Ivanti Endpoint Manager 2017 Part 5

Build & Capture Windows 10 - WIM

In this post, I will show you how to build and capture of Windows 10 operating system with very basic applications and few store apps.

So far, I have written 2 blogs on the above covering install and post configuration. Now we will explore operating system deployment.

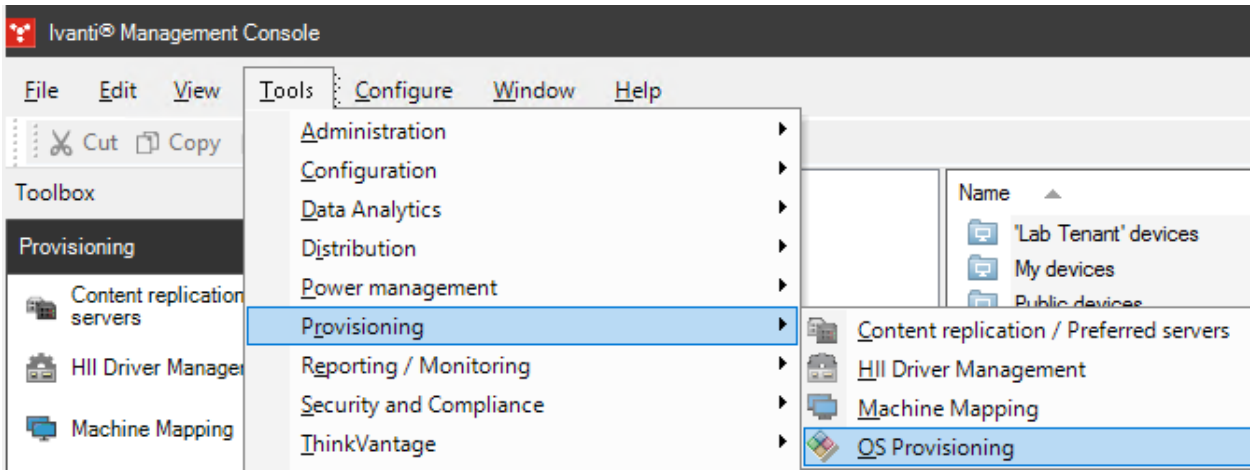
I will be using below link as reference for writing this blog.

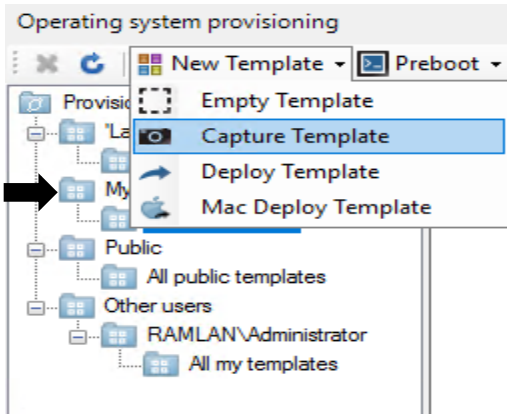
https://forums.ivanti.com/s/article/How-to-Capture-a-Windows-10-image-with-IMAGEX

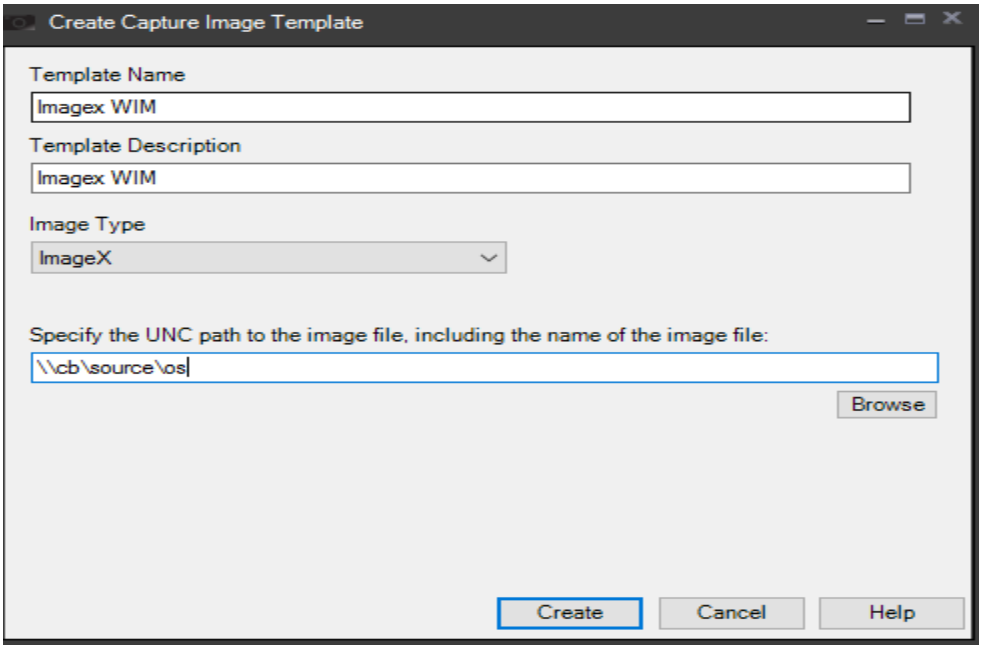
Overview – Build and Capture Windows 10

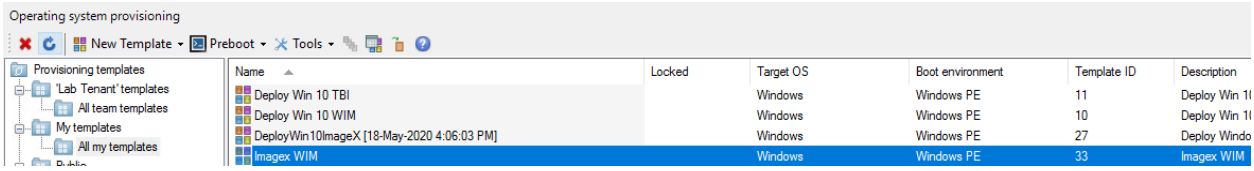
- Create a provisioning template to capture the image
- Install a PXE Representative
- Prepare the Windows 10 Computer for Capturing the Image
- Run SYSPREP.EXE to Prepare the OS for Capturing
- Add a Bare Metal Server Entry
- Create a Scheduled Task for the Capture Template
- Network Boot the Windows 10 Computer to Capture the Image

1. Create a provisioning template to capture the image





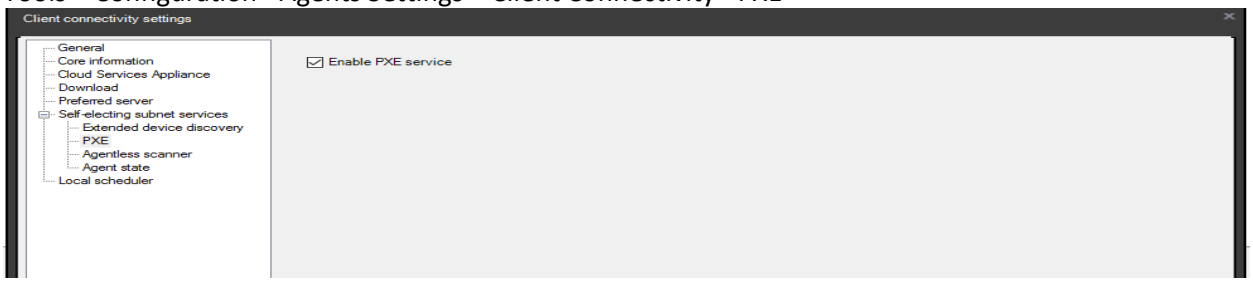




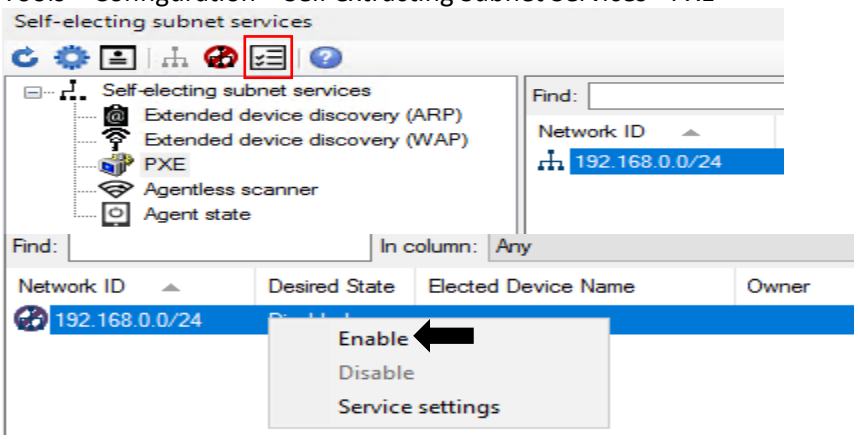
2. PXE Configuration/Setting

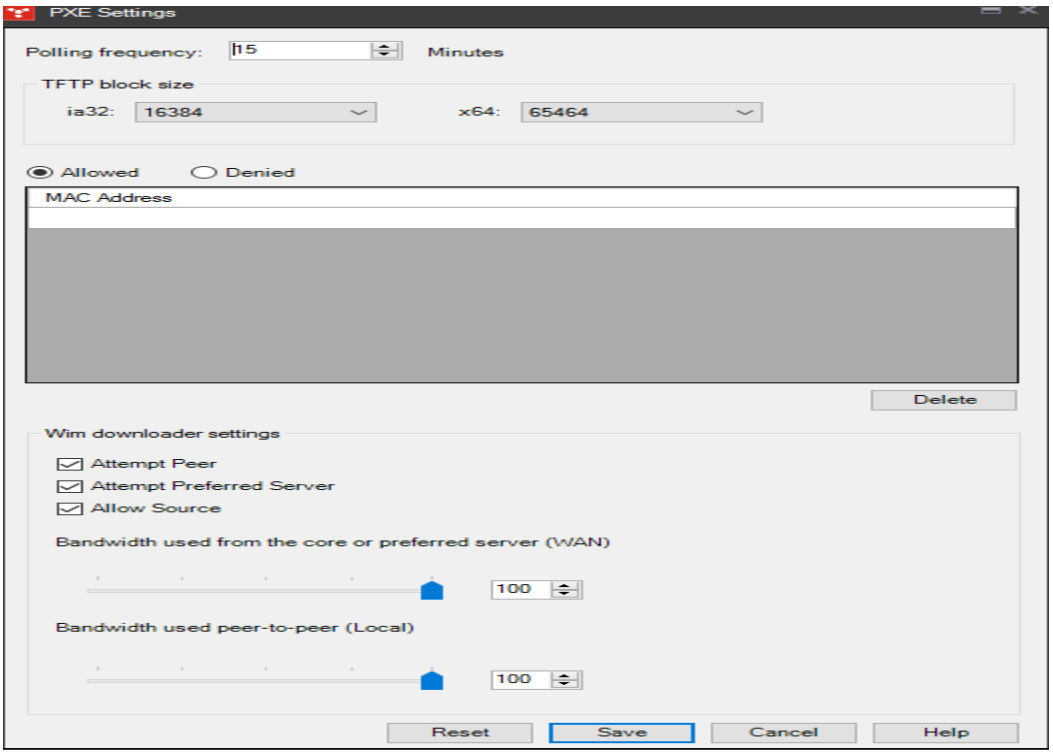
I did configure PXE in Part 2. Here is the screen shot

Tools – Configuration - Agents Settings – Client Connectivity - PXE



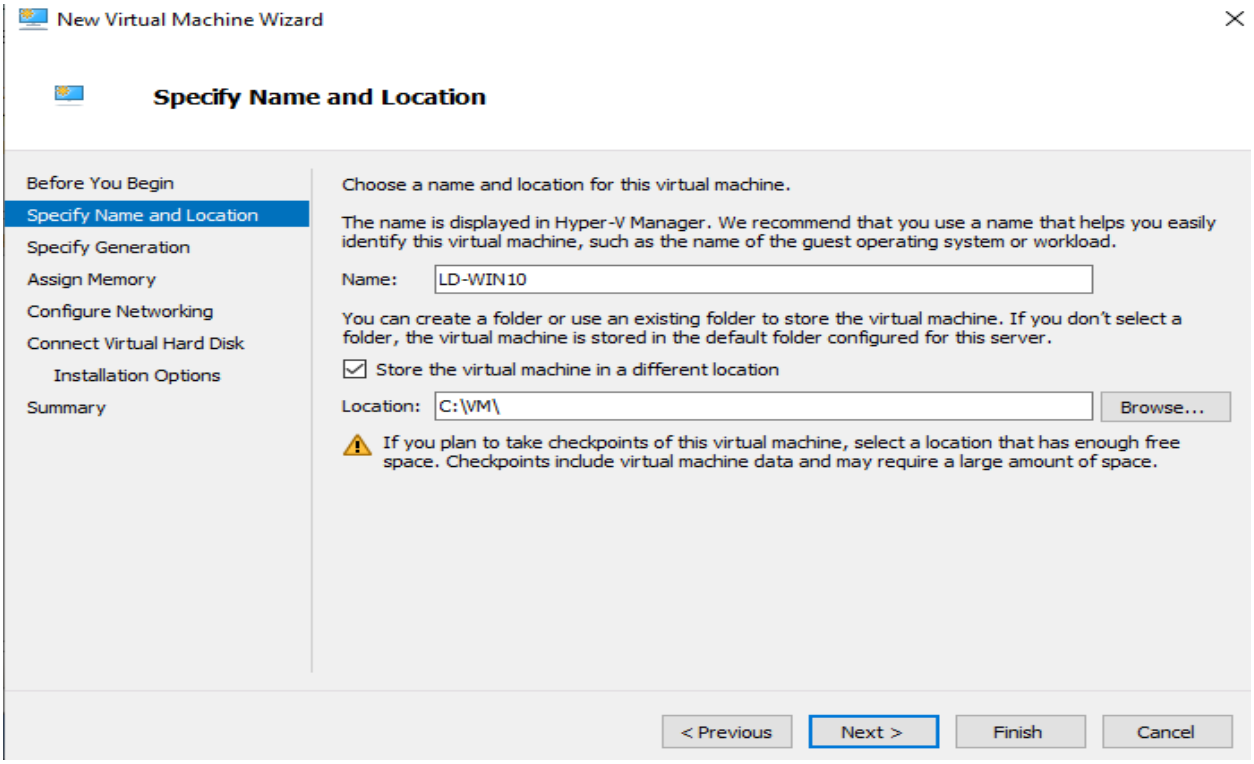
Tools – Configuration – Self extracting Subnet Services - PXE

