likeAMouse_FINAL](#)



Video references

Base on your animation idea!

Always start by doing video references and observe:

- Explore different ways for the same action to be done.
- Break down and study the body mechanic.
- Act slowly a dangerous action scene and observe complexity of your motion.



Watch:

[video Reference](#)

[IA3ComparisonReel](#)

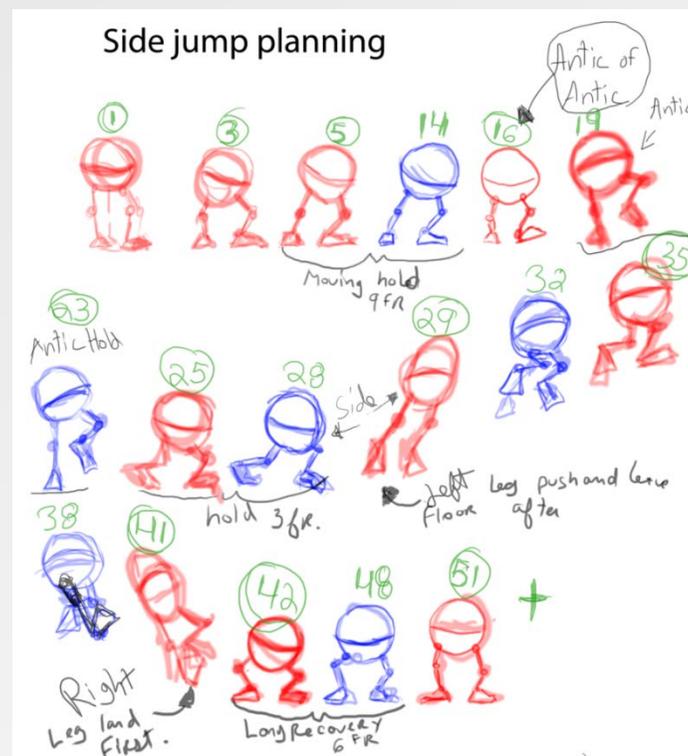
Then from this study I will continue the planning of my shot on paper and bring as close as what I desire my shot to be from my original idea. But only this time I get a better understanding of the body mechanics behind my shot and get inspired by some of my video references for more subtitle action within the actions



Planning on paper

Simply bring your idea to the final intention to be animated. This way you will save time by knowing exactly what are you going to pose into the 3D software, brief timing intention and some reminder for you to take care during your animation/

- Extreme and/or Story Telling poses (**RED**)
- Breakdown poses (**BLUE**)
- Frame number
- Personal Notes (Reminder)
- Any others relevant information

