

Around Windows Server 2008 Deployment



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Server Deployment

Use Microsoft Deployment to explore common deployment issues and locate the resources you need to deploy Windows Server in your organization. Microsoft Deployment is the fourth generation deployment accelerator from Microsoft and the next version of Business Desktop Deployment (BDD) 2007.

- [Introduction to Microsoft Deployment](#)

Featured Resources

Last updated: March 27, 2008

Microsoft Assessment and Planning Tool

The Microsoft Assessment and Planning Tool (MAP) is the newly released network-wide agentless assessment tool designed to help you quickly inventory your servers for migration to Windows Server 2008. Get actionable upgrade recommendations, proposals, and server virtualization candidates with the MAP tool today.

Download the Microsoft Deployment Solution Accelerator

Microsoft Deployment is the next version of Business Desktop Deployment (BDD) 2007. This accelerator is the recommended process and toolset to plan and automate server and desktop deployment.

Image Engineering

Key Steps

1. Choose an Image Strategy
2. Add Operating Systems

Tools and Technologies

- Windows Preinstallation Environment
- Windows System Preparation Tool
- Desktop Deployment Workbench

Community

- Get answers to your deployment questions from the Microsoft Deployment blog

On This Page

- Image Engineering
- Infrastructure Remediation
- Deployment Process
- Security/Updates
- Operations Readiness
- Testing

