



Multimedia Medley

by Péter Jacsó

The Best Plug-Ins and ActiveX Controls

These multimedia add-ons are "best bets" for use with your Web browser

In last month's Multimedia Medley, "A Plug for Plug-Ins, ActiveX Controls," I discussed the benefits that add-ons bring to your Web browsing experience. This month I'll focus on which plug-ins and ActiveX controls I find the most useful and why.

Best in anything is, of course, relative and subjective, but there are certain criteria that make one plug-in or ActiveX control objectively better than another. Overall, I prefer ActiveX controls for Microsoft's Internet Explorer because most of them spare me the obedience course needed by the plug-ins, as I explained last month. However, there are file formats that are handled only by plug-ins. While Microsoft claims on its home page that there are about 83 plug-ins and more than 1,000 ActiveX controls, this figure needs interpretation. Many of the ActiveX controls are tiny routines for developers to create an animated button, or a marquee, or to run a stock ticker on a page. While these are certainly useful, they don't belong in the same category as plug-ins of full-blown utility programs.

If we count only such applications, then the picture is quite different. I estimate that in early November there were about 110 plug-ins and 60 ActiveX controls for applications like audio, animation and video playback, display and search of specially formatted documents, etc. The numbers, however, change daily, and application-league ActiveX controls are likely to outnumber plug-ins soon.

Cutting to the Chase

Even that number is quite high, but there is significant overlap in functionality, and many of the plug-ins and ActiveX controls (add-on programs in general) are for files or file formats that may not be relevant for you. If you don't crave crawling around in quasi 3-D landscapes then you can ignore at least a dozen of the add-on programs. Another consideration that decreases the group of the best add-on programs is the number of Web sites that require you to have the add-on. RapidTransit, the streaming audio plug-in, is impressive, but the sites that use it now are few and far between. The same is true for the mBED plug-in for animated images. On the other hand, RealAudio, one of the best overall add-ons, is used by hundreds of Web sites. Finally, from the perspective of this column, many of the add-ons, while useful, don't qualify for multimedia (such as the excellent HindSite add-on that indexes and saves the text content of previously visited Web pages and makes them searchable, so they can be found even if you forgot to bookmark them). With these criteria in mind, here are the multimedia add-ons that I have found the most useful.

Jack-of-All-Trades Add-On Programs

There are a few plug-ins that were developed at a time when Netscape could not handle WAV and MIDI audio formats, AVI, and MOV video. As not even the current version of Netscape Navigator offers MPEG (in contrast to Internet Explorer, which now has playback capabilities for all these formats), and neither Netscape Navigator nor Internet Explorer directly supports FLI and FLC animation formats and certain popular image formats (TIF, DIB, BMP), there is still room for audiovisual add-ons. The most useful are the ones that can handle multiple standard file formats that are widely popular on the Web.

The best that I have found for the standard audio, video, and animation files (especially for Netscape 1.x and 2.x

that goes beyond pure text, these add-ons for images (even if only text-images) do qualify. Acrobat is the most well known, and its latest version (Release 3.0) can reproduce the sophisticated formatting of documents ranging from tax forms to *The New York Times* crossword puzzles. It now streams the pages, so you don't need to wait until all eight pages of the Web edition of *The New York Times* are downloaded. As soon as the first page arrives, it is displayed, and the rest continue downloading while you read the first page.

Lesser known but equally capable is Tumbleweed's Envoy. No wonder that TimesFax is available in both PDF and ENV formats. Tumbleweed takes less disk space for the application, but its rendering of the crossword page required 15,682 bytes while Adobe made it in 11,321 bytes. Not a big deal you might

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users) is NetToob from Duplexx (<http://www.duplexx.com>). It handles AVI, MOV, VR, FLC, FLI, WAV, MIDI, and MPEG audio and video files. It is shareware (at a more than reasonable price of \$20). When it can stream all these files (hopefully by the end of this year), it will also be important for Internet Explorer users.