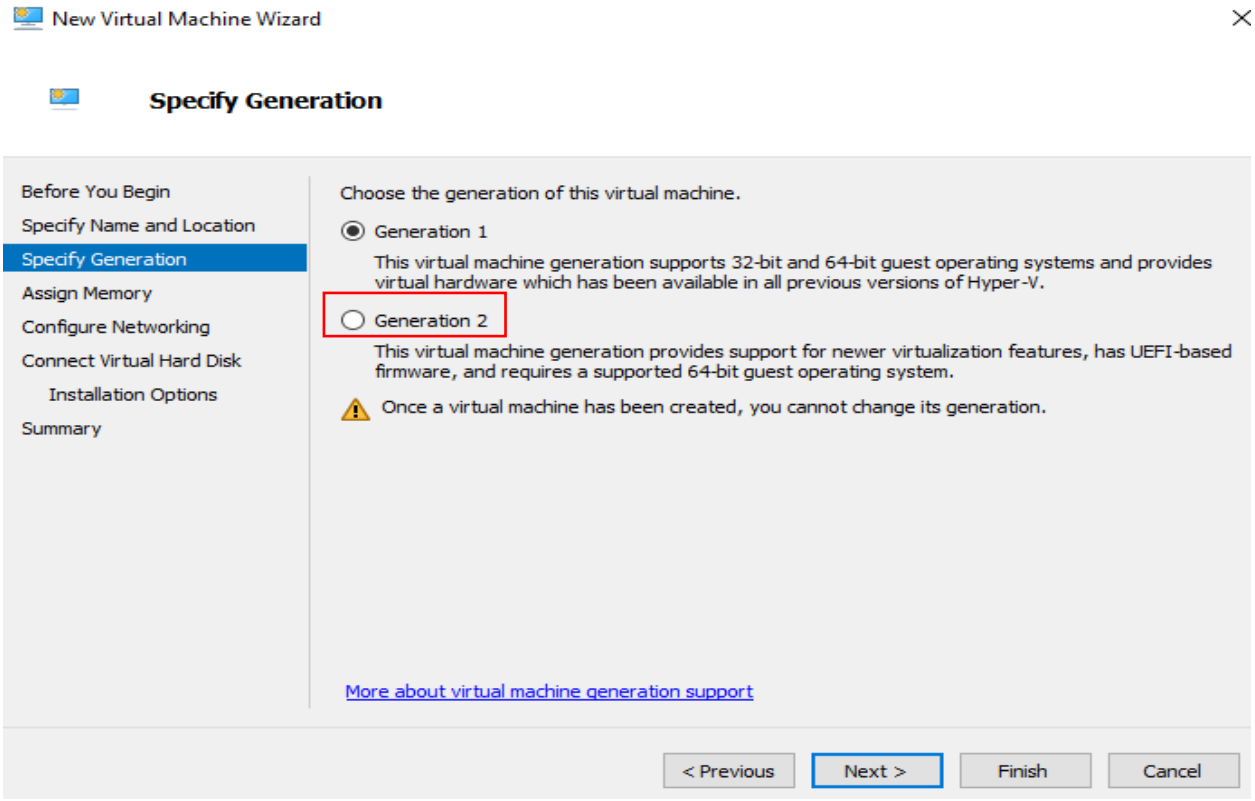


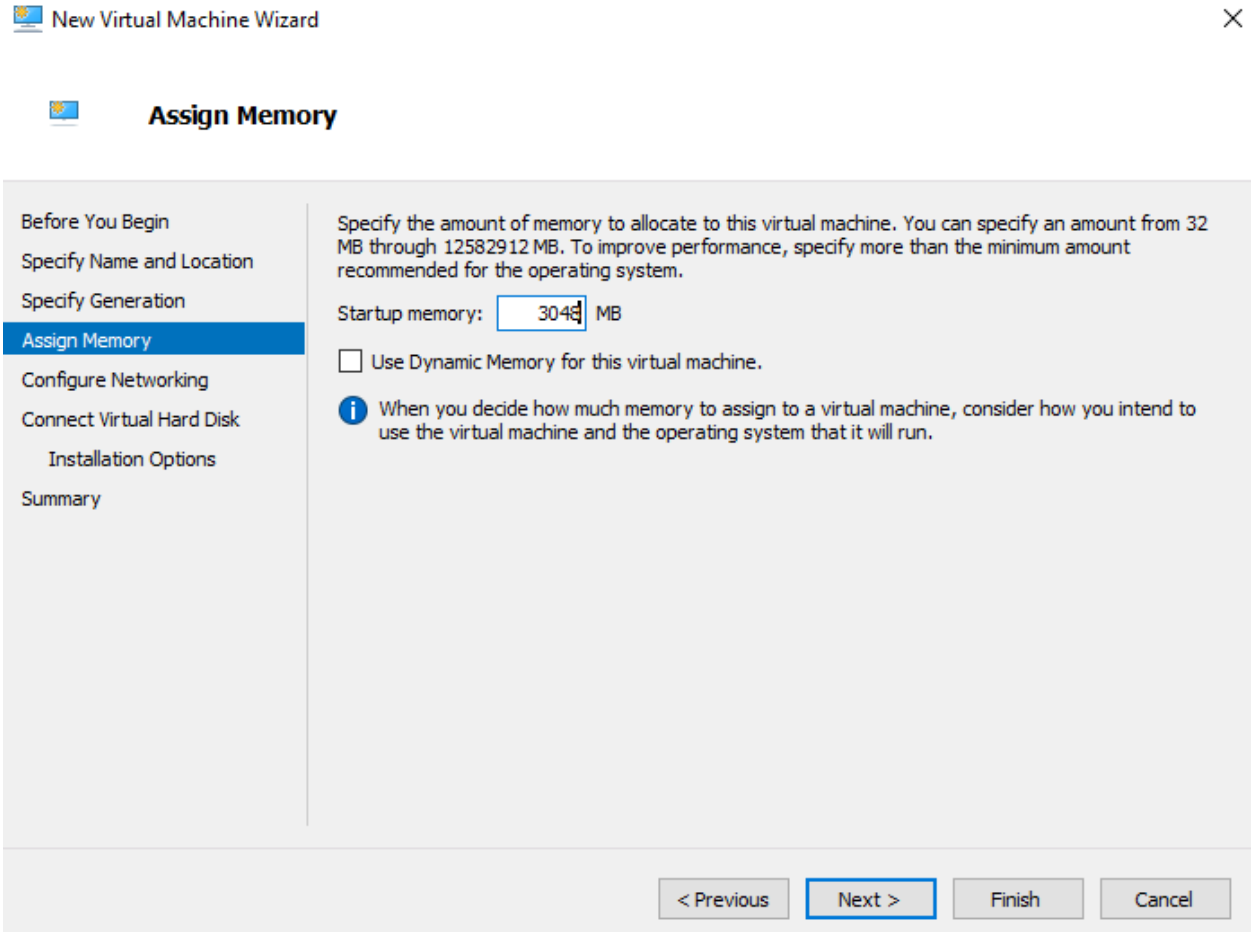


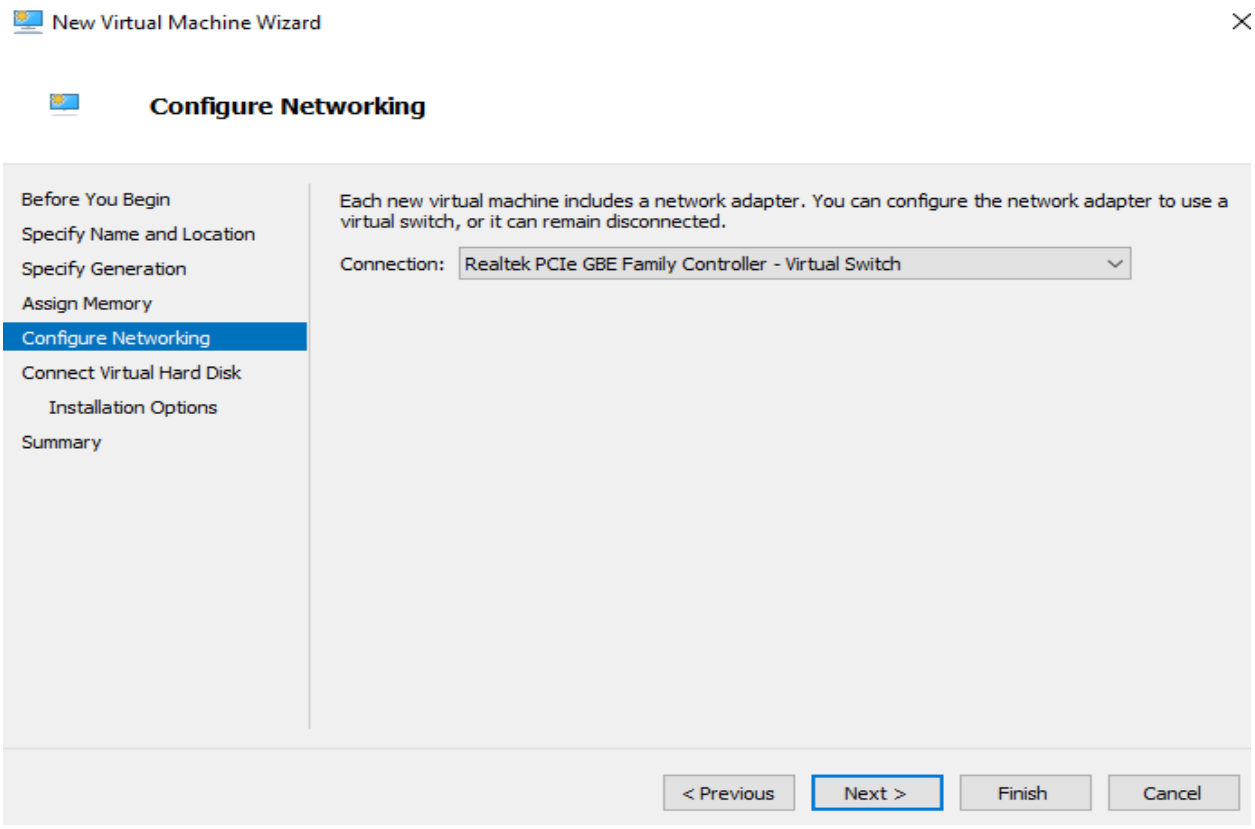
3. Prepare Windows 10 computer (virtual machine).

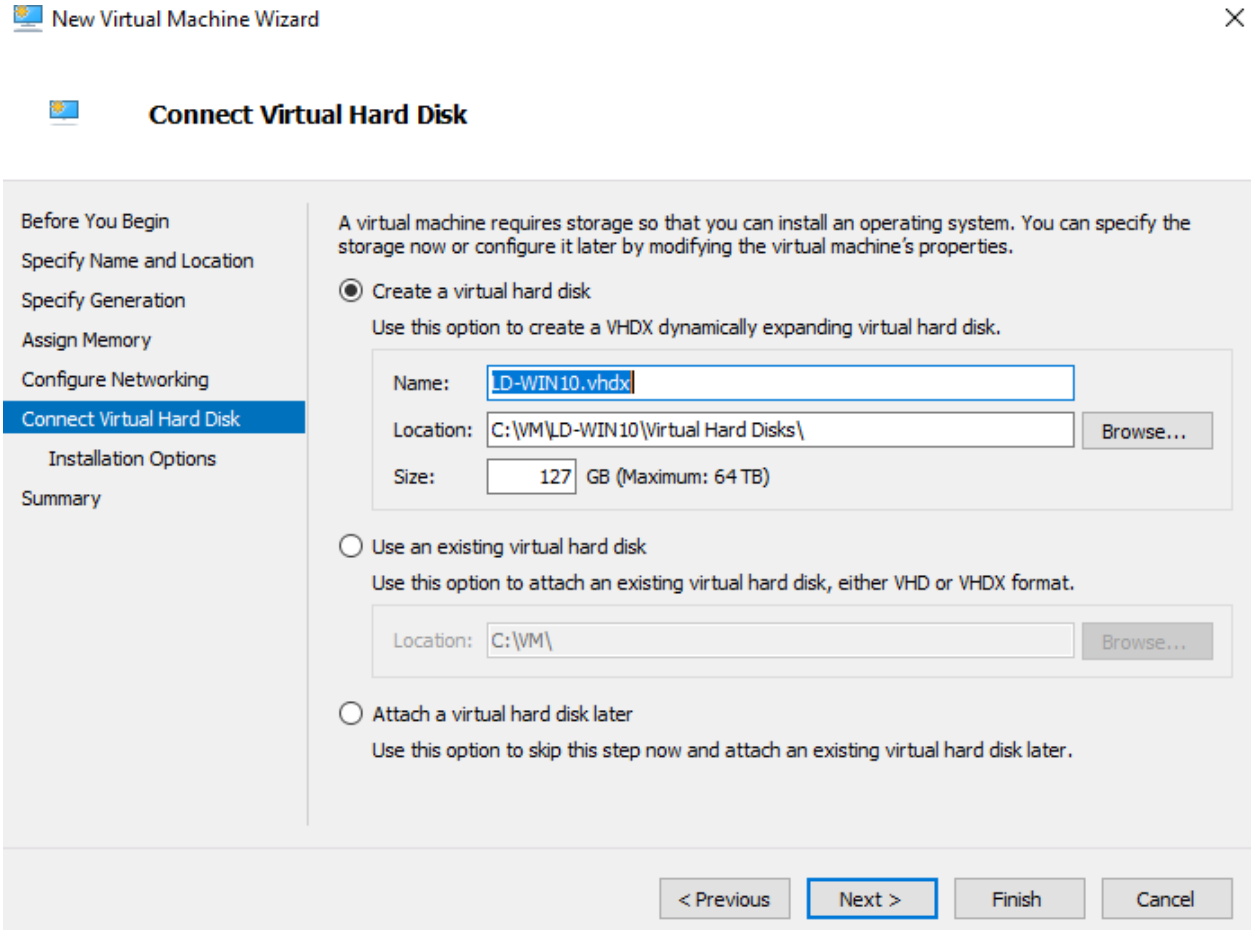
Install Windows 10 on a computer or get a computer that already has Windows 10 installed. Make sure the LANDESK Agent is not already installed on the computer or it will need to be removed before capturing the image. Note down the Mac address as we will need it later for capture (**00155D75FB15**) when we create a bare metal device.