Deployment Resources

- TechNet Trial Software Center - Free
- TechNet Beta Central

Additional Resources

- Microsoft Assessment and Planning

Windows 7 – Server 2008 R2

Deployment Enhancements

SOLUTIONS



**Microsoft
Deployment Toolkit**

**Application
Compatibility Toolkit**

**Microsoft
Assessment and
Planning**

IMAGING



**Deployment
Image Servicing
and Management**

Add/Remove Drivers
and Packages

WIM and VHD Image
Management

DELIVERY



**Windows
Deployment Services**

Multicast

Multiple Stream Transfer

Dynamic Driver
Provisioning

MIGRATION



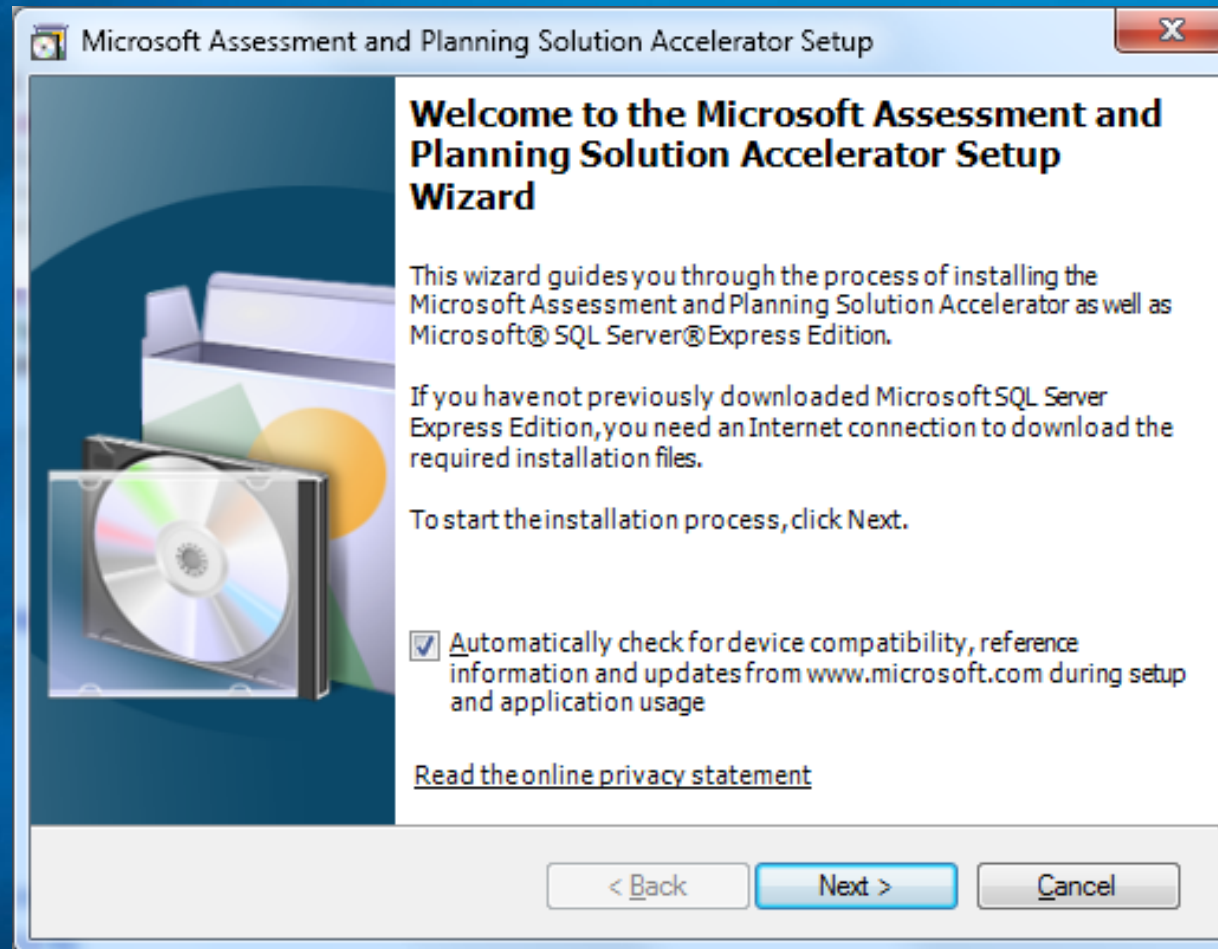
**User State
Migration Tool**

Hardlink Migration

Offline File Gather

Improved user file
detection

Microsoft Assessment and Planning 3.2



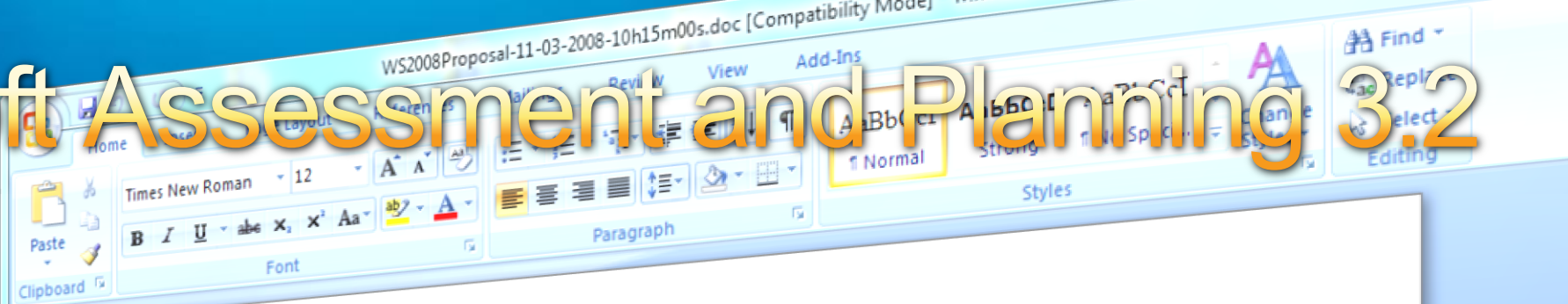
Microsoft Assessment and Planning 3.2

Operating System	Service Pack Level	Ready to run Windows Server	Reasons Not Ready	Reco
Windows 2008 Enterprise	Service Pack 1	Minimum Ready		
Windows(R) 2003, Enterprise	Service Pack 2	Not Ready	RAM less than 512MB	DVD-I netwo
Windows(R) 2003 Enterprise x64	Service Pack 2	Minimum Ready		DVD-I netwo
Windows(R) 2003, Enterprise	Service Pack 2	Minimum Ready		DVD-I netwo

