# Using System Center 2012 R2 Configuration Manager SP1 to Manage Windows-based HP Thin Clients



Windows 10 IoT Enterprise Windows Embedded 8 Standard Windows Embedded Standard 7

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## **Overview**

This document describes how to use Microsoft<sup>®</sup> System Center 2012 R2 Configuration Manager Service Pack 1 (Configuration Manager) to manage HP thin clients running Windows<sup>®</sup> 10 IoT Enterprise, Windows Embedded 8 Standard, and Windows Embedded Standard 7 operating systems.

## **Configuration Manager features**

## **Asset Intelligence**

Asset Intelligence gives organizations better control over their infrastructure by providing IT administrators with continuous insight into what hardware and software assets they have, who is using them, and where they are.

## **Software Update Management**

Software Update Management simplifies the delivery and management of updates to IT systems across the enterprise. IT administrators can deliver updates of Microsoft products, third-party applications, custom in-house line-of-business applications, hardware drivers, and the system BIOS to a variety of devices.

## **Desired Configuration Management**

Desired Configuration Management ensures that IT systems comply with the organization's desired configuration to improve network-wide availability, security, and performance.

## **Software Distribution**

Software Distribution simplifies the distribution of applications and updates to desktops, servers, laptops, and mobile devices across enterprise networks.

## **Operating System Deployment**

Operating System Deployment is a highly flexible, automated solution that allows IT administrators to deploy and configure servers and desktops from any previous state, including bare-metal deployments.

## Configuration

### **Server requirements**

- Windows Server<sup>®</sup> 2008 R2 SP1 with Active Directory (AD), Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), Windows Deployment Services (WDS), Windows Server Update Services (WSUS), and Windows Assessment and Deployment Kit (Windows ADK)
- Microsoft System Center 2012 R2 Configuration Manager SP1
- Microsoft SQL Server 2008 R2 SP1

## **Client requirements**

Microsoft System Center 2012 R2 Configuration Manager SP1 is preinstalled on Windows-based HP thin clients as described in the following matrix.

		Windows 10 IoT Enterprise	Windows Embedded 8 Standard	Windows Embedded Standard 7P (64-bit)	Windows Embedded Standard 7E
	t630	Х			Х
	t628	Х			Х
	t730	Х		Х	
	t420				Х
	t820		Х	Х	Х
	t620 / t620 PLUS	Х	Х	Х	Х
del	t520	Х	Х	Х	Х
HP thin client model	t610 / t610 PLUS		Х	Х	Х
clien	t510				Х
thin	t505				Х
₽	EliteBook 745 G2				Х
	mt245			Х	
	mt42	Х			Х
	mt41				Х
	mt40				Х
	t5740e				Х
	t5570e				Х

## **Additional reading**

For more information about supported configurations for Microsoft System Center 2012 R2 Configuration Manager SP1, go to <u>http://technet.microsoft.com/en-us/library/qg682077.aspx</u>.

## **Inventory in Configuration Manager**

Configuration Manager has many methods to inventory hardware and software. Use the hardware inventory to find detailed information about the hardware of the client computers and mobile devices that are enrolled by Configuration Manager. Use the software inventory to find information about the software and files present on the client computers. Asset Intelligence extends these inventory capabilities to help manage licenses for software in the enterprise.

## Hardware inventory in Configuration Manager

For more information about hardware inventory, go to <u>http://technet.microsoft.com/en-us/library/qq682093.aspx</u>.

## Software inventory in Configuration Manager

For more information about software inventory, go to <u>http://technet.microsoft.com/en-us/library/qq682126.aspx</u>.

## Asset Intelligence in Configuration Manager

For more information about Asset Intelligence, go to <u>http://technet.microsoft.com/en-us/library/qq699382.aspx</u>.

## **Installing Configuration Manager**

The following methods can be used to install Configuration Manager:

- Client push installation
- Software update point installation
- Group Policy installation
- Logon script installation
- Manual installation
- Upgrade installation by using application management
- Automatic client upgrade
- Client imaging

Be sure that the latest Configuration Manager (5.00.8239.1000) is installed before continuing. For more information, go to <a href="http://technet.microsoft.com/en-us/library/gg682132.aspx#BKMK\_DeployClientComputers">http://technet.microsoft.com/en-us/library/gg682132.aspx#BKMK\_DeployClientComputers</a>.

## **Distributing applications to Windows-based HP thin clients**

Configuration Manager provides a set of tools and resources that can help you create, manage, deploy, and monitor applications in the enterprise.

For more information on how to create an application, go to http://technet.microsoft.com/en-us/library/qg682159.aspx.

For more information on how to deploy an application, go to http://technet.microsoft.com/en-us/library/qg682082.aspx.

For more information on how to create packages and programs, go to <u>http://technet.microsoft.com/en-us/library/qq682112.aspx</u>.

For more information on how to deploy packages and programs, go to <u>http://technet.microsoft.com/en-us/library/qq682178.aspx</u>.

When you deploy applications to a Windows-based HP thin client with the write filter enabled, you can specify whether to disable the write filter on the device during the deployment. You must restart the device after the deployment. If the write filter is not disabled, the software deploys to a temporary overlay and is not installed when the device restarts unless another deployment forces the changes to persist.

The checkbox **Commit changes at deadline or during a maintenance window (requires restarts)** controls the write filter behavior.

## Imaging with Configuration Manager 2012 R2 SP1

Complete the deployment process first. For instructions, go to <u>http://technet.microsoft.com/en-us/library/qq682108.aspx#BKMK\_Workflow</u>.

Then, use one of the following methods to deploy the operating system to a computer with the Configuration Manager client.

- PXE initiated deployments
- Multicast deployments
- Bootable Media Deployments
- Stand-alone Media Deployments
- Pre-staged Media deployments

For more information about deployment methods, go to <u>http://technet.microsoft.com/en-us/library/qq682108.aspx#BKMK\_OSDMethods</u>.

#### **Preparing a Windows Preinstallation Environment boot image**

The default boot image in Configuration Manager supports most of the images provided by HP. The HP Windows 10 IoT Enterprise image is deployed in Compact Mode, which is the new format for Windows 10. A customized Windows 10 boot image is required to manage an HP thin client with a Windows 10 IoT Enterprise image using Configuration Manager. For more information on creating a boot image, see <u>Appendix C—Preparing a boot image and adding the correspondent drivers</u>.

## Creating a driver package for imaging

- 1. Select Start, select All Programs, select Microsoft System Center 2012, and then select Configuration Manager.
- 2. Navigate to **Software Library**. Select **Overview** from the left panel, and then select **Operating Systems**. Right-click **Drivers**, and then select **Import Driver**.

So	oftw	vare Library	
4	đ	Overview	
	⊧	Application Management	
	F.	🚰 Software Updates	
	4	🦰 Operating Systems	
		Drivers	
		Dp Folder	
		Notes and the second se	
		💼 Boot Images	
		🔁 Task Sequences	
		📼 Virtual Hard Disks	

3. In the Import New Driver wizard, specify the source folder of the driver, and then select **Next**.

#### Note

You can download drivers from <u>http://www.hp.com/go/bizsupport</u> (search for the thin client model, and then select **drivers, software & firmware**).

ion Managerfind all
Browse
or btsetup.cem file Browse
~

4. Select the driver to import, and then select **Next**.

Driver Details		
Locate Driver Driver Details Add Driver to Packages	Specify the details for the imported driver	
Add Driver to Boot Image	The following drivers will be imported from folder:	
Summary	\\192.168.1.15\Thin Client Drivers\	
Progress	Hide drivers that are not in a storage or network class (for boot images)	
Completion	✓ Hide drivers that are not digitally signed	
	Filter	5
	File Name       Class       Architecture       Signed         Image: Class       Architecture       Signed       Image: Class       Image: Class       Architecture       Signed         Image: Class       Architecture       Signed       Image: Class       Image: Class       Image: Class       Signed       Image: Class       I	
	Enable these drivers and allow computers to install them  Assign this driver to one or more categories for filtering.  Categories	]
< III >	< Previous Next > Summary Cancel	]

5. On the Add Driver to Packages screen, select **New Package**.

Add Driver to Pa	ckages				
Locate Driver Driver Details	Select the packages to a	dd the imported driver			
Add Driver to Packages					
Add Driver to Boot Image	Specify the package to add this drive	erto.			
Summary	Drivers must be added to packages	and deployed to distribution points by	efore computers can use		
Progress		Drivers must be added to packages and deployed to distribution points before computers can use them. Distribution points can be updated immediately.			
Completion	It is recommended that you add all required drivers before updating the package.				
	Name My_x64_Driver My_x86_Driver	Package ID 0010000B 0010000C	Select All Clear All New Package		

6. In the Create Driver Package dialog box, enter the package name and specify the network UNC path—use an empty folder.

10	Create Driver Package	x
Specify the follo	wing information for the new driver package.	
Name:	MyDriverPackage	
Comment:		<
Specify a netwo	ork path (UNC) where Configuration Manager stores drivers added to this package.	
Path:	\\192.168.1.15\MyShared_Empty_Folder     Browse       Example: \\servername\sharename	
	OK Cancel	

7. Select **OK** to close the Create Driver Package dialog, and then select **Next**.

ocate Driver Driver Details	Select the packages to ad	d the imported driver	
Add Driver to Packages Add Driver to Boot Image iummary Progress Completion	Specify the package to add this drive Drivers must be added to packages a them. Distribution points can be upda It is recommended that you add all rec	and deployed to distribution points b ated immediately.	
	Name My_x64_Driver My_x86_Driver My_x86_Driver MyDriverPackage	Package ID 00100008 0010000C 00100015	Select All Clear All
	-		New Package

- 8. On the Add Driver to Boot Images page, do not change the default options. Select **Next**.
- 9. On the Summary page, select **Next**.
- 10. After the wizard completes, select **Close**.
- 11. Select System Center Configuration Manager, select Software Library, select Overview, select Operating System, and then select Driver Packages.