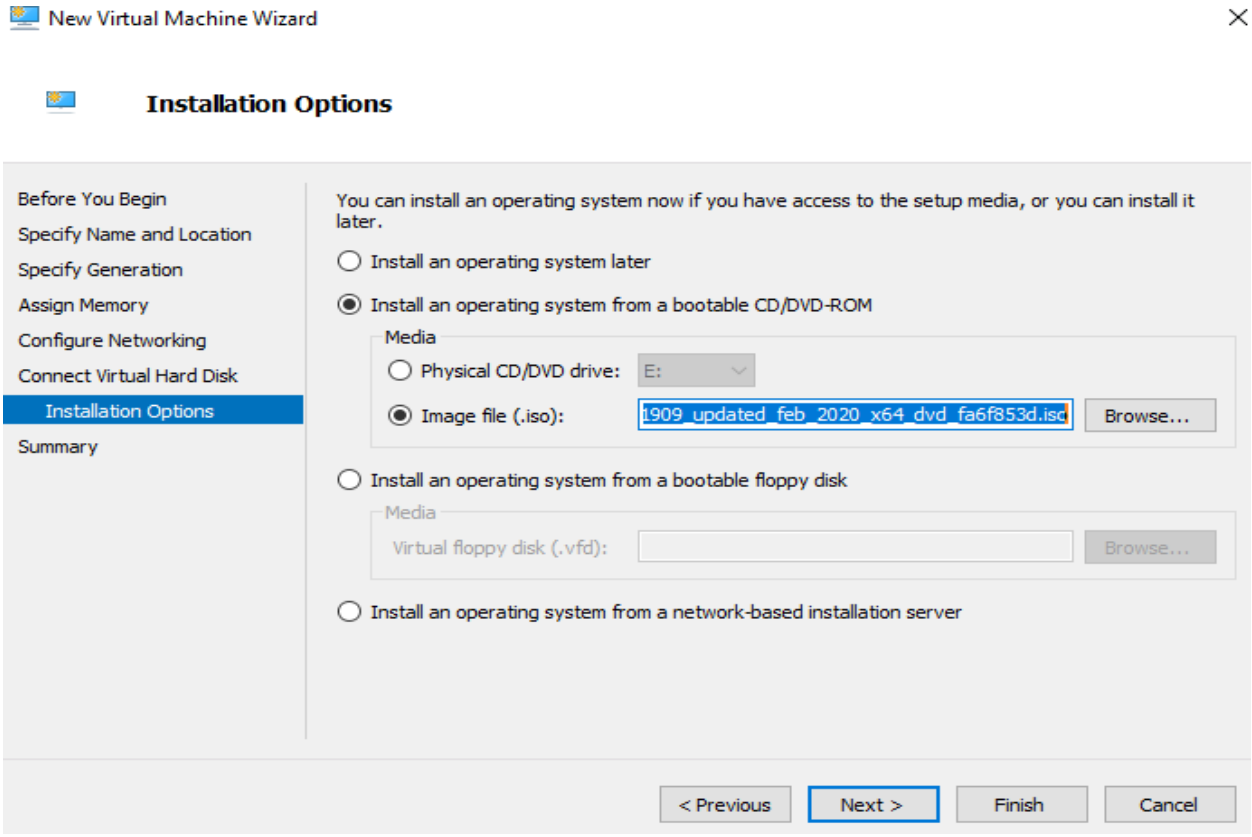


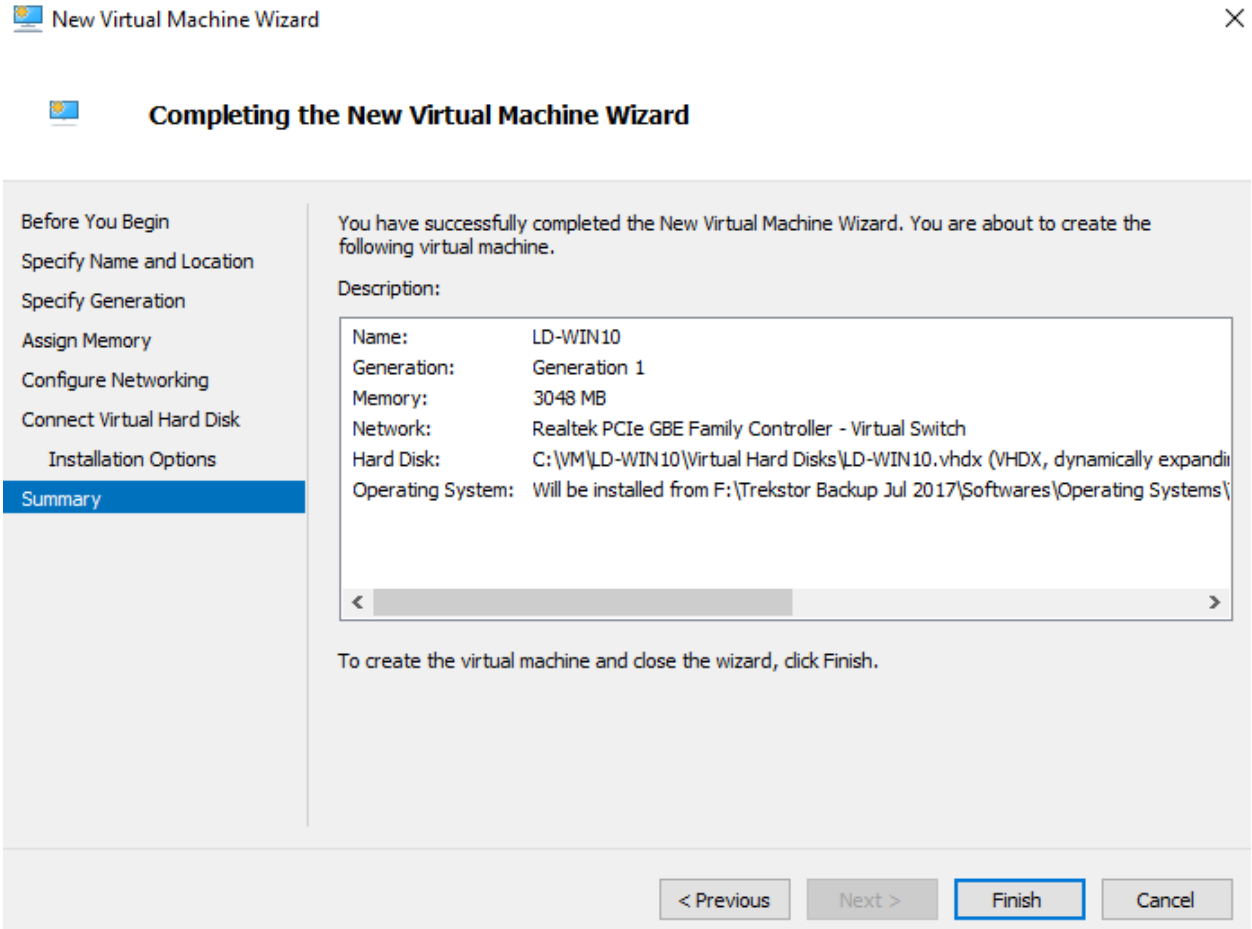

New Virtual Machine Wizard
Specify Generation
Before You Begin
Specify Name and Location
Specify Generation
Assign Memory
Configure Networking
Connect Virtual Hard Disk
Installation Options
Summary
Choose the generation of this virtual machine.
Generation 1
This virtual machine generation supports 32-bit and 64-bit guest operating systems and provides virtual hardware which has been available in all previous versions of Hyper-V.
Generation 2
This virtual machine generation provides support for newer virtualization features, has UEFI-based firmware, and requires a supported 64-bit guest operating system.
Once a virtual machine has been created, you cannot change its generation.
More about virtual machine generation support
< Previous
Next >
Finish
Cancel


New Virtual Machine Wizard
Assign Memory
Before You Begin
Specify Name and Location
Specify Generation
Assign Memory
Configure Networking
Connect Virtual Hard Disk
Installation Options
Summary
Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 32 MB through 12582912 MB. To improve performance, specify more than the minimum amount recommended for the operating system.
Startup memory:
3048
MB
Use Dynamic Memory for this virtual machine.
When you decide how much memory to assign to a virtual machine, consider how you intend to use the virtual machine and the operating system that it will run.
< Previous
Next >
Finish
Cancel

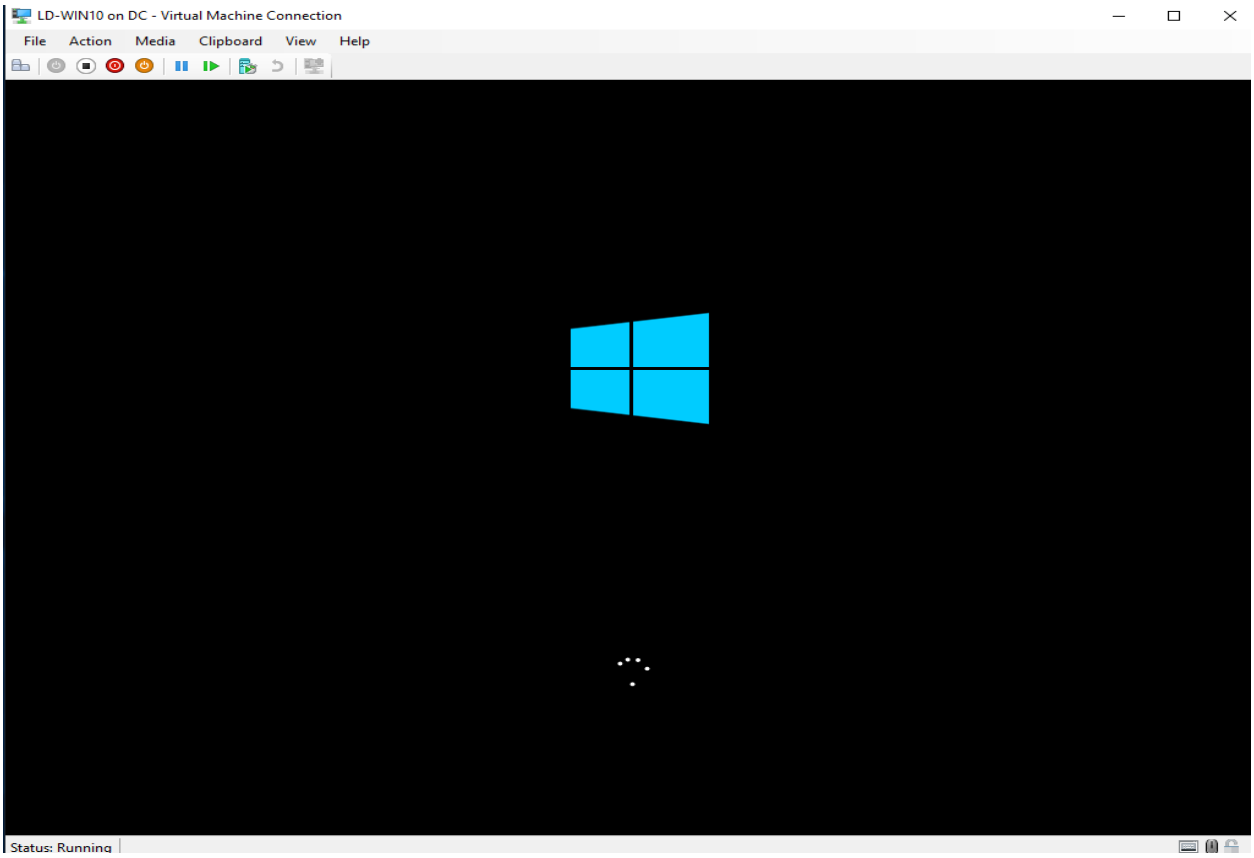

New Virtual Machine Wizard
Configure Networking
Before You Begin
Specify Name and Location
Specify Generation
Assign Memory
Configure Networking
Connect Virtual Hard Disk
Installation Options
Summary
Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual switch, or it can remain disconnected.
Connection:
Realtek PCIe GBE Family Controller - Virtual Switch
< Previous
Next >
Finish
Cancel

