Microsoft Deployment Toolkit

Agenda

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 - Import The OS Image
 - Import The drivers
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 - Import The drivers
 - <u>Update The Deployment share</u>
 - View LiteTouchX86 & LiteTouchX64 ISO & WIM Files in Deplo...
- <u>Microsoft Deployment Toolkit Deploying with Media</u>
- Importing an existing MDT Deployment Share
- Generate Media Install for Existing Deployment Share

MDT Prerequisites

- Microsoft Deployment Tool Kit (MDT) Windows 10
 - v. 6.3.8330.100
- Windows Assessment and Deployment Kit (Windows ADK) Windows 10
 - Note: Make sure the ADK version is paired with the appropriate MDT version or the Deployment workbench will not run
- All MDT and ADK install files are located at <u>https://zebra.app.box.com/files/0/f/8324200277/MDT</u>

MDT Prerequisites

- Deployment Share for Import is located on Box:
 - WIN10-ZEBRA-R1.0-00X-X64-DeploymentShare (1)
- MDT Components for building a Deployment Share from Scratch is located on Box:
 - WIN10-ZEBRA-R1.0-00X-X64-Components

Contact Katyayani D[JBNQ43@zebra.com] for latest release of these components.

Building a Deployment Share

Launch Deployment Workbench (Read the overview)

	DeploymentWorkbench - [Deployment Workbench]	_ 🗆 🗙
File Action View Help		
 Deployment Workbench Deployment Shares 	Microsoft Solution Accelerators Character Deployment Toolkit (MDT) is the recommended process and toolset for automating desktop and server deployment. MDT provides you with unified tools and processes required for desktop and server deployment in a common deployment console and collection of guidance. MDT and server deployment of the Windows & 1.1, Windows & Windows V. Windows Server 2002, and Windows Server 2003 desktop and server deployment of the Windows & 1.2, Windows & Windows V. Windows Server 2003 desktop and server deployment of the Windows & 1.2, Windows & Vindows V. Windows Server 2003 desktop and server deployment of the Windows & 1.2, Windows & 1.2, and Windows Server 2003 desktop and windows Possessment and Deployment Kit (ADK) for Windows 8.1 9. Support for the Windows Assessment and Deployment Kit (ADK) for Windows 8.1 9. Support for the Windows & 1.1 and Windows Server 2012 R2 9. Support for deployment for Windows 8.1 and Windows Server 2012 R2 1. Improved support for x86-based Unified Extensible Firmware Interface (UEFI) systems 9. More Support for x86-based Unified Extensible Firmware Interface (UEFI) systems	Actions Deployment Wor A View A Refresh Help
Done	courtesy	

 Right click **Deployment Shares** in the left navigation and select **New Deployment Share**

New Deployment Shar Open Deployment Sha	e 🧲 re
View	,
Refresh Export List	
Help	

Change the deployment share path

New Deployment Share Open Deployment Shar	e
View	
Refresh Export List	
Help	

• Set Deployment Share Name

	New Deployment Share Wizard	×
Share		
Path Share Descriptive Name	Specify the share name to be used with the specified local path. If the share already exists on this computer, it must point to the path specified for this deployment share. Share name:	
Summary Progress Confirmation	Full path UNC path: \\WS12R2MDT01\DeploymentShare\$	
	Courtesy Net Cancel	

• Set Deployment Share Description

	New Deployment Share Wizard
Descriptive	e Name
Path Share Descriptive Name Options Summary Progress Confirmation	Specify a descriptive name for the deployment share. Deployment share description: MDT Deployment Share
	courtesy TVCE.com Previous Next Cancel

Set deployment Share Options

	New Deployment Share Wizard
Options	
Path Share Descriptive Name Options Summary Progress Confirmation	When performing deployments, the behavior of the Deployment Wizard can be customized by turning various wizard panes on or off. For those that are not desired, modify the defaults below as appropriate. Ask if a computer backup should be performed. Ask for a product key. Ask to set the local Administrator password. Ask if an image should be captured. Ask if BitLocker should be enabled.
	image courtesy

• Review Summary

	New Deployme	nt Share Wizard 🛛 🗶
Path Share Descriptive Name Options Summary Progress Confirmation	New Deployme All of the necessary details have Details: Path: Upgrade: ShareName: Description: Ask about Backup: Ask for Product Key: Ask for Admin Password: Ask for Admin Password:	At Share Wizard X a been specified. Please review the values below. C:\DeploymentShare False DeploymentShare\$ MDT Deployment Share False False False False False
	Ask for Admin Password: Ask about Image Capture: Ask about BitLocker: Click next to execute the reques	False False sted action.

