

By Scott Lowe

In June 2005, Microsoft released Windows Server Update Services (WSUS), the much-anticipated update to its Software Update Services (SUS). As the successor to SUS, WSUS features improvements in patch delivery, status reporting, network usage and implementation, and administration flexibility. The following list outlines ten things about WSUS every network administrator and help desk technician should know.

**1 Updates more than just Windows** – SUS the predecessor for WSUS, was able to keep Windows 2000 SP2 or later, Windows XP Professional and Windows Server 2003 current with updates. WSUS manages updates for many more Microsoft products. The initial WSUS release will update Windows 2000 and later Windows versions, Office XP & 2003, Exchange Server 2003, and SQL Server 2000, including the desktop edition and MSDE 2000. Microsoft intends for WSUS to eventually handle all Microsoft product updates.

**2 WSUS client and server system requirements** – WSUS server components run on Windows 2000 SP4 or Windows Server 2003 and require the .NET Framework 1.1 SP1, IIS, MSDE (included with the WSUS download) or SQL Server 2000 SP3a+, IE 6 SP1+, the Background Intelligent Transfer Services 2.0 (BITS) and WinHTTP 5.1. On the client side, Windows 2000 SP3+, Windows XP, or Windows Server 2003 are required. On the hardware side, Microsoft recommends a 1GHz or faster processor and 1GB of RAM for systems that will update 500 or fewer clients, a 3GHz or faster processor and 1GB of RAM for systems that will updated 500 to 10,000 clients, and dual processors with 1GB of RAM for systems that will update more than 10,000 clients.

**3 Microsoft Systems Management Server (SMS) vs. WSUS?** – SMS and WSUS have much in common and will both patch servers and desktop systems. WSUS however, lacks SMS's ability to deploy and manage systems beyond patching. SMS offers additional capabilities, such as inventory management, advanced reporting, and remote administration.

**4 Bandwidth allocation is better with BITS** – WSUS and Windows Update download client updates through the Background Intelligent Transfer Services (BITS) 2.0. BITS uses available bandwidth to download updates in the background. BITS can download large updates and survive network disconnections and other problems. This is an improvement over previous update mechanisms that, during large update downloads, could degrade overall network performance for all users. While it's not a perfect solution to the bandwidth allocation problem, BITS does make an effort to keep update traffic in the background.

**5 WSUS has reporting capabilities** – SUS lacked a decent reporting function. Microsoft corrected this oversight by giving WSUS significant reporting capabilities. WSUS's patch status reports will help you identify machines that need patches and could pose a security risk. Other standard reports provide an overall look at WSUS's configuration settings, client update compliance status for an individual update or for an individual computer, or the overall status of each computer using WSUS.

**6 WSUS can handle updates in multiple ways** – WSUS clients can download full updates from your WSUS server or directly from Microsoft's update servers. Downloading updates from a local WSUS server provides the best performance when clients are connect to the WSUS server via a dedicated, high-speed network. For locations with limited connectivity to your WSUS server, clients can download updates directly from Microsoft's servers.

**7 You control update deployment via server-side or client-side targeting** – WSUS lets you target your updates using machine groups created via two different methods: server-side targeting or client-side targeting. To use server-side targeting, you create and define groups from the WSUS console's Computers tab. With client-side targeting, you assign to groups either through Group Policy or via registry modifications. To create a new group in the WSUS console, choose Computers | Create a computer group, provide a new name, and click OK.

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**WSUS includes command line capabilities** – The wsusutil.exe program includes command line options that allow you to import and export update metadata, migrate update approvals from a SUS server to WSUS, and list and remove inactive approvals. Wsusutil.exe is, by default, located at C:\Program Files\Update Services\Tools on your WSUS server. Type C:\Program Files\Update Services\Tools\wsusutil /? for assistance with WSUS' command line parameters.

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**WSUS is scalable** – Even though a single WSUS server can support a great number of clients (more than 10,000), Microsoft built further scalability into the product through “upstream” and “downstream” servers. A “downstream” WSUS server gets its updates from the next server “upstream”. Eventually, one of the servers in this chain gets its updates directly from Microsoft Update. WSUS also supports the concept of replicas where multiple servers can mirror most of the settings from a master WSUS server, providing a more distributed update topology.

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**WSUS requires the latest Automatic Update client** – WSUS requires updates to the way that Automatic Updates are applied to some systems. While WSUS makes every attempt to appropriately update the client's version of Automatic Updates, it's not always successful. An unsuccessful update can prevent clients from appearing in the WSUS console. Microsoft created a guide that helps you correct common client update problems. The guide can be found at the following URL:

<http://www.microsoft.com/technet/prodtechnol/windowsserver2003/library/WSUS/WSUSOperationsGuideTC/b23562a8-1a97-45c0-833e-084cd463d037.mspx>



**Scott Lowe** has held a variety of jobs in the information technology field. Although he has been involved primarily in IT management and network/systems engineering, he has also served as a DBA, help desk technician, and several other job roles. He is currently the IT Director for Elmira College, a small private college located in Elmira, NY.

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## Version history

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