Printing in flash

Once you have set up interactivity in your Flash movie, you can set certain frames in the movie to be printable so that users can print them with the Flash Player.

Allowing you to use the Flash Player printing feature to print catalogues, coupons, information sheets, receipts, invoices, or other documents in your Flash movies.

The Flash Player prints Flash content as vector graphics at the high resolutions available from printers and other output devices.

Printing as vector graphics scales Flash artwork so that it prints clearly at any size without the pixelated effects that can occur when printing low-resolution bitmap images.

Printing movies from the Flash Player instead of from the browser gives Flash authors several advantages.

You can do the following:

- Specify which frames in a Flash movie can be printed. This lets you create layouts appropriate to printing and protect material from unauthorized printing.
- Determine the print area of frames.
- Specify whether frames are printed as vectors (to take advantage of higher resolutions) or as bitmaps (to preserve transparency and colour effects).
- Assign Print actions to print frames from movie clips, even if the movie clips are not visible. This lets you provide printable material without using valuable browser space.

All frames in the specified Timeline print by default. You may want to limit the number of frames that can print—for example, if you have a lengthy animation of dozens of frames. You can designate specific frames in a movie as printable in order to print only those frames; unspecified frames won't print.

To specify frames as printable, we label the frames.

The printable area

By default, the movie's Stage determines the print area.

NB. Any object that extends off the Stage is clipped and does not print.

Loaded movies use their own Stage size for the print area, not the main movie's Stage size.

As an alternative to using a movie's Stage size, you can set three different print areas:

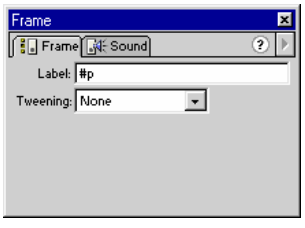
- For either the Flash Player context menu or the Print action, you can designate the movie's bounding box as the print area for all frames by selecting an object in

one frame as the bounding box. This option is useful, for example, if you want to print a full-page data sheet from a Web banner.

- With the Print action, you can use the composite bounding box of all printable frames in a Timeline as the print area—for example, to print multiple frames that share a registration point. To use the composite bounding box, select the Max option in the Print action parameters. See Adding a Print action.

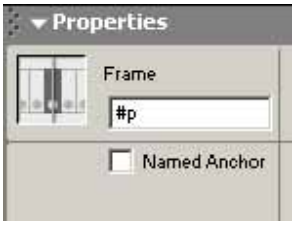
- With the Print action, you can change the print area for each frame, scaling objects to fit the print area—for example, to have objects of different sizes in each frame fill the printed page. To change the bounding box per frame, use the Frame option in the Print action parameters. See Adding a Print action.

To specify a print area:



Open or create the movie whose frames you wish to print.

To specify the printable item we add a frame label and type in, ' **#p**.'

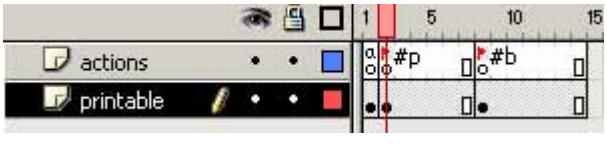


Within or directly below this keyframe draw the object or item you would like to be printed.

Now you need to specify the size and orientation of the printout. This is Identified by another frame label, '**#b**'.

You can enter only one '**#b**' label per Timeline.

N.B. you can disable printing by placing a '!' in front of the print label '**#p**', this is normally a good idea during testing so you don't waste paper.



Your timeline should look something like this.

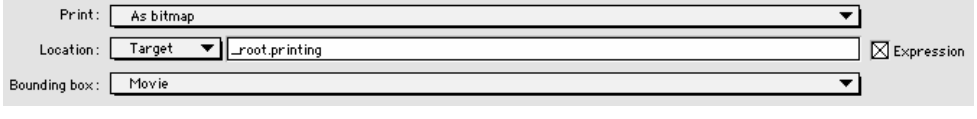
Adding in the Action scripting

The action script can be found in the 'Action' list in the action scripting window in Flash 5 or in the 'Action > Printing' in MX, and looks like this:

printAsBitmapNum(2, "bmovie");

As you can see the code is quite simple and consists of a number of options.

The options box below this in the scripting window gives you the following extra options.



- ***Print*** has the options to Print at Vector or as Bitmap this really is down to you…Vector based is smaller in file size because Flash is vector based.

- ***Location*** in this example is a named movie clip called ‘printing’ but it could very well be a keyframe on the main time line, in which case the code would read:

  PrintAsVector (keyframenumber , “bmovie”);

- ***Bounding box*** is the last choice and determines how the printing happens. It has three options:

  - ***Movie*** – relying on the #b section of the printable item
  - ***Frame and Max*** – overrides any frames labelled #b for the movie's bounding box.