Performance

People browsing the Web today are easily frustrated by the amount of time it takes to download graphics or software, view all the material on a site, and connect to different sites. Microsoft Internet Explorer 3.0 works with the currently available bandwidth by providing mechanisms to quicken the pace of browsing.

Fast startup
Internet Explorer's streamlined code provides a fast start for a good end user experience.

Fast Java performance
Performance tests show Internet Explorer's "Just-In-Time" (JIT) compiler executes Java applets up to 30% faster than Netscape Navigator's JIT compiler. This is increasingly important because content developers are extending their sites with Java applets. For detailed information, please see the Java Applets section earlier in this white paper.

Optimization with Web servers
Internet Explorer improves performance for accessing information because it takes advantage of servers that support HTTP KeepAlive. Support for HTTP KeepAlive protocol provides fast access to complex pages, such as those containing many images, by maintaining a connection until the page is fully loaded instead of establishing a separate connection for each image. This enhancement to HTTP allows for much better performance retrieving information over the wire.

Immediate content download
Internet Explorer provides immediate access to content for reading a Web page online, because it:

- Displays text tags and window sizes while the graphic is being downloaded
- Uses fast text mode for fast display of text
- Uses HTML extensions for custom font typefaces and sizes (reduces page size)
- Uses multithreaded execution
- Can handle multiple server connections during download
- Progressively renders GIF and JPEG images
- Provides for Audio and Video Streaming
- Provides client-side image maps

Improved Caching of Expired Pages
Internet Explorer enables you to cache pages and graphics between Internet sessions, letting you work with Web content offline (for example, from the seat of an aircraft). Caching pages also enables you to connect more quickly to frequently used pages. Plus, improvements to Internet Explorer 3.0's caching mechanism let you set when you want Internet Explorer to refresh the page. Internet Explorer 2.0 refreshed the page every time you visited a site even if the content hadn't changed.

When browsing to a page that was generated from a script, even if the page exists in the cache, Internet Explorer 3.0 will automatically reload the page to get the most up-to-date information.

The HTTP Last-Modified-Since and Expires attributes are used to determine when a cache page is stale. Internet Explorer takes a relatively conservative approach to cache management, checking the Last-Modified-Since and Expires attributes of every object on a Web page. Other browsers only validate the page itself, and not the content, leaving them vulnerable to stale caching errors.

ISDN Support
Internet Explorer 3.0 enables you to connect to the Internet through an ISDN line, a high-speed digital telephone line that enables you to transmit information on the Internet two to four times faster than 28.8 modem speeds. .

Quick Links

Internet Explorer 3.0 comes pre-loaded with useful and cool sites on the Web, helping people quickly get up and running on the Internet.

Fastest Scripting

Internet Explorer 3.0 provides the fasted scripting support for any programming language of all Internet browsers on the market.

32-bit Multithreading

Internet Explorer 3.0 is a complete 32-bit application, building on Windows services such as the Telephony API (TAPI), and on the native 32-bit TCP/IP stack. Internet Explorer uses multiple threads of execution to deliver excellent responsiveness. This means that Internet Explorer 3.0 is more robust than 16-bit browsers and provides smooth multitasking performance, which is an advantage during lengthy downloads.

Progressive Rendering

Progressive rendering delivers complex graphics quickly, enabling users to view a low-resolution version of graphics during download, eliminating the need to wait for the entire transfer before viewing the image. Progressive rendering support is included for both GIF and JPEG format images.

Fast Connect

Supports HTTP KeepAlive, a protocol enhancement that lets Internet Explorer 3.0 open and download multiple items over the same HTTP connection when used in conjunction with a KeepAlive-enabled server.

Fast Text Mode

Instead of waiting for large graphics to download before displaying text and hyperlinks, Internet Explorer 3.0 loads the text first and inserts placeholders for slow loading images while they are downloading. This enables you to view the most important information and links much faster than conventional browsers.