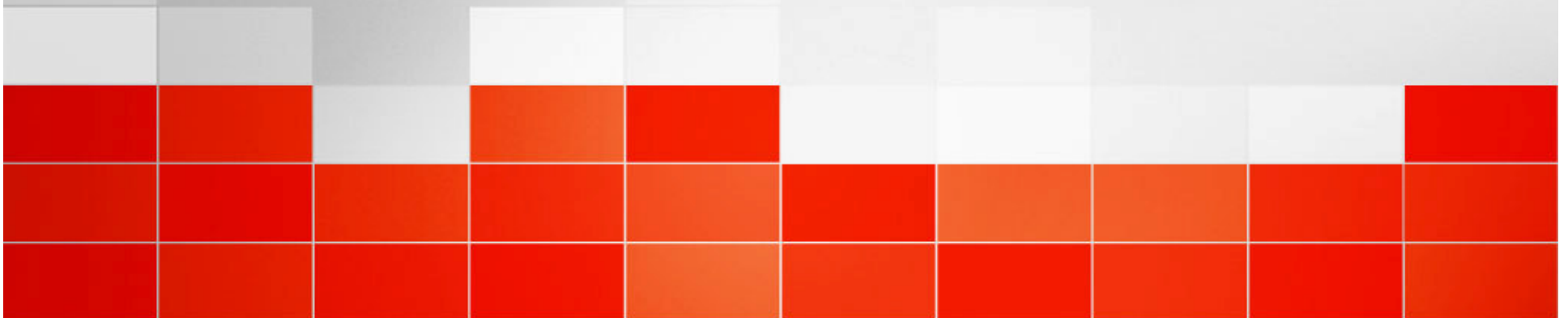


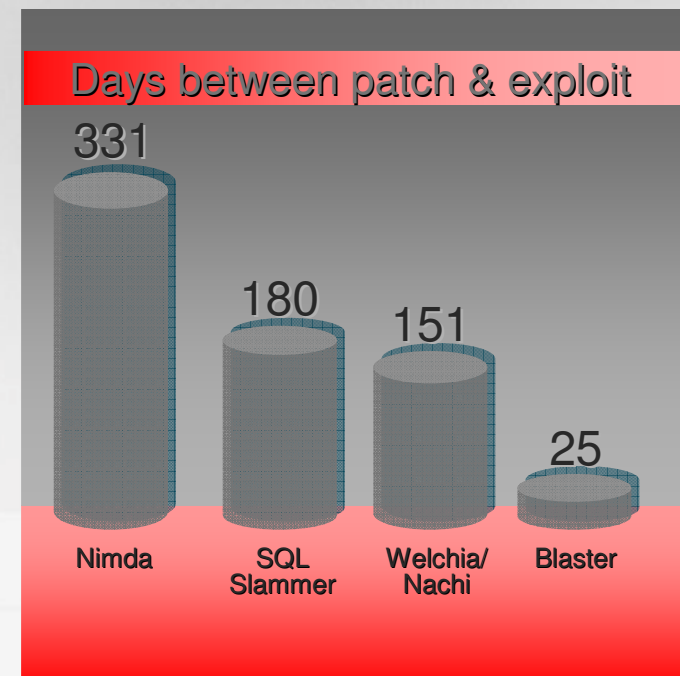
Keeping Up To Date with Windows Server Update Services

