



Shockwave Flash 2

Bring your Web site to life with Shockwave Flash, the only Web animation tool with added badda-badda-BOOM! Neal Slateford twiddles his bits.

Spinning logos, animations that jump all over your browser and buttons that make silly noises when you click them. All completely useless, but very impressive. The sort of things that high-tech Web design companies will charge corporate clients hundreds of pounds a day to create, using complicated and expensive multimedia programs like Macromedia Director.

But now there's Flash 2 (also from Macromedia, as it happens), and anyone with a bit of common sense can jazz up their Web pages quickly and easily. What's more the file sizes of the animations are tiny and they stream, which means they start to play as soon as they download, making on-screen action almost instantaneous. Loads of heavily accessed sites (including Microsoft Network and FutureNet) are using Flash already, a sure sign that it's set to become the standard animation package for the Web.

Flash 2 is a vector-based animation and graphics package made by Macromedia. It used to be called FutureSplash Animator, but Macromedia liked it so much it bought the company and rechristened it Flash. Presumably as a tribute to the speed with which it starts playing in a Web page, unless somebody at Macromedia is a fan of the bathroom cleaner.

Vector-based means that graphical elements are described mathematically rather than as bitmap dots, which is what makes the file sizes so small and scalable too so you can zoom in and out of a Flash animation. You do need the Shockwave Flash plug-in for your Web browser to view the files on-line, but you can get one for free from Macromedia's Web site, (<http://www.macromedia.com>) and it's a small download, around 200K.

Over the next few issues, we're going to take the .net homepage and create a Flash version, gradually working through the main features of the program until we have an all-singing, all-dancing homepage, with animated logos, twinkling navigation buttons and stunning sound.

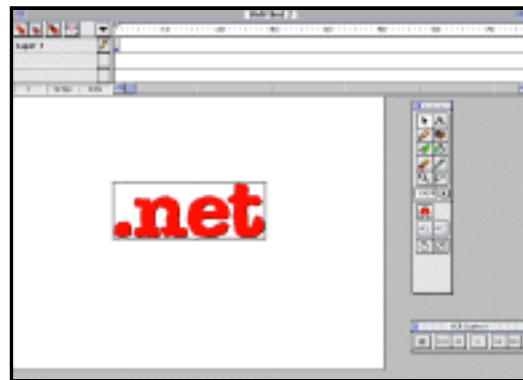
This month we'll concentrate on simple animation, turning the normally sedate .net logo into a dazzling, jumping, bouncing multimedia marvel. [.net](http://www.net)

To start with you'll need a copy of the program. You can download a fully featured trial version from Macromedia's Web site that will work for 30 days for free. Or, if you've bought the CD version of this issue, you'll find it on the disc, along with the browser plug-in.

When you first open up Flash 2 you'll be greeted with a blank 'movie' area – this is where

all the action is set to take place. You can choose the movie size by selecting the option Modify ⇒ Movie and entering the height and width you require. You can also set the background colour and the amount of frames per second you wish your movie to play at, though the default option is fine for most things.

1 The main movie area: Import the .net logo into the program. Select File ⇒ Import and



select netlogo.gif (or whatever takes your fancy, Flash 2 supports both GIF and JPG formats.)

Flash 2 can animate GIFs, but to make the most of its speed and file compression, you should convert the bitmap file into a vector file.

Select the logo by clicking on it with the arrow tool selected from the floating toolbar. Select Modify ⇒ Trace Bitmap. The logo should now have a grey box around it. Click anywhere outside the logo to deselect it and it will return to normal. You'll notice that you can drag different letters and colour areas around the movie area separately. This is because Flash recognises individual areas of colour separately. For this animation we want to move the logo as a whole. Select Modify ⇒ Group to do this.

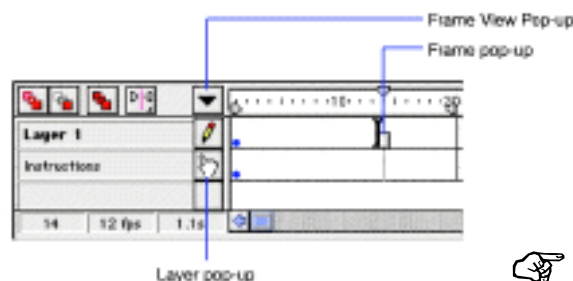
2 The library window: This displays the elements or 'symbols' of your Flash movie. Elements (graphics, sounds, imported GIFs, buttons) used in a Flash movie are called symbols and are displayed in a floating palette from which you can drag them onto the movie area. Select Window ⇒ Library to see the library for your movie. You should just see the GIF we've imported so far. Before we can start

animating we need to make our vector graphic a symbol. Making sure the vector is selected, choose Insert ⇒ Create Symbol and call the symbol 'net vector', leaving the 'button behaviour' box unchecked. The symbol will now be added to the library palette. Next select Edit ⇒ Delete to clear the movie area. Let's animate!