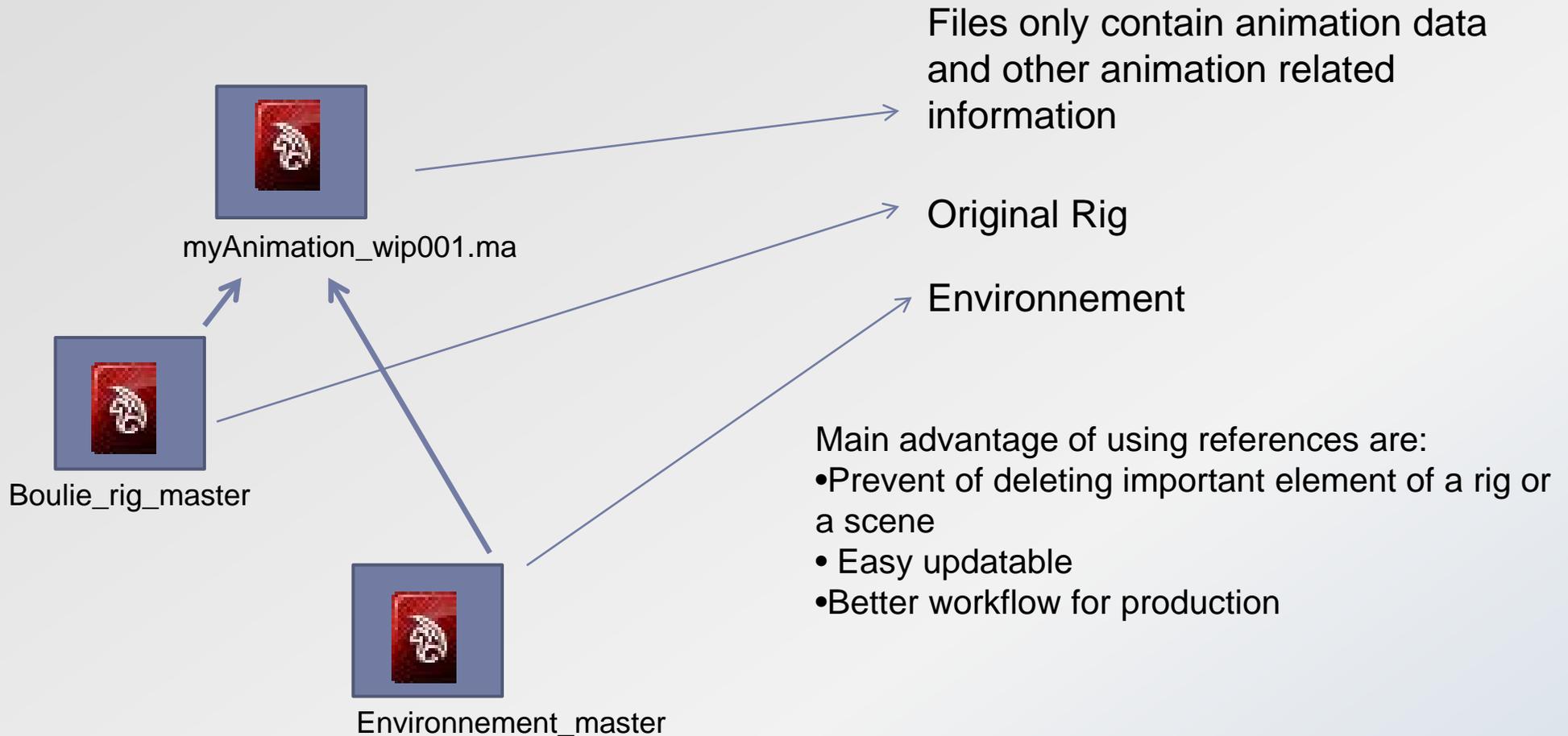


-
- ▶ So far we have seen everything about how to plan a shot.
 - ▶ But what about working on that shot in Maya!
 - ▶ What about basic animation setting