12. Right-click the driver package you imported, and then select **Distribute Content**.

Software Library 4	Driver Packages 3 items						
4 🗬 Overview		Search					
Application Management	lcon	Name		Versic			
🕨 🧮 Software Updates	1	My_x64_Driver					
<ul> <li>Operating Systems</li> </ul>	1	My_x86_Driver					
Drivers	10	MyDriverPackage					
Driver Packages  Coperating System Images  Coperating System Upgrade Packages  Boot Images			<ul> <li>Show Members</li> <li>Export</li> <li>Refresh</li> <li>Delete</li> </ul>	F5 Delete			
Task Sequences			Distribute Content				
C Virtual Hard Disks		11 22 33 11 11	Create Prestaged Content Manage Access Accounts Move	t File			
		E	Properties				

- 13. In the Distribute Content wizard, select **Next** on the General page.
- 14. Select Add and select Distribution Point.

Content will be d	istributed to the following distribution groups that are currently associated	points, distribution poir with collections.	nt groups	, and the	
Content destinati Filter Name	ion: Description	Associations	2	Add 🔻	
	There are no items to show in this	view.	E	Distribution P Distribution P	
			•		
	< Previous	Next > Sum	mary	Cancel	

15. In the Add Distribution Points dialog box, select the available distribution points, and then select **OK** to close the dialog box.

Add Distribu	ition Points	×
Select distribution points that will host this content.		
Software Update Packages are never distributed to	Cloud Distribution Poir	nts.
Available distribution points:		
Filter		2
Name	Туре	Description
MYSCCM.HPDMQA.COM	On-premises	
	OF	Cancel

- 16. Select **Next** until the wizard finishes, and then select **Close**.
- 17. Refresh the Driver Packages screen and make sure that the content status is Success before proceeding.



1 Targeted (Last Update: 8/31/2016 9:58 AM)

- 18. Select System Center Configuration Manager, select Software Library, select Overview, select Operating System, and then select Boot Images.
- 19. Right-click the appropriate boot image, and select **Properties**.

Software Library	< Boot I	mages 2 items						
4 🗇 Overview	Search							
Application Management	lcon	Name		Version	Comment			
Software Updates	83	Boot image (x64)	i contra	10.0 10240 16204	A			
Operating Systems	000	Boot image (x86)	a	Refresh	F5			
Drivers			×	Delete	Delete			
E Driver Packages			2	Distribute Content				
System Images			22	Update Distribution Po	ints			
Operating System Upgrade Packages			1	Create Prestaged Conte	ent File			
Boot Images			30	Manage Access Accourt	nts			
Task Sequences				Move				
C Virtual Hard Disks			8	Set Security Scopes				
				Properties				

20. In the Properties dialog box, select the **Drivers** tab and add the target driver.

riew 🕨 🤇	Oper	rating Sy	-		1							
	B	oot Imag			Ontional Compo	nents Security	e   Data Access	Distribution Setting	1			
	s	Search	Drive			interest [ care cours	o   cuiu recess	[ control of the start of				
	1		Long	5.9. · ·							1.	
		con 1	Filte	N						2		nage II
	Driver name			Class	Class Architecture Signe				001000			
	Broadcom 802.11b/g WLAN Ne		Net	x86, x64	Yes		00100					
			Net	x64	Yes							
			100	Realtek PC	GBE Family Contr	roller	Net	x64	Yes			-
						Select a	driver					2
ders:				Drivers:								
E Ro	ot			Hide dr		atch the architecture n a storage or networ sigitally signed						
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🗾 Ro	ot			Hide dr Hide dr Filter Driver Na	ivers that are not in ivers that are not of me	n a storage or networ Sgitally signed		mages) Da		Architecture	Signed	2
E Ro	ot			Hide dr Hide dr Filter Driver Na Com	ivers that are not in ivers that are not of me Dual Port 1000-S3	n a storage or networ sigtally signed K PCI-X Server NIC		mages) Da		x64	Yes	2
E Ro	ot			Hide dr Hide dr Filter Driver Na 3Com Intel(F	ivers that are not it ivers that are not of me Dual Port 1000-S3 () Ethemet Connect	n a storage or networ sigitally signed K PCI-X Server NIC ction 1217-LM		mages) Cla Net Net		x64 x64	Yes Yes	- 10 - 10
🧾 Ro	ot			Hide dr Hide dr Hiter Driver Na Scom Hitel(R Hitel(R Hitel(R))	wers that are not it wers that are not of me Dual Port 1000-S3 () Ethemet Connec () Ethemet Connec	n a storage or networ sigitally signed K PCI-X Server NIC ction 1217-LM ction 1217-LM		mages) Cla Net Net		x64 x64 x64	Yes Yes Yes	Q • =
E Ro	ot			<ul> <li>✔ Hide dr</li> <li>✔ Hide dr</li> <li>✔ Hide dr</li> <li>♥ Fiter</li> <li>♥ Driver Na</li> <li>♥ Original Optimization</li> <li>♥ Intel(R</li> <li>♥ Intel(R</li> <li>♥ Intel(R</li> </ul>	wers that are not a wers that are not o me Dual Port 1000-S3 () Ethemet Connec () Ethemet Connec () Ethemet Connec	n a storage or network sigitally signed K PCI-X Server NIC ction 1217-LM ction 1217-LM ction 1217-LM		nages) Cla Net Net Net Net		x64 x64 x64 x64	Yes Yes Yes Yes	р <b>с</b>
E Ro	ot			Hide dr Hide dr Hide dr Hide dr Hiter Driver Na Grow Hrtel(R Hrtel(R Hrtel(R Hrtel(R)	wers that are not is wers that are not of Dual Port 1000-S3 () Ethemet Connec () Ethemet Connec () Ethemet Connec () 1350 Gigabit Net	n a storage or network sigitally signed K PCI-X Server NIC ction 1217-LM ction 1217-LM dton 1217-LM work Connection	k class for boot i	mages) Cla Net Net		x64 x64 x64	Yes Yes Yes	
Rot	ot			Hide dr  Hide dr  Hide dr  Fiter  Driver Na  3Com Intel(R Intel(R Intel(R Name: 3Cc	ivers that are not a ivers that are not of Dual Port 1000-S3 () Ethernet Connec () Ethernet Connec () Ethernet Connec () I350 Gigabit Net am Dual Port 1000	n a storage or network sigitally signed K PCI-X Server NIC ction 1217-LM ction 1217-LM ction 1217-LM	k class for boot i	nages) Cla Net Net Net Net		x64 x64 x64 x64	Yes Yes Yes Yes	2 × =
Ro	ot			Hide dr Hide dr Hide dr Hide dr Hiter Driver Na Grow Hrtel(R Hrtel(R Hrtel(R Hrtel(R)	ivers that are not a ivers that are not of Dual Port 1000-S3 () Ethernet Connec () Ethernet Connec () Ethernet Connec () I350 Gigabit Net am Dual Port 1000	n a storage or network sigitally signed K PCI-X Server NIC ction 1217-LM ction 1217-LM dton 1217-LM work Connection	k class for boot i	nages) Cla Net Net Net Net		x64 x64 x64 x64	Yes Yes Yes Yes	2 1
Ro	ot			Hide dr Hide d Hide	ivers that are not a ivers that are not of Dual Port 1000-S3 () Ethernet Connec () Ethernet Connec () Ethernet Connec () I350 Gigabit Net am Dual Port 1000	n a storage or network sigitally signed K PCI-X Server NIC ction 1217-LM ction 1217-LM dton 1217-LM work Connection	k class for boot i	nages) Cla Net Net Net Net		x64 x64 x64 x64	Yes Yes Yes Yes	р < ш <
Ro	ot			Hide dr     Hide dr     Hide dr     Hide dr     Fiter     Driver Na     Gom     trel(F     Intel(F     Intel(F     Intel(F     Name: 3Cc     Provider: B     Class: Net	Ivers that are not is inversithat are not of Dual Port 1000-S3 Dual Port 1000-S3 Dithermet Connec Dithermet	n a storage or network sigitally signed K PCI-X Server NIC ction 1217-LM ction 1217-LM dton 1217-LM work Connection	k class for boot i	nages) Cla Net Net Net Net		x64 x64 x64 x64	Yes Yes Yes Yes	
Ro	ot			Hide dr     Hide dr     Hide dr     Hide dr     Driver Na     Gom     Intel(F     Int	Ivers that are not is inversithat are not of Dual Port 1000-S3 Dual Port 1000-S3 Dithermet Connec Dithermet	n a storage or networ Sgitally signed K PCI-X Server NIC tion 1217-LM tion 1217-LM tion 1217-LM work Connection -SX PCI-X Server NIC	k class for boot i	nages) Cla Net Net Net Net		x64 x64 x64 x64	Yes Yes Yes Yes	р < ш

21. Select Apply, and then Yes.

	Configuration Manager	x
<u> </u>	You have made changes that require you to update distribution points with a new version of this package. Do you want Configuration Manager to update the distribution points now?	
	Yes No	

- 22. In the Update Distribution Points wizard, select **Next**, and then **Close** the finish the wizard.
- 23. Select **OK** to close the **Properties** tab.
- 24. Refresh the **Boot Images** screen and make sure that the content status is **Success** before proceeding.

#### Capturing an operating system image

Before capturing an image, be sure that the corresponding driver package has been created and pushed to the distribution points. See <u>Creating a driver package for imaging</u> for details.

#### Creating a capture media task sequence

1. Select System Center Configuration Manager, select Software Library, select Overview, and then select Operating Systems.

2. Right-click **Task Sequences** in the left panel and choose **Create Task Sequence Media**.

Software Library			<			
🖌 💣 Overview						
Application Management						
🕨 🚞 Software Updates						
🔺 📔 Operating Systems						
Drivers						
📑 Driver Packages						
騹 Operating System	n Imag	jes				
Operating System	n Upg	rade Packages				
📷 Boot Images						
🖹 Task Sequences		Received and the second se	_			
📼 Virtual Hard Disk	1	Create Task Sequence				
	2	Create Task Sequence Media				
	•	Import Task Sequence				
		Folder				

3. In the Create Task Sequence Media wizard, select **Capture Media**, and then select **Next**.

Select Media T	уре
Select Media Type Media Type Boot Image Summary	Select the type of media Select the type of new media (CD, DVD, or USB flash drive) or the file used to deploy or capture an
Progress Completion	operating system.
	Creates media used to deploy operating systems without network access.
	Creates media used to deploy operating systems using ConfigMgr infrastructure.  Capture media Creates media used to capture an operating system deployment image from a reference computer.
	<ul> <li>Prestaged media</li> <li>Creates a file to be prestaged on a new hard drive that includes an operating system image.</li> </ul>
	Select this checkbox to enable unattended operating system deployment. An unattended operating system deployment does not prompt for network configuration or optional task sequences.
	Allow unattended operating system deployment.
	< Previous Next > Summary Cancel

4. Select the media type, and then specify either the **Drive** (if using Removable USB drive type) or the path/name of the **Media file** (if using the CD/DVD set type).