Bob McCoy, CISSP, MCSE
Technical Account Manager
Microsoft Corporation

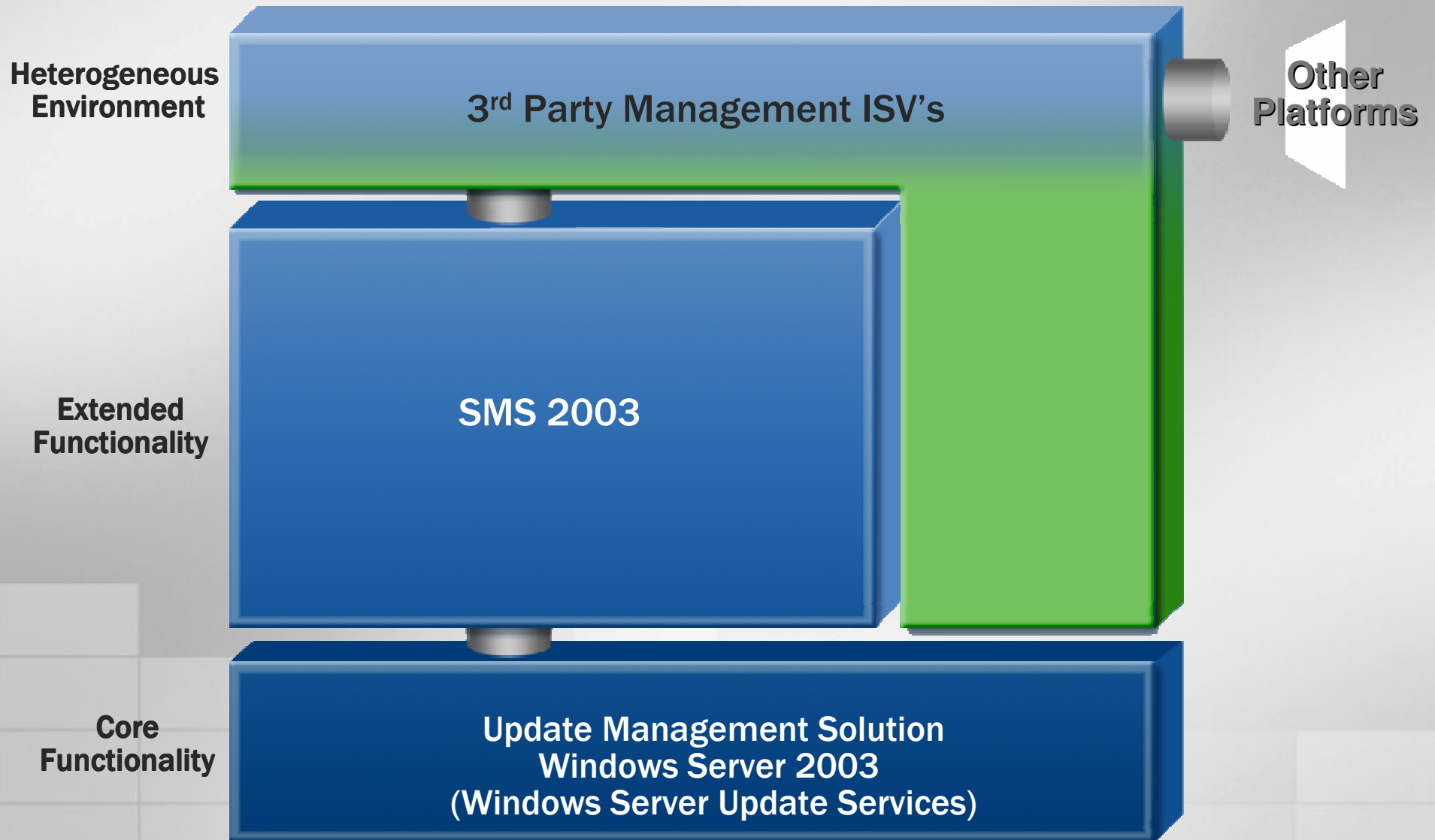


Business Risk Is High

- Up to 95% of breaches exploit vulnerabilities for which a countermeasure exists – CERT
- Staying up to date is hard
 - Patches proliferating
 - Time to exploit decreasing
 - Our tools not sufficient