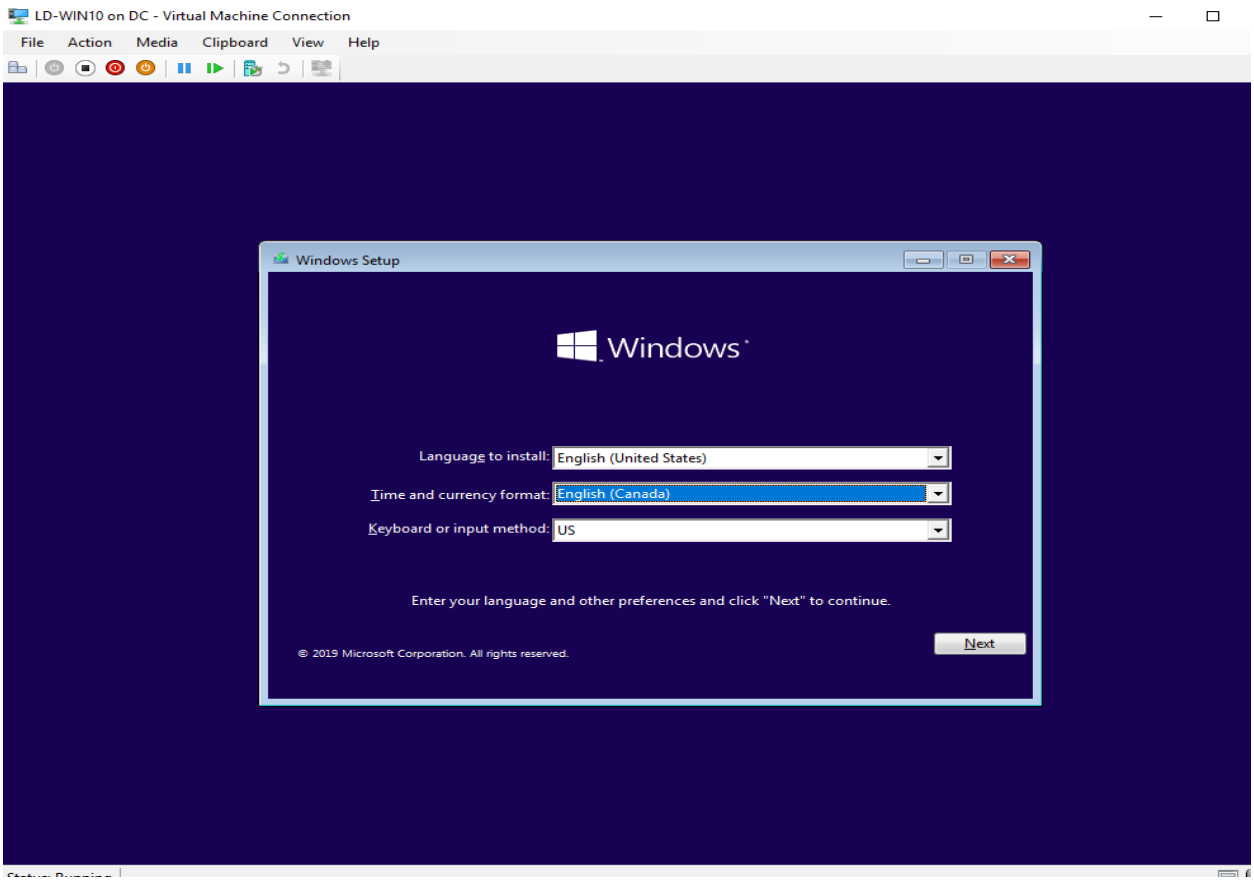

New Virtual Machine Wizard
Connect Virtual Hard Disk
Before You Begin
Specify Name and Location
Specify Generation
Assign Memory
Configure Networking
Connect Virtual Hard Disk
Installation Options
Summary
A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties.
Create a virtual hard disk
Use this option to create a VHDX dynamically expanding virtual hard disk.
Name:
LD-WIN10.vhdx
Location:
C:\VM\LD-WIN10\Virtual Hard Disks\
Browse...
Size:
127
GB (Maximum: 64 TB)
Use an existing virtual hard disk
Use this option to attach an existing virtual hard disk, either VHD or VHDX format.
Location:
C:\VM\
Browse...
Attach a virtual hard disk later
Use this option to skip this step now and attach an existing virtual hard disk later.
< Previous
Next >
Finish
Cancel

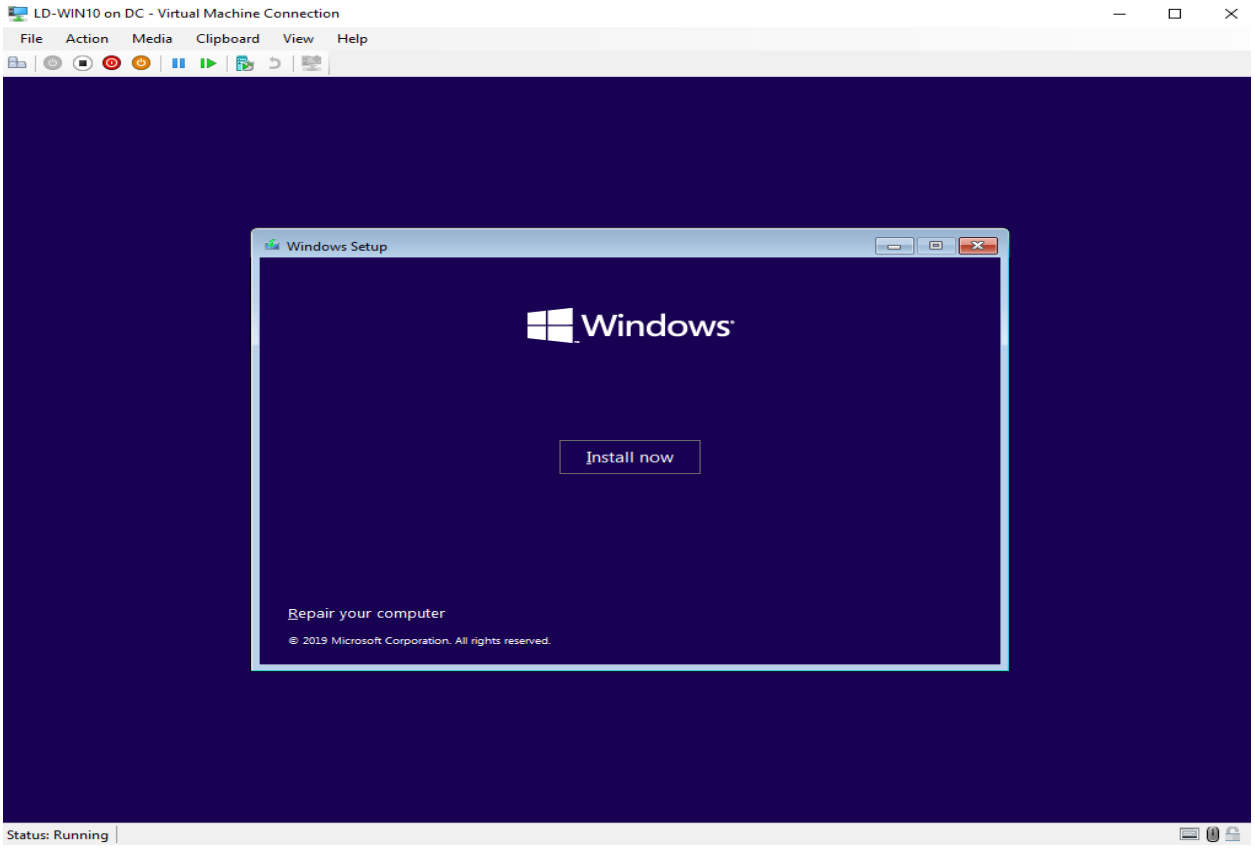

New Virtual Machine Wizard
Installation Options
Before You Begin
Specify Name and Location
Specify Generation
Assign Memory
Configure Networking
Connect Virtual Hard Disk
Installation Options
Summary
You can install an operating system now if you have access to the setup media, or you can install it later.
Install an operating system later
Install an operating system from a bootable CD/DVD-ROM
Media
Physical CD/DVD drive: E:
Image file (.iso): 1909_updated_feb_2020_x64_dvd_fa6f853d.iso
Browse...
Install an operating system from a bootable floppy disk
Media
Virtual floppy disk (.vfd):
Browse...
Install an operating system from a network-based installation server
< Previous
Next >
Finish
Cancel

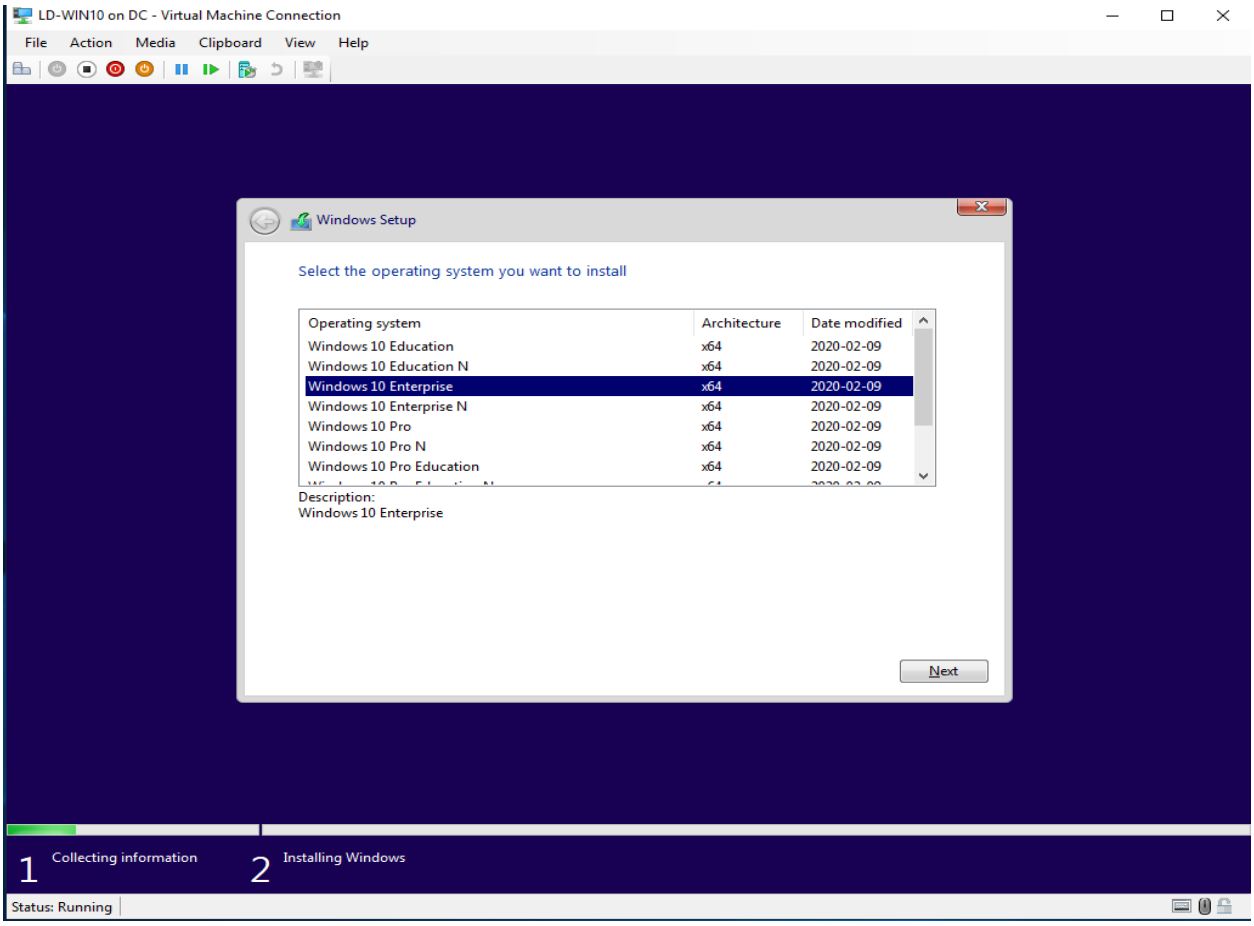

New Virtual Machine Wizard
Completing the New Virtual Machine Wizard
Before You Begin
Specify Name and Location
Specify Generation
Assign Memory
Configure Networking
Connect Virtual Hard Disk
Installation Options
Summary
You have successfully completed the New Virtual Machine Wizard. You are about to create the following virtual machine.
Description:
Name: LD-WIN10
Generation: Generation 1
Memory: 3048 MB
Network: Realtek PCIe GBE Family Controller - Virtual Switch
Hard Disk: C:\VM\LD-WIN10\Virtual Hard Disks\LD-WIN10.vhdx (VHDX, dynamically expandi
Operating System: Will be installed from F:\Trekstor Backup Jul 2017\Softwares\Operating Systems\
To create the virtual machine and close the wizard, click Finish.
< Previous
Next >
Finish
Cancel