Media Type	
Select Media Type Media Type	Specify the media type
Boot Image Summary Progress	Specify whether the media for this image deployment will use CD/DVD media or removable USB drive.
Completion	Removable USB drive Drive:      Orive:      Format removable USB drive (FAT32) and make bootable
	CD/DVD set     Media size:
	Specify the name and path where the output files will be written. If multiple pieces of media are required, a sequence number will be appended to the name for each piece of media.  Media file: \\192.168.1.15\Thin Client Image\Win10.iso Browse
	< Previous Next > Summary Cancel

#### 5. Select Next.

6. Select the appropriate **Boot image** and **Distribution point**, and then select **Next**. The boot image must include the NIC driver of the target thin client.

the conter
Browse
Browse

7. On the Summary screen, select **Next**. The wizard creates the capture media or ISO.

- 8. When the wizard has completed, select **Close**.
- 9. Burn the ISO on media.

#### Capturing a Windows image from a reference system

Local access to a client is required for the following procedure.

- 1. Disconnect the reference system from the domain, if necessary.
- 2. Do not change the Administrator account password from the default value (Administrator).
- 3. Disable the write filter, and then restart.
- 4. Log on as Administrator.
- 5. If the Embedded Device Manager (EDM) is running on your device, stop the EDM write filter services using Windows services.msc.
- For the task sequence to include User State Migration, make sure that the RAM disk on the source/destination image is configured so that there is at least 250 MB of space to support USMT operations. For more information on preparing a task sequence to include User State Migration, see <u>Appendix A—Preparing a task sequence to include User State</u> <u>Migration</u>.
- 7. Insert the media containing the ISO.
- 8. If AutoRun does not launch, manually browse to <Task Sequence Capture Media>:\SMS\bin and launch tsmbautorun.exe.
- 9. A wizard appears. Follow the instructions on the screen. You can specify a network location for the WIM file, if your Windows PE boot image has network connection capability (that is, if a NIC driver is installed).
- 10. After it is complete, the wizard closes automatically. The system restarts to load Windows PE and initiate capture within 2 to 5 minutes. If necessary, remove the capture media so that the device does not boot from it.
- 11. By default, the local admin account is disabled after capturing an image.

## Deploying an operating system image through Operating System Deployment

Before deploying an image, be sure that the corresponding driver package has been created and pushed to the distribution points. See <u>Creating a driver package for imaging</u> for details.

#### Importing a captured Windows reference image into Configuration Manager

- 1. Create a shared folder on the Configuration Manager server use to store the image file. Be sure to give all users access to the folder.
- 2. Copy the captured reference Windows WIM file to this folder.
- 3. Select System Center Configuration Manager, select Software Library, select Overview, and then select Operating Systems.
- 4. Right-click Operating System Images, and then select Add Operating System Image.

agni click operating system mayes, and then select had t
<ul> <li>Øverview</li> </ul>
Application Management
Software Updates
Operating Systems
Drivers
Driver Packages
Notes and the second se
Operating Systen 🖉 Add Operating System Imag
Boot Images Folder
🔁 Task Sequences
📼 Virtual Hard Disks

5. In the Add Operating System Image wizard, enter the network path (UNC), and then select **Next**.

)ata Source ieneral	Browse to	the data sour	ce for the o	perating	system imag	е
ummary						
rogress						
ompletion						
	Specify the p	bath to the operating s	ystem image file.			
	Path:	Example: \\serv	ername\sharena	me\path\file.	WIM	
	\\192.168.1	.15\Thin Client Image	Win10_Big.wim	1		Browse

6. On the General page, enter any necessary information and then select **Next**.

General					
Data Source General	Type gener	al information for the	operating syst	em image	
Summary					
Progress	Provide a name	e, version, and comment for the	operating system ima	oe.	
Completion			operating of a contract	30.	
	Name:	MyTestWin10			
	Version:	1.0			
	Comment:	This is for demo purpose			^
					~
		< Previous	Next >	Summary	Cancel

7. On the Summary page, select **Next**.

-

8. When the wizard completes, select **Close**.

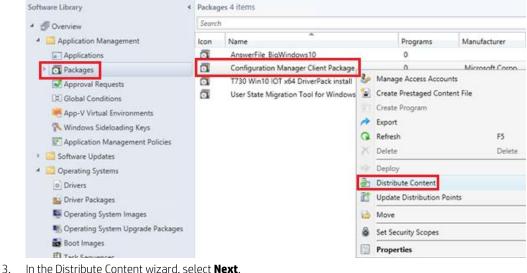
- 9. Select **System Center Configuration Manager**, select **Software Library**, select **Overview**, select **Operating Systems**, and then select the newly added operating system image.
- 10. Right-click Distribute Content, and then select Next.

🗇 Overview	Search	h				
Application Management	lcon	Name	-	^	Version	
Applications		MyTestWin10			1.0	
Packages		Windows 10 E		Schedule Updates		
Approval Requests	<b>N</b>	Windows 10 E	20	Cancel Scheduled U	Ipdates	
[]#]] Global Conditions			G	Refresh		F5
🐖 App-V Virtual Environments			×	Delete		Delete
💦 Windows Sideloading Keys			ł	Distribute Content		
💽 Application Management Policies			置	Update Distribution	Points	
Software Updates			1	Create Prestaged C	ontent File	
<ul> <li>Operating Systems</li> </ul>			80	Manage Access Acc	ounts	
Drivers			8	Move		
🔛 Driver Packages			8	Set Security Scopes	8	
System Images				Properties		

- 11. Under Content Destination, add a Distribution Point.
- 12. Select the available **Destination Point**, and then select **Next**.
- 13. On the Summary page, select Next.
- 14. When the wizard completes, select **Close**.
- 15. Refresh the **Operating System** screen and make sure that the content status is **Success** before proceeding.

#### Deploying the Configuration Manager client package to the Destination Point

- 1. Select System Center Configuration Manager, select Software Library, select Overview, select Application Management, and then select Packages.
- 2. Right-click the Configuration Manager client package, and then select **Distribute Content**.



- 4. Under Content Destination, add a Distribution Point.
- 5. Select the available **Destination Point**, and then select **Next**.
- 6. On the Summary page, select **Next**.
- 7. When the wizard completes, select **Close**.
- 8. Refresh the **Packages** screen and make sure that the content status is **Success** before proceeding.

#### Syncing the User State Migration Tool package to the Distribution Point (optional)

Make sure to use the User State Migration Tool (USMT) that corresponds to the image. The USMT from Windows 10 Assessment and Deployment Kit (ADK) is used for Windows10 IoT Enterprise imaging, and the USMT from Windows 8 ADK is used for Windows Embedded 8 Standard imaging. The USMT package is created by installing ADK.

- 1. Select System Center Configuration Manager, select Software Library, select Overview, select Application Management, and then select Packages.
- 2. Right-click the USMT package created by installing ADK, and then select **Distribute Content**.

Software Library 4	Packages 4 items     Search					
<ul> <li>Overview</li> </ul>						
Application Management	lcon	Name				
Applications		AnswerFile_BigWindows10				
Packages		Configuration Manager Client Package				
Approval Requests [4] Global Conditions (4) App-V Virtual Environments	0	T730 Win10 IOT x64 DriverPack install				
	Ō	User State Migration Tool for Windows 8.1				
		Manage Access Accounts				
Nindows Sideloading Keys		Create Prestaged Content File				
Application Management Policies		1 Create Program				
<ul> <li>Continue Updates</li> </ul>		A Export				
Operating Systems		😱 Refresh 🛛 🖓 🖓				
Drivers		X Delete Delete				
Driver Packages		Deploy				
		Distribute Content				
Operating System Images		Update Distribution Points				
Operating System Upgrade Packages		- oposic osciolation roma				

- 3. In the Distribute Content wizard, select **Next**.
- 4. Under Content Destination, add a Distribution Point.
- 5. Select the available **Destination Point**, and then select **Next**.
- 6. On the Summary page, select **Next**.
- 7. When the wizard completes, select **Close**.
- 8. Refresh the **Packages** screen and make sure that the content status is **Success** before proceeding.

#### Creating a task sequence to deploy a Windows reference image

- 1. Select System Center Configuration Manager, select Software Library, select Overview, and then select Operating Systems.
- 2. Right-click Task Sequence, and then select Create Task Sequence.

Software Library <				
<ul> <li>Øverview</li> </ul>				
Application Management				
Software Updates				
<ul> <li>Operating Systems</li> </ul>				
Drivers	-			
🧧 Driver Packages				
🕎 Operating System Images				
Operating System Upgrade Packages				
👼 Boot Images				
Task Sequences	_			
📼 Virtual Hard 🚺 Create Task Sequence				
🔁 Create Task Sequence Medi				
Import Task Sequence				
Folder				

3. In the New Task Sequence wizard, select Install an existing image package, and then select Next.



4.