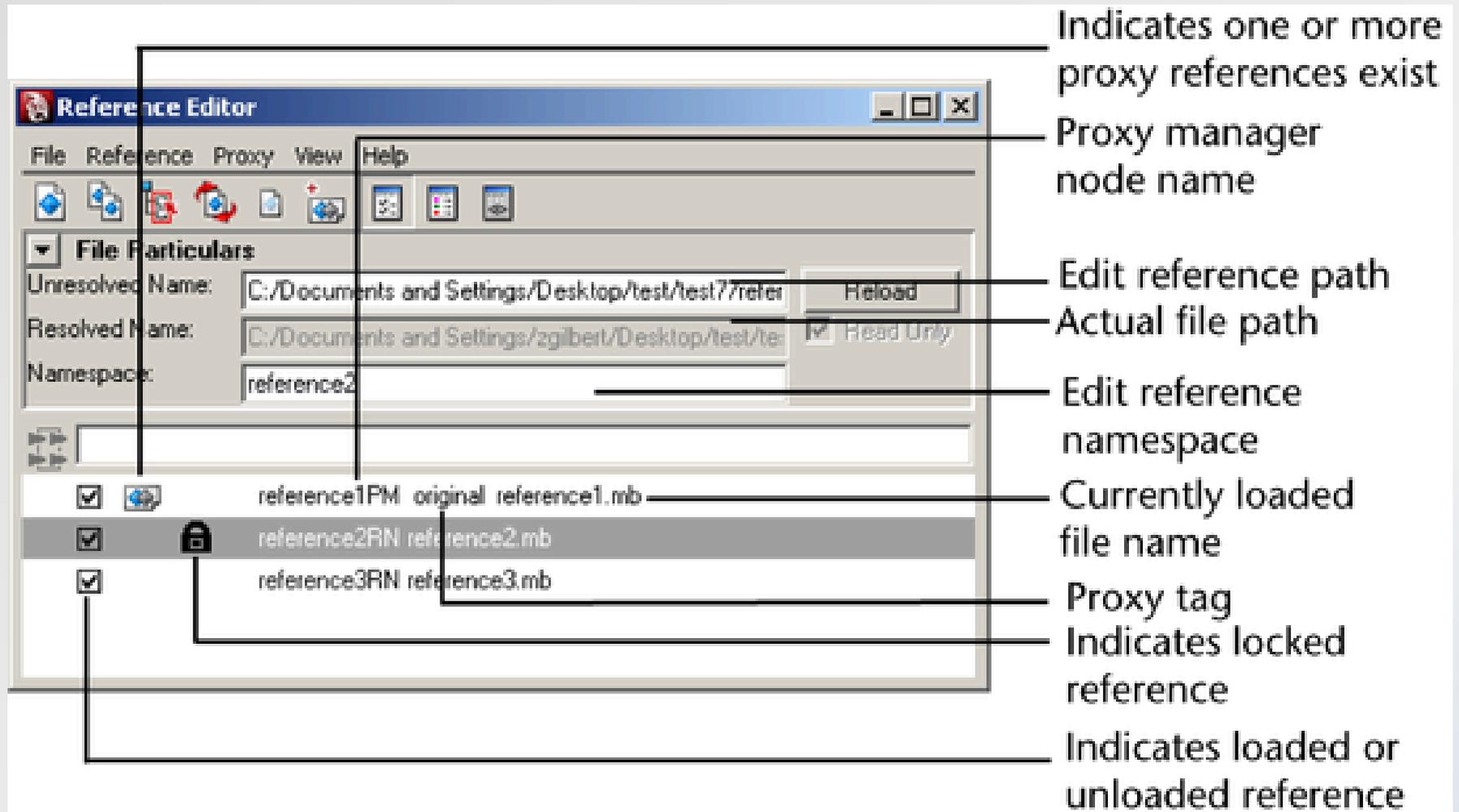


Reference systems in Maya

Reference systems is the ability for Maya to import a scene into a scene without having that scene into our scene.... So what is the advantage!??!



Reference Editor



The screenshot shows the Reference Editor window with the following components and annotations:

- Proxy manager node name:** A line points to the 'Proxy' menu item in the menu bar.
- Indicates one or more proxy references exist:** A line points to the proxy icon in the toolbar.
- Edit reference path:** A line points to the 'Unresolved Name' text box.
- Actual file path:** A line points to the 'Resolved Name' text box.
- Edit reference namespace:** A line points to the 'Namespace' text box.
- Currently loaded file name:** A line points to the 'reference1PM original reference1.mb' entry in the list.
- Proxy tag:** A line points to the proxy icon next to the 'reference1PM' entry.
- Indicates locked reference:** A line points to the lock icon next to the 'reference2RN' entry.
- Indicates loaded or unloaded reference:** A line points to the checkmark icon next to the 'reference3RN' entry.

The 'File Particulars' section contains the following fields:

- Unresolved Name: C:/Documents and Settings/Desktop/test/test77refer
- Resolved Name: C:/Documents and Settings/zgilbert/Desktop/test/te
- Namespace: reference2

The list of references is as follows:

| Checkmark | Proxy Icon | Reference Name | Original Name |
|-------------------------------------|------------|----------------|------------------------|
| <input checked="" type="checkbox"/> | | reference1PM | original reference1.mb |
| <input checked="" type="checkbox"/> | | reference2RN | reference2.mb |
| <input checked="" type="checkbox"/> | | reference3RN | reference3.mb |

