Windows NT/2000

history and features of Windows NT

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This article describes the historical context and features of Windows NT/2000. Note that it is not complete yet!

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1.1 history

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Beginning with Windows 1.0 up to Windows ME, Microsoft" operating systems for home users based upon MS-DOS. Although the Redmonders tried to hide the inner DOS by hiding the prompt etc., they could never hide this fact. Especially the low stability was a result from the weak core that had to bear features developed over a span of about 20 years. Customers demanded for compatibility, thus - from 16 to 32 bit - these operating systems have been updated all the time resulting in a nice and colourful patchwork.
> Maybe this was acceptable for home users, but in a commercial surrounding, an instable operating system running mission critical software can cause a loss of several million dollar. So, Microsoft had to develop a stable and up to date OS ready for professional needs. <p>

Microsoft and IBM started a project for a new operating system not based on any previous OS like DOS. It got the name "OS/2" - yes, you are right if you know that name...
>The two parties startet to develop a modern, 32bit based, operating system that was designed for stability, performance, multi-user operation and network capabilities. But during the years, Microsoft and IBM split the project leading to two generations of systems: OS2 continued by IBM and Windows NT by Microsoft.

(click image to enlarge)

>desk_l.png" target="_blank">

Pic 1: the Win2k desktop

Indeed, during the following time, NT prooved to be a stable and capable system. Due beeing developed for a professional market, NT never had been designed for multimedia purposes; that was still a domain on customer versions.
>However, with the help of some Service Packs, NT was tought a little multimedia by the accelleration architecture DirectX, but only up to version 3 (v8.0a is actual while writing dis tiny doc). <p>

In late 1999, Microsoft released an all new version called Windows 2000. This was the "sequel" of Windows NT 3.51 and 4.0 and still bears the internal name NT 5. In 1998, Microsoft gave it the new name Windows 2000, presumably due to the Y2k hype in that century :-)...
>Windows 2000 should be the best of both worlds: it should continue the reliability and professionality of former NT versions but also import new features left to the Win9xME domain so far: multimedia.

2.0 features

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2.1 general

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Windows 2000 is strictly developed in 32 bit, a 64 port is also available. Although it _has_ 16bit compat, it works much more clean, cos 16bit stuff is encapsulated in an own process called wowexec (Windows on Windows, en emu thus). Not having that strong need to run old DOS and Win3x apps - as Win9x has - allows a much more stable and clear os design.
>Today, Windows 2kNT is widely used for professional workstations and mission critical tasks. Besides Linux, it is still widely used as web and application (ASP) server, mostly using the IIS (Microsoft Internet Information Server, the counterpart of Apache and other webservers).

In contrast to consumer's Windows, NT is offered in several versions depending on the user's needs:
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version	purpose
Professional or Workstation	more like an advanced consumer Windows: compared to the upper versions, less network funktionality, less services etc.
Server	includes more dedicated server tasks and settings and a special server licence that allows the user to connect x clients to that server
Advanced Datacenter	strongly designed as ASP and webserver, containing a special NFS-like extended distributed network filesystem extension called Active Directory; also shipped with a special licence

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