



Introducing Animation

What you will learn

The following examples will walk you through the process of animating images then publishing your images to the Web.

SPECIFICALLY, you will learn to do the following:

- Create/load objects
- Use Frame by Frame animation
- Use Shape Tweening to animate
- Use Motion Tweening to animate
- Use Action scripting to animate
- Publish your document

Frame-by-Frame Animation

In this lab you will create the images used for the animation using the Brush tool. When you have the animation running you will publish to the Web (HTML and SWF format).

Note: for this lab you will be spelling out the word: **xtrack**.

1. Launch Flash MX.
2. Open a new file (document) then save it as *<your-initials>_frame-by-frame fla.*
3. Set the new document to (defaults). **Window-->Panel Sets-->Default Layout.**
4. Select the **Brush** tool (shortcut=B) then draw the backward facing part of the X. (\).
5. Click on Frame 1 in the Layer 1 timeline. You will see that Frame 1 in the Layer 1 timeline turns grey and a black dot will appear in the frame. This indicates the frame is no longer empty and is now a **Keyframe**.
6. Add a new keyframe to Frame 2. **Insert-->Keyframe** (shortcut=F6).

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7. Draw the second half of the X the press **F6** to copy Frame 1 and 2 to Frame 3.
 8. Draw the next letter: “t” then press **F6**.
 9. Repeat the process until you have spelled out the word “xtrack”.
You can check the results of your work by holding the Left-mouse button and dragging it across the occupied keyframes. Your word should animate.
 10. Now, preview the work. Click on the small down-arrow at the right end of the numbered timeline to view the pull-down menu. Select Preview to see the text assigned to each keyframe.
 11. Press <Enter> to see the animation play. To see the animation over and over: Control-->Loop Playback then press <Enter>. Press <Enter> again to stop the show.
 12. Test your move. **Control-->Test Movie**
- This completes the Frame-by-Frame lab.

Shape Tweening

Shape tweening is used to “morph” between one shape and another. It can also be used to animate from one gradient to another, from one color to another, and from one position to another without the need to draw each frame.

Tweening shapes will NOT work with grouped objects, symbols, and text that has not been broken apart.

Step one: Creating a Shape

1. Open a new document then save it as *<your-initials>_shape-tweening*.
2. Select an appropriate size and background color by going to: **Modify-->Document**
The size of the movie is: 200 x 130
3. Type the word: **one**



Note: Anything you shape tween must be on the same layer, so make sure that objects that are not going to be shape tweened are in a separate layer.

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4. You may wish to change the size of your text with the free transformation tool.
5. Select your **Arrow** tool.
6. With the word 'one' still selected go to: **Modify-->Break Apart** (CTRL B)
This breaks the word up into individual letters.
7. Do the same thing again: **Modify-->Break Apart**
The second break apart creates shapes.



When a shape is selected, it is “dotty”.

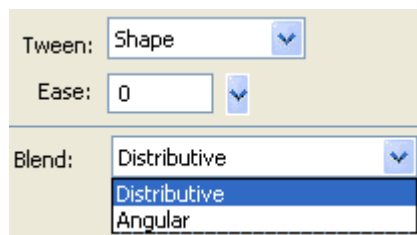
If it is not dotty when selected, but has a rectangle around it, it is not a shape, which means you cannot shape tween it!

Step two: Selecting the frame to shape tween

1. If the Property panel is not open, open it by going: Window > Properties
2. The shape tween is a frame property. To display the frame details in the Property panel click on the keyframe in frame one (the dot under the play head).
3. You should now see the word Tween in the Property panel. From the drop down menu select: Shape



There are now other options visible in this section of the Property panel, none of which you need to use!



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Tween options visible in the Timeline when the tweened frame is selected:

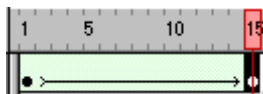
- Ease** A positive value will speed the tween, so that the shape changes very rapidly, then slows down. A negative number does the opposite. Quite honestly it does not make a big difference.
- Blend** Distributive: Creates more smooth but irregular shapes in the animation.
- Blend** Angular: Preserves angles and straight lines during the animation. If there are no angles or straight lines, Flash will revert back to Distributive without asking!

Note: As the tween is not finished, you will not see what these settings do, so don't change them now, come back to frame 1 and play with these settings when you have finished the tween.

Step three: Your second shape

For a shape tween to work you must have two shapes.

1. Right click (Mac: Ctrl click) on frame 15 and select: **Insert Keyframe**



The time line should now have a arrow between frame 1 and 15.

This is the symbol for a tween. If your time line does not have an arrow, you have done something wrong.

At this stage you can either change the shape of your existing art work, or delete it and create a new shape.

2. Delete the word: one
The word will still be in frame 1.
3. Type the word: **two**
4. If you wish, change its size, position, rotation or color.
5. With the word “two” still selected go to: **Modify-->Break Apart**
6. Do the same thing again: **Modify-->Break Apart**



Step four: Test your movie

Your shape tween should now be finished.

1. Save the movie
2. Go to: **Control -->Test movie** (CTRL B)

Step five: Shape hints

You do not need to use shape hints, but often shape tweens throw up unexpected results. To control the way the shape changes as it moves you would use shape hints.

1. Go back to frame 1
2. Go to: **Modify -->Shape -->Add Shape Hint**
This will place a disk marked with a letter: A
3. Drag this to point to a new position that you want to mark on the word: ONE
4. Go to the last frame of the shape tween: frame 15
The disk will already be there.
5. Drag it to mark a corresponding point on the word: TWO
6. Test the move to see the difference.
7. Change the position of the disks and test again.
 - * If you place additional disks in frame 1, they will be marked B, C, D etc. You can only have 24 disks.
 - * If the disks are not visible go to: **View-->Show Shape Hints**
 - * It is best to place the first disk in the top left hand corner of your shape and work anti-clockwise around the shape with subsequent disks.

Step six: Tips

For the best results try not to make the shapes too complicated. Otherwise you may get unexpected results.

You can shape tween things you draw or type, but if they are groups, instances or text, they must be broken apart (Modify-->Break Apart).

Text has to be broken apart twice! Some groups or other objects may need to be broken apart several times. Remember if the object is not dotty, you cannot shape tween it.

The simplest thing to shape tween is something you have drawn on stage.

You can also break apart and shape tween a bitmap, but it does not work very well