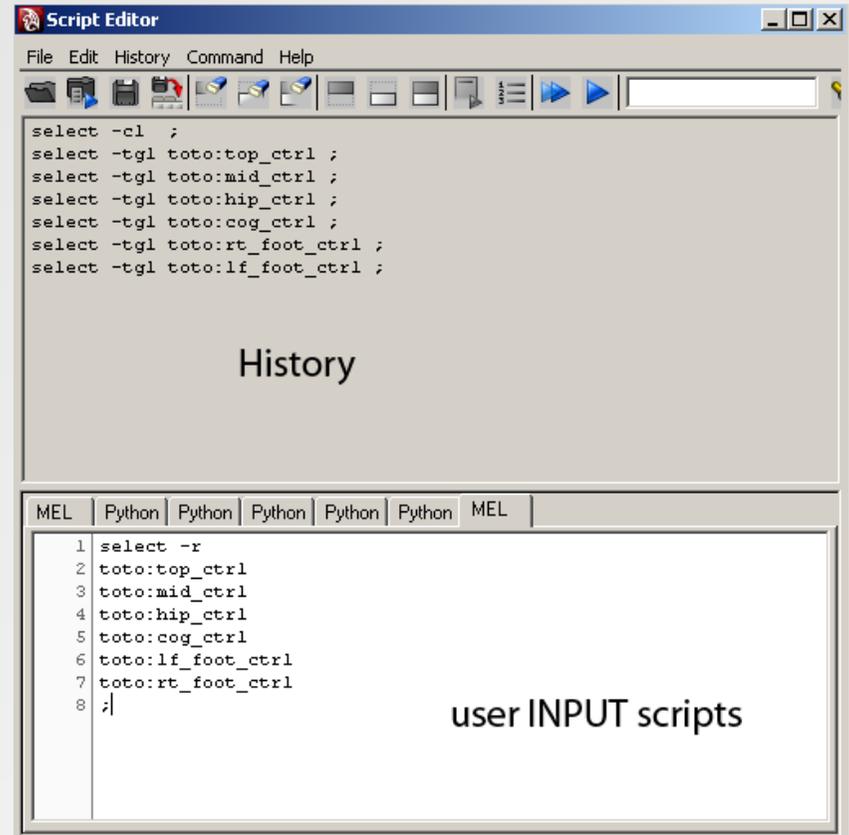


Create shelf mega shortcut

In order to help you animate
In a **Pose to pose** approach

The creation of a special shelf
button can become handy to
help you key all controller and
attributer of a character.

In this way it will be easier for
you to treat your animation of
poses as a drawing

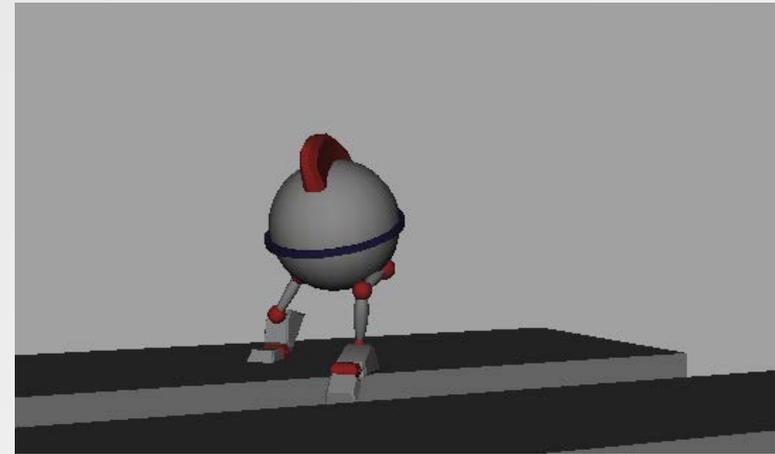
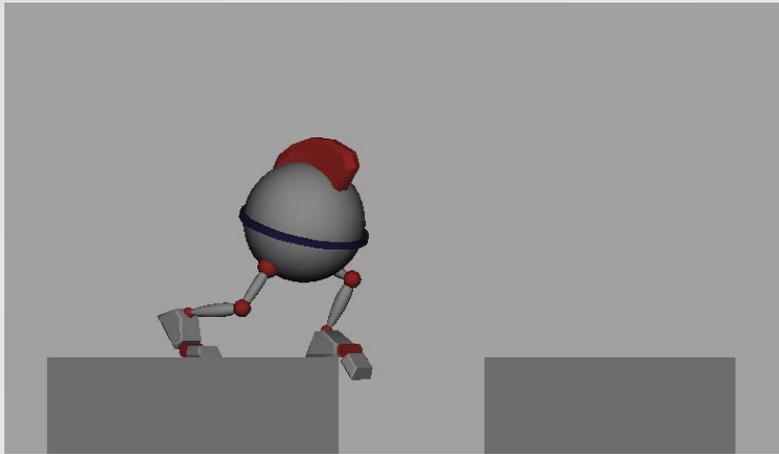


In the background of you working in the software... Maya will DISPLAY all interaction made within Maya. The reuse of those command line can be helpful and will help you in the ways or repeating the same task all over and over again



Stage your scene

Placing your camera and staging your character within the frame and the action are crucial to succeed your animation. Doing this at the **beginning** of the animation will help you to work and emphasize on doing strong **silhouette** for this point of view



Example:

The character has been keyframed from a side point of view

Moving the camera after creating my keypose will bring a new perspective and you will realize that the character may look off balance!

