

Microsoft® Deployment Toolkit 2010

What’s New in MDT 2010?

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Contents

[Introduction to What’s New in MDT 2010 1](#_Toc240038819)

[Feedback 1](#_Toc240038820)

[New Features in MDT 2010 2](#_Toc240038821)

[What’s New? 2](#_Toc240038822)

[What’s Been Removed? 5](#_Toc240038823)

[Operating System Support in MDT 2010 6](#_Toc240038824)

[Windows AIK Support in MDT 2010 7](#_Toc240038825)

# Introduction to What’s New in MDT 2010

Microsoft® Deployment Toolkit (MDT) 2010 is the next version of the Microsoft Solution Accelerator for operating system and application deployment. The purpose of this guide is to explain the changes in MDT 2010 from MDT 2008 Update 1.

This guide specifically discusses the MDT 2010 release and assumes familiarity with previous MDT version concepts, features, and capabilities.

Note   In this document, Windows applies to the Windows® 7, Windows Vista®, Windows XP Professional, Windows XP Tablet PC Edition, Windows Server® 2008 R2, Windows Server 2008, and Windows Server 2003 operating systems unless otherwise noted.

## Feedback

Please direct questions and comments about this guide to [satfdbk@microsoft.com](mailto:satfdbk@microsoft.com?subject=Microsoft%20Deployment%20Toolkit%202010).

Please provide feedback on the usefulness of this guide by filling out the survey at <http://go.microsoft.com/fwlink/?LinkID=132579>.

# New Features in MDT 2010

MDT 2010 has the same features as MDT 2010 Beta 2, with the exception of items listed in [What’s New](#_What’s_New) and [What’s Been Removed](#_What’s_Been_Removed) in this document.

## What’s New?

The new features in MDT 2010 are supported only for Lite Touch Installation (LTI) deployments and are not supported for Zero Touch Installation (ZTI) deployments using Microsoft System Center Configuration Manager 2007.

The MDT 2010 release includes the following new features:

* Support for new deployment shares. MDT 2010 combines deployment points and distribution shares into deployment shares. A deployment share can be stored on a local drive, on a network shared folder, or on a stand-alone distributed file system (DFS) and does not have to be located on a specific computer. Just as with deployment points, deployment shares contain operating systems, applications, operating system packages, and device drivers.
* Improved management model. You can manage deployment shares from any computer that has the Deployment Workbench installed and has the appropriate NTFS file system permissions and network share permissions on the deployment share. You can open multiple deployment shares simultaneously in the Deployment Workbench.
* Support for selecting groups of items within the Deployment Workbench. Selection profiles in the Deployment Workbench allow you to select items in the deployment share that you can manage or apply as a unit. For example, you can create a selection profile that specifies the device drivers included for a specific make and model of target computers.
* Support for hierarchical management of items in deployment shares. You can create hierarchical folder structures in the Deployment Workbench to help organize and manage items such as operating systems, device drivers, and task sequences in deployment shares. This hierarchical structure allows you to include groupings of items in selection profiles.
* Support for linked deployment shares. Linked deployment shares are specialized deployments shares that you create using a selection profile in an existing standard deployment share. The content of the standard deployment share is replicated to the Universal Naming Convention (UNC) path specified for the deployment share. The content in the linked deployment shares can be replicated any time the content in the source deployment share changes. For more information about linked deployment shares, see the section, “Manage Linked Deployment Shares,” in the MDT 2010 document, Using the Microsoft Deployment Toolkit.
* Improved performance for replicating linked deployment shares. Linked deployment shares can be opened in single user mode, which dramatically improves the performance of replicating linked deployment share content. For more information configuring linked deployment shares for single user mode, see the section, “Modify an Existing Linked Deployment Share in Deployment Workbench,” in the MDT 2010 document, Using the Microsoft Deployment Toolkit.
* Improved database support. The Deployment Workbench supports the ability to dynamically display columns that are added to the MDT database (MDT DB). If you add a new column to the tables or views in the MDT DB, the Deployment Workbench automatically displays the new column.
* Support for drag-and-drop, copy-and-paste, and cut-and-paste operations in the Deployment Workbench. You can copy or move items in the Deployment Workbench within the hierarchical folder structure in a deployment share or between deployment shares.
* Improved support for media-based deployments. You can create media for performing media-based deployments from existing deployment shares based on the criteria specified in a selection profile. The Deployment Workbench can create bootable Windows Imaging Format (WIM) and International Organization for Standardization (ISO) files that can be used in deployments to virtual and physical target computers. For more information about media deployment shares, see the section, “Manage MDT 2010 Deployment Media,” in the MDT 2010 document, Using the Microsoft Deployment Toolkit.
* Support for automation of management tasks using Windows PowerShell™ cmdlets. Most of the processing logic that was previously included in the Deployment Workbench has now been implemented in Windows PowerShell. The Windows PowerShell support allows for the automation of common management tasks and for using other user interfaces (UIs) to perform management functions. Most management actions exposed in the Deployment Workbench can be performed in Windows PowerShell scripts.
* Enhancements in task sequence steps and scripts. Task sequence steps and scripts now include improvements in diagnostics output, logging, network recovery logic, code formatting and structure, security, and Deployment Workbench wizard usability.
* Improved security support. MDT 2010 supports the ability to refresh machines that use BitLocker™ Drive Encryption without decrypting the target hard disks when deploying the Windows 7 operating system and protecting confidential information, such as passwords, stored in MDT 2010 configuration files.
* Support for upgrading from previous versions of MDT and Microsoft Business Desktop Deployment (BDD). MDT 2010 supports upgrading from the following versions of MDT and BDD:
* MDT 2010 Beta 2
* MDT 2010 Beta 2 Preview
* MDT 2010 Beta 1
* MDT 2008 Update 1
* BDD 2007 Update 2