Create New Task Sequence Task Sequence Informatie Install Windows	Create a new task sequence					
Configure Network Install Configuration Mar State Migration Include Updates Install Applications	A task sequence performs multiple steps or actions on a client computer at the command-line level without requiring user intervention. Select the type of task sequence to create. You can use the task sequence editor to add steps to your task sequence.					
Summary	Select a new task sequence to be created.					
Progress						
Completion	<ul> <li>Install an existing image package</li> </ul>					
	O Build and capture a reference operating system image					
	Install an existing image package to a virtual hard disk					
	Create a new custom task sequence					
	< Previous Next > Summary Cancel					
el miller si	e name, select the appropriate boot image, and then select Next.					
Task Sequence In Create New Task Sequence Task Sequence Information						
Install Windows Configure Network						
Install Configuration Mar	Task sequence name: MvWin10Denloyment					
State Migration						
Include Updates	Description:					
Install Applications Summary						
Progress	· · · · ·					
Completion	Boot image: Boot image (x64) 10.0.10240.16384 Browse					
	< Previous Next > Summary Cancel					
< III 5	Calcel					

5. On the Install the Windows operating system page, browse to the previously created Windows image package.

- 6. Before installing the operating system, select **Partition and format the target computer before installing the operating system**. Clear **Configure task sequence for use with BitLocker**, unless your target device has a wellconfigured TPM module. Do not specify the **Product key**.
- 7. Select **Enable the account and specify the local administrator password**, and then enter and confirm the password. See <u>Appendix E—Known issues and solutions</u> before continuing.
- 8. Select Next.

Create New Task Sequence	Install the Wind	lows operating system		
Task Sequence Information				
Install Windows				
Configure Network	Specify the Windows	operating system image and installa	ation information.	
Install Configuration Mar	Image package:	MyTestWin10 1.0 en-US		Browse
State Migration		1 - Windows 10 Enterprise 2015	ITSB V	bionioc
Include Updates	Image:	1 - Windows 10 Enterprise 2015	LISB	
Install Applications	Partition and form	at the target computer before instal	ing the operating system	61
ummary	Configure task as	quence for use with BitLocker		
rogress	Configure task se	quence foi use min bicuocker		
Completion	Specify the licensing	nformation for the Windows installa	tion.	
	Product key:			
	Server licensing mode	Do not spec	ifu	~
			•,	
		ections: 5		
	Maximum server conr	· · ·		
	Randomly genera	te the local administrator password	and disable the account	on all supported
		te the local administrator password	and disable the account	on all supported
	Randomly general platforms (recomm	te the local administrator password		on all supported
	Randomly general platforms (recomm	te the local administrator password nended)		on all supported
	Randomly general platforms (recommodered and the account of t	te the local administrator password nended) Int and specify the local administrat		on all supported
	Randomly general platforms (recomm	te the local administrator password nended) Int and specify the local administrat		on all supported

9. On the Configure the network page, specify the preferred configuration, and then select **Next**.

Configure Netwo	rk		
Create New Task Sequence Task Sequence Informatio Install Windows	Configure the netv	vork	
Configure Network	Select the domain or work	kgroup to join.	
Install Configuration Mar	Join a workgroup		
State Migration	Workgroup:	test	
Include Updates			
Install Applications Summary	<ul> <li>Join a domain</li> </ul>		
Progress	Domain:	HPDMQA	Browse
Completion	Domain OU:	LDAP://CN=Computers,DC=HPDMQA,DC=C(	Browse
	Specify the account that I	has permission to join the domain.	
	Account:	hpdmqa\administrator	Set
		< Previous Next > Summary	Cancel

- 10. On the Install the Configuration Manager Client page, select **Browse** and then select **Configuration Manager Client Package**.
- 11. Select Next.
- 12. On the Configure State Migration page, select the preferred settings and select **Next**. For the task sequence to include User State Migration, make sure that the RAM disk on the source/destination image is configured so that there is at least 250 MB of space to support USMT operations. For more information on preparing a task sequence to include User State Migration, see <u>Appendix A—Preparing a task sequence to include User State Migration</u>.

#### Note:

If you select any settings on the Configure State Migration page, steps 18 through 23 are required.

- 13. On the Include Software Updates page, select Do not install any software updates, and then select Next.
- 14. On the Install Applications page, do not select anything, and then select **Next**.
- 15. On the Summary page, select **Next**.
- 16. When the wizard completes, select **Close**.
- 17. Right-click the deployment task sequence, and then select **Edit**.

oftware Library <	<ul> <li>Task Sequences 4 items</li> </ul>				
🗇 Overview	Search				
<ul> <li>Application Management</li> <li>Software Updates</li> <li>Operating Systems         <ul> <li>Drivers</li> <li>Driver Packages</li> <li>Operating System Images</li> <li>Operating System Upgrade Packages</li> <li>Boot Images</li> <li>Task Sequences</li> <li>Virtual Hard Disks</li> </ul> </li> </ul>	Icon E E E	Name T730 Driver Pack Install t730_TaskSequence_Afte BigWindows MyWin10Deployment	/ ◆ + / 10	Description D Edit Enable Disable Export Copy Refresh	

18. In the Task Sequence Editor, select Partition Disk 0 - BIOS. Select the Options tab to verify the running condition.

Add - Remove	Properties Options
Capture Files and Settings	Disable this step
<ul> <li>Capture Network Settings</li> <li>Capture User Files and Settin</li> <li>Request User State Storage</li> </ul>	Continue on error
Capture User Files and Setting Release User State Storage	Add Condition - X Remove X Remove All
Install Operating System	This group/step will run if the following conditions are met:
Restart in Windows PE	Task Sequence Variable <u>SMSTSClientCache not exists</u>
💓 Partition Disk 0 - BIOS	Task Sequence Variable SMSTSMedia Type not equals "OEMMedia"
👽 Partition Disk 0 - UEFI	Task Sequence Variable OSDMigrateUseHardlinks not equals "true"
Apply Operating System	Task Sequence Variable SMSTSBoot UEFI not equals "true"
AutoLogon	

19. Select the **Properties** tab, and then double-click **Windows (Primary)** to edit its properties.

Му	Win10Deploymen	t Task Sequence Editor
Add - Remove	Properties Options	
Add - Remove	list below. This action	Format and Partition Disk         Partition Disk 0 - BIOS         This action partitions and formats the disk for new deployments of BIOS-based computers. This step will not vorwite any data on the disk.         sk to format and partition. Specify the partition layout to use in the overwrites any data on the disk.         0         Standard(MBR)
Setup Operating System Setup Windows and Configuration Restore User Files and Settin Request User State Storage Restore User Files and Setting Release User State Storage	Volume: System Reserved 350 MB fixed size. N Windows (Primary 95% of remaining sp	ITFS file system.
		OK Cancel Acoly
		repy

20. In the **Partition Properties** dialog, under **Use a percentage of remaining free space**, enter 95.

#### Note:

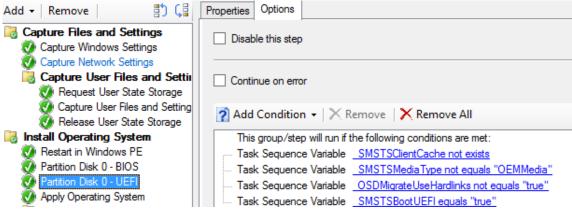
The deployment fails if this value is left at 100, because Windows cannot create the write filter partition.

21. Under Formatting options, select **Quick format**. Select **OK** to close the window.

	Partition Properties	
Partition name:	Windows	
Partition options		
Partition type:	Primary	~
Use a percentage	of remaining free space	
Size (%):	95	
O Use specific size		
Size:	1 🎝 MB	~
Formatting options	NTES	J
Formatting options File system:	NTFS	~
	Quick format	
Advanced options		
	will automatically assign the next av o save this drive letter as a task seq variable here.	
Variable:		
	ОК	Cancel

22. Reopen the Task Sequence Editor.

23. In the Task Sequence Editor, select Partition Disk 0 - UEFI. Select the Options tab to verify the running condition.



24. Double-click Windows (Primary) to edit its properties.

	MyWin10Deploy	ment Task Sequence Editor
Add - Remove	Properties Optio	ns
Add • Remove	Settin rage Setting rage Setting rage Unit below. This Disk number: Disk number: Disk type: Volume: Volume: (EFI) 500 MB fixed : (MSR) 128 MB fixed : Windows (Pr)	Format and Partition Disk         Partition Disk 0 - UEFI         This action partitions and formats the disk for new deployments of Unfield Extensible Firmware Interface         itical disk to format and partition. Specify the partition layout to use in the action overwrites any data on the disk.         0       Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         0       Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         Image: Comparison of the partition layout to use in the action overwrites any data on the disk.         Image: Comparison ov
		OK Cancel Apply

25. In the Partition Properties dialog, under Use a percentage of remaining free space, enter 95.

#### Note:

The deployment fails if this value is left at 100, because Windows cannot create the write filter partition.

26. Under Formatting options, select **Quick format**. Select **OK** to close the window.

Part	tition Properties
Partition name:	Windows
<ul> <li>Partition options</li> <li>Partition type:</li> <li>Use a percentage of rem Size (%):</li> <li>Use specific size Size:</li> </ul>	95 V 1 V WB V
Make this the boot partiti Do not assign a drive lett Formatting options	
File system:	NTFS V Quick format
	utomatically assign the next available drive e this drive letter as a task sequence variable, le here.
Variable:	OK Cancel

- 27. Reopen the Task Sequence Editor.
- 28. In the group Restore User Files and Settings, select **Request User State Storage**, and then select the **If computer** account fails to connect to state store, use the Network Access account option.

My	Win10Deployment	Task Sequence Editor	_ <b>_</b> ×
Add - Remove	Properties Options		
	Properties Options Type: Name: Description: Request state storag Capture state fro Restore state fro if a state store request Number of retries: Retry delay (in seconds)	Request State Store Request User State Storage Request User State Storage Request of the state Storage Request State Store Request State Store Request State Storage Request Storage Request Storage Request Storage Request	3 ÷
< III >			
		OK	Cancel Apply

29. In the group Restore User Files and Settings, select **Restore User Files and Settings**, and then select the **Restore local computer user profiles** option, and then input and confirm then password.

My <sup>1</sup>	Win10Deployment Task S	Sequence Editor	l	- 0 X
Add - Remove	Properties Options			
Add - Remove	Type: Rest	ate Migration Tool for Wir profiles with standard optic es are restored juration files: er profiles nts cannot be migrated. Er	ndown	Browse  Files d to assign to
< III >		OK	Cancel	Apply

30. Select Apply and then OK to close the Task Sequence Editor.

#### Note:

For thin clients that do not have enough disk space to store both the downloaded WIM and the extracted contents locally, a few more settings need to be modified

In the Task Sequence Editor, select **Apply Operating System**, and then select the **Options** tab. Select **Access content directly from the distribution point**.