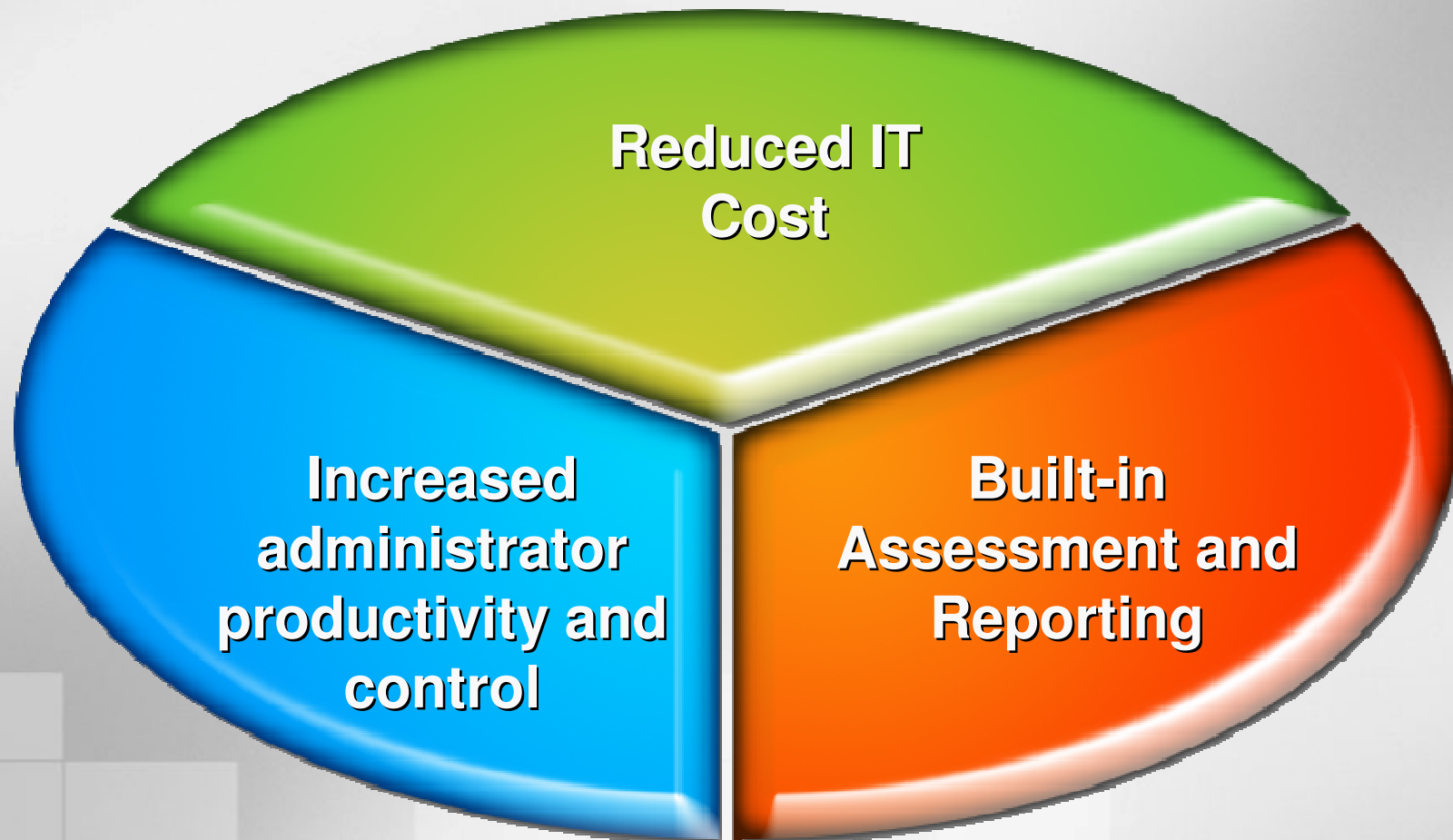
Microsoft Update Management Strategy



What is Windows Server Update Services?

- Corporate update management offering
 - Gets content from Microsoft Update (MU) service
- RTW component of Windows Server
 - Free to Windows Server (2000 and above) licensees
 - Requires Windows Server / Server CAL for target systems
- Does not change currently available offerings
 - SUS 1.0 continues to get content from WU
- Core component of Microsoft's Update Management solutions & roadmap

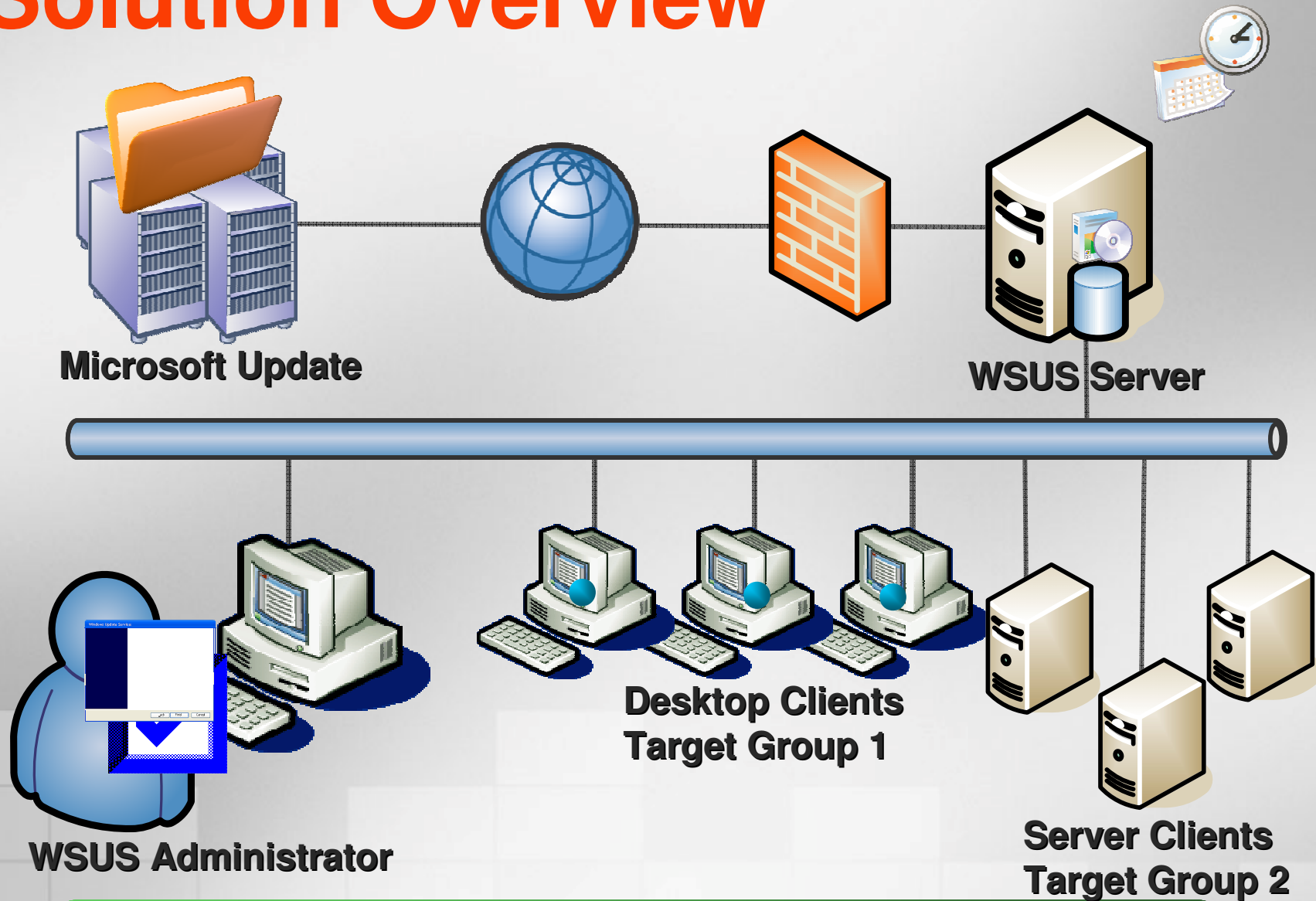
Windows Server Update Services Benefits



Goals and Design Principles

- Deliver easy to use, fully functional *solution* to address update management scenarios for all Microsoft products
 - Automate the update management process as much as possible
 - Support more than just Windows patches
 - Address customer requests from SUS 1.0
 - Optimize administrator experience for IT generalist
- Build the core patch management *infrastructure* for the Windows platform
 - Leveraged by other tools (e.g., SMS & MBSA)
 - Rich set of APIs to allow for extensibility and customization
 - Scale to large Internet services (Microsoft Update)