Note   Create a backup of existing MDT or BDD infrastructure before attempting an upgrade. Upgrades to production computers are not supported.

* Support for Windows 7. Deploy Windows 7 using MDT 2010.
* Support for Windows Server 2008 R2. Deploy Windows Server 2008 R2 using MDT 2010.
* Support for System Center Configuration Manager 2007 SP2. This version of System Center Configuration Manager is required to deploy Windows 7 and Windows Server 2008 R2.
* Support for Windows Automated Installation Kit (Windows AIK) version 2.0. Deployment of Windows 7 and Windows Server 2008 R2 using MDT 2010 requires the use of Windows AIK version 2.0.
* Support for Windows User State Migration Toolkit (USMT) version 4.0. USMT 4.0 is required to support Windows 7 deployments. Specifically, the following new features of USMT 4.0 are supported in LTI deployments:
* Support for USMT 4.0 hard-link migration. USMT 4.0 includes a new method of saving user state called hard-link migration. Hard-link migration creates a snapshot of current user data files before reinstallation, which keeps data in the same location on the disk while upgrading the system and rebuilds the links after Windows 7 is installed. Hard-link migration dramatically reduces the time required to migrate user state, because the data is never moved, which is faster than copying user data to another disk.
* Support for USMT 4.0 shadow copy. USMT 4.0 supports the ability to archive files that are in use by using the shadow copy feature in Windows 7 and Windows Server 2008 R2.
* Support for the Deployment Image Servicing and Management (DISM) tool. The new DISM tool (Dism.exe) allows for servicing offline images, mounting and unmounting WIM files, and customizing Windows Preinstallation Environment (Windows PE) boot images. The DISM tool replaces many of the tools in previous versions of the Windows AIK, including Package Manager (Pkgmgr.exe), the International Settings Configuration Tool (Intlcfg.exe), and the Windows PE command-line tool (PEimg.exe).
* Support for Windows PE version 3.0. Windows PE 3.0 is included as a part of the Windows AIK version 2.0 and is required to deploy Windows 7 and Windows Server 2008 R2 using MDT 2010.
* Support for the Boot Configuration Data (BCD) management tool. MDT 2010 uses the new BCDEdit command-line tool to manage BCD files. MDT 2008 Update 1 used the BitLocker Drive Preparation Tool (BdeHdCfg.exe) to manage boot configuration.
* Support for Windows 7 default disk partition configuration. In MDT 2010, the disk partition configuration for Windows 7 is similar to the BitLocker Drive Encryption disk configuration, where the operating system is installed on Disk 0, Partition 2, and the system partition is on Disk 0, Partition 1.

## What’s Been Removed?

The MDT 2010 release does not include the following features that existed in MDT 2008 Update 1:

* Support for Microsoft Systems Management Server (SMS) 2003. MDT 2010 no longer supports performing ZTI deployments using Systems Management Server. All other deployment scenarios that were supported in MDT 2008 Update 1 are supported in MDT 2010.

# Operating System Support in MDT 2010

Table 1 lists the operating system support that LTI and ZTI deployments provide in MDT 2010.

Note   You can perform ZTI deployments only by using System Center Configuration Manager and MDT 2010. You can no longer perform ZTI deployments using Systems Management Server and MDT 2010, as support for Systems Management Server has been discontinued.

Table 1. MDT 2010 Operating System Support

| Operating system | LTI | ZTI |
| --- | --- | --- |
| Windows 7 | ● | ● |
| Window Server 2008 R2 | ● | ● |
| Windows PE version 3.0 | ● | ● |
| Windows Vista (with Service Pack 1 [SP1] and later) | ● | ● |
| Windows Server 2008 (all service pack levels) | ● | ● |
| Windows XP (with SP3) | ● | ● |
| Windows Server 2003 R2 | ● | ● |
| Windows PE version 2.1 |  | ● |

● = supported

# Windows AIK Support in MDT 2010

Table 2 lists the Windows AIK support that LTI and ZTI deployments provide in MDT 2010.

Note   You can perform ZTI deployments only by using System Center Configuration Manager and MDT 2010. You can no longer perform ZTI deployments using Systems Management Server and MDT 2010, as support for Systems Management Server has been discontinued.

Table 2. MDT 2010 Windows AIK Support

| Windows AIK | LTI | ZTI |
| --- | --- | --- |
| Windows AIK version 2.0 | ● | ● |
| Windows AIK version 1 |  | ● |

● = supported