• Finish and Generate

	New Deployment Share Wizard	×
Confirmation		
Path Share Descriptive Name Options	The process completed successfully.	
Progress Confirmation	Creating share "Deployment Share\$" with path 'C:\Deployment Share'. Share created successfully. Performing the operation "New drive" on target "Name: DS001 Provider: MicrosoftDeploymentToolkit\Performing the operation "new" on target "deployment share". Initializing a new deployment share Initializing scripts and tools. Performing the operation "open" on target "deployment share". Deployment share at 'C:\DeploymentShare' opened successfully. Adding MDT drive DS001 to the persisted drive list. Successfully added MDT drive DS001 to the persisted drive list.	— MI
		2
	Save Output View Script	-
	courtesy NVCE com Previous Finish Cancel	4

MDT Service Account

 Go to Computer Management. Expand Local Users and Groups and right click Users to select New User:



MDT Service Account

 Create Local User and set password to "Never expirer " New User

		New User	L
User name:	MD	т	
Full name:			
Description:			
Password:)
Confirm passwo	ord:	······ è	-
User must c	hange p	assword at next logon	
User cannot	t change	e password	
Password n	ever exp		
Account is a	disabled		
	18		
Help		Create	e Close

Deployment Share Properties

• Identify Share Folder Right Click

General	Sharing	Security	Previoue Versions	Customiza
General		Jocumy		Guacomize
Netwo	ork File and	Folder Sh	aring	
	Deploy	mentShare	e	
	Shared	d		
Netw	ork Path:			
\\WS	12R2MD1	T01\Deploy	mentShare\$	
S	hare			
Advar	nced Shari	na		
Set c	ustom pem	nissions, cr	eate multiple shares	, and set other
Set c advar	ustom pem nced sharir	nissions, cr ng options.	eate multiple shares	, and set other
Set cr advar	ustom pem nced sharir Advance	nissions, cr ng options. d Sharing	eate multiple shares	, and set other
Set c advar	ustom pem nced sharir Advance	nissions, cr ng options. d Sharing	eate multiple shares	, and set other
Set c advar	ustom pem nced sharir Advance	nissions, cr ng options. d Sharing	eate multiple shares	, and set other
Set or advar	ustom pem nced sharir Advance	nissions, cr ng options. d Sharing	eate multiple shares	, and set other
Set c advar	ustom perm nced sharin Advance	nissions, cr ng options. d Sharing	eate multiple shares	, and set other
Set c advar	ustom pem nced sharir Advance	nissions, cr ng options. d Sharing	eate multiple shares	, and set other
Set o advar	ustom pem nced sharir Advance	nissions, cr ng options. d Sharing	eate multiple shares	, and set other

Deployment Share Properties

• Set Permission

Share this t	folder
Share nam	e:
Deployme	ntShare\$ v
Add	Remove
Comments MDT Dep	: Joyment Share
	ons Caching
Permissi	

Group or user names:		
	Add	Remove
Permissions for Everyone	Allow	Deny
Full Control Change Read	Y Y	

Deployment Share Properties

• Click Security Tab and review permissions

ieneral	Sharing	Secunty	Previous Versions	Customize	
Object r	name: C	:\Deploym	entShare		
Group o	or user nan	nes:			
SCF	REATOR	WNER			
SY SY	STEM				
Ad Ad	Iministrator	s (WS12R	2MDT01\Administra	tors)	
Us Us	ers (WS1)	2R2MDT0	1\Users)		
To char	nae permis	sions click	< Edit	E Ja	_
				Edit	
Permiss	ions for Us	sers	Allo	w Deny	8
Full c	ontrol				^
Modi	fy				
Read	& execute	е	~		=
List fo	older conte	ents	1		
Read	ł		1		
Write					~
For spe click Ad	cial permis Ivanced.	sions or ad	lvanced settings,	Advanced	1

Set Deployment Share Rules

• Set share Rules



Set Deployment Share Rules



Set Deployment Share Rules

- Edit Boot.ini
- Remove:
 - UserID=MDT

 UserDomain=WS12R2MDT01
 UserPassword=P@ssw0rd01
 KeyboardLocale=en-US
 SkipBDDWelcome=YES