In **Operating System Images**, right-click the reference image package, and select **Properties**. On the Data Access tab, configure the **Package share settings**.

#### Deploying a Windows reference image

1. Right-click the new task sequence and select **Deploy**.

Software Library	Task S	equences 4 items			
* 🗇 Overview	Searci	h			
🕴 🛄 Application Management	lcon	Name		Description	Package ID
🕨 🧰 Software Updates	ß	T730 Driver Pack Install			00100011
Operating Systems	Ē	MyWin10Deployment			00100017
Drivers	E	t730_TaskSequence_Aff	1	Edit	
📔 Driver Packages	E	BigWindows		Disable	
System Images			*		
s Operating System Upgrade Packages			1		
Boot Images			-	Сору	
Task Sequences			G		F5
Virtual Hard Disks			X	Delete	Delete
			•	Deploy	

2. Specify the collection to which you want to deploy the task sequence, and then select **Next**.

eployment Settings Scheduling	Specify general	information for this deployment	
User Experience Alerts	Task sequence:	MyWin10Deployment	Browse
Distribution Points	Collection:	T730	Browse
immary	🖂 Line defauit dateis	ution point groups associated to this collection	
ogress		and there groups associated to this constraint.	
mpletion	Automatically distr	bute content for dependencies	
	Comments (optional):		

- 3. For the Purpose item, select **Required**. Verify that the correct collection was specified in step 2.
- 4. Select the option to make this task sequence available to **Configuration Manager Clients, media and PXE**.

General Deployment Settings	Specify settings to control how this software is deplo	yed
Scheduling User Experience Alerts Distribution Points Summary Progress Completion	Action:       Install         Purpose:       Required         Pre-deploy software to the user's primary device         Send wake-up packets         Allow clients on a metered Internet connection to download content after installation deadline, which might incur additional costs         Specify whether to make this task sequence available to Configuration Mana run when you deploy an operating system by using boot media, prestaged meters	ager clients, and whether it is available to
	Make available to the following: Configuration Manager clients, media and PXE	

- 5. Select Next.
- 6. Specify the preferred schedule for the deployment, and then select **Next**. For a PXE-initiated deployment, a mandatory assignment schedule must be created.

General Deployment Settings	Specify the schedule for this deployment
Scheduling User Experience Alerts Distribution Points	This program will be available as soon as it has been distributed to the content servers unless it is scheduled for later time below. For required applications, specify the assignment schedule.
ummary	Schedule when this deployment will become available:
rogress	8/31/2016 🗊 - 11:11 AM 🖓 🔲 UTC
ompletion	Schedule when this deployment will expire:
	8/31/2016 🗐 🗧 11:11 AM 🗇 🔲 UTC
	Assignment schedule: New Edt Dele
	As soon as possible

- 7. On the User Experience page, do not change the default options. Select **Next**.
- 8. On the Alert page, do not change the default options. Select **Next**.
- 9. On the Distribution Points page, select the **Download content locally when needed by running task sequence** deployment option, and then select the **When no local distribution point is available, use a remote distribution point** option.

Distribution Poin	ts
General Deployment Settings Scheduling User Experience Alerts	Specify how to run the content for this program Specify how clents interact with the distribution points to retrieve content from packages referred by the task sequence:
Distribution Points	Deployment options:
Summary	Download content locally when needed by running task sequence
Progress	Clients will always try to get content from the local distribution points. In addition, interaction with remote distribution
Completion	points can be controlled:
compression	When no local distribution point is available, use a remote distribution point. When this content is not available on any preferred distribution points, you can allow the client to use a fallback source location for content. Allow clients to use a fallback source location for content A network access account is required to access content from Windows PE.
	< Previous Next > Summary Cancel

- 10. Select Next.
- 11. On the Summary page, select **Next**.
- 12. Select Close.

#### Note:

After the task sequence finishes successfully, the write filter status is disabled by default.

#### **Post-deployment tasks**

The deployed image might require more customization. For example, the previous procedures do not configure the write filter status, domain membership, and Auto Logon options.

It is recommended to customize these options by running command lines or scripts at first boot. For more information on enabling the write filter and an example script, see Appendix B—Enabling the write filter using a deployment task sequence.

#### Note:

After a Windows Embedded Standard 7P image is deployed, the system does not start automatically until the settings, such as time zone and region, have been configured from the client side.

## Modifying an existing operating system deployment task

#### Downloading and extracting the manageability driver pack

- 1. Download the driver pack for the appropriate thin client model from <u>http://www.hp.com/go/bizsupport</u> (search for the thin client model, and then select **drivers, software & firmware**).
- 2. Run the driver package, and specify the location to extract the files to.

#### Note:

By default, this driver package extracts to c:/swsetup.

<b>U</b>	t730Win10IoT DriverpaQ - InstallShield Wizard
	tion to Save Files /here would you like to save your files?
	ease enter the folder where you want these files saved. If the folder does not ist, it will be created for you. To continue, dick Next.
Sa	ave files in folder:
0	C:\SWsetup\T730DriverPack
	Change
nstallShiel	d
	< Back Next > Cancel

When complete, the extracted contents are as follows:

Name	Date modified	Туре	Size
Privers	8/31/2016 4:13 PM	File folder	
SCCM	8/31/2016 4:13 PM	File folder	
🛃 Install	5/17/2016 1:41 PM	Application	697 KI
ReleaseNote	5/18/2016 4:17 PM	Text Document	4 KI
Second Second	5/17/2016 1:56 PM	Application	3,187 K
UWF	2/17/2016 12:29 PM	Windows Installer	9,537 KE

## Creating a driver package for an operating system deployment task

- 1. Create a shared folder on the Configuration Manager server to store the drivers.
- 2. Copy the folder created in <u>Downloading and extracting the manageability driver pack</u> to this shared folder.

1/ 🎩 1	cm01\share\Drivers\T730	¥ (	Search T73
	Name	Date modified	Туре
	Drivers	8/9/2016 2:44 PM	File folder

3. Select System Center Configuration Manager, select Software Library, right-click Drivers, and then select Import Driver.

and the second	<b>1</b> . 2024	
oftware Library		
<u> S</u> oftwa	re Update Groups	
🛐 Deploy	ment Packages	
📑 Autom	atic Deployment f	Rules
🔺 🚞 Operatin	g Systems	
🔺 😫 Drivers		
+ 📔 w	Import Driver	
🕨 🧮 W	Folder	•
🖣 нр с	lient WinPE 10.0 x	64 Driver Pack
🔺 📑 Driver	Packages	
📔 НР С	lient Driver Packa	ges
🕨 🜉 Operat	ing System Image	25
S Operat	ing System Upgra	de Packages

4. Select **Import all drivers in the following network path (UNC)**, select **Browse**, and then select the shared folder. HP recommends that under Specify the option for duplicate drivers, you select **Import the driver and append a new** category to the existing categories.

\$	Import New Driver Wizard
Locate Driver	
Locate Driver Driver Details Add Driver to Packages Add Driver to Boot Image Summary Progress Completion	Specify a location to import driver         This wizard allows you to import one or more drivers. You can let Configuration Manager find all drivers in the given network path or specify a specific driver to import.            • Import all drivers in the following network path (UNC)         Source folder:         • \cm01\share\Drivers\T730\Drivers         • Browse         • Import a specific driver by specifying the network path (UNC) to its inf or btsetup cem file         Source:         Browse         Specify the option for duplicate drivers
	Import the driver and append a new category to the existing categories
< III >	< Previous Next > Summary Cancel

5. Select **Create** to create an administrative category for the driver package, and then select that category to assign it to the driver package. Select **OK**.

Ma	anage Administrative Categories	x
To assign adminis check boxes.	trative categories to the selected objects, select the	
Administrative cat	egories:	
SP73204	^ Create	
□ sp73206		
SP73599	Rename	
sp75204	Delete	
		_
Storage		
T730 Driver	/ack	
L Test		
USB	=	
Win10x64		
Win7x64	~	
<		
	OK Cancel	
the Add Driver to Pa	ckages page, select <b>New Package</b> .	
	Import New Driver Wizard	
Add Driver to Pac	kages	
cate Driver Driver Details	Select the packages to add the imported driver	
Add Driver to Packages Add Driver to Boot Image	Specify the package to add this driver to.	
mmary	Drivers must be added to packages and deployed to distribution points before co	mputers can use
ogress	them. Distribution points can be updated immediately. It is recommended that you add all required drivers before updating the package	
mpletion		
	Name         Package ID         ∧         S           8x0 g1 Win10x64         PS10000D         ≡	elect All
	HP Client WinPE 10 x86 and x64 Driver PS100058	Clear All
	HP Client WinPE 10.0 x64 Driver Pack PS1000A3	
	HP DT 600/700/800 G1 Windows 7x64 PS100026	
	HP Elite Folio G1 Win10 x64 Driver Pack PS100019	
	UB Eta v2 1012 C1 Wa 10 vC4 Driver B BC100090	Packeter
	V New	Package
	< Previous Next > Summary	Cancel

6.

7. Enter a Name for the package and select Browse to specify the location to store the driver package to. Select OK.

#### Note:

0

Do not save these drivers to boot images. HP recommends that you leverage the appropriate WinPE driver pack from this location: http://ftp.hp.com/pub/caps-softpag/cmit/HP\_WinPE\_DriverPack.html.

Name:	T730 Win10 x64 Driver Package
Comment:	This package includes the flat inf files from the T730 manageability driver pack
Specify a net	work path (UNC) where Configuration Manager stores drivers added to this package.