The Timeline is the main control of your animation. You should see it at the top of your movie – if you don't select View ⇒ Timeline. Flash animations are made of layers, each containing individual frames of animated symbols. The layers appear directly below the Timeline. As the time line moves through the layers and frames, the illusion of movement occurs. To better understand this, open some of the sample movies that come with Flash by selecting Xtras ⇒ Samples and play them back by hitting the return button on your keyboard.



3 Timeline pop-up menus: Timeline events are controlled through pop-up menus. The layer menu is located immediately to the right of each layer. Select ⇒ Properties and call layer one 'main'. From the library palette, select the .net vector dragging it to the movie area. A blue dot should appear at frame one.



Flash advice here

Macromedia's Flash support site at <http://www.macromedia.com/support/flash/> is the best place to look for on-line help with Flash. You'll find a Flash FAQ, technical notes and more.

Macromedia also has its own newsgroups, including one for Flash. It's largely frequented by Web design professionals, so do check out the FAQ before asking a beginners question, or you're liable for a flaming.

Access them through your newsgroups program by typing forums.macromedia.com/

into the host preferences box.



On this month's CD-ROM we have a demo version of Flash 2 for Windows 95 and Mac 68K and PPC. We also have Shockwave plug-ins for Netscape Navigator and Internet Explorer.



Wow!

Check out these sites to get an idea of what's possible when you use Flash...

When the world's third largest on-line service decides to make its Web site only available in Flash, you know it's here to stay. Microsoft Network's site at <http://www.msn.com/> does, and if you visit using Microsoft's Internet Explorer Browser it will even download the Flash plug-in for you and install it if you don't already have it.

US clothing company Homewrecker's entire site at <http://www.homewrecker.com/> is in Flash, with virtually no html text visible anywhere. Clever use of typography, colour and layout deliver a site that's both stylish and functional.

The Simpson's site at <http://www.foxworld.com/simpsons/simpsons.htm> was one of the first high profile sites to use Flash, and is still one of the best. You can tour Springfield with Bart, visit Moe's bar and more...

4 Inserting frames in Flash: Now decide how long you want your movie to be. The default frame rate is 12 frames per



second, so a 60-frame movie should come in at around five seconds. Click under '60' on the Timeline in the 'main' layer – the 'I-beam' or frame-marker should appear, along with a small grey box to its right. Click this to access the frames pop-up menu.

Select Insert frame. A solid line will appear at to the right of the I-beam indicating the end of your movie. You should now be able to click on the Timeline's current-frame pointer (the down-pointing arrow at the top of the Timeline) and drag it back and forth through the 60 frames. You don't have to decide the length of the movie before you start animating; you can add and subtract frames with the frame pop-up menu at any stage.

Animating in Flash happens when the

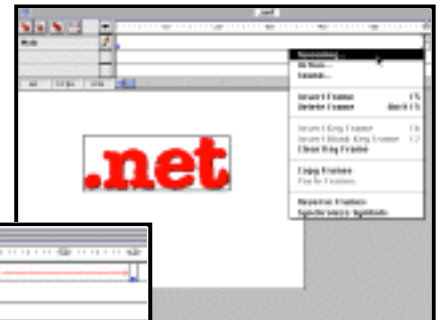
Timeline moves through Key Frames. Key frames are any frame where an object changes from the previous frame, and are indicated by a blue dot. Create two key frames by going to frames 40 and 60 and selecting Insert Key Frame from the frames pop-up menu. A blue dot will appear in each frame.

Drag the Timeline pointer to frame 40. A black border should appear around the image. Drag the logo across the stage. Play your movie. Hit [Return].

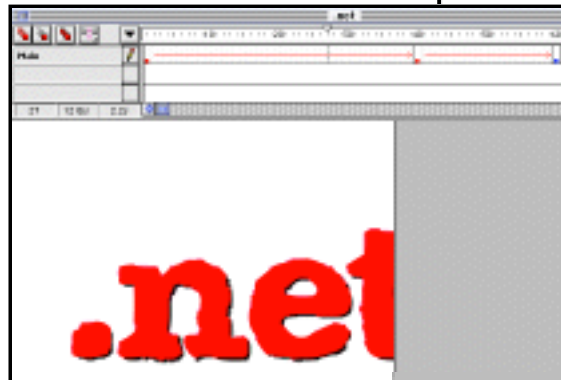
As the Timeline pointer moves through the movie, the image should stay stationary until it passes frame 40, when it will suddenly jerk across the stage to wherever you put it, staying there until frame 60, when it will return to its original position.

