

the *Availability Digest*

www.availabilitydigest.com
[@availabilitydig](https://twitter.com/availabilitydig)

Windows Server 2003 Nearing End-of-Life

July 2014

Shades of Windows XP! Microsoft ended support for its Windows XP operating system on April 18, 2014.¹ Support for its popular Windows Server 2003 operating system will be ending in a year, on July 14, 2015. Windows Server 2003 is running on 11.7 million servers worldwide. Many of these servers are running mission-critical applications for an enterprise.



What Does This Mean?

Released almost ten years ago (Windows Server 2003 R2 was released in December, 2005), the operating system has grown into a large number of sub-editions including Itanium and x64 editions, the Compute Cluster Edition, the Datacenter Edition, the Web Edition, and the Enterprise Edition. The end-of-life support applies to all of these sub-editions.

Phasing out Windows Server 2003 will be much more complicated than it is for XP. The mission-critical applications being run by these servers cannot be taken down during the migration, unlike a Windows XP PC. Many large customers are not even aware of how many Windows Server 2003 applications they are running. Many of these applications are not public-facing and cannot be detected by Web statistics.

Once Windows Server 2003 reaches end-of-life, it will create a compliance nightmare. New security issues will not be fixed (there are already a number of known vulnerabilities in Windows XP that will not be corrected). As with Windows XP, it is anticipated that hackers will stockpile vulnerabilities that they discover until after the Windows Server 2003 end-of-life date. At that time, the sudden flow of zero-day exploits will present a serious security problem for Windows Server 2003 users, as these vulnerabilities will not be fixed by Microsoft.

Running end-of-life software that is no longer supported by the vendor is non-compliant with most security and regulatory standards, including PCI DSS (Payment Card Industry Data Security Standard). Windows Server 2003 will have to be removed from all payment systems in the next year in order for those systems to remain PCI DSS compliant.

Organizations using hosted services will have little choice but to upgrade. Service providers cannot maintain Windows Server 2003 systems and continue to provide the support and security required by their SLAs. Providers have no option but to force their Windows Server 2003 customers to upgrade their applications.

Although some migration tools can aid the migration of some applications, most services still running on Windows 2003 servers are fairly custom and will present unique, specific challenges during migration.

¹ [Windows XP Retirement a Boon for Hackers](http://www.availabilitydigest.com/public_articles/0810/windows_xp.pdf), *Availability Digest*, October 2013.
http://www.availabilitydigest.com/public_articles/0810/windows_xp.pdf
[Windows XP Is No Longer PCI DSS Compliant](http://www.availabilitydigest.com/public_articles/0906/xp_pci.pdf), *Availability Digest*, June 2014.
http://www.availabilitydigest.com/public_articles/0906/xp_pci.pdf

Therefore, a best practice to prepare for migration is to start with a thorough migration and upgrade plan well in advance of the end-of-life date.

Options

There are several options available to upgrade from Windows Server 2003, though none of them may be palatable to many organizations.

Move to Unix or Linux

For most Windows Server 2003 applications, moving to Unix or Linux will mean rewriting them. This is a risky and expensive proposition.

Move to Windows Server 2012

Windows Server 2012 will not run 16-bit Windows-based applications, and many early Windows Server 2003 applications were written in this format. Even 32-bit applications must be run with an emulator.

However, if current applications are 64-bit applications running on Windows Server 2003 x64, they can be moved directly to Windows 2012, though a hardware upgrade may be required.

Move to Windows Server 2008

The obvious choice for most enterprises will be to upgrade to Windows Server 2008. However, this simply delays the pain until this operating system reaches end-of-life in 2020.

Stay on Windows Server 2003

If applications have been secure so far, and ongoing support is not needed, an organization can decide to continue to use its Windows Server 2003 systems by locking them securely behind a firewall (or give them no access to the Internet).

Security can be improved by deploying Microsoft's Enhanced Mitigation Experience Toolkit 4.0 (EMET) that allows administrators to apply a variety of mitigation technologies to applications that do not use them natively.

Microsoft Extended Support

Microsoft will offer extended support for Windows Server 2003 systems for a fee. However, the cost of this approach may be beyond what many organizations will be willing to incur.

Microsoft Exchange

Exchange Server 2003, which at the time of its release did not exist in a 32-bit version, exists today only in a 64-bit version. It must be migrated to an operating system capable of running 64-bit applications.

HP/Microsoft Migration Services

HP and Microsoft are launching the HP Microsoft Windows Server 2003 Migration Program to help customers migrate safely and rapidly off of Windows Server 2003 to Windows Server 2012. The resulting applications will integrate better with Microsoft's Azure cloud, which can be used as a backup. The service will provide bundles engineered for specific Microsoft workloads. The program will also offer special license replacement promotions.

HP Financial Services is offering a \$3 million program to upgrade 600 servers at \$4,500 each and includes an additional \$300,000 in consulting services. This expense can be capitalized at \$65,000 per month, or 2.2% of the cost.

Summary

Now is the time to start planning and implementing the conversion from Windows Server 2003. Third-party vendors should be contacted to ensure that they can port their applications off of Windows Server 2003.

The rewriting of old applications must be started now. This gives an organization the opportunity to improve application security and stability and to add much-needed new features.

Acknowledgements

Material for this article was obtained from the following sources:

Plan to migrate before Windows Server 2003 end of life, *SearchSecurity*; undated.

Windows Server 2003 End-Of-Life Support Rapidly Approaching: What's Your Action Plan?, *Rackspace*; March 18, 2004.

Windows 2003: Microsoft's next support sinkhole, *Infoworld*; June 16, 2014.

HP, Microsoft Roll Out Partner Program To Capture Windows Server 2003 End-Of-Life Upgrade Opportunity, *CRN*; July 14, 2014.

Microsoft and HP Launch Program to Get Customers Off Windows 2003, *Datacenter Knowledge*; July 18, 2014.