

NB: remember Esc is undo in CelAction!!

Username = uni password = educate

CELACTION INTERMEDIATE/RIGGING

The purpose of this workshop is to build on what was learnt in the Beginners Workshop.

The main aim of this workshop is to rig a simple character. Load this into a scene and, time permitting, animate a simple walk cycle.

We want to cover - Creating artwork for our character

 Rigging a simple character

 Adding and animating SHAPES in our character

 Using LIMBERS

Rigging process steps...

- Create artwork/shape file (only create one arm and leg as these can be copied in Celaction)
- In Assemble mode create dummies - Position - Move Character
- Load your artwork/elements/shapes into the **Pool of Elements**
- Arrange your hierachys (leaving all but default shape unattached and in Pool of Elements) - Alt Click
- Attach your Actor to **Character** dummy in **Actor Elements** - Alt Click
- Scale down Actor so you can see all elements
- Set your **Anchor Points**/Pivot Points - A in wireframe. Ctrl A copies from element. Shift A copies Anchor from above
- Hide the pivots - select elemet and V
- Add element shapes - Alt S
- Add Limbers if required
- Copy and flip legs and arms
- Set your **Display Orders** - Shift D

CREATING ARTWORK

Shape Files are how drawings are brought into **CelAction2D**. They can be single images (in TGA or PNG formats), movies (in AVI or MOV format or in sequences of TGAs or PNGs), or from multi-layer files (in PSD, AI or SVG formats). Multi-layer files are the usual way of bringing assets into **CelAction2D**.

PSD files must be saved in 8-bit RGB mode, using the Maximum Compatibility option.

Illustrator files must be saved as SVG files if using a version higher than AI7. Check the

CelAction2D help file (Appendices->Import File Types) for the options necessary to save the SVG file out correctly.

- Make sure you have a layer for each element/shape
- You only need to create one arm/leg as you can copy/flip elements in Celaction
- Use numbers instead of Left and Right if copying arms/legs in Celaction
- Create pivot points on sepearate layer
- Use RGB mode
- Create a large file - approx 5000 x 5000 pixels
- Create an empty layer called align box
- delete the Background layer

ASSEMBLING/RIGGING YOUR CHARACTER IN CELACTION

We will start in ASSEMBLE mode.



Create a new actor

Alt D to create 3 dummies - MOVE, POSITION and CHARACTER. POOL OF ELEMENTS Alt click to position them in a hierachy - Dummies-Position-Move-Character. ACTOR ELEMENTS Alt click Positon to Root.



Next bring in your artwork by clicking the 'man in a pool'

All your ELEMENTS will be in the POOL OF ELEMENT. Now you need to set-up the hierachys using ALT CLICK.

Link your elements to their corresponding pivots and link your hierachys for example- **Hip pivot - Thigh - Knee pivot - Shin - Ankle pivot - Foot**

Attach your Actor to **Character** dummy in **Actor Elements** - Alt Click

Scale down your actor so you can see all your elements - Ctrl Q

Set all Anchor Points in wireframe - A. To copy anchor points from the limb pivot point circles - first select the element you want to copy the point to - Ctrl A - and select the element you want to copy from.

Hide your pivot points - select element and V

Next add your shapes from the Pool of Elements...

Select the default shape and click - Alt S - Opens up Element Shapes folder. Click **Add New Shape(s)** and **Pool**. Shift select your shapes and **Add Shapes - Apply - Done**.

You will notice that your default element then has a green number next to it pertaining to the number of shapes you added. If you select that default element you can use [] to scroll through your shapes.

LIMBERS

Allows an Element to be turned into a deformable object drawn along a bezier curve.

When creating a Shape to be Limbered, draw it straight on a horizontal or vertical axis, to preserve as much fidelity of the original image.

Select element to be limbered - **Element - Create - Limber - Set**. Remember to set if you want horizontal or vertical. By default a limber will have 2 points one either end, so set if you want more than 2.

You can then animate the Limber Control Point Base and the Limber Control Point = which is the handle for the bezier.

COPY AND FLIP LEGS/ARMS

NB: you have to copy Limbers separately.

Select the Element parent you want to copy - ELEMENT - DUPLICATE - FAMILY - select the element you want the copied family to link to. EG: to copy a leg select the thigh - ELEMENT - DUPLICATE - FAMILY - select the body/hip/pelvis.

Now copy the Limbers. select the top Limber - ELEMENT - DUPLICATE - LIMBER - Select where you want the limber to link to eg. the hip pivot point.

You will then have to move your copied families by selecting their top root eg. Thigh/pivot point and clicking **Z**. Click **Z** again to set position.

NB: to rename an element - right click - rename. or F2

To Flip a family - Alt V

DISPLAY ORDERS

Next you need to set your display orders. To do this click - D - select elements and use the arrows to move forwards and backwards. NB: the top is the back and the bottom is the front! To select the family of an element tick Family on right hand side.

Then you are ready to start animating!!

Switch to Animate mode 

Create Actor Level  and load in your Actor

SEE THE BEGINNERS HANDOUT FOR A REMINDER ON ANIMATING!

ADDING VIDEO

You can add video to your CelAction file = Animate Mode - Level - Create - Video.

This function creates a new Level consisting of a new, unique Actor that has one Element

that automatically contains a sequence of alternate Shapes. These Shapes can be brought in from a video file (where each frame becomes a separate Shape), a sequence of image files (where each file becomes a separate Shape), or a PSD, SVG or AI file (where each layer becomes a separate Shape).

CELACTION TIPS

- **NB: If you need to change your actor/character rig after you've added it in the Animate mode scene** - go to Assemble mode - make your changes - (you can use ACTOR - MODIFY to re-link elements). Then in Animator mode - TOOLS - REPLACE ACTOR WIZARD.
- If your elements are all RED it means CelAction has lost the path to your psd/shape file. Go to Assemble mode - ACTOR - SHAPES - FILE -SET to reload your image file.
- Animate Mode - TOOLS - OPTIONS = there's some useful options in here!
- To update shapes/image file = Animate Mode - POSE - SHAPES - UPDATE
- TO COPY AND PASTE ANIMATION FROM A CHARACTER/ACTOR TO ANOTHER CHARACTER/ACTOR- Animation Mode - AUTOMATE - ANIMATION CLIPBOARD - COPY/PASTE NB: elements need to be named the same or you'll need to match up the different elements.