Solution Overview



Clients install administrator approved updates

Supported Products and Content

■ Content Partners

- Windows, Office, SQL, Exchange at RTM.
- Additional products added over time

■ OS platforms

- Client/agent
 - ▶ Win2k SP3 and later, WinXP RTM and later (incl. XP embedded and XP x64)
 - ▶ Win2k3 RTM (32-bit only), Win2k3 SP1 (x64 and ia64)
- Server
 - ▶ Win2k SP4 and later
 - ▶ Win2k3 RTM and later (32-bit only)

■ International support

- Client is localized to 25 Windows client locale
- Server is localized to 17 Windows Server locales
- MUI support

Update Management Features

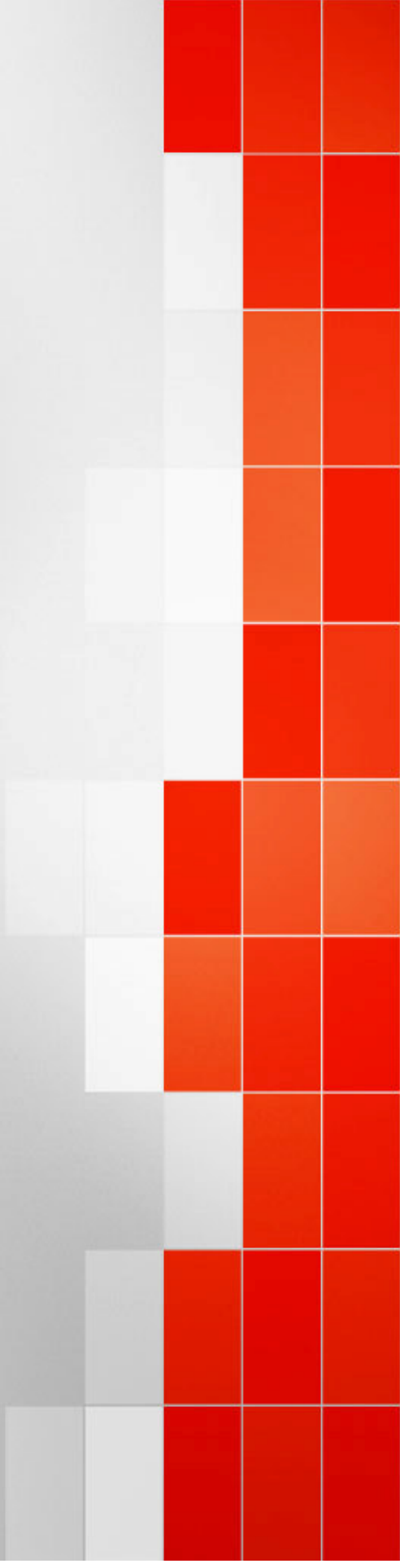
- Administrator defined target groups
 - Group Policy defines client membership for AD environments
 - WSUS Server defined group membership for non-AD environments
- Administrator control of approvals
 - “Detect only” evaluation of machines for patch applicability
 - Approve for install and uninstall (requires update support)
 - Date-based deadlines
- Flexible Agent Configuration
 - Polling frequency
 - Notification, Install and Reboot behaviors
 - Port configurability
 - Install at Shutdown (XP SP2 and Win2k3 SP1 only)

Update Management Features

- Resilient and transparent
 - BITS* for client-server and server-server downloads
 - Downloads are in the background
- Minimized data downloads
 - Update subscriptions – only download updates for products, classifications and languages that *you* need
 - Support for “delta compression” technologies for client-server communications
- Reporting
 - Summary status and alerts (home page)
 - Per computer, per update with printable compliance reports
 - Drilldown capabilities
 - Synchronization reports
- Server deployment options
 - Stand alone, Hierarchical, Disconnected

*Background Intelligent Transfer Service

demo



Welcome Page

Windows Server Update Services

Home Updates Reports Computers Options

Home Help

Welcome to Windows Server Update Services

You can use Windows Server Update Services to quickly and reliably deploy the latest updates to your machines. [Get the latest WSUS news from Microsoft](#)

