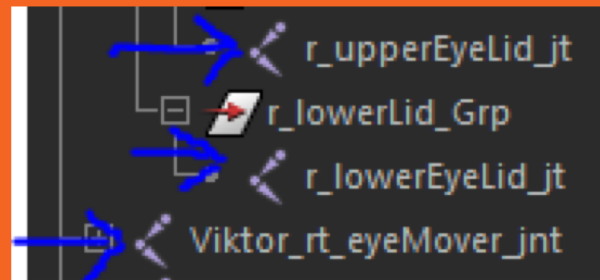

Makin' Eyes

With Chef Tom



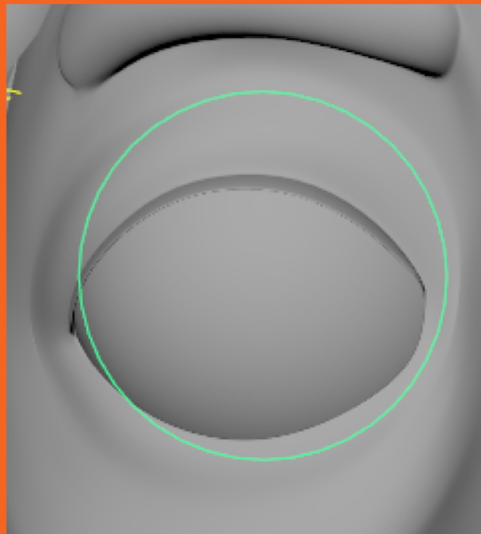
You're gonna need joints

- At least three
- One for top lid
- One for the bottom
- And one for the eye geo
- You should group the upper and lower lid separately
- These should all be in the dead center of the eye geo



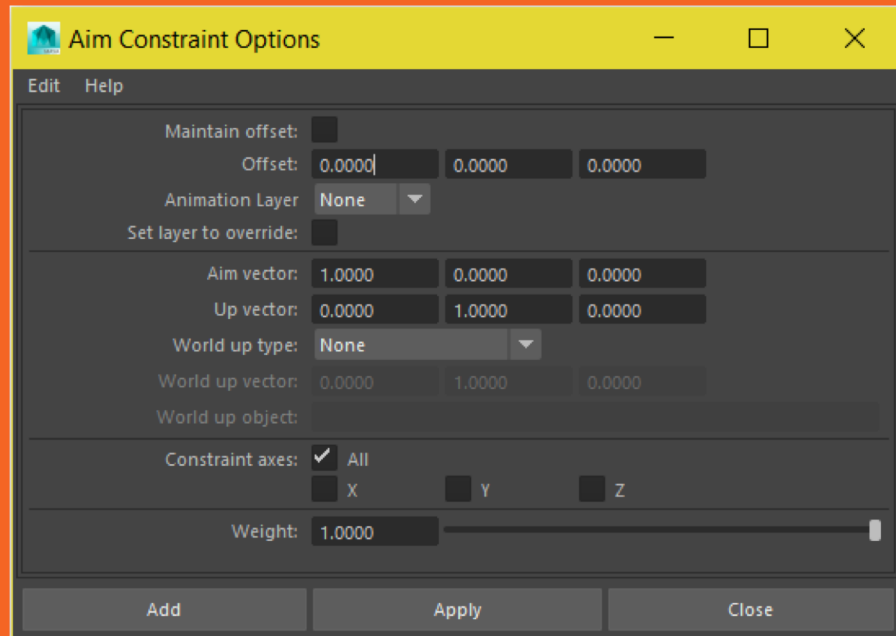
Control it

- Now make a controller
- Put it on the center of the eye
 - Move it out a bit in front of the eye
- Freeze transforms
- Group it
- Parent constraint that group to the head controller



Time for Constraints

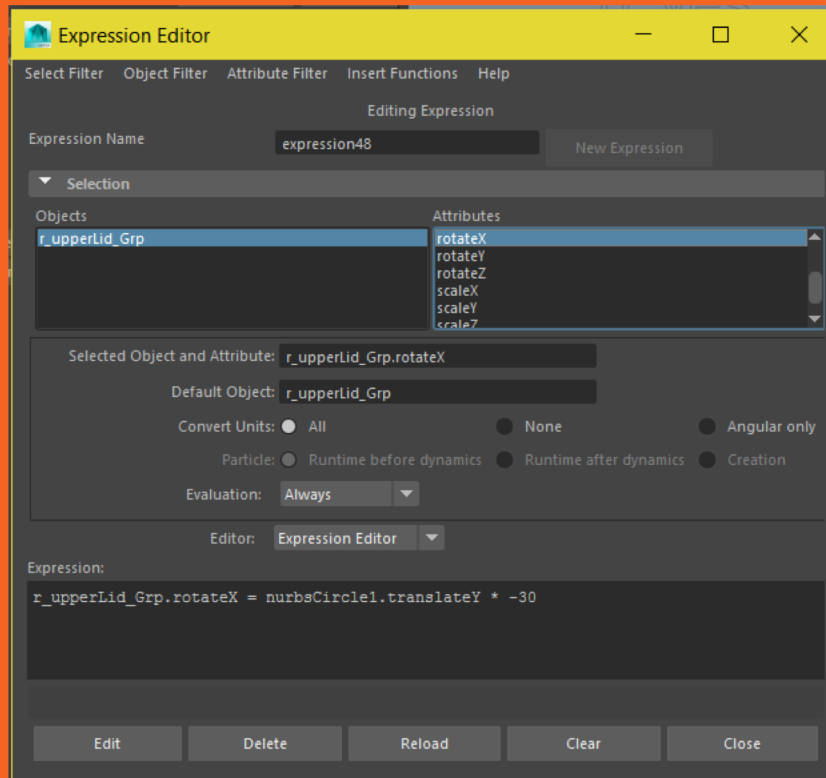
- Scale and Parent constrain the eye geo to the eye geo joint
- Aim constraint the eye geo joint to the new controller
- Most importantly set world up type to “None”