Item	Service Pack Level	Ready to run Windows Server	Reasons Not Ready	Reco
	Service Pack 1	Minimum Ready		
	Service Pack 2	Not Ready	RAM less than 512MB	DVD-I netwo
x64	Service Pack 2	Minimum Ready		DVD-I netwo
	Service Pack 2	Minimum Ready		DVD-I netwo
	Service Pack 1	Minimum Ready		

9	NE.COM				Server® 2008 Enterprise				
10	Computer_103.LUCER NE.COM	Success	192.168.55.31	255.255.255.0	Microsoft® Windows Server® 2008 Enterprise	Service Pack 1	Minimum Ready		
11	Computer_104.LUCER NE.COM	Success	192.168.55.32	255.255.255.0	Microsoft® Windows Server® 2008 Enterprise	Service Pack 1	Minimum Ready		
12	Computer_105.LUCER NE.COM	Success	192.168.55.33	255.255.255.0	Microsoft® Windows Server® 2008 Enterprise	Service Pack 1	Minimum Ready		
13	Computer_106.LUCER NE.COM	Success	192.168.55.34	255.255.255.0	Microsoft® Windows Server® 2008 Enterprise	Service Pack 1	Minimum Ready		
14	Computer_107.LUCER NE.COM	Success	192.168.55.35	255.255.255.0	Microsoft® Windows Server® 2008 Enterprise	Service Pack 1	Minimum Ready		
15	Computer_108.LUCER NE.COM	Success	192.168.55.36	255.255.255.0	Microsoft® Windows Server® 2008 Enterprise	Service Pack 1	Minimum Ready		
16	Computer_109.LUCER NE.COM	Success	192.168.55.38	255.255.255.0	Microsoft® Windows Server® 2008 Enterprise	Service Pack 1	Minimum Ready		
	Computer_11.Lucerne. com	Success	192.168.55.173	255.255.255.0	Microsoft(R) Windows(R) Server 2003 Enterprise x64	Service Pack 2	Not Ready	RAM less than 512MB	DVD-I netwo

Microsoft Assessment and Planning 3.2



www.Microsoft.com/TechNet/SolutionAccelerators
Microsoft Assessment and Planning

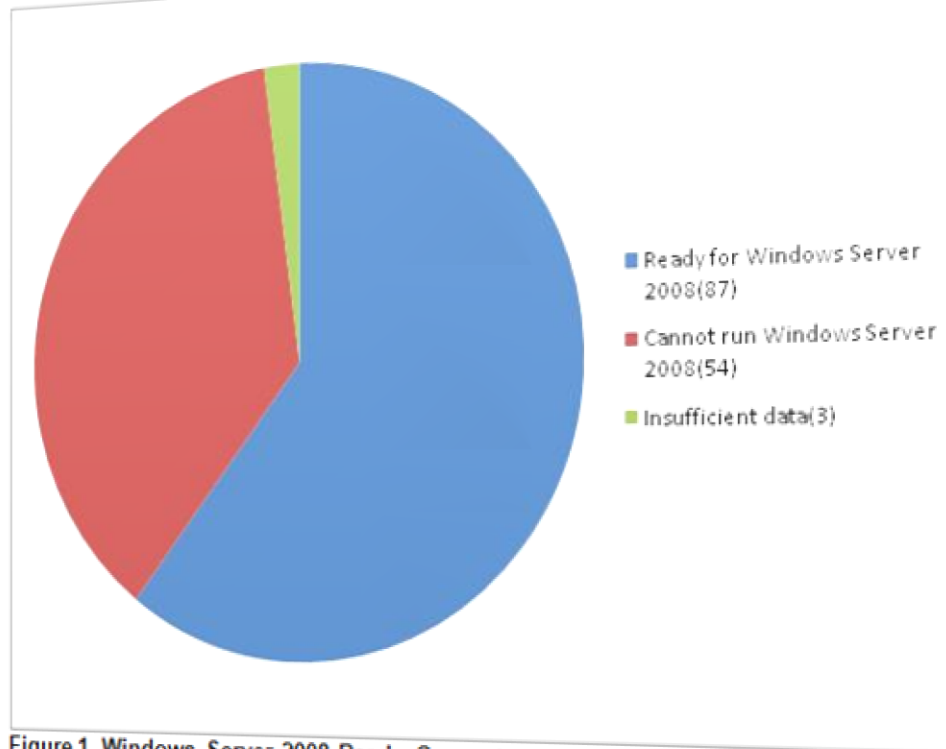


Figure 1. Windows Server 2008 Ready Computers

The hardware in some of the computers in your organization can be upgraded to meet the minimum or recommended requirements for Windows Server 2008, for example by adding more system memory or upgrading a hard drive. This document does not provide recommendations for hardware upgrades to existing servers that cannot run Windows Server 2008.

