With this wealth of new and enhanced features, Netscape promises to maintain its edge in the World Wide Web browser market. However, Netscape 2.0 is currently not supported by the University. Given the known problems with the e-mail client in Penn’s environment and the great complexity of other new features described below, only the browsing functions are likely to be supported initially.

Performance

Version 2.0 is noticeably faster than previous versions. This is especially evident on dial-up phone lines using SLIP or PPP. Netscape Communications Corporation optimized Netscape 2.0’s code for speed over telephone lines and the result is a wonderfully usable browser—even from home.

Another performance enhancement is client-side image mapping, which means that those cool pictures you click on to navigate the Web can be interpreted by your machine—instead of it having to wait for the server to do the work.

Netscape 2.0 can also download multiple types of data simultaneously, including sounds, video, text, and graphics. It also supports Progressive JPEG images. Progressive JPEGs load images in layers so that you can see images faster, without having to wait for perfect quality before something appears on your screen.

E-mail, news, and frames

Netscape now features a POP mail client similar to Eudora. While it doesn’t have as many useful features as Eudora, it has all of the basic features one would expect, including the capability for users to create folders to manage messages. And you get easy access to e-mail capabilities through both menus and buttons.

What sets it apart from other mail clients, however, is the capability to easily send, receive, and natively render multimedia HTML code embedded in messages.

A caveat lector is in order for Penn users: The e-mail client is currently not fully compatible with the POP mail server used on some campus mail hosts. Specifically, the Leave Mail on Server feature is not supported and—if selected—will cause one’s e-mail to seem to disappear from the server. It is not really gone and can be made visible, but it can be horrifying when it happens, to say the least! Eudora, with its stronger feature set and cleaner appearance, continues to be the POP mail client recommended and supported by the University.

Netscape’s news reader has been upgraded to a full-featured news client. A separate Address Book module serves both the e-mail and news clients. Again, the feature setting it apart from other new readers is the capability to natively render any embedded HTML code, image, or other data format recognized by the browser (e.g., GIF, JPEG, e-mail addresses, references to other newsgroups, and hyperlinks).

Binary file transfer via e-mail or news is completely transparent and, in many cases, such files can be automatically interpreted by the browser and presented to the user. This means the user can see images, hear sounds, and view movies without having to worry about how to decode the information. However, users should be careful to retain control over what programs execute on their desktop. In general, it is a good idea to not accept unsolicited binary files in e-mail, and to exercise caution before accepting binaries or automatically allowing mail viewers or Web browsers to launch uncommon applications. While there have been no reports to date of any harm in such commonly launched applications as Telnet sessions; JPEG, GIF, or QuickTime viewers; or audio players, there is increasing concern about “macro” viruses, which are spread through sharing word processing documents, spreadsheets, and PostScript or MIME attachments that contain harmful or self-replicating macro-language commands.

Netscape 2.0’s e-mail client and news reader make use of another new capability of the browser—frames. Frames are panels within the main browser window. They can function independently of each other and may be fixed or scrolling. It is also possible to link the content of one frame to hypertext contained in another. Although frames allow many powerful and creative new applications—such as the improved news reader and e-mail clients—they can be difficult for HTML developers to design and for users to navigate. In fact, many Web pages using frames appear messy, ugly, and confusing. Although the frames Netscape uses in its e-mail and
news clients are fairly well designed, they demonstrate how cluttered frames can become unless one has a very large monitor.

Security

Security continues to be an issue on the Web. Netscape has led the way with security services, and other vendors have been forced to follow their lead. Netscape set the standard for data encryption on the Web, and plans to repeat that success by giving individuals a reliable way to prove their identity.

However, security measures are never foolproof, and users should be cautious about relying on the new security technologies before they have gone through a thorough shakedown. Netscape was embarrassed twice last fall when weaknesses were found in their encryption technology.

Plug-ins

One of the exciting new technologies included in Netscape 2.0 is the capability for software developers to create plug-in software modules that allow the browser to recognize and work with data and file formats natively instead of by using separate “helper” applications. The idea is that sounds, movies, animations, and the like play right inside the browser window. In effect, plug-ins allow the user to quickly and easily add new functionality to Netscape as soon as a plug-in becomes available. Macromedia’s Shockwave is a good example of the power of plug-ins. Shockwave allows multimedia animations created in Macromedia Director to run within Netscape. This really does have to be seen and heard to be believed! Amber is another important plug-in that allows you to natively view PDF documents created with Adobe Acrobat.

Java and JavaScript

Netscape 2.0 supports Sun’s Java programming language on the UNIX, Windows 95, and Windows NT platforms; versions for Windows 3.1 and the Macintosh will soon be available. Java can run programs across the Internet by using the Internet itself as an operating system. Java is a full-featured, object-oriented programming language with built-in networking and security. It can be used to write applications that can be downloaded and run on a computer or “applets” that will only work within a Java-aware Web browser. Netscape 2.0 includes a scaled-down, localized version of Java, called JavaScript. JavaScript is an advanced scripting language for Netscape similar to Visual Basic for Applications or AppleScript. It will allow end users to add intelligent processing to their Web pages.

JOSEPH R. HARRIS JR. is a Consultant for ISC’s Computing Resource Center.