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Browsers Display Clear Differences -- Choice between Microsoft and Netscape depends on your enterprise environment
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After more than six months of beta releases, Microsoft Internet Explorer 4.0 is shipping. This means IT managers will be able to evaluate it without turning their PCs into dog meat. Similarly, the latest Netscape Communicator Pro 4.03 is a relatively stable version that no longer causes type 11 errors on Power Macintoshes. So are you ready to roll out one of these browser "suites" enterprisewide onto your corporate desktops?

Despite a lot of common functionality, there are important differences from an enterprise perspective between Communicator Pro and IE that have each company playing a game of catch-up with the other. Ultimately, choosing the right one will depend on what machines you use for your clients and servers, how your E-mail system is configured, and how important Windows-centric technologies are to your intranet.

Communicator is clearly the choice for deployment in heterogenous environments containing a mix of Macintosh, Unix, and Windows machines. Netscape delivers Communicator fairly consistently across all the platforms. In contrast, Microsoft admits it can't deliver the same level of integration on other platforms that it has achieved with IE 4.0 for Windows 95 and NT 4.0-there will be no Active Desktop for these other platforms. Microsoft also is at least a few months behind delivering IE 4.0 for Macintosh and Windows 3.1, and easily six months behind on a Solaris version. On the other hand, Microsoft is committed to Windows 95 and NT. If your site is mostly Win95 and NT 4.0 desktops, Microsoft's Active Server development environment and robust support of ActiveX controls make IE the obvious choice. Microsoft also has a more mature browser installation and management solution with the Internet Explorer Administration Kit and Active Setup technology. Netscape's Mission Control is too expensive and doesn't have the flexibility of the IEAK, though Netscape is sure to improve Mission

Control in the near future.

The Server Side

Choosing a Web browser to deploy on enterprise desktops appears, on the surface, to be one of the easiest purchasing decisions an IT manager might ever make. After all, there are only the two previously mentioned realistic choices. It won't cost much initially, since these browsers are very inexpensive (Communicator Pro is $79, IE is free). Both browsers are based on standard protocols, so they interoperate with a wide range of third-party servers.

Deploying just the browser isn't a big deal, but Communicator and IE 4.0 are no longer just browsers. They are now browser suites that offer a lot more capability than simply displaying Web server content. IE 4.0 and Communicator Pro 4.03 distributions each weigh in at well over 40 Mbytes-and that includes a lot of bundled personal productivity heft such as E-mail clients, HTML editors, push clients, and real-time conferencing applications. This translates into a major deployment decision with far-reaching effects.

For one thing, IT managers need to consider the back end as well as the client. Particularly in the case of E-mail, each client application requires a server, and although nearly all of the clients can be used with third-party servers running standard protocols such as IMAP, POP, HTTP, and NNTP, Netscape and Microsoft are adding more proprietary functionality, such as Netscape's Calendar, that requires purchasing server software from the browser vendor. Thus, getting the most out of Communicator requires that you deploy some or all of Netscape's SuiteSpot servers.

Similarly, you get the most mileage out of IE 4.0 when you use Microsoft's various NT-based servers. Of course, Microsoft's servers run only on Windows NT, but Unix servers are still the scalable choice for many corporate server solutions. If your site is heavily invested in Unix platforms on the server side, Netscape is a better choice for deployment on the client and server since Netscape delivers their servers on several Unix platforms.

Security And Administration

The security and administrative features of Communicator and IE 4.0 won't be the main reason sites choose one over the other, but they reveal the direction the industry is taking with desktop management.

Netscape's Mission Control and Microsoft's IEAK generally accomplish the same administrative tasks, though Microsoft's IEAK 4.0 for Windows 95 and NT 4.0 is a more refined and flexible product. That's partly due to Microsoft's delivery architecture, which unbundles all of the 20 or so applications, ActiveX controls, and other components it delivers with IE 4.0. This lets administrators choose which apps they

want installed on users' desktops.

In contrast, Communicator 4.0 allows few custom installation options. In fact, the main suite, which includes the Navigator browser, Messenger E-mail client, Composer HTML authoring tool, and Collabra conferencing program, has to be installed. There is no way to install any of them individually. That's still the case, but Netscape now offers the Navigator browser as a separate installation package.

Mission Control and IEAK basically do two things:They let administrators create global settings files for Communicator and IE, and they let administrators create customized install distributions. Microsoft's installation distributions offer a lot more customization than Netscape's because of the unbundling previously mentioned.