Why Migrate to Windows Server 2008?

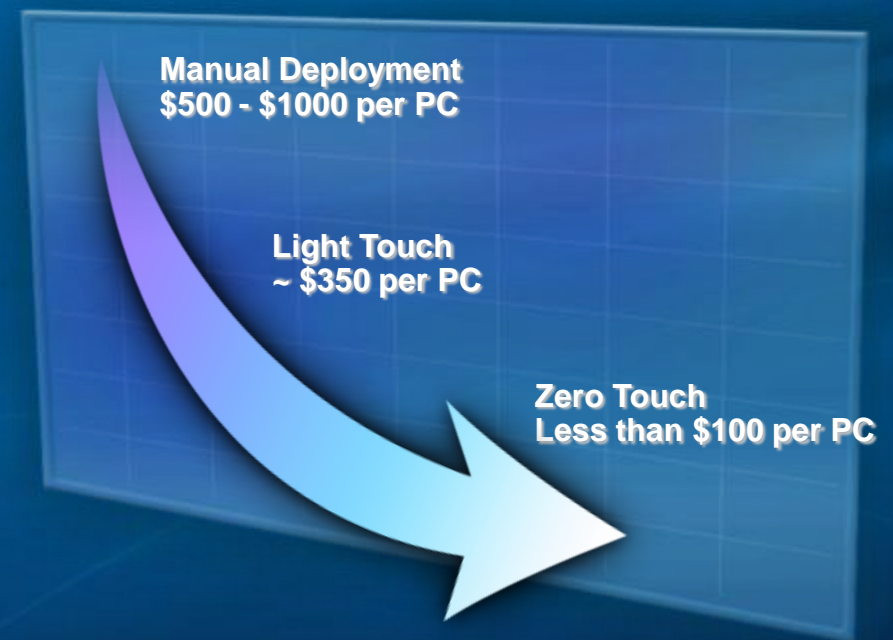
Windows Server 2008 is the most flexible and robust Windows Server operating system to date. With new technologies and features such as Server Core, PowerShell, Windows Deployment Services, and enhanced networking and clustering technologies, Windows Server 2008 provides the most versatile and reliable Windows platform for all of your workload and application requirements. These advantages include:

- Increased dependability with improved failover...
- time, data, and...

Microsoft Deployment Toolkit 2008

Microsoft Deployment Toolkit 2010

- End-to-end guidance, best practices, and tools for efficient planning, building, and deploying Windows and Microsoft Office
- Based on real-world experience and industry best practices
- Pre-configured and pre-tested
- Increase automation
- Decrease costs



www.microsoft.com/deployment

www.microsoft.com/technet/SolutionAccelerators

End to End guidance, best practices & Tools for deployment



MDT Options

- Lite Touch Deployment
 - Aligns With Configuration Manager
 - Uses the Task Sequencer
 - Run from DVD, USB-stick, File-share
- Zero Touch Deployment
 - Uses Configuration Manager 2007 OSD Capabilities
 - Fully Automated
 - MDT extends SCCM and provides Templates for Deployment

MDT Positioning

- Do you have System Center Configuration Manager 2007?
 - Yes, then use its OS deployment capabilities
 - Consider Microsoft Deployment Toolkit to add more functionality, process guidance, automation
- Do you have SMS 2003?
 - Yes, then use the OS Deployment Feature Pack
 - Consider Microsoft Deployment Toolkit to add more functionality, process guidance, automation
 - Consider Lite Touch for creating reference images to be deployed
 - Plan to migrate to Configuration Manager 2007
- Don't have either?
 - Consider MDT, with its Lite Touch support
 - Migrate to Configuration Manager 2007 as soon as possible