8. Distribute the driver package to the distribution points.

#### Creating a driver package for HP thin client software configuration

- 1. Create a shared network folder on the Configuration Manager server to store contents of the thin client manageability driver package.
- 2. Copy the entire contents of the extracted driver pack to this new location. VIC 10

🍌 //c	m01\share\HP Softpaqs\T730driverpack	v d	Search T730drive	rpack 🖌
	Name	Date modified	Туре	Size
	Drivers	8/9/2016 2:46 PM	File folder	
s	J SCCM	8/9/2016 2:45 PM	File folder	
ces	🛃 Install	5/17/2016 1:41 PM	Application	697 KB
	ReleaseNote	5/18/2016 4:17 PM	Text Document	4 KB
	🛃 Second	5/17/2016 1:56 PM	Application	3,187 KB
012	🔁 UWF	2/17/2016 12:29 PM	Windows Installer	9,537 KB

3. Copy the .exe files from the **SCCM** folder to the root folder of the package. Stidic VIEW

	A			
	Name	Date modified	Туре	Size
	Drivers	8/9/2016 2:46 PM	File folder	
ds	J SCCM	8/9/2016 2:45 PM	File folder	
laces	🛃 Install	5/17/2016 1:41 PM	Application	697 KB
	ReleaseNote	5/18/2016 4:17 PM	Text Document	4 KB
	🛃 Second	5/17/2016 1:56 PM	Application	3,187 KB
1012	UWF	2/17/2016 12:29 PM	Windows Installer	9,537 KB
	SCCM_Second	5/17/2016 2:15 PM	Application	3,187 KB
nts	SCCM_Install	5/17/2016 2:10 PM	Application	697 KB

4. Delete the **Install.exe** and **Second.exe** files from the root folder of the package.

📕 //c	m01\share\HP Softpaqs\T730driverpack	v C	Search T730drive	rpack
	Name	Date modified	Туре	Size
	Drivers	8/9/2016 2:46 PM	File folder	
s	SCCM	8/9/2016 2:45 PM	File folder	
ces	ReleaseNote	5/18/2016 4:17 PM	Text Document	4 KB
	SCCM_Install	5/17/2016 2:10 PM	Application	697 KB
	SCCM_Second	5/17/2016 2:15 PM	Application	3,187 KB
012	UWF	2/17/2016 12:29 PM	Windows Installer	9,537 KB

5. Select System Center Configuration Manager, select Software Library, right-click Packages, and then select Create Package.

Packages	= 🖾 Intel M
📔 HP Client Su	s Intel V
HP So	T730 1
Approv	2 10
	from Definition P Hc
- 3	P No
Windov	P Wi
F Application Ma	
App Configura	Intel \
🗎 Software Update	HP Wireless
Global (     App-V     Windov     Application Ma     App Configura	icies Inte

6. Specify any necessary information, select **This package contains source files**, select **Browse**, and then select the shared folder created in step 1.

3		Create Package and Program Wizard	)
Package			
Package Program Type Standard Program Requirements Summary	Enter a name and	nation about this package other details for the new package. To take full advantage of new features that include the g, use an application instead.	
Progress Completion	Name:	T730 Driver pack install	
compiction	Description:	This package contains the extracted files from the T730 Manageability Driver Pack sp76109	~
	Manufacturer:	HP	=
	Source folder	Version: 1 Rev A contains source files : >\HP Softpags\T730driverpack Browse	]

7. On the Program Type page, select **Standard program**.

3	Create Package and Program Wizard
Program Type	
Package Program Type	Choose the program type that you want to create
Standard Program	
Requirements	Standard program
Summary	Create a program for a client computer.
Progress	
Completion	
	O Program for device
	Create a program for a device.
	O Do not create a program
	Create a package, but do not create a program. You can use the Create Program Wizard to add a program later.

8. Specify the Name, select the SCCM\_Install.exe as the Command line, and then select Whether or not a user is logged on under Program can run.

Name:	SCCM Install #1	
Command line:	SCCM_Install.exe	Browse
Startup folder:		
Run:	Normal	
Program can run:	Whether or not a user is logged on	
Run mode:	Run with administrative rights	
	and interact with the program installation	

9. On the Requirements page, do not change the default settings.

10. Right-click the new package, and then select **Create Program**.

			INTEL ME LI	illiwale SF/ 1050	- E
nt Su	ppor	t Packages	Intel WLAN	driver SP72777	1
r	ppor	a a	T730 Win1	이어 x64 DriverPack install	2
paqs	20	Manage Access Accounts		Update	1
Requ		Create Prestaged Content File		upport	2
onditi	t	Create Program		ons Application SP73348	1
rtual	-	Export		Intel Bluetooth Driver SP74382	1
Side	Q	Refresh	F5	l Bluetooth Softpaq SP74755	1
on M	×	Delete	Delete	s Driver	1
igura odati	+	Deploy		river and Control Panel for v2 1012 64 DriverPack install	1
are U	2	Distribute Content			
Upda	Ľ	Update Distribution Points			
ent P	6	Move		PS100099	
c Dej	6	Set Security Scopes			
ompl		Properties			

11. Repeat steps 7 and 8, but specify **SCCM\_Second.exe** as the Command line.

Name:	SCCM Install #2	
Command line:	SCCM_Second.exe	Browse
Startup folder:		
Run:	Normal	
Program can run:	Whether or not a user is logged on	
Run mode:	Run with administrative rights	
	Run with administrative rights and interact with the program installation	

12. Distribute the package to the appropriate distribution points.

## Modifying an existing Windows 10 operating system deployment task to support an HP thin client

1. Configure the task sequence to add partitioning steps to leave space to use for the write filter. You must configure **Windows (Primary)** on both **Partition Disk 0 – BIOS** and **Partition Disk 0 – UEFI**.

	Windows 10 E	nterprise x64 v	1511 Task Sequence Editor	_ 0
Add • Remove	1) (1)	Properties Option	15	
Install Operating System	^	Type:	Format and Partition Disk	
Restart in Windows PE Partition Steps		Name:	Partition Disk 0 - UEFI Thin Client	
Partition Disk 0 - UEFI Partition Disk 0 - UEFI Thin C Partition Disk 0 - BIOS	ient	Description:	This action partitions and formats the disk for of Unified Extensible Firmware Interface (UEF	new deployments ^  }-based ~
Partition Disk 0 - BIOS Thin C     OSDPerserveDriveLetter     Apply Operating System	lent		cal disk to format and partition. Specify the partition laye on overwrites any data on the disk.	out to use in the list
Apply Windows Settings		Disk number:	0	8
Driver Injection			GPT	
Apply Elite x2 1012 G1 Win10		Disk type:		
Apply HP 600/800 G2 Deskto			Make this the boot disk	
Apply Elitebook Folio G (Win )	vin 10 x64 drive	Volume:		* X
Apply Folio 1040 G3 Win 10x6 Apply Pro Tablet 608 G1 Drivi	er Package	(EFI) 500 MB fixed s	ize. FAT32 file system.	000
Apply Probook 6xx G2 Win10 Apply Z1 G2 Workstation Win Apply Z240 Workstation Win1	10x64 Driver F	(MSR) 128 MB fixed si	ze.	G
Apply Zx40 Workstation Win Apply Zx40 Workstation Win1	0x64 Driver Pa	Windows (Pri 95% of remaining	<b>mary)</b> ng space on disk. NTFS file system.	
Apply Zbook 15/17 G3 Win 10 Apply T730 Win 10 IOT x64 D Setup Operating System		Recovery (Re 1% of remaining	scovery) ) space on disk. NTFS file system.	

2. In the Options tab of each "Thin Client" partition step, select **Add Condition** to add a WMI Query condition to make sure this step runs only on the HP thin client models that you use.

#### Note

This examples uses the HP t730, which has a SysID of 8103. Run the following command on your thin clients to get the SysID specific to each model:

WMIC	baseboard	get	Product
------	-----------	-----	---------

Disable this step	
Continue on error	
2 Add Condition -   🗙 R	emove 🛛 🗙 Remove All
	emove XRemove All
This group/step will run if t	
This group/step will run if t Task Sequence Variable	he following conditions are met:
This group/step will run if t Task Sequence Variable Task Sequence Variable	the following conditions are met: SMSTSClientCache not exists

3. In the Options tab of the default (non-thin client) partition steps, select **Add Condition** to add a WMI Query condition to make sure that these steps do *not* run on the HP thin client models that you use.

roperties Options	
Disable this step	
Continue on error	
👔 Add Condition 👻 🕅	emove XRemove All
This group/step will run if t	the following conditions are met:
Task Sequence Variable	SMSTSClientCache not exists
Task Sequence Variable	SMSTSMediaType not equals "OEMMedia"
Task Sequence Variable	OSDMigrateUseHardlinks not equals "true"
Task Sequence Variable	SMSTSBootUEFI equals "true"
WMI Query SELECT * FF	ROM Win32 BaseBoard WHERE NOT Product = "8103"

4. To the driver injection steps of the task sequence, add an **Apply Driver Package** step using the driver package created earlier.

Windows 10	Enterprise x64 v15	11 Task Sequence Editor
Add - Remove	Properties Options	
Install Operating System  Restart in Windows PE  Partition Steps  Partition Disk 0 - UEFI  Partition Disk 0 - UEFI Thin Client  Partition Disk 0 - BIOS	Type: Name: Description:	Apply Driver Package Apply T730 Win 10 IOT x64 Driver Package
Parttion Disk 0 - BIOS Thin Client     OSDPerserve DriveLetter     Apply Operating System     Apply Windows Settings     Apply Hetwork Settings	Select the driver pace	kage containing drivers to be made available during Windows setup.           T730 Win 10 IOT x64 Driverpack         Browse
Driver Injection     Apply Elte x2 1012 G1 Win10 x64 Driver Pa     Apply Elte x2 1012 G1 Win10 x64 Driver Pa     Apply Eltebook Folio G1Win10 x64 Driver Pa     Apply Eltebook Folio G1Win10 x64 Driver Pa     Apply Eltebook 7x0/% b0 G3 win10 x64 drive		storage driver that must be installed before Configuration Manager installs ng systems that are earlier than Windows Vista.
Apply EliteDesk 705 G2 Win 10x64 Driver Pa Apply Folio 1040 G3 Win 10x64 Driver Packa Apply Pro Tablet 608 G1 Driver Package Apply Probook 6xx G2 Win 10x64 Driver Pac Apply Probook 6xx G2 Win 10x64 Driver Pac	Driver: Model	▼ ▼
<ul> <li>Apply Z1 G2 Workstation Win 10x64 Driver F</li> <li>Apply Z240 Workstation Win 10x64 Driver Pi</li> <li>Apply Zx40 Workstation Win 10x64 Driver Pi</li> <li>Apply Zbook Studio G3 Win 10x64 Driver Pa</li> <li>Apply Zbook 15/17 G3 Win 10x64 Driver Pa</li> <li>Apply T730 Win 10 IOT x64 Driver Package</li> </ul>	Do unattended in allowed	nstallation of unsigned drivers on versions of Windows where this is
Setup Operating System Setup Windows and Configuration Manager Restart Computer Install Softpags Install MP Wireless Button Driver Restart Computer Restart Computer		
Install HP Windows 10x64 Intel Bluetooth Packa     Install HP NXP Softpag SP74611     V     Install UP Notifications Boolication SP73248     V     III		OK Cancel Apply

5. Add a **WMI Query** to this driver package step to make sure it runs only on the HP thin client models that you use.

	Options	
Disab	le this step	
Contin	nue on erro	ır
2 Add	Condition	n 🗸   🗙 Remove   🗙 Remove All
This	group/step	p will run if the following conditions are met:
⊨ If A	ny the cor	nditions are true:
	VMI Querv	SELECT * FROM Win32 BaseBoard WHERE Product = "8103"

6. At the end of the task sequence, add a new group to contain the thin client software installation steps.

Type:		Group	
Name:		Thin Client Software Steps	
Description:		1	^
			~

7. In this group, add an **Install Package** step. Select the driver package created earlier, and then select **SCCM Install #1** as the Program.