Both Global settings files let administrators maintain desktop settings for Communicator and IE from a central location. Communicator's settings files are actually JavaScript files. Microsoft's are Windows Policy Editor files. Although both files are plain text files, Netscape's don't work with Navigator 3.0. Also, some attractive administrative features, such as LDAP server queries via JavaScript, require the JavaScript implementation in Communicator 4.0. IE 3.0 will use the Windows Policy Editor files generated by the IEAK, but won't handle other IEAK features such as polling for updates.

There probably isn't a single IT manager who thinks IE 4.0's and Communicator's security mechanisms are going to solve their security problems-or even seriously protect the desktop-but most will accept that they're good enough. Whether or not you think Microsoft's Authenticode or Netscape's Object Signing Model will work, managers need a way to preset browser security mechanisms to best suit their corporate network configuration.

The IEAK and Mission Control are used to create preset distributions with security settings locked down, if desired, but Microsoft's Security Zones give administrators a lot more flexibility than Netscape by giving users and administrators finer grained control of their browser security settings than were previously possible. Most of all, security zones provide context for Microsoft's Authenticode digital certificate technology by letting managers decide where they care about security.

By default, there are three predefined zones:Internet, My Intranet, and Trusted Web Sites. My Intranet usually consists of sites behind your corporate firewall. Trusted Web Sites are sites that you have identified as trustworthy. The Internet zone consists of all sites that aren't in one of the other zones. You can set security for each zone to low, medium, or high, but you can also bypass those generalized security settings and configure directly how each object such as scripts, ActiveX controls, and applets are handled.

Enterprise administrators should get a lot of mileage out of IE 4.0's

security zones. They can use the IEAK 4.0 to create IE 4.0 distributions with predefined security zones that can be locked down. The high degree of customization will let them block out various Internet objects while offering unblocked access to those same objects behind the firewall.

Security zones aren't a panacea for security problems, but they do give administrators a lot more leverage to customize the security of users' desktops. I expect Netscape to introduce its own enhanced security model in the future.

Messaging And Other Applications

E-mail is a touchy area. Many companies are satisfied with their current system or have no intention of switching to another. Meanwhile, both Communicator and IE 4.0 have their own E-mail clients that are part of the package. Both support POP3 and IMAP4 E-mail access standards and rich HTML E-mail, though Microsoft's Outlook Express additionally supports Microsoft Mail access.

If you want to go with Netscape's E-mail solution, you have the advantage of a consistent cross-platform solution. Microsoft has implemented its E-mail clients somewhat differently on platforms other than Windows 95 and NT 4.0 and it remains to be seen how Outlook Express (or Outlook 98) will look on Macintosh and other platforms.

However, as mentioned previously, you can't install Communicator piecemeal, so you're stuck with loading an E-mail client even if you don't want to use it. That becomes an annoyance when you click on "mail to" links in your browser and it switches you automatically to Netscape's Messenger E-mail client.

Content creation is an area where both Netscape and Microsoft are unwilling to consider tools that will work with both IE and Communicator, which is what users really need. The denuded FrontPage 97 included with IE 4.0, called FrontPage Express, isn't much more of an HTML authoring tool than Netscape's Composer. Both are adequate for simple HTML editing, but not much more.

Similarly, the push clients in IE and Communicator aren't different enough to make a difference. CDF (Channel Definition Format) isn't even a bona fide standard yet, and despite Microsoft's main claim that CDF makes Web-crawling more efficient, a well-designed Web site can do the same thing.

Microsoft's NetMeeting 2.0 is a hot conferencing tool. Its integrated whiteboarding and sharing of Windows applications make it a standout application compared to Netscape's Collabra conferencing tool. Still, Collabra is good enough for the typical desktop. In any case, NetMeeting is free and if you are using Communicator, you can still run NetMeeting as well.

One of the few major features of Communicator that's not included in IE 4.0 is a scheduling application. Netscape Calendar, though it requires Netscape's Calendar server, is included in the Communicator suite. To get similar functionality under Windows requires purchasing Outlook 97.
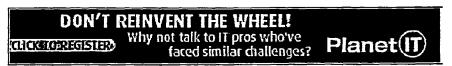
Deployment Decision

Standards are, more than ever, influencing the design and evolution of browsers. They are also making the deployment decision less complicated than in the past. It's likely that whether IT managers choose to go with Communicator or IE 4.0, they'll more easily be able to switch over in the future without having to make major changes on the server side. If software technology is moving in the right direction, then the version 5.0 deployment decision should be easier, not harder.

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