Express yourself

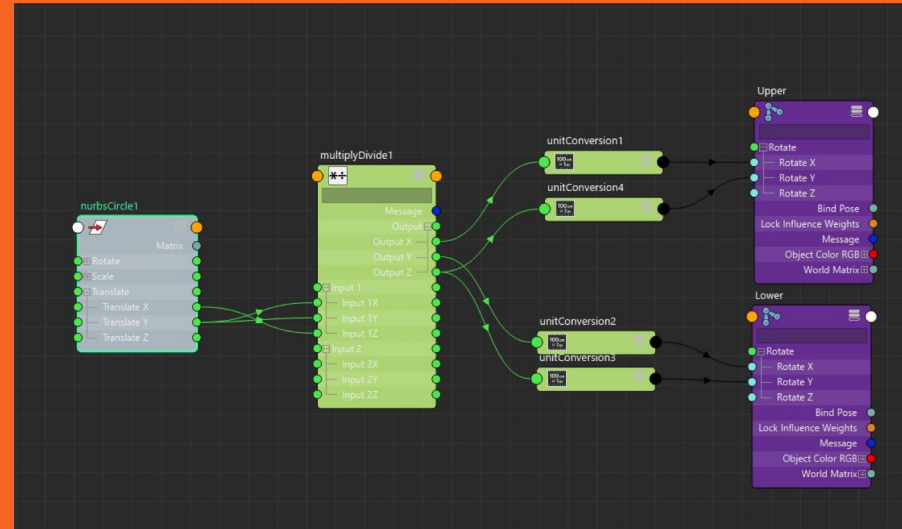
- Put an expression on the upper lid group
 - `r_upperLid_Grp.rotateX = nurbsCircle1.translateY * -30`
- This says the x rotation of the group is now equal to the y translation of your eye controller multiplied by -30
 - This is because the controller movement is very small compared to the rotation required
- Lower requires a smaller number
 - `r_lowerLid_Grp.rotateX = nurbsCircle1.translateY * -10`
- Rotation Y & Z need one too
 - `r_upperLid_Grp.rotateY = nurbsCircle1.translateX * 10`
 - Do this for the lower lid too

*Your number may be different. Experiment.



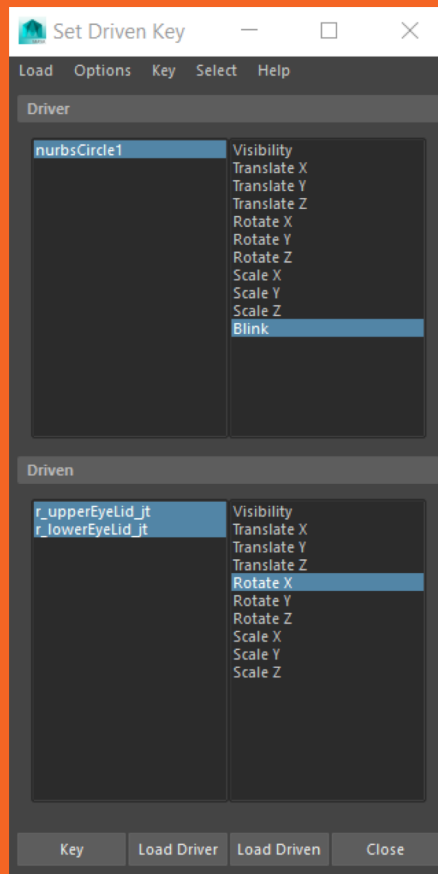
Or Node it!

- In the node editor:
 - Have your controller
 - Your upperlid joint
 - Your lowerlid joint
 - And a multiplydivide node
- Connect the Controller's translate Y:
 - Input 1X
 - Input 1Y
- Set Input 2X to -30(or your upperlid rotation)
- Set Input 2Y to -10(or your lowerlid rotation)
- Connect output X To upperlid rotate X
- Connect output Y To lowerlid rotate X
- Connect the Controller's translate X:
 - Input 1Z
- Set Input 2Z to 10(or your side rotation)
- Connect Output Z to rotate Y of both lid joints



Set some Keys

- Make an attribute on your controller called “Blink”
- Setkey the upper and lower lid JOINTS
- First is at resting pose
- Last is rotating the joints to a blink



Now you're Done

