



A020101

A Brief History of IIS

Despite how ubiquitous you might think Microsoft is now on the Web—particularly the high use of the Internet Explorer product—you'd be forgiven for thinking that Microsoft was there right from the start.

In fact, Microsoft came to the scene relatively late in terms of its own presence—and quite later still in terms of its IIS product.

The first version of a Web server to be used and supported by Microsoft was the one running its Web site on Windows NT 3.51 using the European Microsoft Windows Academic Consortium (EMWAC) WWW software. This was 1994, and many of the bigger companies like Sun and the National Center for Supercomputing Applications (NCSA) had jumped on the bandwagon a few years earlier.

IIS 1

The first noted version of IIS was IIS 1, born out of the EMWAC server and officially built and tested using Microsoft's own Web sites before being formally released to the world in February 1996.

IIS 1 incorporated and supported the three main protocols of the time—HTTP, FTP, and Gopher (a hierarchical file viewing system). IIS 1 also included support for CGI working with tools such as Perl to provide a dynamic environment and ISAPI that enabled developers to write custom applications that worked with IIS.

This version also gave rise to a number of the basic features we expect to find in all versions of IIS today, including

- Internet Services Manager (now part of the MMC)
- Integration with the OS
- Virtual Servers
- Virtual Directories
- Basic authentication and Windows NT LAN Manager authentication
- Secure Sockets Layer support

IIS 2

This was the first release of IIS that was bundled with an operating system. In this case, the OS was Windows NT 4.0 Server, which itself was designed to cater to (and in many ways was a descendant of) the enhanced desktop OS of Windows 95.

The primary change was that IIS 2 became part of the setup of Windows NT—you could select IIS as an option to be installed with the rest of the operating system. IIS 2 was also the first time the Index Server was introduced as a core component of the IIS system.

IIS 3

Released in December 1996, IIS 3 was available within a few months of IIS 2 and within a year of IIS 1. This is generally the first version that people begin to recognize because it became a standard component of Windows NT just as many companies were making the move to the NT server platform.

The most significant feature of IIS 3 was the inclusion of Active Server Pages, a system that today we take for granted as a solution to the problem of building dynamic components—combined with ActiveX (a new component-based technology), Visual Basic Scripting Edition, and JScript (designed to compete with Netscape's JavaScript).

ASP, combined with a few other systems such as ActiveX Data Objects (ADO), enabled developers to build dynamic Web sites entirely using the systems provided in a standard Windows NT build.

IIS 4

Released in March 1998, IIS 4 was a component of the Windows NT 4.0 Option Pack, which was available freely from Microsoft as an update to your Windows NT 4 server installation.

IIS 4 marked the most significant upgrade to the Web serving platform and became the standard platform for serving Web sites for a number of years. Some companies are still using it even now.

Some of the key enhancements provided by Windows NT 4.0 included

- New Internet Service Manager—now a ‘snap-in’ to the new Microsoft Management Console (MMC).
- Support for the new HTTP 1.1 standard.
- An upgrade to the SSL system to version 3, which supported 128-bit encryption in addition to the existing 40-bit standard.
- Use of the new Microsoft Transaction Server (MTS) with ASP applications to help record state information for users.
- Browser-based administration using the HTML Administrator (HTMLA).
- Command-line based administration through a series of scripts using the new Windows Script Host (WSH), which enabled the JScript and ActiveX components to work outside of IIS.
- The use of a ‘metabase’ to store configuration information for the server instead of using the registry. This enabled information to be easily exchanged between machines.
- Bare bones support for SMTP and NNTP, eliminating the need for a separate server to handle email forwarding and discussion services.

IIS 5

IIS 5 was, for many, a bit of an anticlimax. IIS versions 1 to 4 had included a huge number of improvements with each new revision, and by the time IIS 4 had been released, Microsoft had more or less stopped development on the IIS platform.

IIS 5 was launched with the release of the Windows 2000 Server platform—strangely enough in the year 2000. The biggest difference between IIS 4 and IIS 5 was a name change from Internet Information Server to Internet Information Services. This reflected a change within Microsoft to treat IIS as a component of the operating system rather than a bolt on to the existing system.

The changes in IIS 5 were minor—the most significant being those that integrated IIS 5 with the new Active Directory component of the operating system. Other changes included a change to the way that applications could be hosted to enable them to run within a ‘pooled process’ memory space, separate from the main Inetinfo.exe application, which helped improve stability.

New wizards were also introduced that made setting up IIS, Web sites, and security significantly easier.

IIS 5.1

Desktop versions of the Windows operating system have had a version of IIS available for some time. In genuine desktop operating systems (Windows NT Workstation, Windows 95, Windows 98, Windows Me), this has been called the Personal Web Service (PWS). IIS 5.1 is part of Windows XP, but it was the first time that the IIS name had been applied to the user-level solution. It’s a cut down version of IIS 5—limited in both its capabilities and in the number of users and sites it can reasonably be expected to support.

IIS 6

Windows Server 2003 includes IIS 6, an almost complete redesign of the IIS system right from the basics of accepting requests and transferring information up to the extensions to the ISAPI and ASP systems in the form of ASP.NET and the .NET Framework.