

Vector application provides workflow and interactivity enhancements, plus support for QuickTime, MP3 and Illustrator

Macromedia Flash 4

BY PETER DUDAR

MACROMEDIA POSITS *FLASH* AS THE INDUSTRY STANDARD FOR INTERACTIVE VECTOR GRAPHICS and animation on the Web. And recent independent research backs that assertion: 83.1% of Web users have the *Flash Player* pre-installed in their Web browsers, which translates into 142.1 million users and counting. The *Flash* file format (SWF) is open, and a Free Source licensing program for the player code is in the works. But business savvy alone hasn't put *Flash* out in front. Simply put, the application provides a relatively easy authoring environment for delivering seemingly high-bandwidth results with low-bandwidth demands. Version 4 puts the accelerator to the floor: a revamped interface, strengthened scripting component, plus new video and audio capabilities speed up authoring and enable you to output more sophisticated, more interactive sites.

REVAMPED AUTHORIZING INTERFACE

The interface has been fine-tuned in numerous ways, so frequently accessed features are easier to get at and it's more harmonized with other Macromedia applications like *FreeHand* and *Dreamweaver*.

The *Library* has been enhanced with geometric tools and modifiers: circle, rectangle, corner radius. The *Inspector* window has been subdivided with tabs — you can position selected objects numerically, and transform them with scale, rotation, and skew commands. The *Scene* tab enables you to organize a movie thematically (introduction, loading teaser, credits, and so on) while adding, deleting, duplicating and setting properties.

A symbol can now be edited in relation to other (grayed out) artwork onscreen — right- or control-click an instance of the symbol and a context pop-up menu provides an Edit in Place option. The redesigned *Library* enables you to organize assets

into folders and reorder them by symbol type, number of times used in the movie, and last modification date.

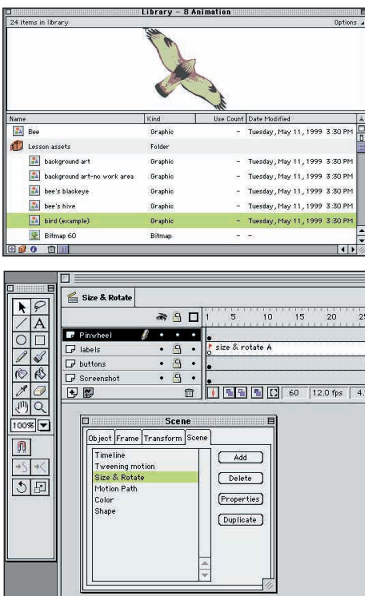
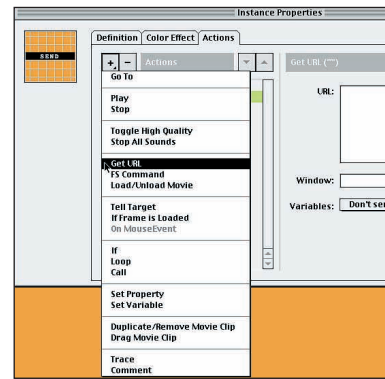
The *Timeline* is now dockable, and supports multiple monitors. Enhancements to layer management, along with object-oriented keyframes, a create motion tween command, and smart guide layers enable you to realize concepts faster. Layer commands like delete, hide and lock, which were once buried in pop-ups, are now on the *Timeline*; a revised outline color command can be applied to individual layers, to differentiate elements as you edit on-stage. The Create Motion Tween command streamlines the tweening process; *Flash* automatically converts shapes into symbols and names them tween 1, tween 2, and so on. And if you define a tweening range by dragging an element on the Stage, *Flash* insets a keyframe at its end point. Motion-tweened elements snap automatically to a motion path sketched out on a motion guide layer. As well, you can link and unlink multiple layers to a motion guide or mask layers.

To ensure color consistency across web sites, version 4 imports and exports RGB palettes between Flash files using Flash Color Set files (CLR). Color Table files (ACT) can be exported for use by *Fireworks* and *Photoshop*.

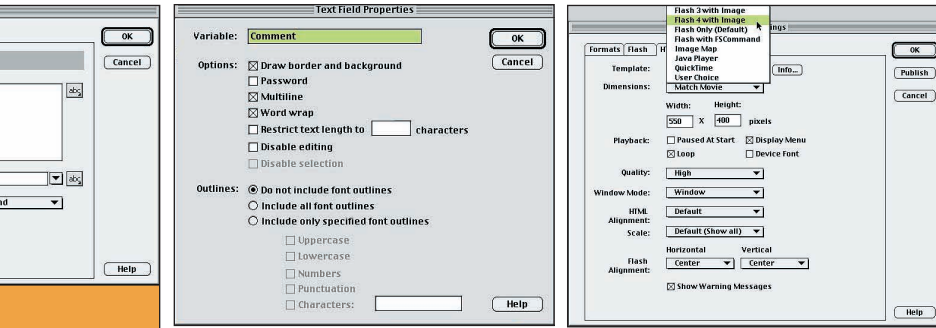
INTERACTIVITY THRU ACTIONS

Scripting in *Flash* is far removed from writing Lingo for Director; actions are set by selecting statements from the *Actions* tab of the *Properties* dialog and then determining relevant parameters. New actions in *Flash 4* can evaluate events and information while a movie is playing, and respond to the result, duplicating the output of JavaScript and other scripting languages — so *Flash 4* has progressed from animation tool to a viable application for interactive movie-making. And your end user can now jump to different parts of movies, move elements around and enter text that provokes a response.