Add       Remove       Image: Constant of the second secon	Windows 10 E	Enterprise >	x64 v1511	Task Sequence Editor	_ <b>□</b> ×
Apply HP 600/800 G2 Desktop Win 10 x64 f     Apply Bitebook Folio G1 Win 10x64 Driver Pa     Apply Bitebook 7x0/8x0 G3 win 10 x64 driver Pa     Apply Bitebook 7x0/8x0 G3 Win 10x64 Driver Pa     Apply Folio 1040 G3 Win 10x64 Driver Pa     Apply Pro Tablet 608 G1 Driver Package     Apply Pro Tablet 608 G1 Driver Package     Apply Z40 Workstation Win 10x64 Driver Pa     Apply Z240 Workstation Win 10x64 Driver Pa     Apply Z40 Workstation Win 10x64 Driver Pa     Apply Zbook 15/17 G3 Win 10x64 Driver Pa     Apply Zabok 15/17 G3 Win 10x64 Driver Pa	Add - Remove	Properties	Options		
Install MF Normware     Restart Computer     Install MF Normware     Restart Computer     Install MP Windows 10x64 Intel Bluetooth Packa     Install HP Windows 10x64 Intel Bluetooth Packa     Install HP NxtP Softpag SP74611     Install HP NxtP Softpag SP74611     Install HP NxtP Softpag SP74611     Install HP NxtP Softpag SP7348     Install HP NxtP Softpag SP74611     Install HP Intelexes Display     Install Full Intel Graphics Driver for X2 1012     Install Full Intel Wireless Lan Driver     Restart Computer Before Installing WIDI Software     Restart Computer Before Installing WIDI Software     Install Intel Witolicen 6 SP75105	Add       Remove       Image: Constraint of the second sec	Properties Type: Name: Descriptio Install & Select the Package: Program: Install = The list of common b package I Base var	Options Options a single software a software pack T730 V Software pack software pack software pack ase name plus ID and program nable name:	Install Package T730 Driverpack Install #1 re package re package rage to install //in10 IOT x64 DriverPack install Install #1 v ages according to dynamic variable list ages to install consists of a series of task seque a numeric suffix starting at 001. Each variable name separated by a colon.	Browse
Thin Client Software Steps T730 Driverpack Install #1 Restart Computer Restart Computer T720 Driver pack Install #2	7730 Driverpack Install #1				

8. Select **Add Condition** to add a WMI condition to make sure this step runs only on the HP thin client models that you use.

properties	Options
Disab	ole this step
Conti	nue on error
? Add	Condition - Kemove Kemove All
	group/step will run if the following conditions are met:
and the second second	<u>ny</u> the conditions are true: WMI Query <u>SELECT * FROM Win32 BaseBoard WHERE Product = "8103"</u>

9. Add a **Restart Computer** step that boots to the currently installed default operating system.

10. In this group, add an **Install Package** step. Select the driver package created earlier, and then select **SCCM Install #2** as the Program.

Add - Remove	Properties O	ptions
Apply Bite x2 1012 G1 Win10 x64 Driver Pa     Apply HP 600/800 G2 Desktop Win10 x64 f     Apply Bitebook Folio G1 Win10x64 Driver Pa     Apply Bitebook 7x0/8x0 G3 win10 x64 drive     Apply Biteboek 705 G2 Win10x64 Driver Pa     Apply Folio 1040 G3 Win10x64 Driver Packa	<ul> <li>Type:</li> <li>Name:</li> <li>Description:</li> </ul>	Install Package T730 Driver Pack Install #2
Apply Pro Tablet 608 G1 Driver Package     Apply Probook 6xx G2 Win10x64 Driver Pac     Apply Z1 G2 Workstation Win10x64 Driver P     Apply Z240 Workstation Win10x64 Driver P     Apply Zx40 Workstation Win10x64 Driver Pa     Apply Zx60 Workstation Win10x64 Driver Pa		single software package oftware package to install
Apply Zbook 15/17 G3 Win10x64 Driver Pa	Package:	T730 Win10 IOT x64 DriverPack install Browse
Apply T730 Win10 IOT x64 Driver Package     Setup Operating System	Program:	SCCM Install 2
Restart Computer     Install Softpags     Install HP Wireless Button Driver		ftware packages according to dynamic variable list
Install ME Firmware     Restart Computer     Install HP Windows 10x64 Intel Bluetooth Packs     Install HP NXP Softpaq SP74611     Install HP Notifications Application SP73348	common ba: package ID	oftware packages to install consists of a series of task sequence variables with a se name plus a numeric suffix starting at 001. Each variable must contain a and program name separated by a colon.
<ul> <li>Restart Computer</li> <li>Install IHP Windows 10x64 Intel Bluetooth Packat</li> <li>Install IHP NXP Softpaq SP74611</li> <li>Install IHP Notifications Application SP73348</li> <li>Install IHP Hotkey Support Package</li> </ul>	common bas	se name plus a numeric suffix starting at 001. Each variable must contain a and program name separated by a colon.
<ul> <li>Restart Computer</li> <li>Install HP Windows 10x64 Intel Bluetooth Packa</li> <li>Install HP NXP Softpaq SP74611</li> <li>Install HP NXP Kather Softpaq SP74611</li> </ul>	common ba: package ID Base varia	se name plus a numeric suffix starting at 001. Each variable must contain a and program name separated by a colon.
Restart Computer     Install HP Windows 10x64 Intel Bluetooth Packa     Install HP NXP Softpaq SP74611     Install HP NXP Softpaq SP74611     Install HP Notficetions Application SP73348     Install HP Hotkey Support Package     If Deploying Wineless Display     Install Full Intel Graphics Driver for X2 1012     Install Full Intel Wineless Lan Driver     Restart Computer Before Installing WiDi Software	common ba: package ID Base varia	se name plus a numeric suffix starting at 001. Each variable must contain a and program name separated by a colon.

11. Select **Add Condition** to add a WMI condition to make sure this step runs only on the HP thin client models that you use.

roperties	Options			
Disab	e this step			
Contir	ue on error			
? Add	Condition 👻   🔀 R	emove   🗙 Re	move All	
This	Condition - X R group/step will run if t y the conditions are	he following cond		

12. HP recommends adding a final restart to the task sequence.

## Appendix A—Preparing a task sequence to include User State Migration

The source computer needs at least 250 MB of hard disk space to support USMT operations. For more information, go to <a href="http://technet.microsoft.com/en-us/library/dd560770%28v=ws.10%29.aspx#BKMK\_SpaceRegs">http://technet.microsoft.com/en-us/library/dd560770%28v=ws.10%29.aspx#BKMK\_SpaceRegs</a>.

For a Windows image on an HP thin client, USMT uses RAM disk Z: by default. Extend the disk size before capturing and deploying an image using the following procedure.

To extend a RAM disk:

- 1. Modify the registry value and commit to write filter if enabled: HKEY\_LOCAL\_MACHINE\SYSTEM\ControlSet001\Services\RamDrive\Parameters\DiskSize
- 2. Run the command line:reg add HKLM\SYSTEM\ControlSet001\services\Ramdrive\Parameters /v DiskSize /t REG\_DWORD /d 0x10400000 /f

## Appendix B—Enabling the write filter using a deployment task sequence

To enable the writer filter as part of the operating system deployment process, HP recommends running the command lines or scripts at first boot. The following is a procedure to enable the writer filter.

- 1. Edit the **Operating System Task Sequence** to automatically log on the Administrator during deployment.
- 2. Use unattend.xml to create First Launch Commands.
- 3. After the operating system deployment completes, the task sequence exits and return full control to the operating system. These example first launch commands execute the following:
  - Automatically logs on the Administrator after deployment.
  - Enables the write filter.
  - Configures the BCD Fixup option. The Enhanced and File-Based Write Filter require the IGNOREALLFAILS policy be in the Boot Configuration Data (BCD). This flag prevents error dialogs regarding unsafe shutdowns during the boot process. Typically, in Windows Embedded Standard 7, enabling the write filter automatically sets this policy in the BCD and prevents boot errors. It might not be set automatically following a deployment tast sequence in Configuration Manager, and then needs to be set manually.
  - Removes Administrator Autologin on next reboot or sets User Autologin.
  - Restarts the system after 90 seconds.
- 4. After restarting, the write filter is enabled and the thin client can be used.