- Deployment Workbench
 - Information Center
 - Getting Started
 - Documentation
 - News
 - Components
 - Distribution Share
 - Operating Systems
 - Applications
 - OS Packages
 - Out-of-Box Drivers
 - Task Sequences
 - Deploy
 - Deployment Points
 - Database
 - Computers
 - Roles
 - Locations
 - Make and Model

Before you can deploy an operating system, several tasks need to be performed. Use this checklist to help track your progress.

- Install the Windows Automated Installation Kit.**

The Windows Automated Installation Kit contains several tools that are needed as part of the OS deployment process. It needs to be installed on this computer. Use the "Components" node to download and install this component.
- Create a distribution share directory.**

The distribution share directory is a storage location for all the scripts, operating systems, applications, drivers and other files needed to perform an OS deployment. Use the "Create distribution share directory" wizard to create this directory.
- Add operating system files.**

One or more operating systems (either images or source files) are needed. These are copied to the distribution share directory.
- Add applications. (Optional)**

Often it is desirable to install applications onto a computer as part of the OS deployment process. These applications can be copied to the distribution share or can be installed from a separate share.
- Add OS packages. (Optional)**

The distribution share directory is a storage location for all the scripts, operating systems, applications, drivers and other files needed to perform an OS deployment. Use the "Create deployment share directory" wizard to create this directory.
- Add drivers. (Optional)**

The distribution share directory is a storage location for all the scripts, operating systems, applications, drivers and other files needed to perform an OS deployment. Use the "Create deployment share directory" wizard to create this directory.

Actions

- Distributio... ▲
- Creat...
- View ▶
- Refresh
- Help

MDT 2010 Focus Areas

Windows 7 and Windows Server 2008 R2 Support

- ▶ Add support for the latest operating systems
- ▶ Use the latest tools
- ▶ Enable new scenarios

Deployment Workbench Architecture Enhancements

- ▶ Improve administrative processes
- ▶ Support more than one user
- ▶ Enhance automation and extensibility

Script Architecture Enhancements

- ▶ Improve diagnostics and logging
- ▶ Better error reporting and recovery
- ▶ Make scripts as easy to follow as possible

Documentation Improvements

- ▶ Continue to simplify documentation
- ▶ Cross-linked content
- ▶ Cover both the “why’s” and the “how’s”

Windows Server 2008 (R2) Deployment

Imaging

Windows Automated Installation Toolkit - WAIK

Windows System Image Manager (Windows SIM)

- The tool used to open Windows images, create answer files, and manage distribution shares and configuration sets.

ImageX

- The tool used to capture, create, modify, and apply Windows images.

Deployment Image Servicing and Management (DISM)

- The tool used to apply updates, drivers, and language packs to a Windows image. DISM is available in all installations of Windows 7 and Windows Server 2008 R2.

Windows Preinstallation Environment (Windows PE)

- Windows PE is a minimal operating system environment used to deploy Windows. The AIK includes several tools used to build and configure Windows PE environments.