Status as of Thursday, August 04, 2005 7:25 PM

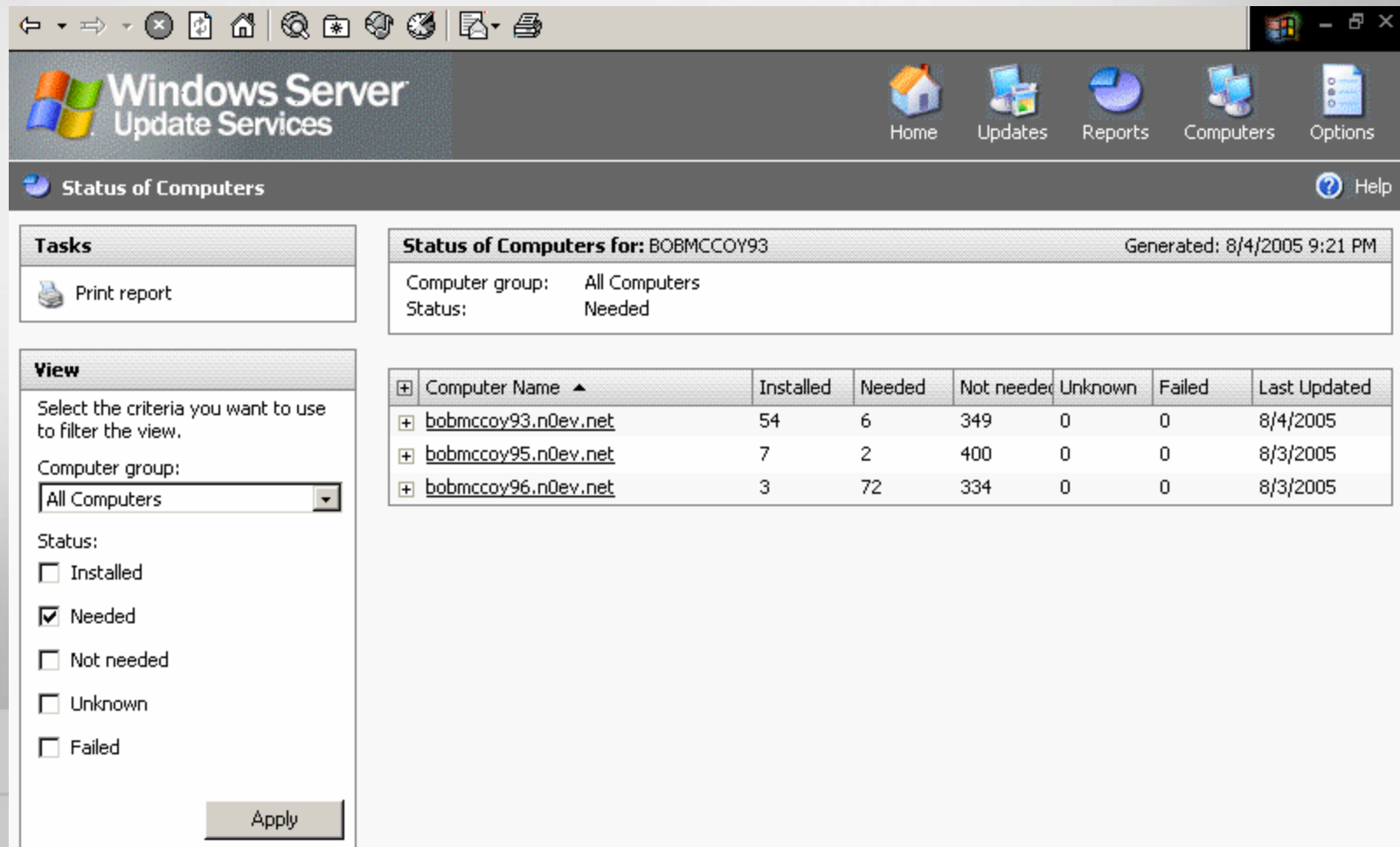
Updates		Synchronization Status	
Total:	416	Last synchronization:	8/2/2005 1:31 AM
Approved updates:	409	Last synchronization result:	Success
Updates not approved:	0	Next synchronization:	Manual
Declined updates:	7	Current status:	Idle
Updates with computer errors:	0	Synchronize now	
Updates needed by computers:	78		

Computers		Status of Downloads	
Total:	3	Updates needing files:	0
Computers with update errors:	0		
Computers needing updates:	3		

To Do List

- Review Security and Critical updates**
404 Security and Critical updates have not been approved for install.
- Review synchronization settings**
16 new products and 8 new classifications have been added in the past 30 days.
- Use Secure Sockets Layer (SSL)**
WSUS has detected that you are not using Secure Sockets Layer (SSL). Microsoft recommends using SSL to secure administration and client to server communications for better security. For more information, see [Using Secure Sockets Layer \(SSL\)](#).

Status



Windows Server Update Services

Home Updates Reports Computers Options

Status of Computers Help

Tasks

Print report

View

Select the criteria you want to use to filter the view.

Computer group:
All Computers

Status:
☐ Installed
☒ Needed
☐ Not needed
☐ Unknown
☐ Failed

Apply

Status of Computers for: BOBMCCOY93 Generated: 8/4/2005 9:21 PM

Computer group: All Computers
Status: Needed

Computer Name	Installed	Needed	Not needed	Unknown	Failed	Last Updated
bobmccoy93.n0ev.net	54	6	349	0	0	8/4/2005
bobmccoy95.n0ev.net	7	2	400	0	0	8/3/2005
bobmccoy96.n0ev.net	3	72	334	0	0	8/3/2005

Patch Drilldown

Windows Server Update Services

Home Updates Reports Computers Options

Status of Computers Help

Tasks

Print report

View

Select the criteria you want to use to filter the view.

