

Tips on using the *Andy* rig

Setting Up

- After downloading the .zip file, un-archive it using Winzip or Stuffit or a similar program.
- Use Maya to make a normal Maya project with all the normal subfolders.
- Place the *andyRigv1.4.6.ma* file into your project's /scenes folder.
- Place all the .jpg texture files into your project's /sourceimages folder. This is where Maya will look for them by default.

Getting Started

- To change the geometry or textures, select *andy_world* (the big circle at the bottom of the rig). In the Channel Box, make changes to the Hair, Chest, and Clothes attributes
- To adjust the level of geometry detail, select *andy_world*, change *Level*. Least geometry and therefore fastest is *Proxy*.
- To turn on/off the various controllers, select the big *andy_world circle*, then in the Channel Box, turn on or off (with a 1 or 0): Body Cntrls, Face Cntrls, Face Sliders
- To turn off stretchiness, select the wrist controllers (boxes), turn off *Auto Stretch*. (You can type a 0 to indicate “off”.) Select foot controllers (foot-shaped curves), turn off *Auto Stretch*.

Character Sets

- *Andy* makes use of character sets. Each of these is a collection of animatable parameters. The best way to keyframe *Andy* is to keyframe the character sets directly, rather than the individual controllers.
- To select and activate a character set, go to the far lower right of the Maya screen; to the left of “No Character Set”, click the small down triangle, go to >Andy_all >Andy_Body or Andy_Face.
- Using this approach, you do NOT need to keyframe the individual controllers. Their attributes will be automatically be keyframed because they are included in the character set you have selected.

Keyframing

- After selecting the character set, go to frame 0, then use >Animate >Set Key []. Use >Edit >Reset Settings to make sure Set Key is using the default settings. This keyframes all the attributes in the selected character set.
- For subsequent keyframes two approaches work well.
- A) Advance to a new frame, pose Andy, hit the s key to keyframe all the attributes in the character set. Or...
- B) Turn on Auto Key (the tiny key icon, far lower right), go to new frame, pose Andy. Any attribute you just changed will be automatically keyframed.

Working with the Graph Editor

- With the character set still selected, open the Graph Editor. You will see that the character set is selected in the editor – for example, *Andy_Body*. Every attribute in that character set will be displayed. There are many, many attributes! This can be extremely confusing.
- To isolate just the attributes you are interested in, select one of the controllers. Then click on its name in the Graph Editor.

IK/FK Switching

- This exists in the Andy rig, but is implemented in a way that makes it pretty useless. (Groan)

Fingers

- Try using a top-down approach, in which you keyframe the big motions before you work on the smaller details. Only after getting these, start working on the details of the hand gestures.
- The fingers are part of the *Andy_body* character set, so when you keyframe that you also keyframe finger positions.
- Select the circle controller next to one hand. Each finger has an attribute for each joint of that finger. Click on the name of the attribute, then in the 3D window, middle-mouse to change the value and rotate that joint.
- The thumb has some extra attributes.
- To make the whole hand close, click and drag on the names of all the attributes for all four fingers – but not the thumb. Middle mouse drag in a 3D window to close the fingers.
- Warning: There are no limits set for the rotations of these joints. This means you can bend the fingers backwards into physically impossible positions.

Facial Animation

- Try using a top-down approach, in which you keyframe the big motions of the whole body before you work on the details of the face. That is, keyframe the *Andy_body* character set first. When that is pretty good, de-activate that character set and start working on the details of facial animation.
- You must activate the correct character set for facial animation. At the far bottom right of your screen, click the small down triangle next to the Character Set, go to >*Andy_all* >*Andy_Face*.
- There are two sets of controllers for facial animation. Select the big *andy_world* circle at the bottom of the rig. In the Channel Box, turn on Face Sliders and/or Face Cntrls
- Warning: I have on occasion had trouble activating facial keyframing after having completed the *Andy_body* animation. I don't know why.