Windows Setup and SysPrep

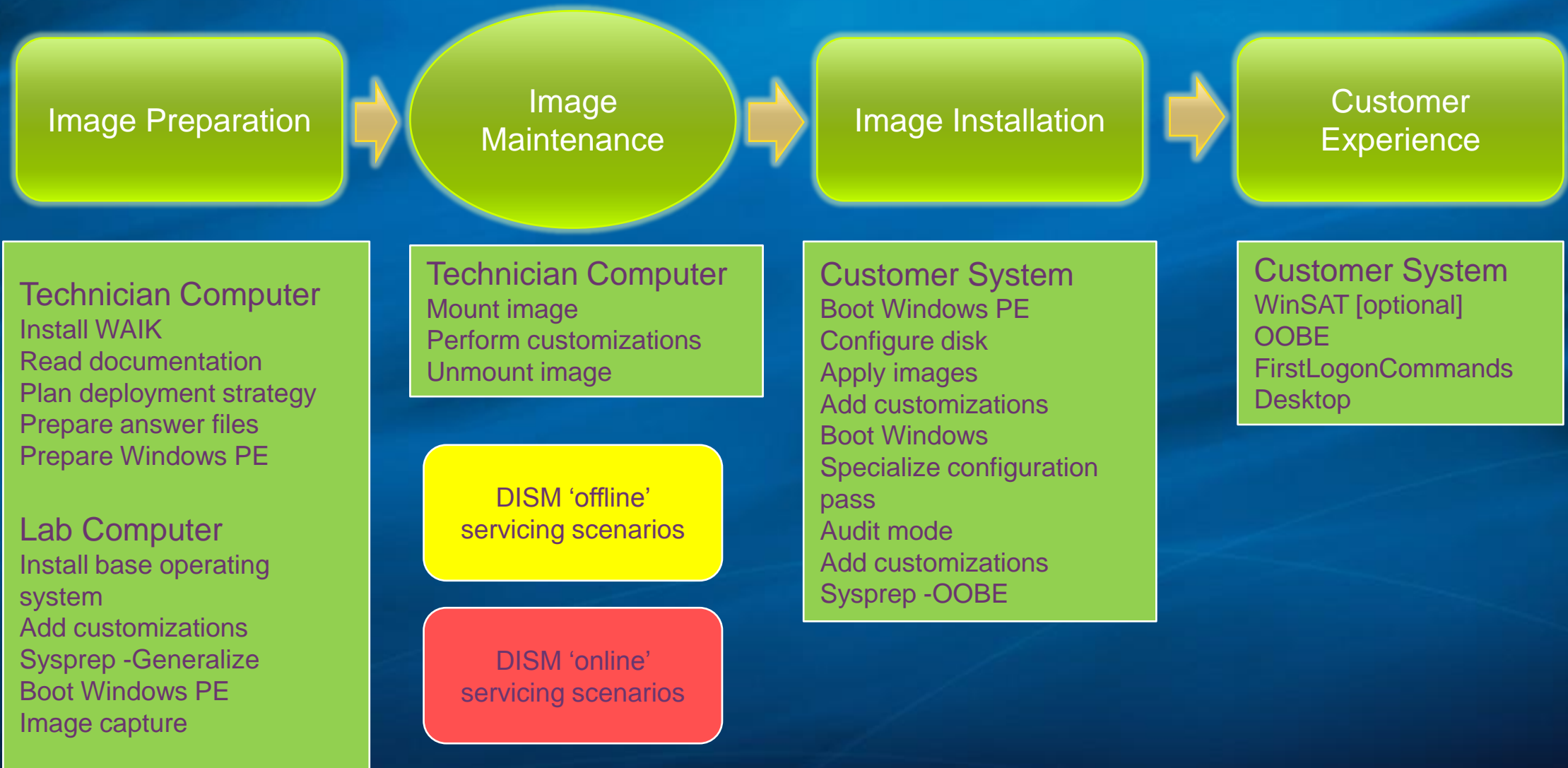
- The tools used to install Windows. These tools are included in the Windows product DVD and are not part of the AIK installation.

User State Migration Tool (USMT)

- USMT is used to migrate user data from a previous Windows operating system to Windows 7.