So remember animate from the camera point of view!



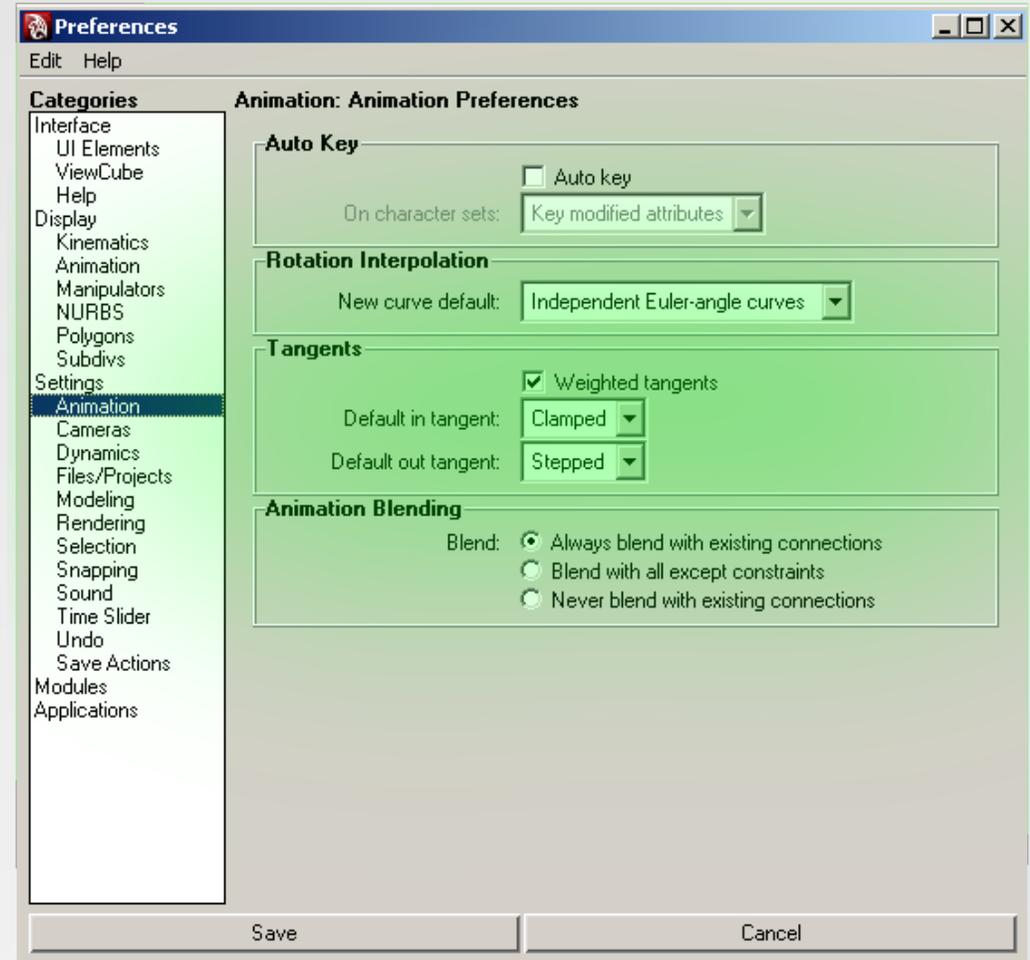
Step Tangent for Pose to Pose keyframing

To animate in a pose to pose manner. We will need to change the default Maya setting to give us a **Step interpolation** per default.

Maya per default will be to clamp tangent.

Why using pose to pose:

- Focus on keypose and Breakdown.
- Build strong silhouette for any of your pose.
- Don't get distract by the in-between.
- Fast and effective ways to see all your animation without to much effort.



Don't forget

- ▶ Get Familiar with the rig before you start your animation.
- ▶ Take the time to understand the possibility and limitation of the rig before you start animating.