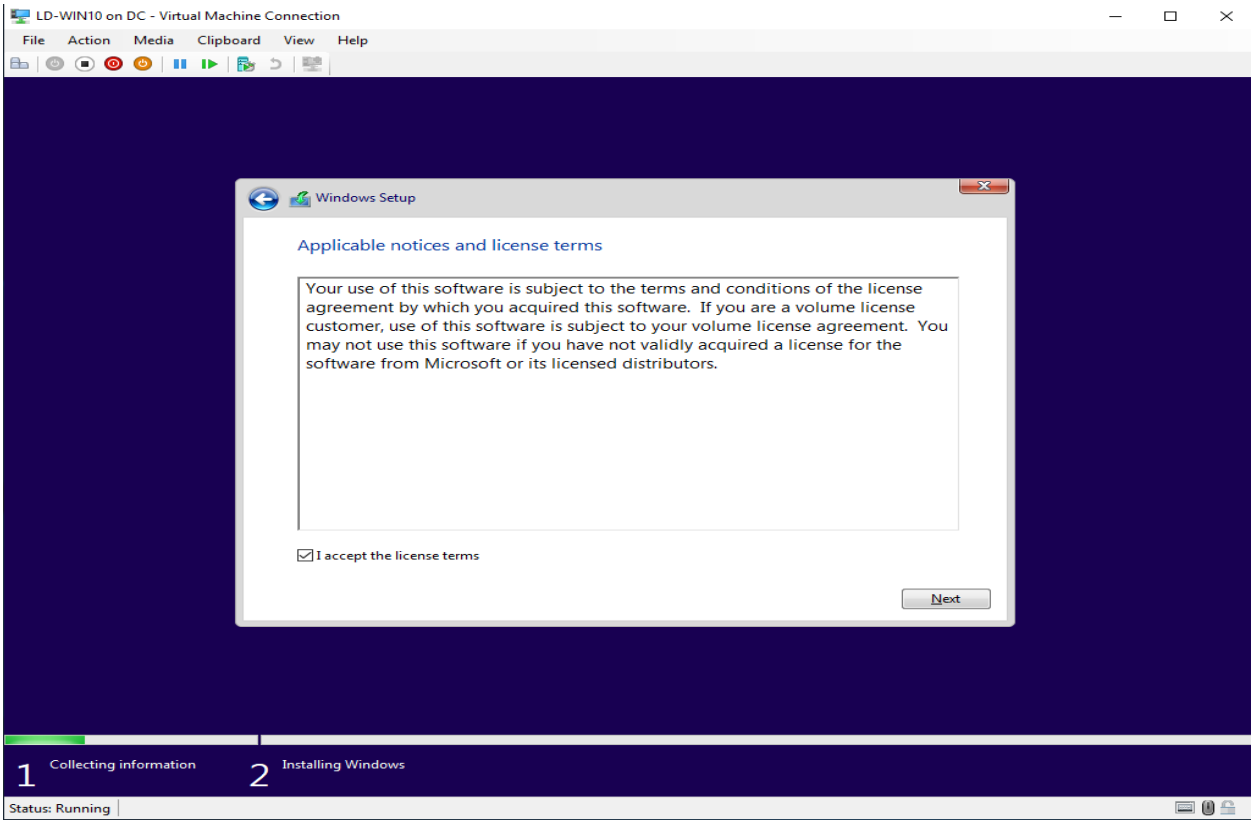
Power on the virtual machine

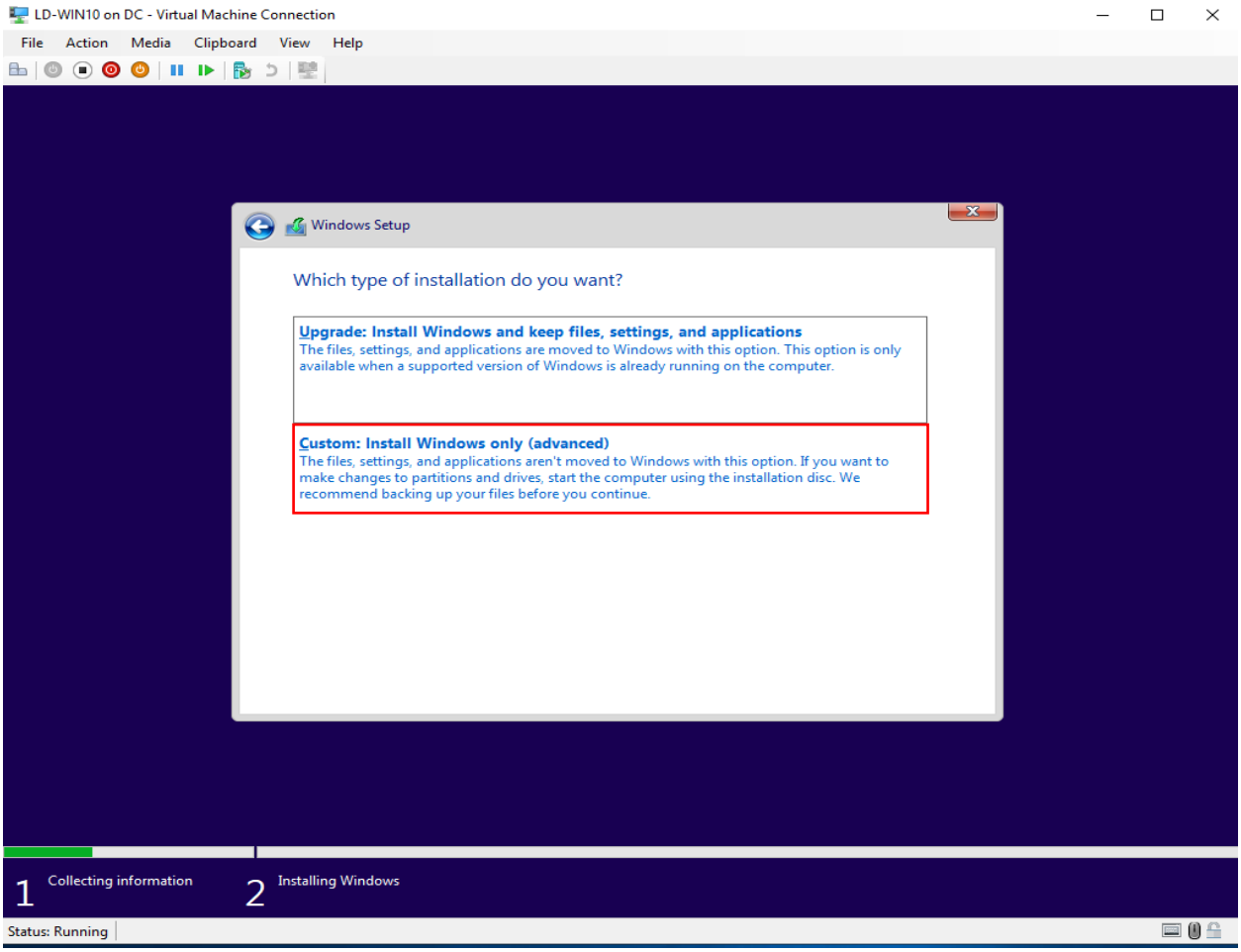


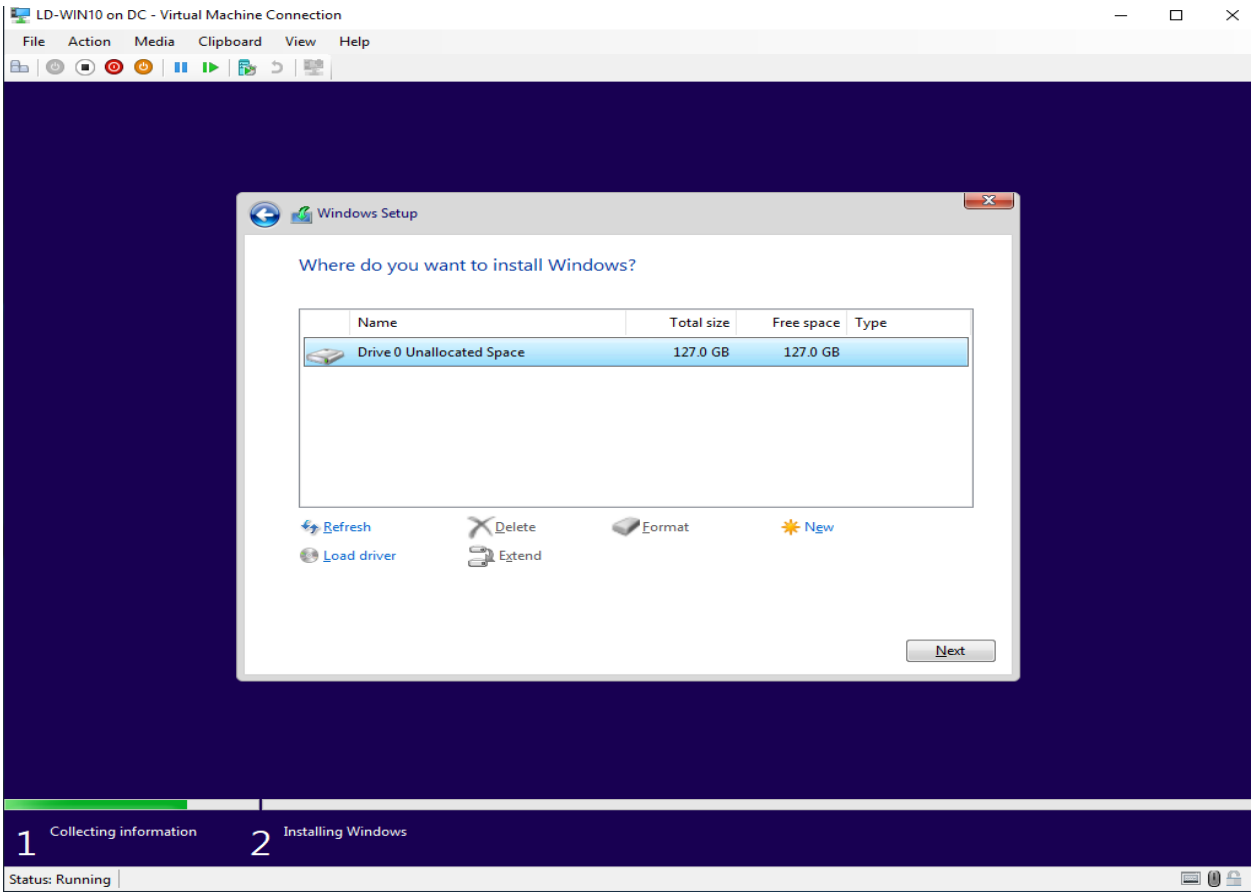


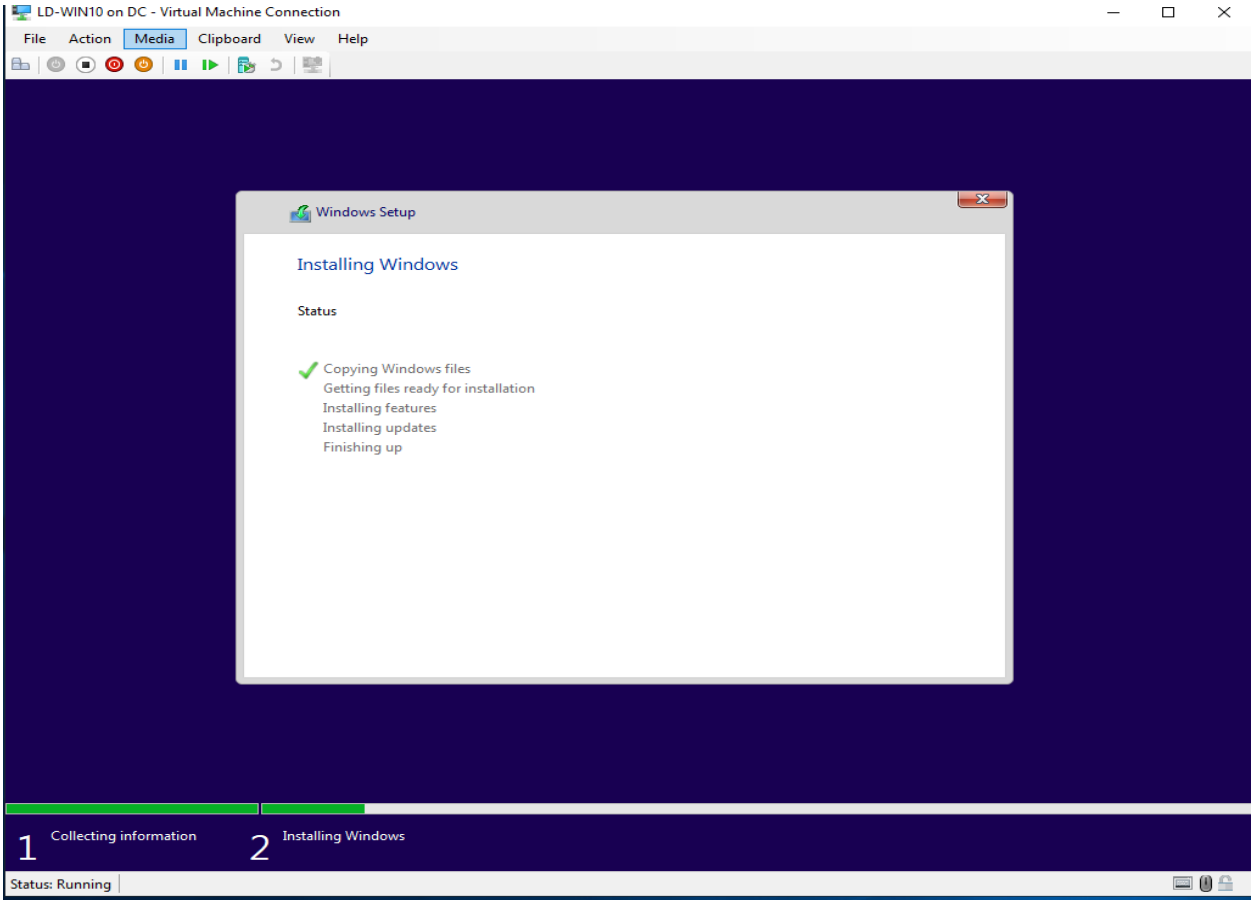

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Windows Setup
Windows
Install now
Repair your computer
© 2019 Microsoft Corporation. All rights reserved.
Status: Running

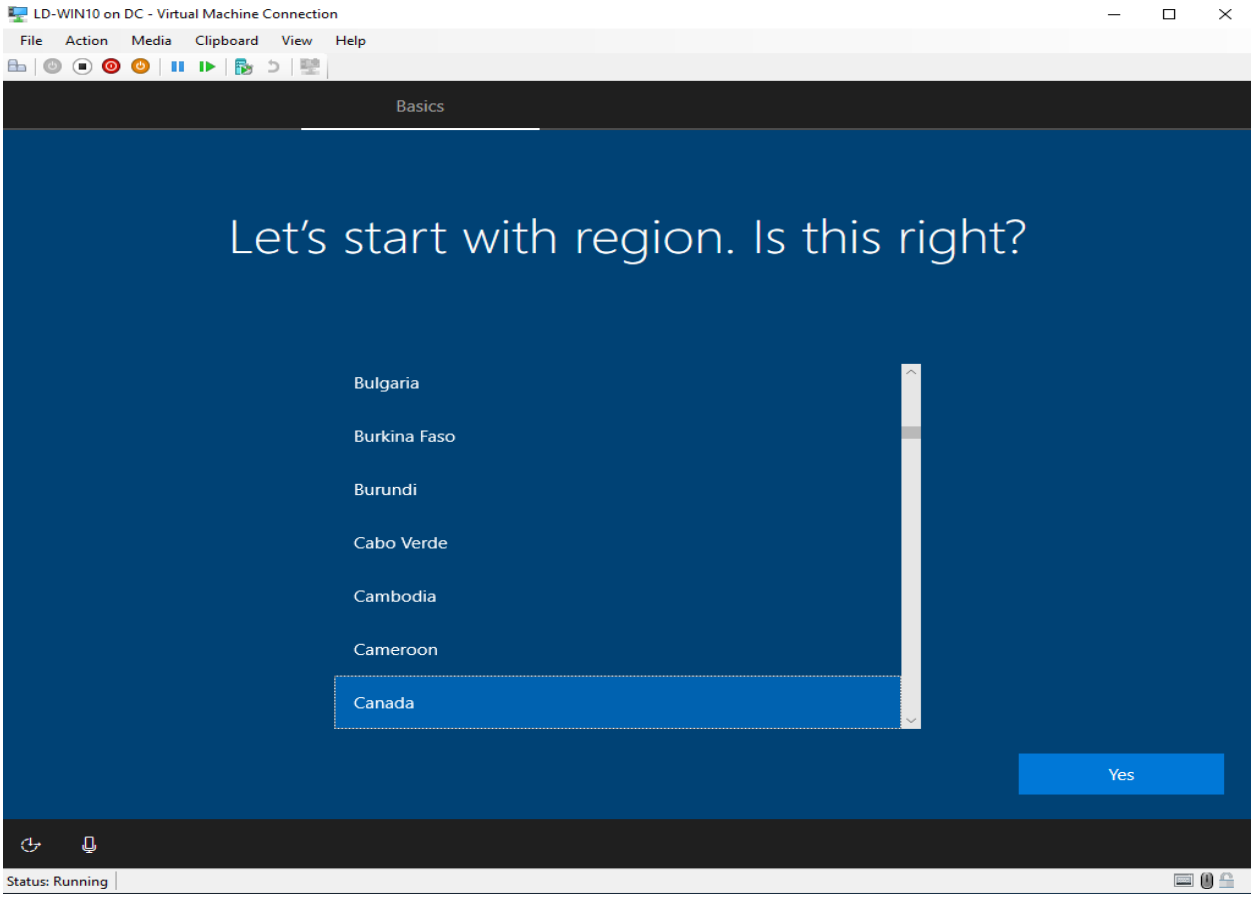

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Windows Setup
Select the operating system you want to install
Operating system
Architecture
Date modified
Windows 10 Education x64 2020-02-09
Windows 10 Education N x64 2020-02-09
Windows 10 Enterprise x64 2020-02-09
Windows 10 Enterprise N x64 2020-02-09
Windows 10 Pro x64 2020-02-09
Windows 10 Pro N x64 2020-02-09
Windows 10 Pro Education x64 2020-02-09
Description:
Windows 10 Enterprise
Next
1 Collecting information
2 Installing Windows
Status: Running