DISM Overview

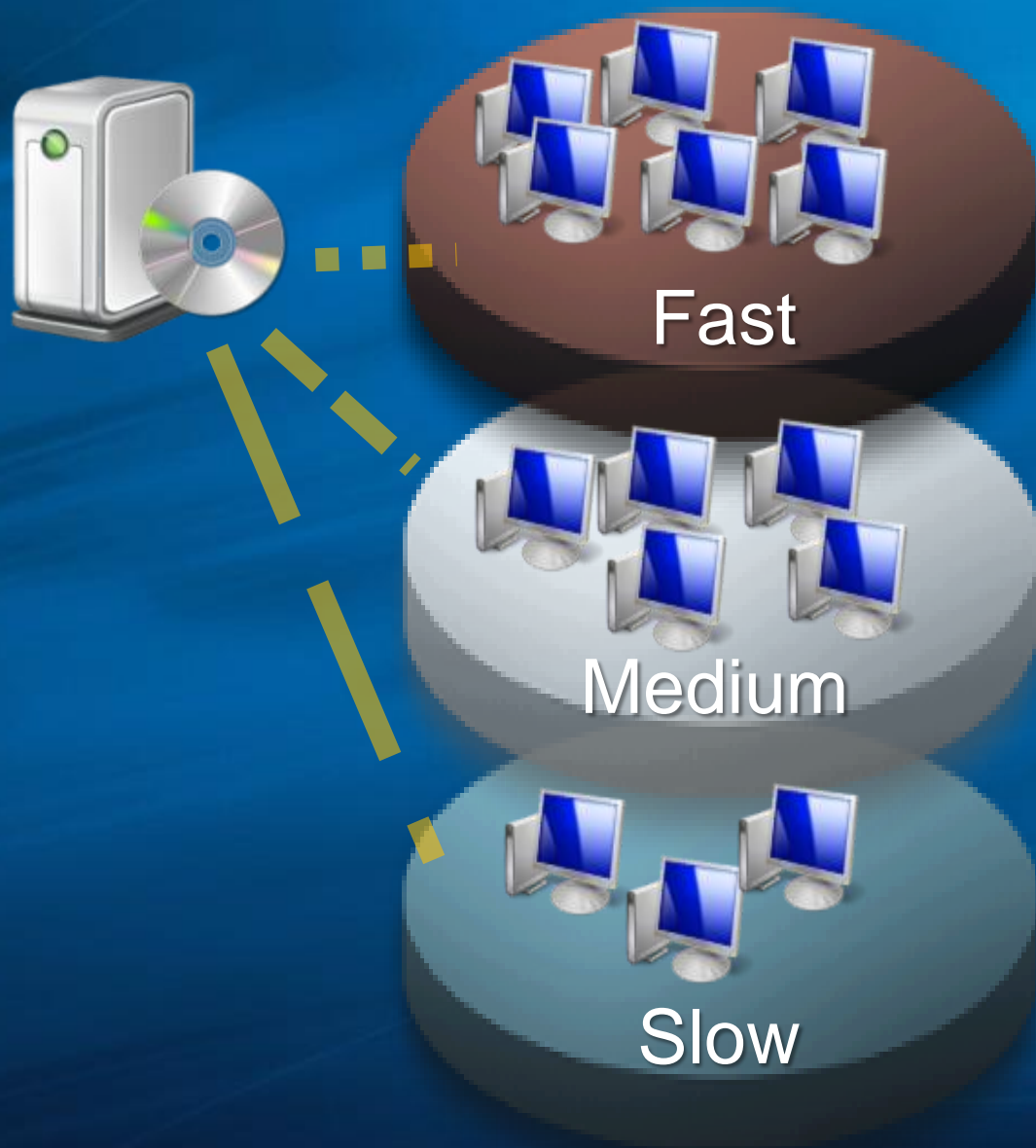
Image Servicing Strategy: Typical Customer Scenario