KeyView by FTP Software (<http://www.ftp.com>) is capable of handling far more formats than NetToob, but the way it installed itself and took over functions from other plug-ins was just too pushy and aggressive for me. Yes, I am thin-skinned—when on the receiving end. Maybe I have just been living for too long in gentle Hawaii, and those who ride the subways of New York, Tokyo, and Mexico City or who drive the highways of Los Angeles or the streets of Manila and Rome will find this otherwise capable plug-in a good sidekick to tackle 200 standard file formats.

Add-Ons for Document Images

You may dispute whether this category is multimedia, but by stretching the definition of multimedia to include any format

say, but for 14.4 Kbps modem users, the difference is perceptible. Both had very good reproductions of the original layout and typography, with minor glitches. Adobe chopped the last letter of a headline that ran too wide for Acrobat, but it had better kerning, i.e., the spacing between letters was better. Get both these add-on programs available as a plug-in and an ActiveX control—most conveniently from <http://www.nytimesfax.com>.

Add-Ons for Bit-Mapped and Vector Graphics

Although the most popular bit-mapped images on the Web (GIF and JPEG) are efficient and are handled by all browsers automatically, there is fierce competition to have better compression, faster display, and improved quality and functionality for images (rotating, zooming, and flipping). Iterated System's Fractal Viewer plug-in is superb, and its home page offers excellent demonstrations (<http://www.iterated.com>). (This accolade does not extend to the ClearVideo plug-in from the same company, by the way. It was deeply disappointing, being unable to play back AVI files even from sites that

Iterated System's home page recommended.) Lightning Strike's (<http://www.infinop.com>) wavelet compression can outperform even Fractal Viewer in some instances but is not nearly as widely used by Web site developers. On the vector graphics front, Corel's CMX viewer (<http://www.corel.com>) and, for CAD images, the DWG/DXF plug-in from SoftSource (<http://www.softsource.com>) stand out.

Add-Ons for Audio

The indisputable king for streamed audio has been RealAudio, with the most sites offering music, radio programs, presidential speeches, news, sermons, etc., in the proprietary streaming format. Frankly, I was not crazy about the quality of the first two releases of RealAudio even when tested on a T-1 direct connection with a 166-MHz Pentium and an inexpensive (\$70) sound system with a subwoofer, but RealAudio 3 made me a convert when listening to stereo clips of the Ride of the Valkyries, and of a pop song. More and more sites offer clips in RA3 format. Progressive Network, the developer of the format, has a terrific showcase page (<http://www.realaudio.com/hpproducts/ra3.0>) that clearly explains and demonstrates the features of the new version.

Voxware, Inc.'s ToolVox has always impressed me with its unique capability of accelerating and slowing down the playback of voice recordings under user control in fine increments. Its interface has improved lately and is strongly recommended (<http://www.voxware.com>). Xing's Streamworks (<http://www.xingtech.com>) provides high-quality streamed playback of MPEG audio files and acceptable rendering of MPEG video files. My two earlier favorites (TrueSpeech and Internet Wave) seem to have been sitting on their laurels and have lost momentum.

Add-Ons for Animation with Sound

The Macromedia Shockwave plug-in and ActiveX control are recommended as more and more sites get shocked. Many of them use it just for effect, but there are genuinely useful and engaging sites. Macromedia also has an excellent home page (www.macromedia.com) with pointers to shocked sites.

The add-ons are very large, especially if you want to download the players for files created by Director, FreeHand, and Authorware, but it is worth the time if you have a direct connection. The latest version now also plays streamed Macromedia audio files in top-notch quality.