5 Tweening makes animation easy: By individually creating a series of key frames and moving an image by hand you will create an animation, but this is time consuming and a lucrative career in multimedia beckons. Luckily we have tweening, a nifty feature of Flash. Here's the deal; you specify the position of two frames, and Flash works out all the frames in between.

Let's tween between frames one and 40. Drag the timeline to frame one. From the frame pop-up select Tweening → Motion and click OK. A red line should appear between frames one and 40. Play your movie. Your image should be moving smoothly across the stage. You are Walt Disney. Tween between frames 40 and 60 to complete the sequence.



6 Congratulations – you are an animator. Now you can experiment with inserting more key frames and moving the image around your movie. Delete unwanted key frames by selecting the 'Clear Frame' option from the frame pop-up menu. Not only does tweening calculate movement, it also handles colour effects, scaling, rotation and more. This is where Flash really scores. Drag the pointer to a key frame and select Modify → Transform → Rotate. Rotate the image wherever you fancy. Hit play, sit back and watch it spin. Select Modify → Transform → Scale. Drag the corners of the logo to increase and decrease its size. Flash will then do the rest for you. Select Modify → Transform → Scale and Rotate to amaze yourself. You'll find it won't take long before you're creating something really impressive.



7 Add layers for new animations: Each tweened animation needs to have its own layer. Select Insert → Layer to create a new one. We've added a 'the internet magazine' animation on a separate layer. Use the text tool (the 'A' on the tool palette) to do this. Remember to make it a symbol as before.

whatever you want).

Embed the exported SWF file in an HTML page using the following code:

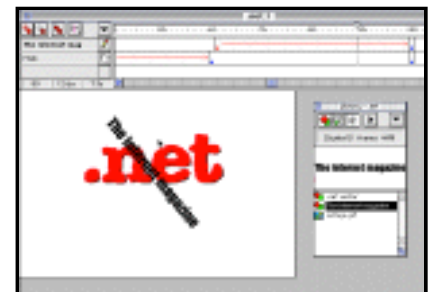
```
<EMBED SRC="netmovie1.swf" HEIGHT="300" WIDTH="440" QUALITY="HIGH" LOOP="YES">
```

Quality="LOW" will play a faster, not so smooth version and Loop="NO" will play the animation once only.

Preview the page in your browser and start visualising your future as a highly-paid multimedia guru. [mca](http://www.mca.com)

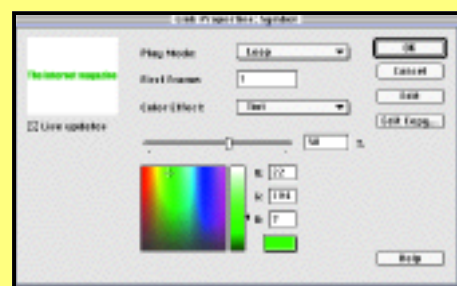
Once you're happy with your movie, save it. To be viewed in a Web browser the movie must be exported as an SWF (Shockwave Flash) file.

Select File → Export Movie, and choose the Shockwave Flash option. (You can also export the movie as an animated GIF, QuickTime movie or



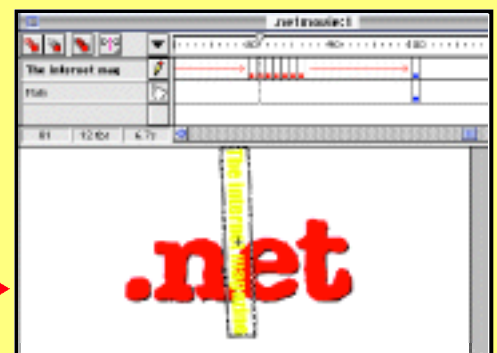
SPECIAL EFFECTS

Insert a Key Frame at the point you want your effect to take place, then select Modify → Element. Select Tint from the Colour Effect menu. Choose a colour and hit OK.



◀ The Modify Elements box – if you insert the key frame into a previously tweened section, Flash will gradually change between the two colours. A succession of Key Frame colour changes creates a more 'lightening-flash' effect.

Experiment with the Brightness and Special features of the Colour Effect menu for fade in and out effects. [mca](http://www.mca.com)



NEXT MONTH:

Creating animated buttons and embedding links and using Flash's drawing tools.