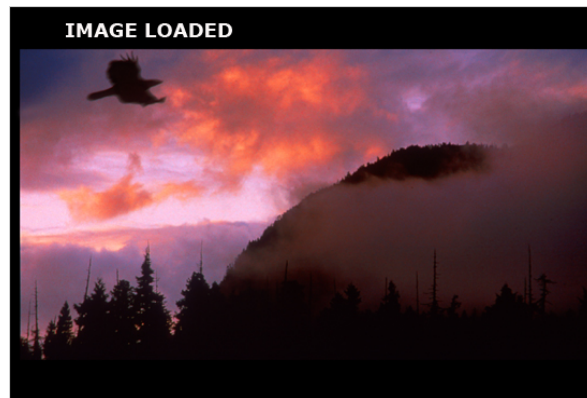


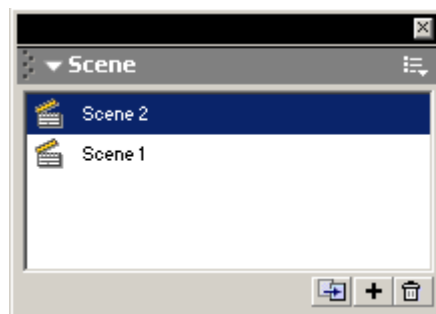
**Percentage Preloader with Load Bar** (original tutorial by Shane Waldeck modified from [www.kirupa.com](http://www.kirupa.com)) R. Berdan April 21, 2004

Although Flash uses streaming technology, some very large files that contain music or animated movie clips with several bitmap images may not run smoothly on slow internet connections unless you preload the file first. While the files are loading you could add another animation that entertains visitors while the main movie loads in the background or you could simply add a bar that grows and displays the percentage of the movie that has downloaded and when it reaches 100% - the movie starts to play or becomes active. This tutorial will show you how to add a Percentage preloader to your movie clips – I like to use it on my object VR Flash movies as these files are usually 200 – 1000 Kb. Also – I like to add the preloader in a separate scene – this way I can easily copy it into another movie without having to rebuild it. This tutorial assumes you already built your movie – and want to add a preloader after the fact so we will add scene 2 – create a preloader, then we will change the play order so scene 2 loads before scene 1. Note this requires Flash MX or MX2004 as the scripts will not work in older versions of Flash.

1. Create a simple movie with a .jpg image (154 Kb) in size – if you already have a movie that requires a preloader you can skip to step 4
2. Open Flash – modify Document> resize the canvas to 550 x 336 (size of my image).
3. Select File>import>select a large image (150 Kb or more) – I put some text on the image “Image Loaded” - this is not required.



4. Select>Insert>scene - to add a second scene.
5. Select>Modify>scene – in the scene window drag Scene 2 before (above Scene 1)



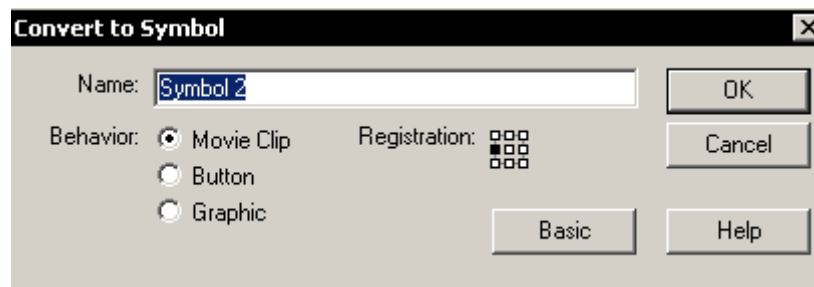
Drag Scene 2 above Scene 1 – this determines the order in which the scenes load and play.

6. In scene 2 – Name the current layer load Bar (double click on layer 1 and type in load Bar). Select the rectangle drawing tool and create a horizontal bar any color you like (I used light gray), make sure the bar has no outline.