Windows Server 2008 (R2) Deployment

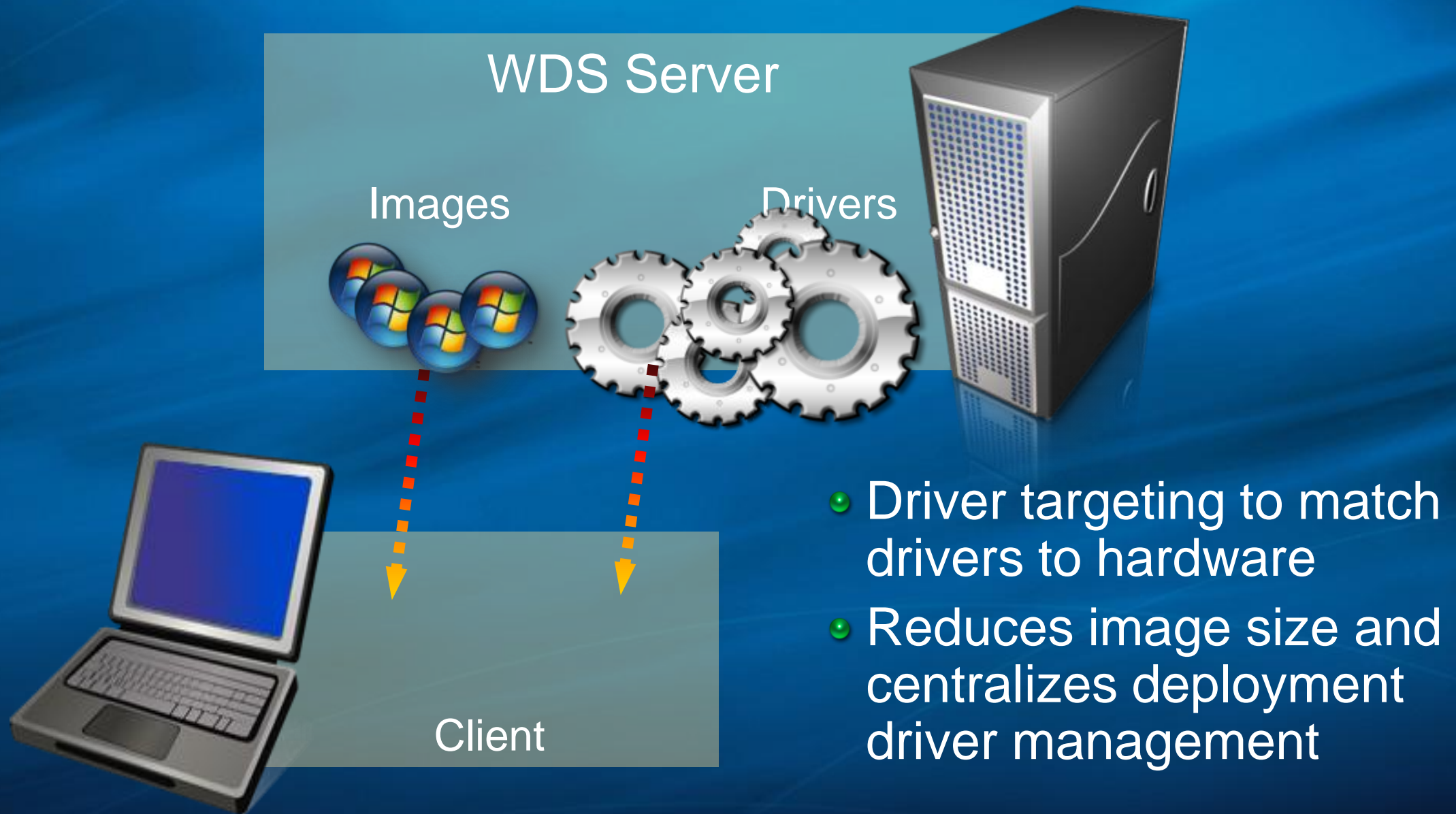
Delivery

Windows Deployment Services Multicast Enhancements



- **Multiple Stream Transfer**
 - Multiple bands to broadcast images to clients
 - Optimized rates per client connection
- **Client Auto Removal**
 - Slower clients can be dropped to unicast or entirely
- **Boot Image Multicast**
 - Windows PE boot images can use multicast

Windows Deployment Services Dynamic Driver Provisioning



User State Migration Tool



- **Hardlink Migration**

- Enables local file migration without copying or moving files
- Processes migration jobs in third of the time or less

- **Offline User State Capture**

- Capture during Windows PE phase to improve speed



- **Volume Shadow Copy**

- Capture files even while they are in use

- **Improved File Discovery**

- Reduces XML customization need

Windows 7 – Server 2008 R2

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Links

- www.microsoft.com/deployment
- www.microsoft.com/solutionaccelerators
- www.microsoft.com/windows7
- www.microsoft.com/windowsserver
- blogs.technet.com/msdeployment
- blogs.technet.com/deploymentguys
- blogs.technet.com/mniehaus

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Your potential. Our passion.[™]

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