

**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

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#### **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.