I find Shockwave particularly useful because the best multimedia CD-ROMs were built using Macromedia software, and the company makes it easy to transfer those applications to the Web. For those and more reasons, I also vote for the Enliven plug-in and ActiveX control from the up-and-coming company Narrative Communications. It streams audio and animation together and is optimized for high-speed modems. Developers can con-

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vert Macromedia Director files into Enliven format (<http://www.enliven.com>). They not only can but certainly will once they have seen the short but impressive interactive animation demo of the popular children's title *Arthur's Birthday* from Living Books. The other animation add-ons (Sizzler, mBED) are also capable but they hardly stand a chance against these two in the fight for market share.

Add-Ons for Slide Shows

In this category, two add-ons may be worth downloading and installing. I have been impressed with the ease of creating slides with Software Publishing's ASAP software. While I have not yet seen outstanding slide shows created by ASAP on the Web, the ASAP Webshow plug-in is still promising because of the extremely lean ASAP files (<http://www.spc.com>). I have also been fond of the more powerful and reasonably priced Astound Gold Disk multimedia authoring software, and I had high expectations for the Astound Web Player plug-in (<http://www.golddisk.com>). It caused me some headaches a few months ago, but it may be worth the trouble-shooting it requires, as it can play back not only Astound slide shows but those created by PowerPoint as well. PowerPoint being the most popular business presentation software, plenty of PowerPoint slide shows are going to appear on the Web. While there is an add-on specifically for PowerPoint files, Astound may help you to kill two flies with one swatter.

Add-Ons for Video and Virtual Reality Files

I combine the two here as they have at least one thing in common: Neither is for prime time yet. I like the useful and high-quality virtual reality walk-throughs on Dorling Kindersley's or Voyager's CD-ROMs, and I watch video clips occasionally on some Web sites, but on the Web I cannot whole-heartedly recommend either video or virtual reality. If you have a direct connection and you realize that the best you can get is a 1/8 or 1/16 screen at 10 to 12 frames per second, the following may be appropriate. For streamed MPEG video, StreamWorks, which I mentioned earlier, or PreVU (<http://www.intervu.com>) stand out. Vosaic (<http://www.vosaic.com>) will deserve attention when it becomes steady. VDOLive from VDONet (<http://www.vdonet.com>) uses proprietary video format, but it is getting popular, being used by a number of sites.

For VR files, Cosmo Player from Silicon Graphics, Inc. is a good choice (<http://www.sgi.com>). It may have been part of the extra software that you downloaded with Netscape Live3D, but may also have expired. Mine did. You can get a new version for free from <http://www.sgi.com>. Two others that I have heard good things about but haven't tested are VREALM by Integrated Data Systems (<http://www.ids-net.com>) and WIRL from VREAM (<http://www.vream.com>).

Proceed with Care

Things are changing at a breakneck pace on the Web. Every week there will be a few new multimedia add-on programs. The question is how many developers are going to use a given program and make files available in that format. Those that improve the playback of existing standard format such as the ones that stream standard audio and video have quite a safe future.

Sometimes a great idea is embodied in an add-on program and will become integrated in the next edition of the browsers. Currently, a very promising plug-in of this type is NCompass for Navigator, which can make it run ActiveX controls

by wrapping them as bitter medicine in a gel cap. I downloaded it but chickened out before installing it. In preparing for this series of Multimedia Medley columns I have messed up my system much too often installing all these plug-ins and ActiveX controls. If you can resist going on a binge, you may not have serious incompatibilities. Add-ons may behave when alone or in twosomes or threesomes like British lords but are likely to become like soccer fans when in a crowd. No matter how curious I was about NCompass' ability to make Internet Explorer's ActiveX controls acceptable for Netscape Navigator, I felt that it would be like letting the wolf in the

pen—in sheep's clothing. Other deadlines requiring the same computer were just too close for that gamble.

As for gambling, I am about to leave for Las Vegas (primarily for COMDEX, of course), and will report soon about what we can bet on in multimedia computing in 1997.

Péter Jacsó is associate professor of library and information studies at the University of Hawaii. He writes for this and other professional magazines, speaks at professional conferences, and regularly offers his online/CD-ROM workshop series. His e-mail address is jacso@hawaii.edu.



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