The *If* statement allows you to create conditional actions. For example, you can check a user-entered value in a text field and respond appropriately if it's too high or too low. The *Loop* statement, commonly used with counters, sets up a series of statements that run repeatedly while a specific condition persists. The *Call* statement eliminates the need to copy and paste repeatedly when reusing an action on multiple elements. The statement that everyone will give a spin whether or not they have a use for it is *Drag Movie Clip*, which enables end users to reposition clips onscreen. *Set Property* can be used to alter the position, scale, transparency, visibility and rotation of the clip as it plays. The other new statements are: *Set Variable*, *Duplicate/Remove Movie*



(top) The redesigned **Library** enables you to organize assets into folders. (bottom, clockwise) The enhanced **Toolbar**, the dockable **TimeLine** and the expanded **Inspector** window, **Scene** tab selected



(from left) Instance Properties dialog with the expanded Actions list selected; Text Field Properties dialog; Publish Settings dialog with HTML templates list selected

Clip, Trace, and Comment (some actions require familiarity with programming languages).

Flash has stepped into data gathering and e-commerce; to create an editable text field, just click the text tool, then the Text Field modifier, and drag. Data collected from your password entry fields, registration forms, surveys, and so on, can be passed to any CGI script for closer integration with *Active Server Page*, *ColdFusion*, or *Macromedia Generator* dynamic graphic servers. Text fields can also be used to dynamically replace text that is not editable: sport scores, stock quotes, weather reports, and so on. Options available in the Text Field Properties dialog include: password field, multi-line field, word wrap, disable editing, and disable selection. Fields can be restricted to a specified number of characters; and fonts can be embedded.

QUICKTIME AND MP3 SUPPORT

Flash 4 provides export (but not import) capabilities for streaming and event audio with MP3 compression, enabling you to create longer movie soundtracks while keeping files small enough for low-bandwidth delivery. Three options let you adjust output for the target medium: preprocessing (stereo to mono), bit rates (8 to 160 kbps), and quality (fast, medium, best). You can visually synchronize audio streams on the Timeline, forcing animation to keep pace with audio.

Macromedia *Flash 4* provides native support for importing, extending, and exporting *QuickTime 4* movies — and Apple has built the *Flash Player* into *QuickTime 4*, so *QuickTime* movies can include Flash graphics, animations, and interactivity. (Check out the demo movie at www.macromedia.com/software/flash/qt4. It uses an intro animation, navigation linking to bookmarks in the movie, a semi-transparent control interface, and titles layered over the movie.) The *Flash/QuickTime* combination produces high-quality streaming video overlaid with high-quality vector interfaces.

A *QuickTime* movie imported into *Flash* is not incorporated into the *Flash* file; though it is automatically filed in the Library, *Flash* is really just pointing to the Source file. But the *QuickTime* movie can be scaled, rotated and animated within *Flash*. The Publish Settings dialogue lists export

options, including: dimensions, alpha transparency, layers, streaming sound, controller placement and playback. *Flash* and *QuickTime* videos remain in separate tracks in the final *QuickTime* file. Any number of SWF tracks can be added to the movie. And since the tracks play along the same timeline, effects, titles, and navigational elements can be tightly synchronized.

Adobe Illustrator users will no longer need to reformat artwork as bitmapped files for use in *Flash*. A free plug-in called *Macromedia Flash Writer* will enable *Illustrator* to save artwork natively to the *Flash Player* file format, just like *Macromedia Freehand*. Check for it online.

ONE-STEP, CROSS-PLATFORM PUBLISHING

AfterShock is history. In addition to SWF, the new Publish command exports a variety of file formats, including: GIF, JPEG, PNG, BMP, PICT, QuickTime, or AVI. The command exports all the selected formats with a single click; and it also creates the supporting HTML document required to run the Flash movie in a browser. The HTML panel in the Publish Settings dialogue provides templates such as Flash Only, Flash with FS Command, Image Map and Java Player — or you can create your own. The dialog also provides an array of export options for each supported format. When you select an image format like GIF or JPEG, *Flash* automatically adds the HTML code required to display the image if the *Flash Player* is not installed. Once the Publish Settings options have been entered, you can re-output by just selecting File>Publish.

If you are upgrading to *Flash 4*, the enhanced scripting alone may justify the reinvestment. The inclusion of statements like Set Variable and If Else, has made *Flash* more viable for online game development. *Director* still commands the high end, but for most Web-oriented developers *Flash* provides a more amenable authoring environment and is versatile enough to meet their needs. And *Flash* retails for less than one-third the price of *Director*.



MACROMEDIA FLASH 4.0

System requirements
 Power Macintosh with MacOS 7.5 or later; 32 MB of RAM; 20 MB of available disk space
 133 MHz Pentium processor; Windows 95/98, NT4 or later; 32 MB of RAM; 20 MB of available disk space
Playback requirements are less stringent: minimum Windows 3.1 or MacOS 7.1, and plug-in with Netscape 2 or later
Street price \$299 (US)
Upgrade \$129 (US)
 Macromedia
 Telephone: 800-457-1774
 Web: www.macromedia.com