• Save the file to Deployment Share

• In the Deployment workbench go to the Deployment share and then New Applications

🚡 DeploymentWorkbench - [Deployment	nt Workbench\Deployment Shares\MDT Dep	oyment Share (C:\DeploymentShare)\Applicat	ons]
File Action View Help			
🗢 🔿 🖄 🗟 👔			
Deployment Workbench	Name	ShortName	Actions
Information Center Deployment Shares	There are no	items to show in this view.	Applications
MDT Deployment Share (C:\D	eploymentS		New Application
Application New App	lication		New Folder
Qut-of-Bc New Fold	ier		View •
Packages View	•		G Refresh
Advanced Refresh			Export List
Monitorin Export Lis			Неір
Help			
< [4	
Displays Help for the current selection.			

Set application type



Set application details



Set application source



Set Destination directory



 Set Command Line instructions to install application on target host/Hosts



• Review application summary

DeploymentWorkbench - [Deployme	ent Workbench\Deployment Shares\I	MDT Deployment Share (C:\Deployme	entShare)\Applicat	tions]
Deployment Workbench	Name New Application Wizard	S	hortName	Actions
 MDT Deployment Share (C: Applications Q, Operating Systems Out-of-Box Drivers Packages Task Sequences Advanced Configuration Monitoring 	Application Type Details Source Destination Command Details Summary Progress Confirmation	All of the necessary details have been Details: ApplicationType: ApplicationPublisher: ApplicationShortName: ApplicationName:	COPY Adobe Adobe Reader	review the values below.
		Application Name. Application Source Directory: Move File: Application Destination Directory: Application Command Line: Application Working Directory: Click next to execute the requested a	C:\Users\QGJC86\ False Adobe Adobe Read SetUp.exe .\Applications\Adol	Jocuments\Applications der be Adobe Reader
< <u> </u>				Previous Next Cancel

• Confirm & finish

1	eploymentWorkbench - [Deployment Workbench\Deployment Shares\MDT Deployment Share (C:\DeploymentShare)\Applications]	
is	Action View Help	
	Area Application Wizard	
	Information Deployment Deployment	•
	Image: Solution Control of the process completed successfully.	•
	Image: Summary Progress Performing operation "import" on Target "Application". Confirmation Performing operation "import" on Target "Application". Description Description Import process Confirmation Confirmation Import processing finished.	
	Save Output View Script	
	Previous Finish Cancel	
-		

Mount the operating system ISO and record the path



 In the Deployment workbench go to the share and operating system



• Select full set of source files



Point to the source directory



• Name the Destination Directory

	Import Operating System Wizard	×
OS Type Source Image Setup WDS Server Destination Summary Progress Confirmation	Import Operating System Wizard Specify the name of the directory that should be created for these operating system files. Destination directory name: Windows Server 2012 R2	X
	courtesy Next Can	cel

• Review the summary

	Import Operating System Wizard	×
Summary	,	
OS Type Source Image	All of the necessary details have been specified. Please review the values below. Details:	
Setup WDS Server Destination <u>Strimary</u> Progress Confirmation	OSType: SOURCE OSDestination: Windows Server 2012 R2 OSSource: E:\ MoveOS: False	
	Click next to execute the requested action.	
		Cancel

View confirmation



Import The drivers

 Go the MDT Workbench and Deployment Share and select Out Of Box drivers



Import The drivers

• Specify the source directory for the drivers



Import The drivers

Hit next and Import the drivers



• Go to the Deployment Workbench and select Task Sequence in the deployment share



• Set general settings



• Select Template



Select OS

	New Task Sequence Wizard	>
Select OS Select Template Select Template Select OS Specify Product Key OS Settings Admin Password Summary Progress Confirmation	The following operating system images are available to be deployed with this task sequence. Select the one to use. Operating Systems Windows Server 2012 R2 Datacenter with	
	Intege Cancel	

• Specify whether to use Product Key or not

	New Task Sequence Wizard
General Settings Select Template Select OS Specify Product Key OS Settings Admin Password Summary Progress Confirmation	New Task Sequence Wizard Oduct Key On not specify a product key at this time. A product key is not required when deploying Windows 7. Windows Server 2008 R2, or later OS versions, or if the product key will be specified at deploy time using the wizard or a rule. Specify a multiple activation key (MAK key) for activating this operating system. In order to activate, each computer deployed using this MAK key will need to contact the Microsoft activation service on the internet. This is only supported for Windows 7 and later operating systems when using volume license media. MAK Product Key:
	image courtesy