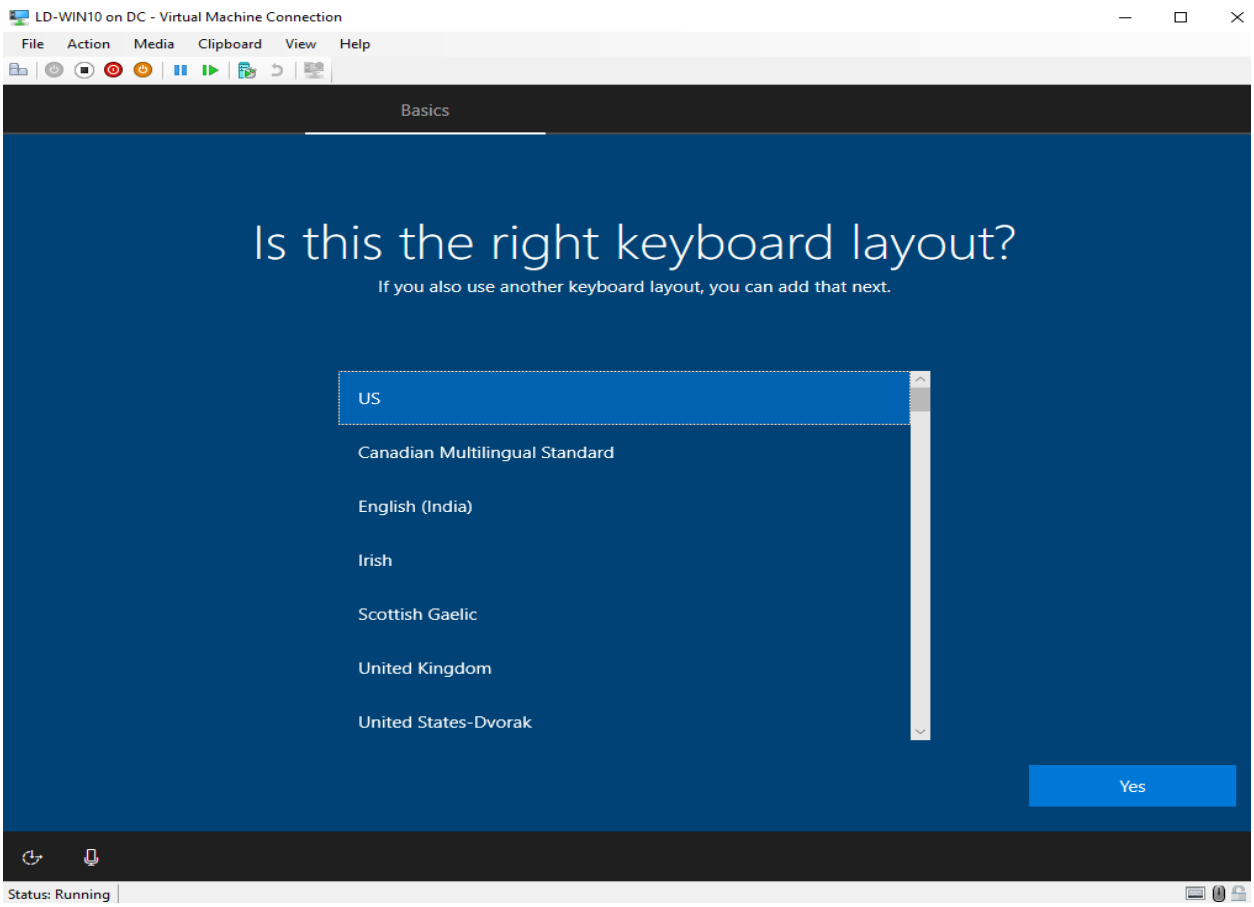

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Windows Setup
Applicable notices and license terms
Your use of this software is subject to the terms and conditions of the license agreement by which you acquired this software. If you are a volume license customer, use of this software is subject to your volume license agreement. You may not use this software if you have not validly acquired a license for the software from Microsoft or its licensed distributors.
I accept the license terms
Next
1 Collecting information
2 Installing Windows
Status: Running

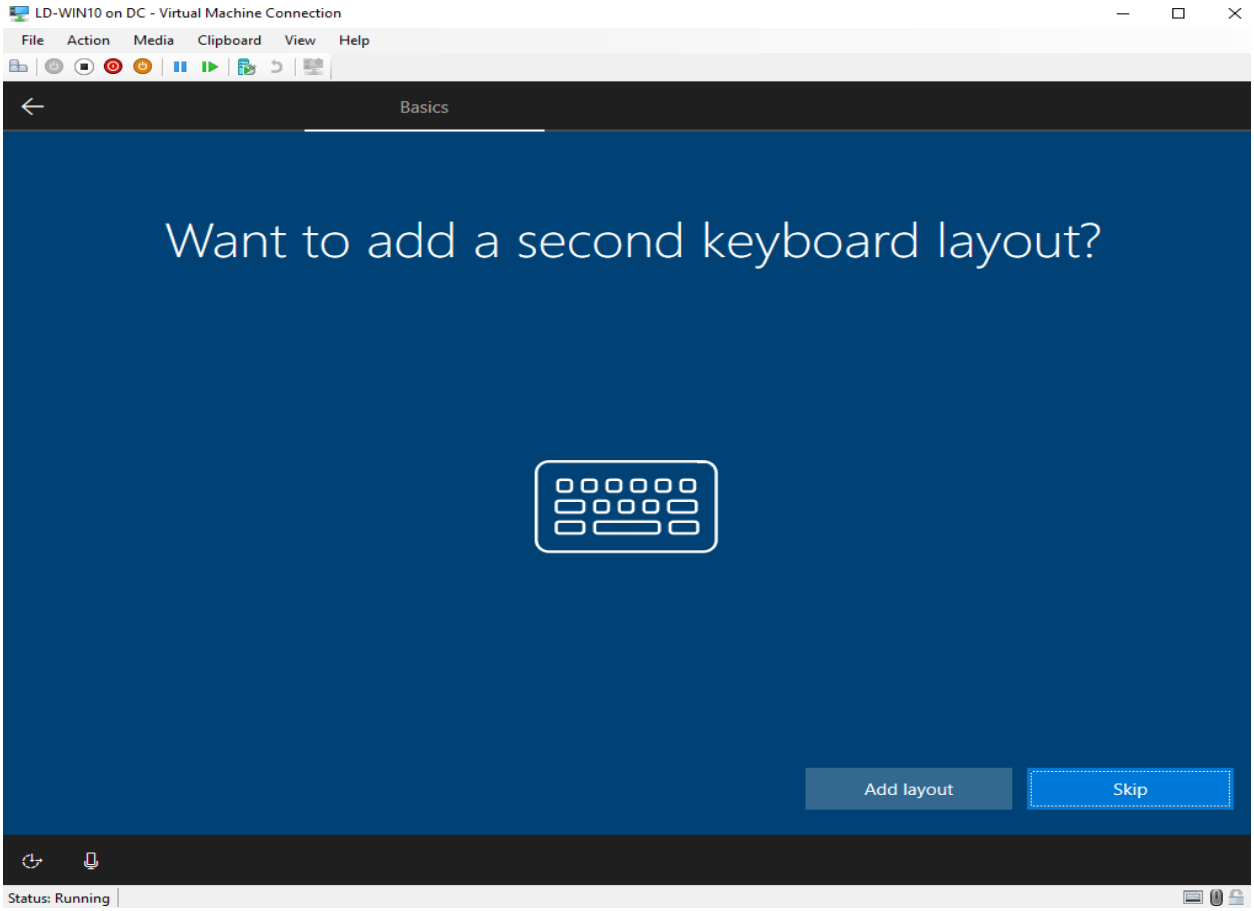

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Windows Setup
Which type of installation do you want?
Upgrade: Install Windows and keep files, settings, and applications
The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.
Custom: Install Windows only (advanced)
The files, settings, and applications aren't moved to Windows with this option. If you want to make changes to partitions and drives, start the computer using the installation disc. We recommend backing up your files before you continue.
1 Collecting information
2 Installing Windows
Status: Running

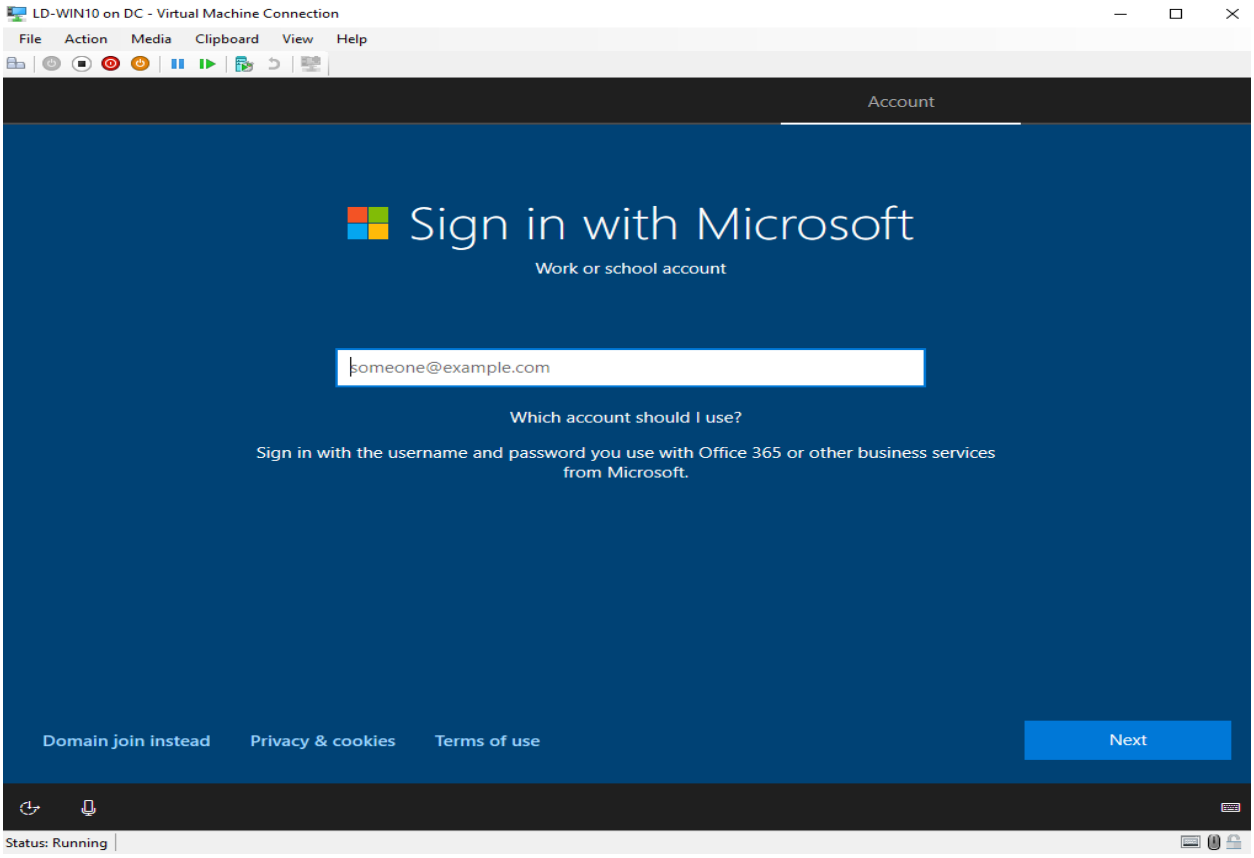

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Windows Setup
Where do you want to install Windows?
Name Total size Free space Type
Drive 0 Unallocated Space 127.0 GB 127.0 GB
Refresh Delete Format New
Load driver Extend
Next
1 Collecting information
2 Installing Windows
Status: Running

