

Introduction

This tutorial aims to explain the technique of frame animation using the **Paint Window** in Director. This technique is labour intensive but can produce excellent results.

To begin

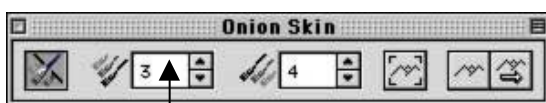
- 1 Open **Paint Window**. **Window > Paint**
- 2 Use drawing tools to create a cartoon image. In the example shown below I used a gradient fill to decorate the face. Give the image a name.



- 3 To create a frame animation you next have to draw a succession of images, each slightly different to the one before. In this case I wanted to make the mouth and eye animate.

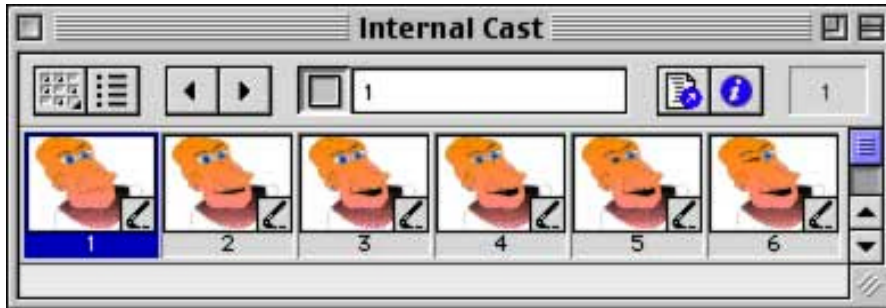
To create the second image, you need to duplicate the first image and make slight alterations. To duplicate the image press the keys **⌘+D**. A duplicate of the first image will appear in the **Paint Window** (and in the **Cast**). Once you have done this, name the new cast member by adding a 1 to its original name.

- 4 You next need to alter the second image. To do this you need to be able to see the preceding image to see where to make the changes. **Onion Skinning** is a very helpful technique here. By switching on the **Onion Skinning** facility, you can see an outline of both preceding and succeeding cast members. To do this go **View > Onion Skin**.



Set the number of preceding cast members to 3 in the dialog that appears.

- 5 Make changes to the image by either drawing onto it or by erasing parts of it or a combination of both. To make the mouth open, for example, draw underneath the existing line to create the effect of a mouth slightly open. The onion skin of the preceding cast member will enable you to decide where to draw.
- 6 Once you have made a slight alteration in this way, you need to duplicate this image and give the duplicate a new name. In this way you will end up with a string of cast members each identified by a number. Continue to duplicate and alter a sequence of images until you are happy you have created the desired motion. To check the motion at any point, use the **Backward** and **Forward** arrows in quick succession.



- 7 You will see that the **Cast** contains each of the images you have created. To turn these into an animation you can use a technique called **Cast to Time**. Click on the first image to select it then **Shift Click** on the last image to select the entire sequence. Then go **Modify > Cast to Time**. This will place the whole sequence in one sprite, which will appear in the **Score** and on the **Stage**.
- 8 Play the sequence to see what it looks like. If you need to adjust the speed of the animation, simply change the length of the sprite in the **Score**. See cartoon_face as an example.