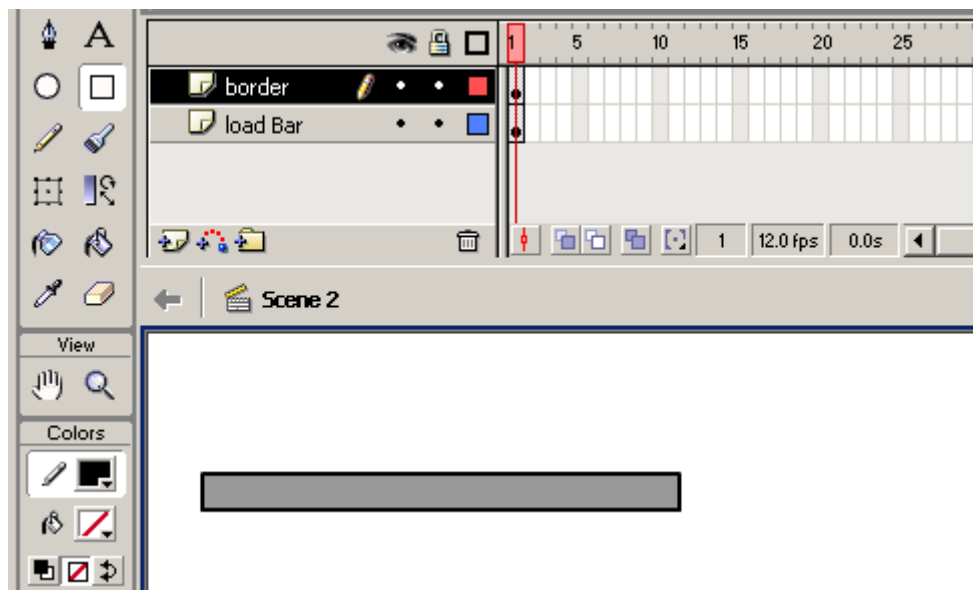


Simple load bar

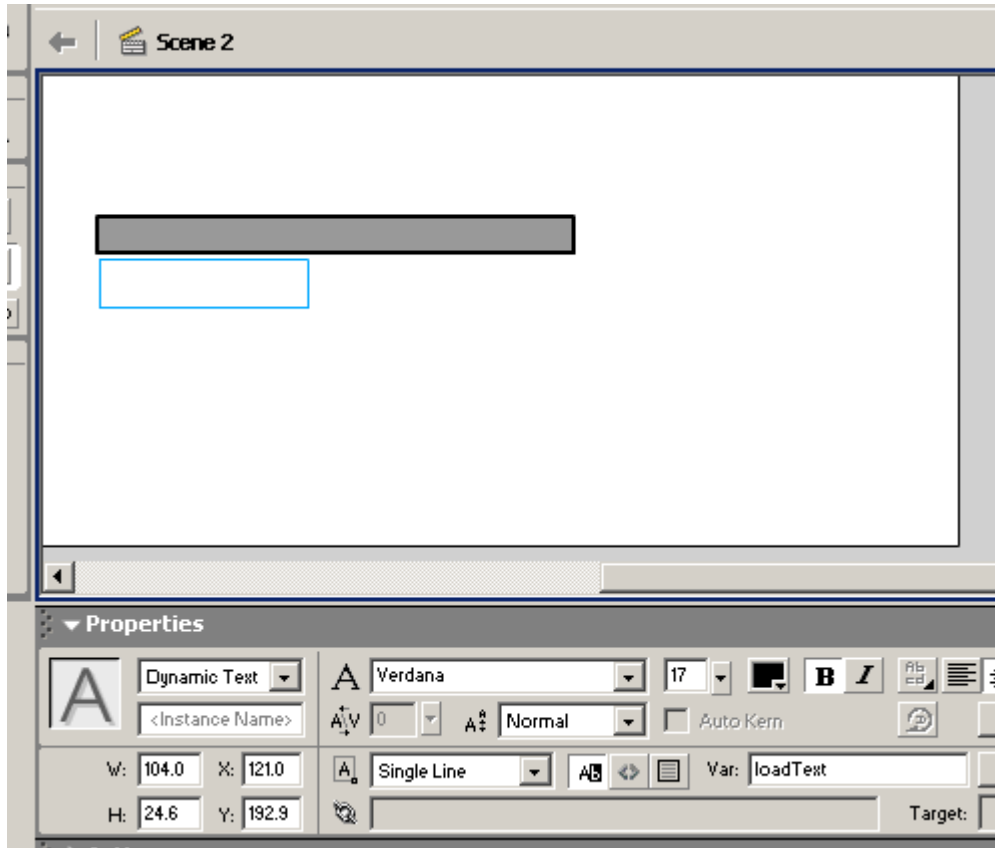
7. Select the load bar then select>Insert>Convert to symbol – make sure you select the left registration on the movie clip. (see below) and Name it loadBar



8. Create a new layer and call it Border – we will make a border around the load bar so it does not appear out of nowhere. With this layer selected, use the line tool to draw a border around the load bar about 1-2 pixels be fine. (see below).

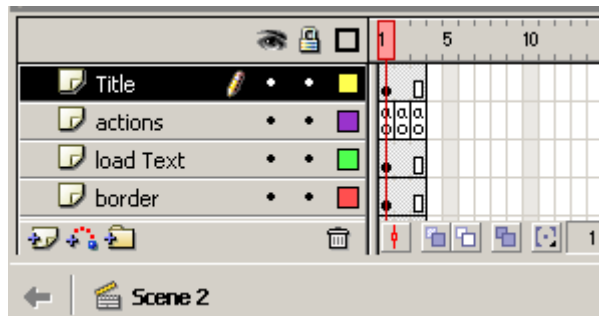


9. Next we will add a dynamic text box that will output the value % loaded to the screen. First add another layer and call it load text. (see below)



Blue outline shows the Dynamic text box below the load bar and in the properties box – Var text field – type **loadText** as shown above.

10. Add a new layer – call it actions. Right click on frame two in the actions layer and insert Blank keyframe and repeat in frame 3. In the layers beneath – Right click on the third frame in each layer and select>insert frame from the pop up window. Your screen should like the image below.



Screen shot showing the additional blank keyframes in the actions layer and the 2 additional frames in the other layers.(Title layer is optional it contains a text message).