Computer group: All Computers

Status:

☐ Installed

☒ Needed

☐ Not needed

☐ Unknown

☐ Failed

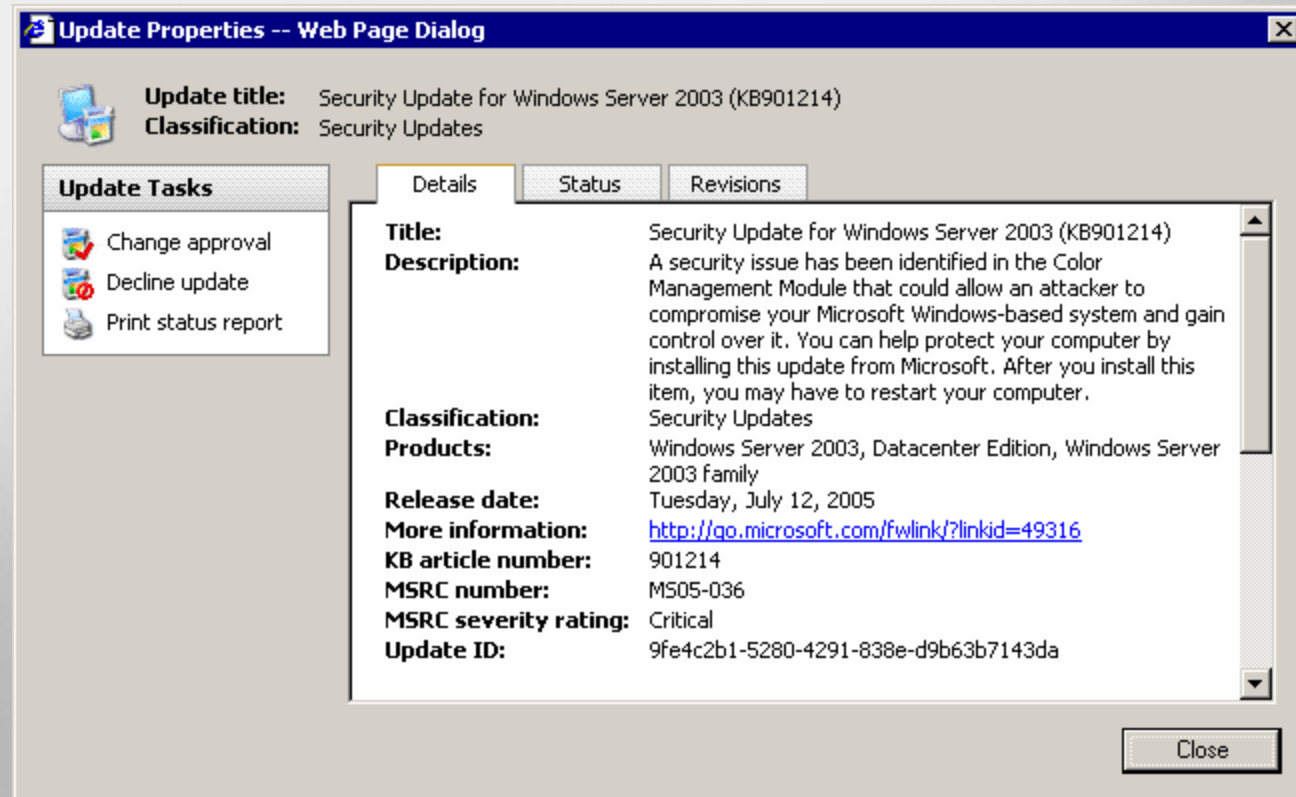
Apply

Status of Computers for: BOBMCCOY93 Generated: 8/4/2005 9:21 PM

Computer group: All Computers
Status: Needed

Computer Name	Installed	Needed	Not needed	Unknown	Failed	Last Updated									
+ bobmccoy93.n0ev.net	54	6	349	0	0	8/4/2005									
- bobmccoy95.n0ev.net	7	2	400	0	0	8/3/2005									
<table><thead><tr><th>Update Title</th><th>Approval</th><th>Status</th></tr></thead><tbody><tr><td>Security Update for JView Profiler (KB903235)</td><td>Detect only</td><td>Needed</td></tr><tr><td>Security Update for Windows Server 2003 (KB901214)</td><td>Detect only</td><td>Needed</td></tr></tbody></table>							Update Title	Approval	Status	Security Update for JView Profiler (KB903235)	Detect only	Needed	Security Update for Windows Server 2003 (KB901214)	Detect only	Needed
Update Title	Approval	Status													
Security Update for JView Profiler (KB903235)	Detect only	Needed													
Security Update for Windows Server 2003 (KB901214)	Detect only	Needed													
+ bobmccoy96.n0ev.net	3	72	334	0	0	8/3/2005									

Patch Details



Patch Status

Update Properties -- Web Page Dialog

Update title: Security Update for Windows Server 2003 (KB901214)
Classification: Security Updates