• Specify OS Settings



Set Admin Password



• View Summary

	New Task Sequence Wizard	×
General Settings Select Template Select OS Specify Product Key OS Settings Admin Password Summary Progress Confirmation	All of the necessary details have been specified. Please review the values below. Details: Task SequenceID: DEPLOY-WS2012R2 Task SequenceName: Deploy Windows Server 2012 R2 Template: Server xml OperatingSystem: Windows Server 2012 R2 Datacenter.wim FullName: youngtech MomePage: www.it/vce.com AdminPassword: Terment	
	Click next to execute the requested action.	Cancel

 Right Click on the Deployment Share and select update



• Set Options

DeploymentWorkbench - [Deployment Workbench	\Deployment Shares\MDT Deployment Share (C:\DeploymentShare)\Task Sequences]	
File Action View Help		
Update Deployment Share Wizard		<u> </u>
Deployment v Appr Deployment v Deployment v Appr Deployment v Deploymentv Deployment v Deployment v D		e
Image: Construction of the second	 When updating the deployment share, the latest tools will be copied to the deployment share. If any changes have been made to the boot image settings or to the content that needs to be included in the boot image, those updates will also be made. If necessary, you can choose to completely regenerate the boot images, or to compress the existing boot Optimize the boot image updating process. Compress the boot image contents to recover space used by removed or modified content. Completely regenerate the boot images. 	
	Previous Next Cancel	
< +		

• Review Summary

DeploymentWe	orkbench - [Deployment Workbench]	\Deployment Shares\MDT Deployment Share (C:\DeploymentShare)\Task Sequences]	
File Action V	/iew Help		
🔶 🔿 🖄 📴	Update Deployment Share Wizard	×	η
 Deployment Deployment Deployment Deployment MDT D App 	Summary		e
⊳ ⊶, Op ⊳ ⊶, Ou ⇒ Pac iii Tas ⊳ iii An	e Options Summary Progress Confirmation	All of the necessary details have been specified. Please review the values below. Details: Earce: Ealse	
		Force: False Compress: False Compress: False	
		Previous Next Cancel	

• Update the Share

Deployment W	Update Deployment Share Wizard		×
Informatio Deployment MDT D D P App	Progress		e (C:\Deploy nt Share Share
 □ □ □ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Options Summary Progress Confirmation	Cleanup complete	
		Loading the existing boot image profile for platform x86. Calculating hashes for requested content. No changes were made, existing boot images will be kept. === Completed processing platform x86 === === Making sure the deployment share has the latest x64 tools === === Processing LiteTouchPE (x64) boot image === Building requested boot image profile. Determining if any changes have been made in the boot image configuration. Loading the existing boot image profile for platform x64.	E
		Calculating hashes for requested content. Stop Executio Previous Rnish Cancel	

View LiteTouchX86 & LiteTouchX64 ISO & WIM Files in Deployment Share

• Generated ISO & WIM files to integrate with WDS or SCCM



Microsoft Deployment Toolkit Deploying with Media

Select Advance Configuration\Media\New Media



Select the MDT_Media Folder to store the deployment Files



Click Finish and the istall files will saved to MDT_Media folder



Copy the entire contents of the "Content Folder" to a USB formatted as Fat32 and the media is ready to use



Importing an existing MDT Deployment Share

• Source Files are located in:

- WIN10-ZEBRA-R1.0-00X-X64-DeploymentShare

Go the source Files for the Deployment Share and give the top level Folder A Unique Name



Copy The Renamed Deployment share to your C: Drive



Go to the Deployment Workbench and Right Click on The deployment Share folder



Browse to C: Drive and select your renamed Deployment Share



The imported Deployment Share will be displayed in the Deployment Share folder



Generate Media Install for Existing Deployment Share

- In the open deployment share, browse to Advanced Configuration / Media, right-click MEDIA001 and select "Update Media Content". This will create directory C:\MDT_MEDIA.
- On Windows Explorer, browse to directory "Control" under the extracted deployment share. Copy the file CustomSettings.ini to directory C:\MDT_MEDIA\Content\Deploy\Control, replacing the default configuration file. Format an USB disk with FAT32 and copy all the files under C:\MDT_MEDIA\Content\ to the empty disk.
- See Also Generating Media Install for USB