11. Now we will add the action script – select the 1<sup>st</sup> keyframe in the actions layer and add the code below. Open your actions palette – in expert mode and type the script below.

```

bytes_loaded = Math.round(this.getBytesloaded());
bytes_total = Math.round(this.getBytesTotal());
getPercent = bytes_loaded/bytes_total;
this.loadBar._width = getPercent * 100;
this.loadText = Math.round(getPercent * 100)+"%";
if (bytes_loaded == bytes_total)
{
    this.gotoAndPlay(3);
}

```

12. Select the 2<sup>nd</sup> Keyframe and add the following script

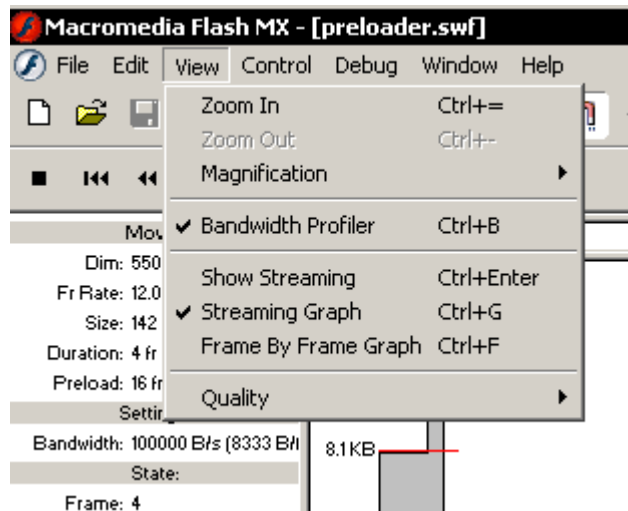
```
this.gotoAndPlay(1);
```

This sends the movie back to frame 1 to re-evaluate how much of the movie has downloaded. When `bytes_loaded == bytes_total` - the entire file has loaded and we will then send the movie to the next scene in frame 3.

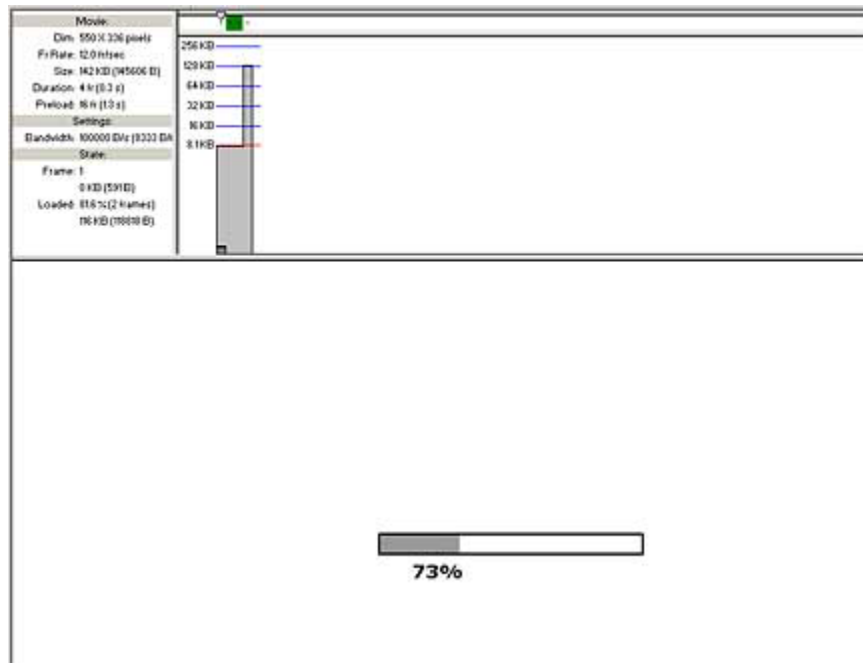
13. Select keyframe 3 in the actions layer and add the following script:

```
nextScene();
```

You are now ready to test your script >Control>Test movie – then select view>show streaming to see the bar load and the percentage text box.



Select Bandwidth Profiler and select Show Streaming to view the bar load. You can simulate the movie loading off a server and you can vary the bandwidth speed.



In Test mode – you can see the percentage bar increase in width and the amount of the movie loaded is displayed in the dynamic text box as the file loads.

14. This last step is optional and not required, but I like to add a short message above the bar while the bar is visible. Add one more layer – I called mine Title and then type in some text above the load bar like:

**Please wait while movie is loads**

You are Done – try it out. To save yourself time in the future – you can simply create a new scene in any movie that requires a preloader – copy all the frames and paste it the other movie. Note if you run your published flash movie off the desktop you may not see the preloader – it will however work when you load it to a server.

#### **APPENDIX:**

The preloader width depends on the amount of the file that has loaded and depends on the `getBytesLoaded()` and `getBytesTotal()` functions which were added in Flash MX and therefore can not be used in earlier versions of Flash.

`Math.round()` - this function simply rounds off the percentage value so it does not have a large number after the decimal place

The color, shape and size of the loadBar can be almost anything you like – this example just shows the simplest version.