Update Tasks

- Change approval
- Decline update
- Print status report

Details | **Status** | Revisions

Installation File Status

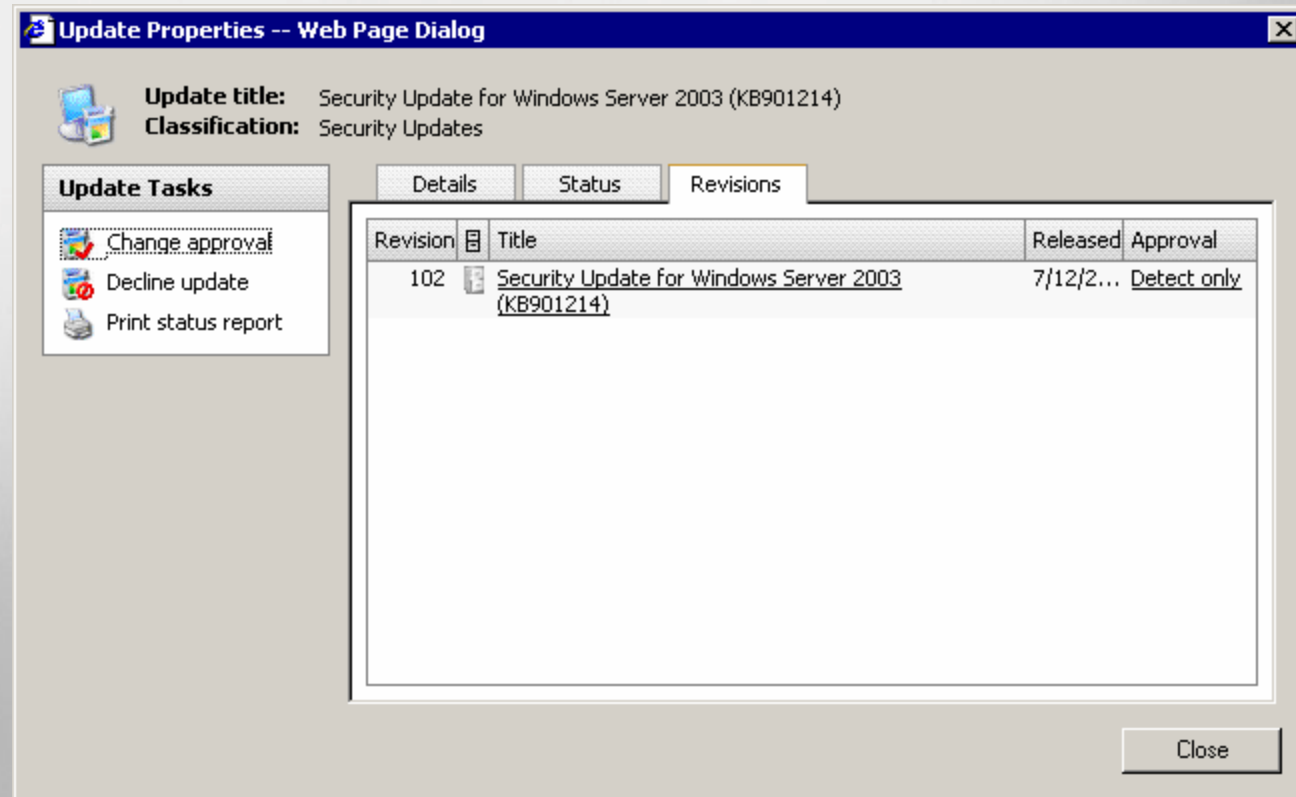
The files for this update have not yet been downloaded. The update can be approved but will not be available to computers until the download is complete.

Update Status

	Computer Gr...	Approval	Deadline	Inst...	Nee...	Not n...	Unkn...	Failed
+	All Computers	Detect only	N/A	0	1	2	0	0
+	Unassigned Computers	Same as All Computers group	Same as All Computers group	0	1	2	0	0
+	Servers	Same as All Computers group	Same as All Computers group	0	0	0	0	0

Close

Patch Revisions



Computer Groups

Windows Server Update Services

Home Updates Reports Computers Options

Computers Help

Tasks

- Move the selected computer
- Remove the selected computer
- Create a computer group

Groups

- All Computers: 3
- Unassigned Computers: 2
- Servers: 1
- Workstations: 0

Computers in this group: 3 Computers managed by this server: 3
Computer group: Unassigned Computers

Computer Name	Operating System	Last Status Report	Computer Group
bobmccoy95.n0ev.net	Windows Server 2003	8/3/2005 9:27 AM	Unassigned Comput...
bobmccoy96.n0ev.net	Windows XP	8/3/2005 5:09 PM	Unassigned Comput...

Move Computers -- Web Page Dialog

Select the computer group into which you want to move the selected computers.