The following snippet is the first launch command to be included in the unattend.xml file under the <settings pass="oobeSystem" > section:

<FirstLogonCommands>

<SynchronousCommand wcm:action="add">

<Order>1</Order>

<CommandLine>ewfmgr c: /enable </CommandLine>

<Description>Enable EWF WF </Description>

</SynchronousCommand>

<SynchronousCommand wcm:action="add">

<Order>2</Order>

<CommandLine>bcdedit /set {current} bootstatuspolicy

ignoreallfailures

</CommandLine>

<Description>Fix BCD </Description>

</SynchronousCommand>

<SynchronousCommand wcm:action="add">

<Order>3</Order>

<CommandLine>autologcfg /u:User /p:User</CommandLine>

<Description>Enables user Autologin</Description>

<RequiresUserInput>false</RequiresUserInput>

</SynchronousCommand>

<SynchronousCommand wcm:action="add">

<Order>4</Order>

<CommandLine>shutdown -r -t 90</CommandLine>

<Description>Restarts after 90 seconds</Description>

<RequiresUserInput>false</RequiresUserInput>

</SynchronousCommand>

</FirstLogonCommands>

## Appendix C—Preparing a boot image and adding the correspondent drivers

By default, Configuration Manager 2012 R2 SP1 uses Windows PE 5.0 as the boot image. This boot image is used for Windows 8 and Windows Server 2012. To manage an HP thin client with a Windows 10 IoT Enterprise image, import Windows PE and use Windows 10 ADK.

By default, after installing Windows 10 ADK, WinPE.wim is available in the following location:

C:\Program Files (x86)\Windows Kits\10\Assessment and Deployment Kit\Windows Preinstallation Environment\amd64\en-us

For more information about Windows 10 ADK, go to <u>https://msdn.microsoft.com/en-us/windows/hardware/dn913721.aspx</u>.

The Windows Embedded Standard 7 image uses Windows PE 3.0. This requires a different driver package. Be sure that you have selected the corresponding package before capturing or deploying an image.

For example, HP t820 uses the Intel<sup>®</sup> Ethernet Connection I217-LM network card. Before capturing a Windows Embedded Standard 7 image on an HP t820, go to <u>http://www.intel.com</u> and search and download the network card driver for Windows 8 instead of Windows Embedded Standard 7.

# Appendix D—Automating language selection with a customized answer file during Windows setup

A customized answer file is required to automate the Windows setup to remove the language selection page.

The following software is required to create a customized answer file:

- Windows System Image Manager, which is part of Windows ADK
- install.wim file from the source folder of the operating system installation media

## Creating a customized answer file

- 1. Open Window System Image Manager.
- 2. Right-click Select a Windows Image or catalog file, and then select Select Windows Image.

a	Windows System Image Mana	ger
File Edit Insert Tools Help		
Distribution Share — Select a Distribution Share	Answer Flie  — Create or open an answer file	Properties
Windows Image Select a Windows image or catalog file		
Select Windows Image		
Select Windows Image		
	Messages	
	XML (0) Validation (0) Configuration Set (0) Description	
	Descaption	

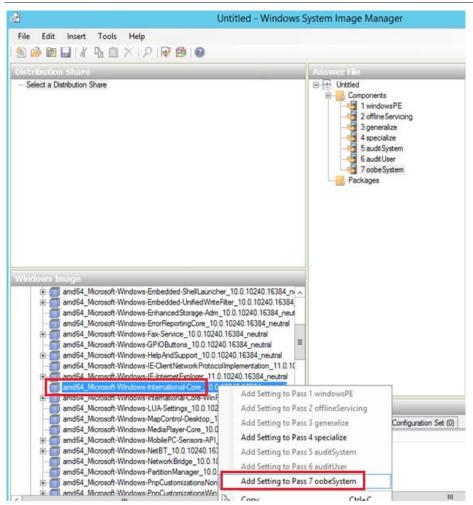
- 3. Broswe to the location of the install.wim file, and then select the file to import it. Select **YES** when prompted.
- 4. Right-click Create or open an answer file, and then select New Answer File.

istribution Share	Answer File
- Select a Distribution Share	-Create or open an answer file
	New Answer File Ctrl+N
	New Answer File
rindows Image	

5. Expand Components. Right-click amd64\_Microsoft-Windows-International-Core\_<version>\_neutral, and then select Add Setting to Pass 7 oobeSystem.

#### Note:

Select the component based on the architecture of the operating system that the answer file is being applied to.



- 6. Confirm that **amd64\_Microsoft-Windows-International-Core\_neutral** is selected under **oobeSystem**, and then specify the language codes in each of the following fields:
  - InputLocale
  - SystemLocale
  - UILanguage
  - UILanguageFallback
  - UserLocale

For the latest language codes, go to https://msdn.microsoft.com/en-us/library/cc233965.aspx.

Answer File			ows-International
	⊿	Properties	
Components		AppliedConfigura	7 oobeSystem
		Enabled	True
2 offlineServicing	⊳	ld	amd64_Microsoft-Windc
	⊿	Settings	
	ιг	InputLocale	en-US
🦣 5 audit.System		SystemLocale	en-US
		UlLanguage	en-US
		UILanguageFallt	en-US
amd64_Microsoft-Windows-International-Core_neutral		UserLocale	en-US
Packages			

- 7. Select Tools, and then select Validate Answer File. The validation is successful if 0 is returned.
- 8. Select File, select Save Answer File, select a location to save the file, and then name the file unattend.xml.

## Deploying the customized answer file with Configuration Manager

1. Create a new package in Configuration Manager. Select **This package contains source files**, and then specify the saved unattend.xml file as the **Source folder**.

Packages 4 items	AnswerFile_BigWindows10 Properties				
Search	General Data Source Data Access Distribution Settings Reporting Content Locations Security				
Icon Name AnswerFile_BigWindows1 Configuration Manager C T730 Win10 IOT x64 Driv User State Migration Too	This package contains source files				
	Update distribution points on a schedule     Occurs every 1 days effective 8/31/2016 2:07 PM     Schedule     Persist content in the client cache				
	To keep content in the client cache after it has already run, you can persist it. Use this option when you have a package that you must run multiple times, such as antivirus software.  Enable binary differential replication To minimize the network traffic between sites, binary differential replication updates only the content that has changed in the package.				

- 2. Edit the task sequence used to deploy the Windows operating system.
- 3. Select the Apply Operating System step, and then select Use an unattended or Sysprep answer file for a custom installation.
- 4. Select **Browse**, select the package created in step 1, and then enter unattend.xml as the **File name**.

Search		MyWin10Deployment Task Sequence Editor				
con	Name	Add - Remove 3) (3 Prop	perties Options			
	T730 Driver Pack Install		ype:	Apply Operating System Image		
1 1	t730_TaskSequence_Afte	Capture Windows Settings	lame:	Apply Operating System		
E E	BigWindows MyWin10Deployment	Hequest User State Storage	escription:	Actions to apply operating system	~	
		Capture User Files and Setting     Pelease User State Storage     Install Operating System	Annly oneration	system from a captured image	v	
		Restart in Windows PE	Image package:	MyTestWin10 1.0 en-US	Browse	
		Partico Disk 0 - LIFEL	Image:	1 - Windows 10 Enterprise 2015 LTS 💙		
		Contracting Contracting	Apply operating	system from an original installation source		
		Apply Network Settings Apply Device Drivers	Package:		Browse	
		Setup Operating System	Edition:	~		
		Setup Windows and Configuration Restore User Files and Settin				
		Treatore user riles and Setting	Use an unattend	ded or Sysprep answerfile for a custom installation		
		Release User State Storage	Package:	AnswerFile_BigWindows10 1 en-US	Browse	
			File name:	unattend xml		
MyWin10Deployment		S	elect the location v	where you want to apply this operating system.		
,		D	estination:	Next available formatted partition	Ŷ	
Sumn	nary					
Nar Des	me: M scription: :kape ID: 0					

- 5. Select **OK** to save the template sequence.
- 6. Deploy the updated template sequence to remove the language selection page from Windows setup.

## Appendix E—Known issues and solutions

**Issue:** After capturing a Windows 10 IoT Enterprise image with Configuration Manager 2012 R2 SP1, the Start menu of the user account does not work.

**Solution:** Remove ActivationStore.dat after running sysprep. To do this, create a .cmd file with a script like in the following example:

c:

cd c:\Users

del /s /f /q ActivationStore.dat

Copy the .cmd file to the USB device that is going to be used to capture the image, and execute the .cmd file before capturing the image.

**Issue:** The local administrator account is disabled after capturing and deploying an image with Configuration Manager 2012 R2 SP1.

**Solution:** Edit the template sequence to add the thin client to a domain after the image is deployed. Use a domain account to enable the local administrator account if necessary.

**Issue:** After deploying an HP Windows 10 2015 LTSB image with Configuration Manager R2 SP1, the Configuration Manager client is not installed automatically. All following subtasks abort to the desktop login.

Solution: This is an issue caused by Configuration Manager. To resolve this issue:

- 1. Go to http://www.catalog.update.microsoft.com/Search.aspx?g=KB3205383.
- 2. Download the KB3205383 cumulative update.
- 3. Install this update to the golden image, and then capture the image.

#### Note

This issue is not present on the the Windows 10 2016 LTSB image from HP that has the KB3206632 update preinstalled.

**Issue:** After Configuration Manager was used for imaging on an HP computer with a Windows 10 2016 LTSB image with UWF enabled, BitLocker<sup>®</sup> cannot be enabled to encrypt the C drive.

**Solution:** This issue can occur when using Configuration Manager to capture or deploy an image. To fix this issue, enter the Reagentc /disable command on the client side.

To enter this command, do one of the following:

- In Command Prompt on the client computer, enter CMD and then press **Enter**.
- To automate the process, add the Reagentc /disable command-line subtask to the end of the Configuration Manager imaging task sequence. Be sure to select **Disable 64-bit file system redirection**.

	Amanda_0331 Task Se	equence Editor	_ <b>_</b> ×
Add 🗸   Remove   👘 🖓	Properties Options		
Capture Files and Settings     Capture Vindows Settings     Capture Network Settings     Install Operating System     Pastar in Vindows PE     Pastino Disk 0     Apply Operating System     Apply Network Settings     Apply Device Drivers     Setup Operating System	Type:	un Command Line	
Setup Windows and Configuration Sisable WinRE Disable Default WinRE	Disable 64-bit file system Start in: C:Windows Package:		Browse
	Time-out (minutes): Run this step as the follo Account:	15 A	Browse

• Send this command using any third-party software that has ability to remotely execute commands.

## For more information

For more information about HP thin clients, go to the following websites:

- http://www.hp.com/support (Search for your thin client model. For documentation, select Manuals.)
- <u>http://www.hp.com/go/thinclient</u>

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