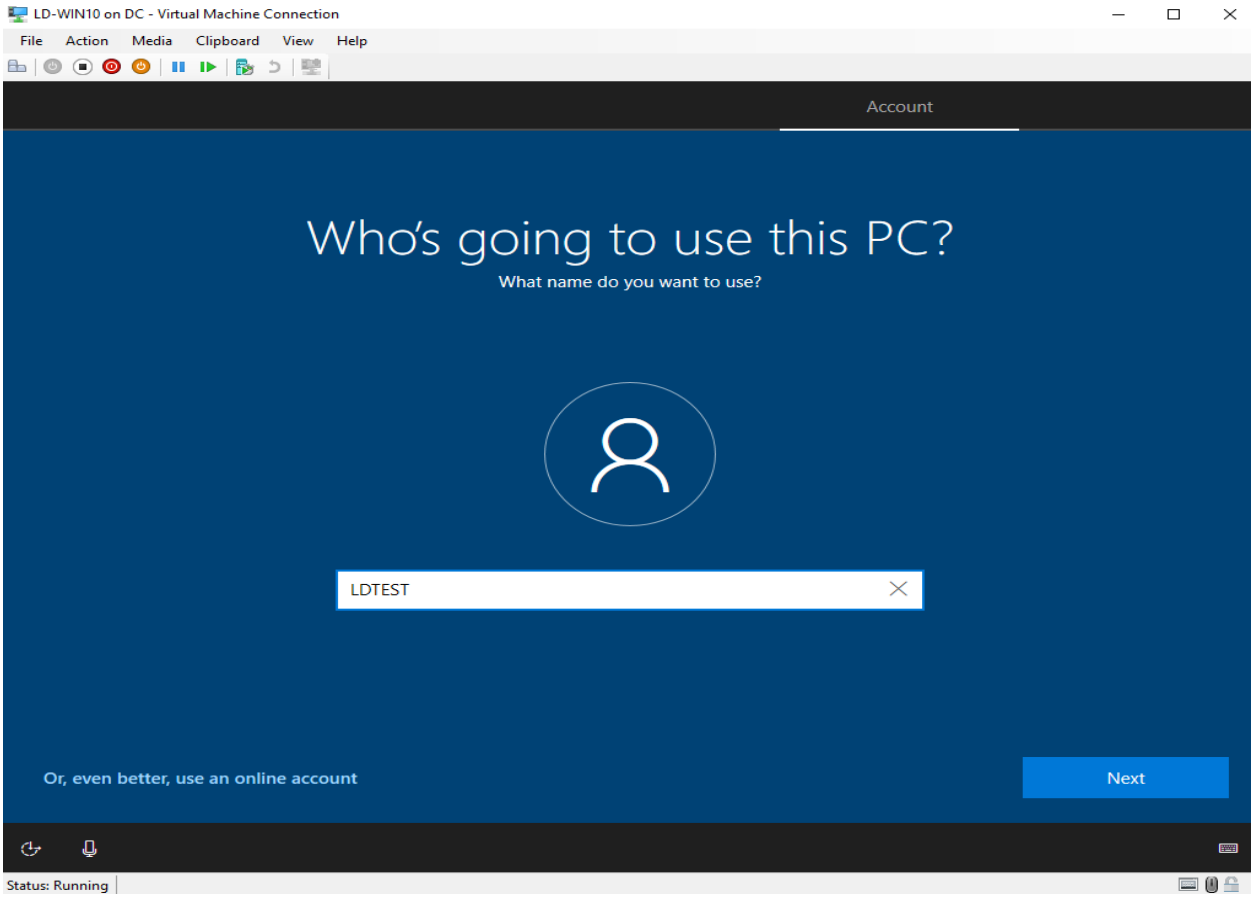

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Windows Setup
Installing Windows
Status
Copying Windows files
Getting files ready for installation
Installing features
Installing updates
Finishing up
1 Collecting information
2 Installing Windows
Status: Running

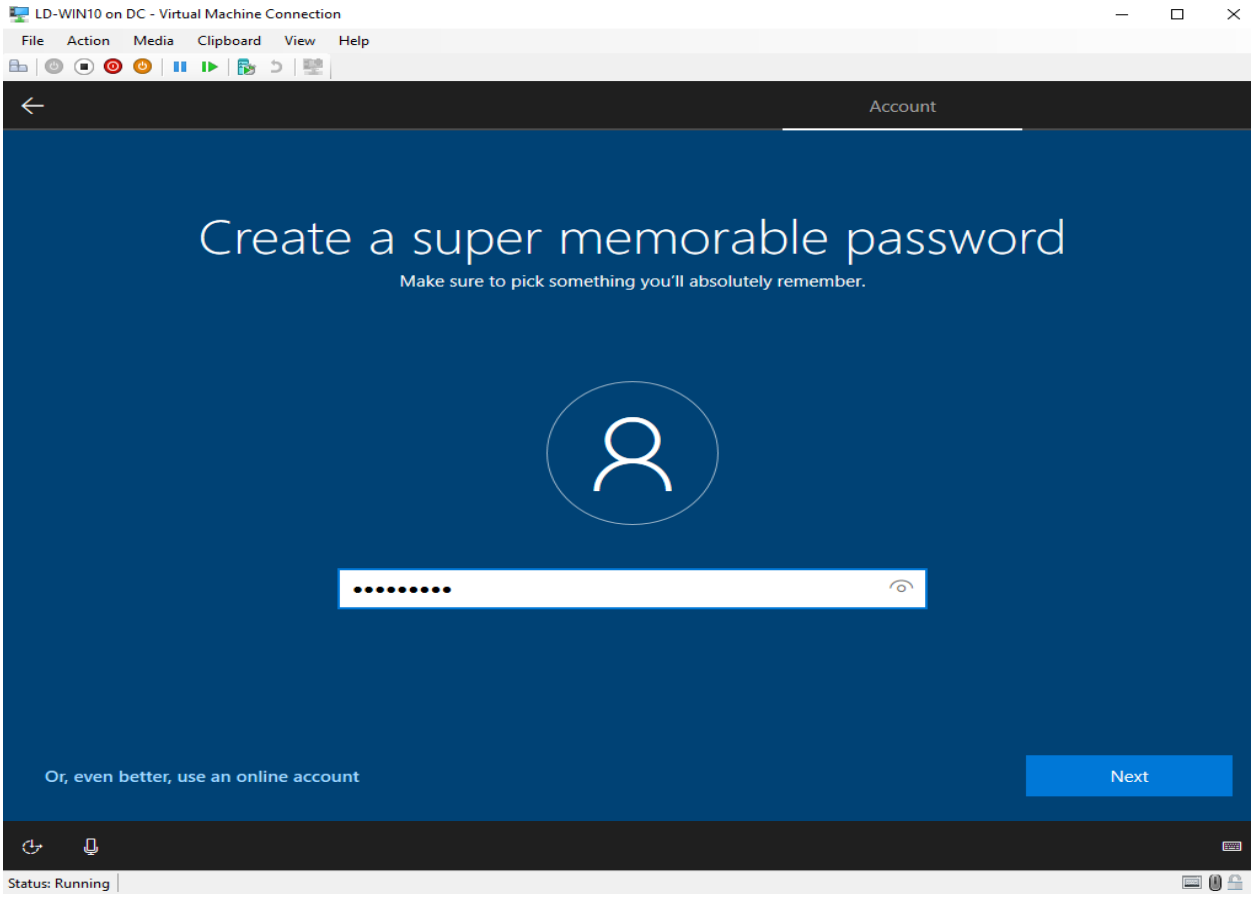

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Basics
Let's start with region. Is this right?
Bulgaria
Burkina Faso
Burundi
Cabo Verde
Cambodia
Cameroon
Canada
Yes
Status: Running

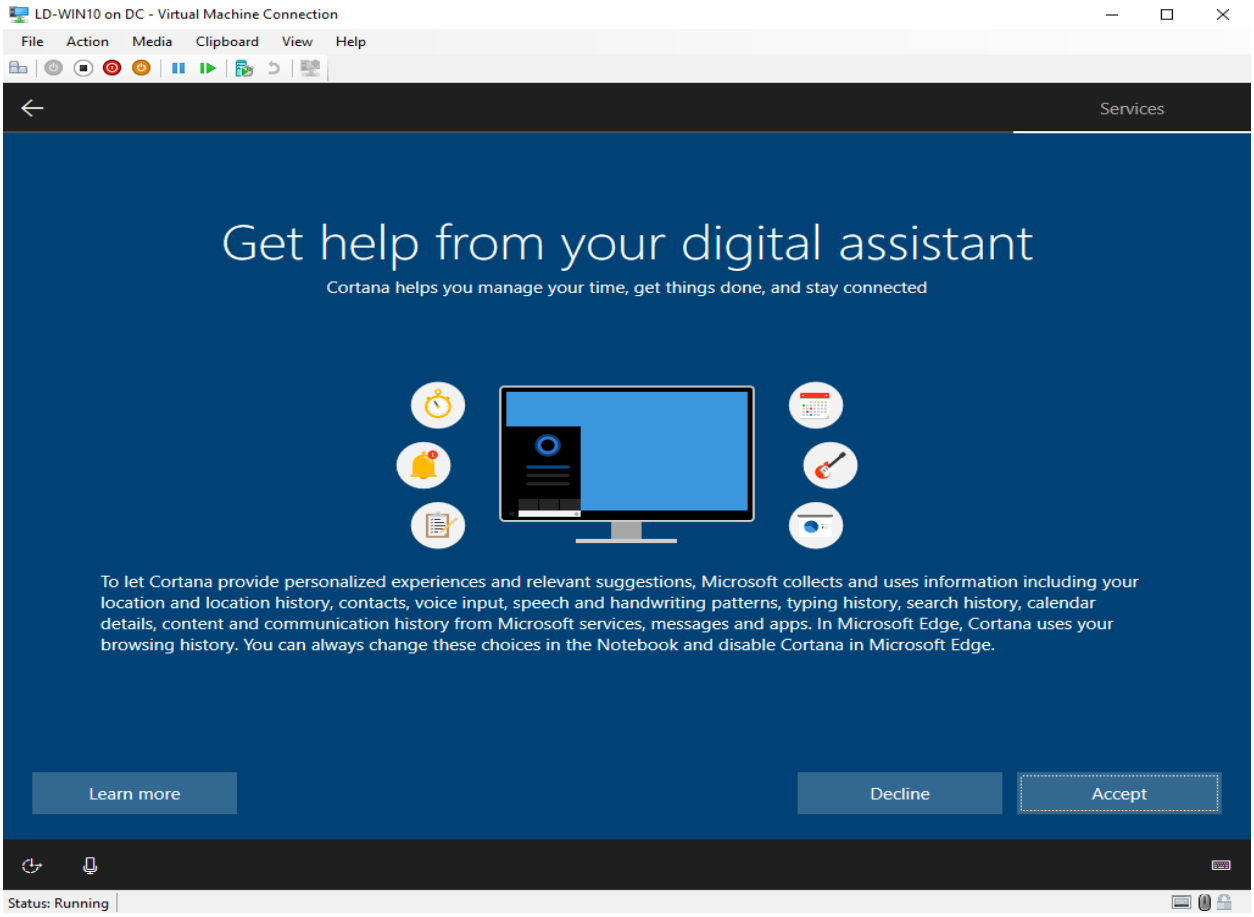

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Basics
Is this the right keyboard layout?
If you also use another keyboard layout, you can add that next.
US
Canadian Multilingual Standard
English (India)
Irish
Scottish Gaelic
United Kingdom
United States-Dvorak
Yes
Status: Running

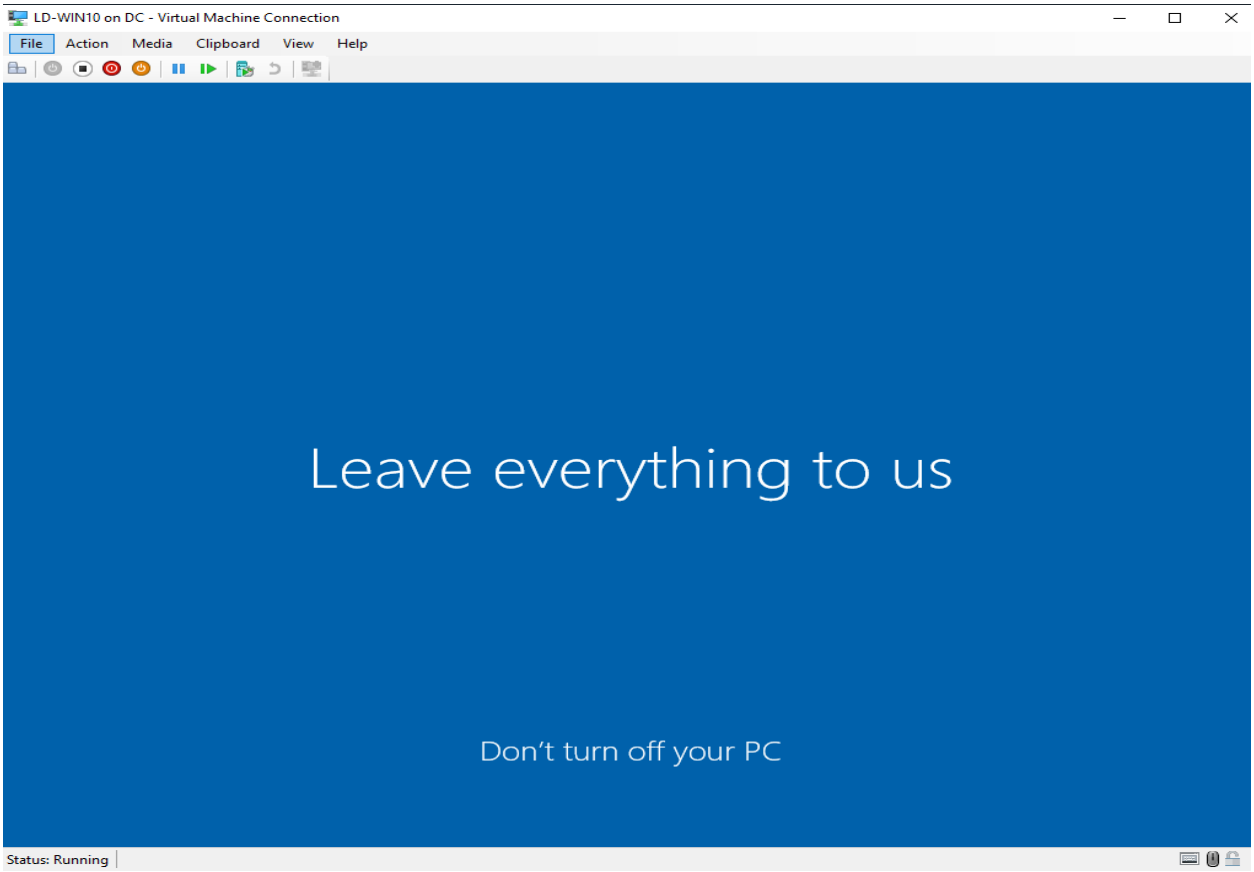

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Basics
Want to add a second keyboard layout?
Add layout
Skip
Status: Running