Computer group:

Servers

OK Cancel

Details Status Print status report

Computer group: Unassigned Computers
Requested group: None
IP address: 192.168.0.195
Operating system: Windows Server 2003
Service pack: 1
Operating system language: en-US
Last status report: 8/3/2005 9:27 AM
Last contacted: 8/4/2005 6:54 PM

Approving Updates

The screenshot displays the Windows Server Update Services (WSUS) management console. The main window is titled 'Windows Server Update Services' and features a navigation pane on the left with 'Updates' selected. The 'Approve Updates -- Web Page Dialog' is open, showing options for 'Approval' (set to 'Detect only') and 'Deadline' (set to 'N/A'). Below this, a table shows group approval settings for 'Unassigned Computers', 'Servers', and 'Workstations'. A second dialog, 'Edit Deadline -- Web Page Dialog', is also open, allowing the user to choose between using client settings or a specific date and time for installation. The 'Edit Deadline' dialog shows the date '8/10/2005' and time '5:00 PM'.

Windows Server Update Services

Home Updates Reports Computers Options

Approve Updates -- Web Page Dialog

You can specify a default approval setting for **All Computers** and any necessary specific settings for each computer group. For definitions of approval options, see [Update Approval and Status Terminology](#).

By default, take this action on the selected updates for **All Computers**:

Approval: Detect only

Deadline: N/A

Group approval settings for the selected updates:

Computer Group	Approval	Deadline
Unassigned Computers	Same as All Computers group	Same as All Computers group
Servers	Detect only	N/A
Workstations	Install	None

Edit Deadline -- Web Page Dialog

You can choose whether to install the selected updates by a specific date and time. It might take 22 hours to process deadline requests, depending on WSUS client settings.

☐ Use client settings to determine update installation time

☒ Install updates by the selected date and time
This option overrides client settings.

Date: 8/10/2005

Time: 5:00 PM

OK Cancel

Release date: Friday, July 29, 2005
More information: <http://support.microsoft.com/?id=870669>
KB article number: 870669

Approving Updates

Microsoft Windows Server Update Services - Microsoft Internet Explorer

Address: <http://bobmccoy93/WSUSAdmin/>

Back Forward Stop Home Search Favorites Media Print

Win Update

Updates

Update Tasks

- Approve for
- Approve for
- Decline selected
- Cancel download

View

Select the criteria to use to filter the view.

Products and classifications: Critical and security updates

Approval: Detect only

Synchronized: Within the last 7 days

Contains text:

Approve Updates -- Web Page Dialog

You can specify a default approval setting for **All Computers** and any necessary specific settings for each computer group. For definitions of approval options, see [Update Approval and Status Terminology](#).

By default, take this action on the selected updates for **All Computers**:

Approval:

Deadline: N/A

Group approval settings for the selected updates:

Computer Group	Approval	Deadline
Unassigned Computers	Same as All Computers group	Same as All Computers group
Servers	Same as All Computers group	Same as All Computers group
Workstations	None	None

When approving multiple updates there may be conflicts with different installation behaviors. If there is a conflict, you will be notified after you click OK to approve.

[Help](#) OK Cancel

Approved Updates: 005 Mixed, 005 Mixed, 005 Mixed, 005 Detect ..., 005 Detect ..., 005 Detect ..., 005 Detect ..., 005 Detect ...

status report

Command to be used in Microsoft ... from launching ... service.

Comparing Microsoft Update, Windows Update Services, and SMS 2003

Adopt the solution that best meets the needs of your organization

Capability	Microsoft Update	Windows Server Update Services	SMS 2003
Supported Software and Content			
Supported Software for Content	Same as Windows Update Services + WinXP Home	Win2K, WS2003, WinXP Pro, Office 2003, Office XP, Exchange 2003, SQL Server 2000, MSDE	Same as Windows Update Services + NT 4.0 & Win98 + can update any other Windows based software
Supported Content Types for Supported Software	All software updates, critical driver updates, service packs (SPs), and feature packs (FPs)	All software updates, critical driver updates, SPs, & FPs	All updates, SPs, & FPs + supports update & app installs for any Windows based software
Update Management Capabilities			
Targeting Content to Systems	N/A	Simple	Advanced
Network Bandwidth Optimization	Yes	Yes	Yes
Patch Distribution Control	N/A	Simple	Advanced
Patch Installation & Scheduling Flexibility	Manual & end user controlled	Simple	Advanced
Patch Installation Status Reporting	Install errors reported to user. Lists missing updates for accessing computer	Simple	Advanced
Deployment Planning	N/A	Simple	Advanced
Inventory Management	N/A	No	Yes
Compliance Checking	N/A	Simple	Advanced

Choosing A Patch Management Solution

Typical Customer Decisions

Customer Type	Scenario	Customer Chooses
Large or Medium Enterprise	Want single flexible update management solution with extended level of control to update (+ distribute) ALL Windows OSes and Applications, as well as an integrated asset management solution	SMS 2003
	Want update management-only solution that provides simple updating for Microsoft software and initially supports Windows (Win2K & later versions), Office (2003 & XP), Exchange 2003, SQL Server 2000, and MSDE 2000	Windows Update Services*
Small Business	Have at least 1 Windows server and 1 IT administrator	Windows Update Services*
	All other scenarios	Microsoft Update*
Consumer	All scenarios	Microsoft Update*

*Customer uses Windows Update, another update tool, or manual update process for OS versions & applications not supported by Windows Update Services or Microsoft Update



Microsoft®

Your potential. Our passion.™

© 2004 Microsoft Corporation. All rights reserved.

This presentation is for informational purposes only. Microsoft makes no warranties, express or implied, in this summary.