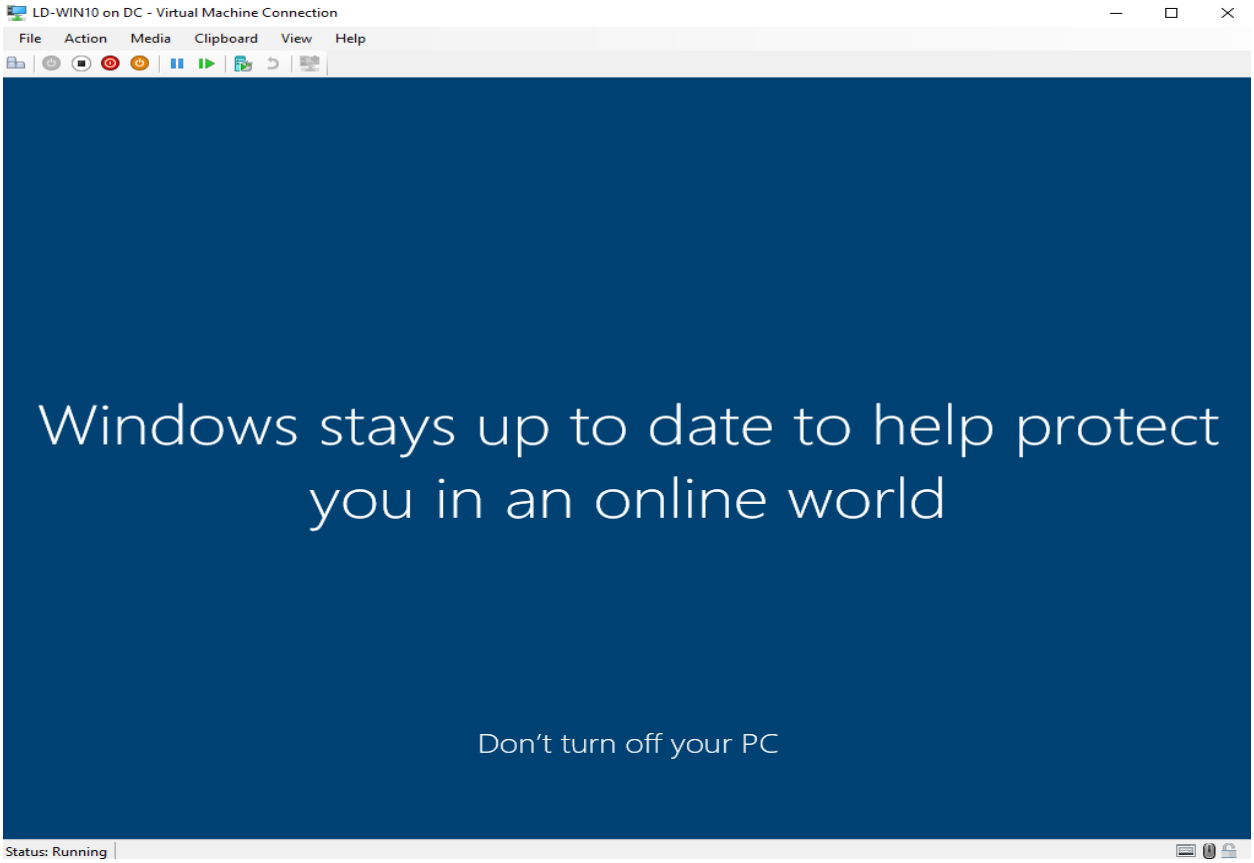

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Account
Sign in with Microsoft
Work or school account
someone@example.com
Which account should I use?
Sign in with the username and password you use with Office 365 or other business services from Microsoft.
Domain join instead
Privacy & cookies
Terms of use
Next
Status: Running

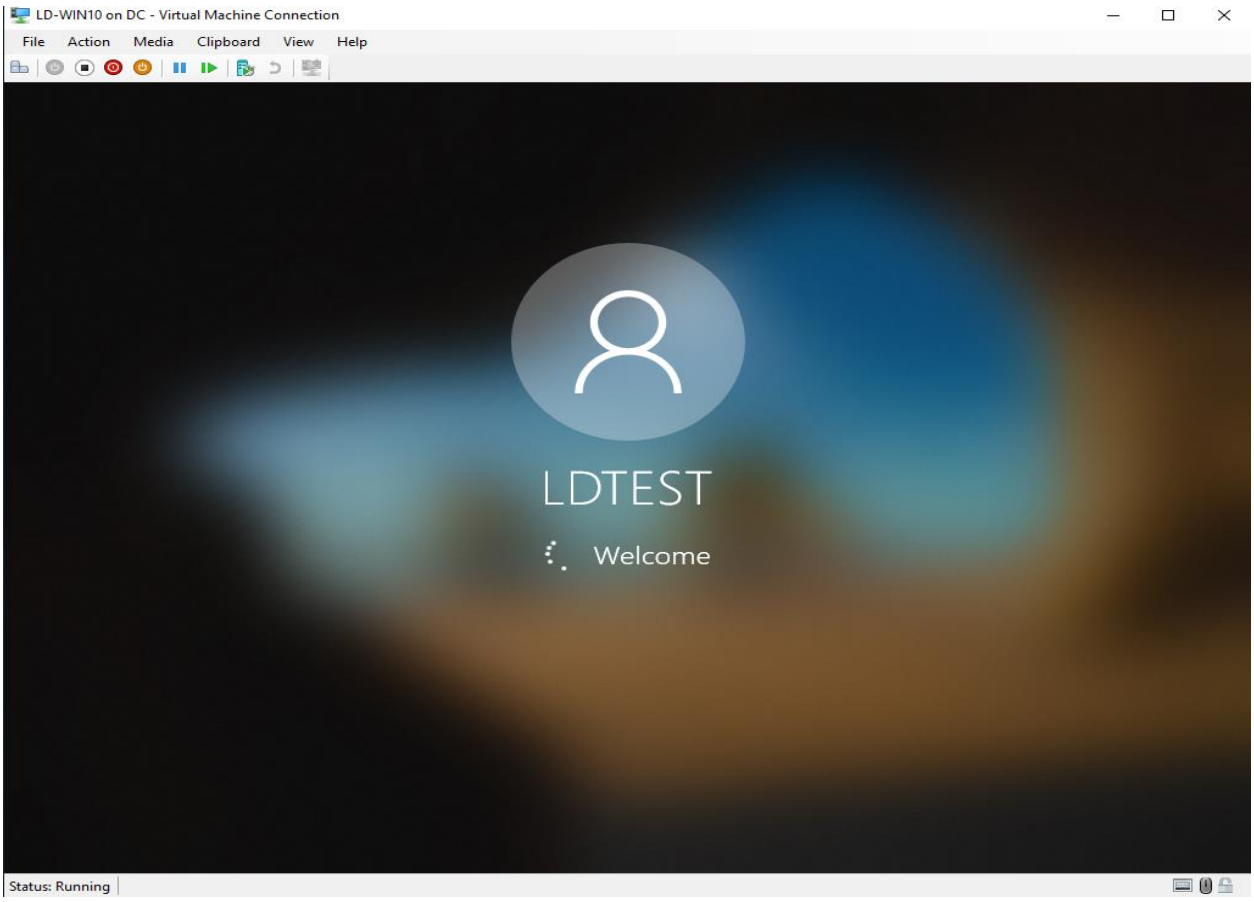

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Account
Who's going to use this PC?
What name do you want to use?
LDTEST
Or, even better, use an online account
Next
Status: Running

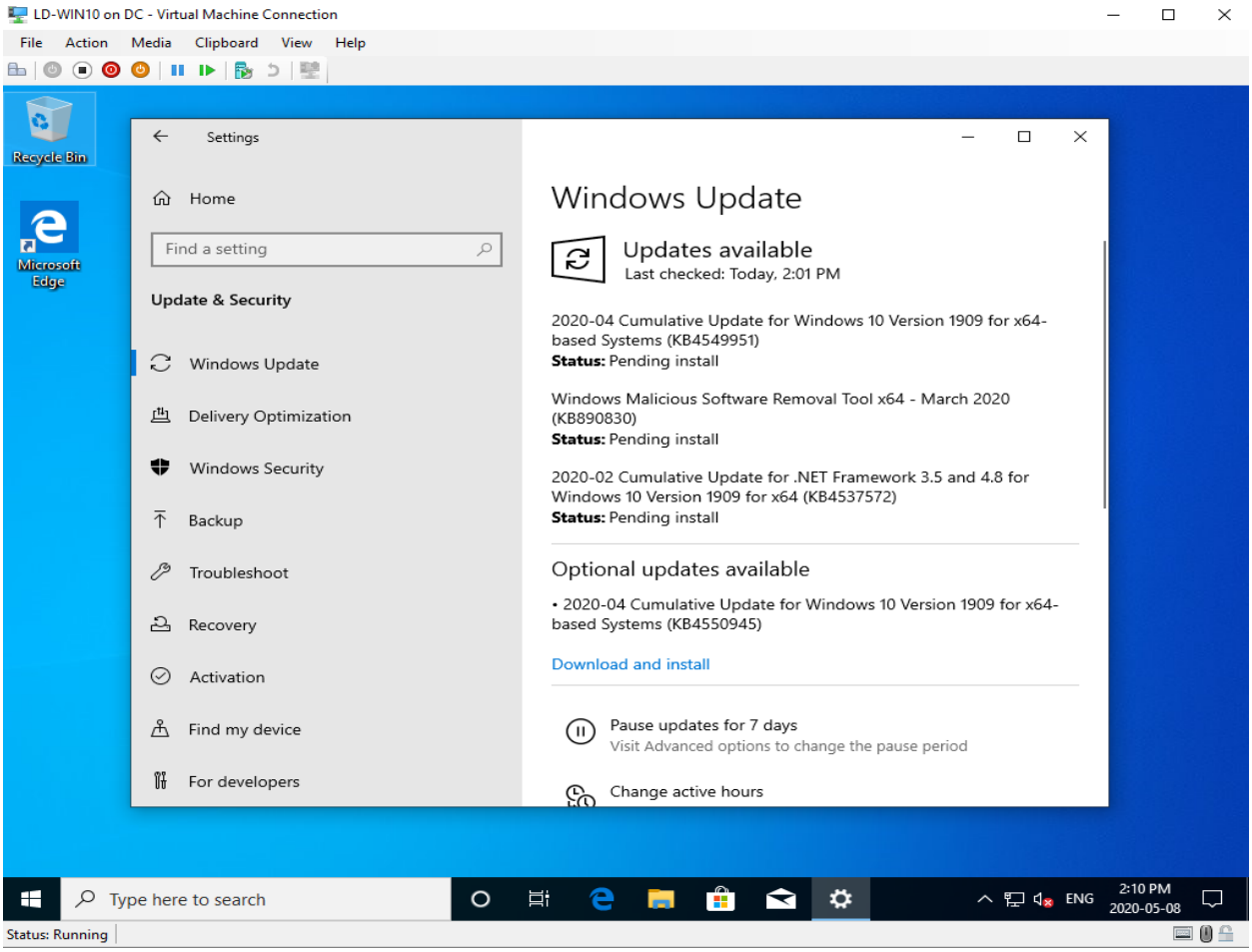

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Account
Create a super memorable password
Make sure to pick something you'll absolutely remember.
Or, even better, use an online account
Next
Status: Running

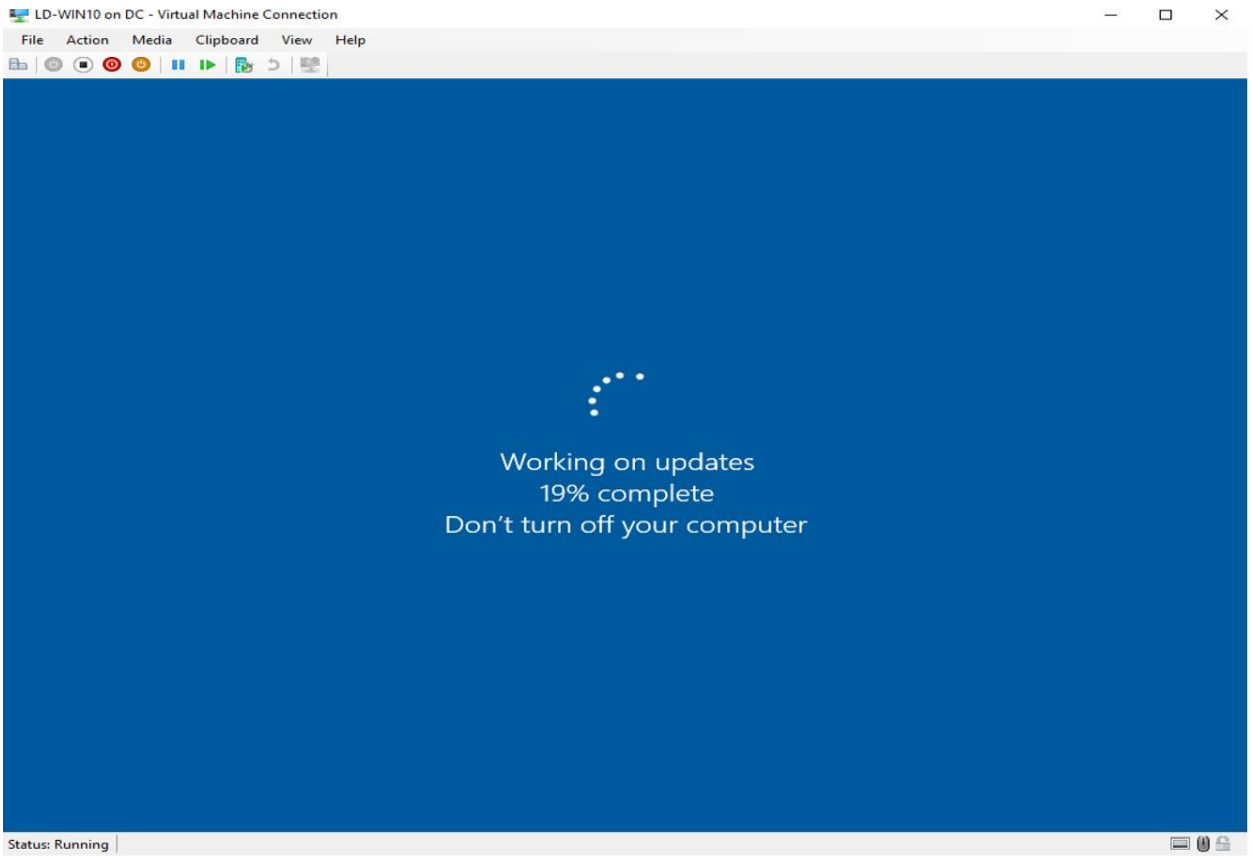

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Services
Get help from your digital assistant
Cortana helps you manage your time, get things done, and stay connected
To let Cortana provide personalized experiences and relevant suggestions, Microsoft collects and uses information including your location and location history, contacts, voice input, speech and handwriting patterns, typing history, search history, calendar details, content and communication history from Microsoft services, messages and apps. In Microsoft Edge, Cortana uses your browsing history. You can always change these choices in the Notebook and disable Cortana in Microsoft Edge.
Learn more
Decline
Accept
Status: Running

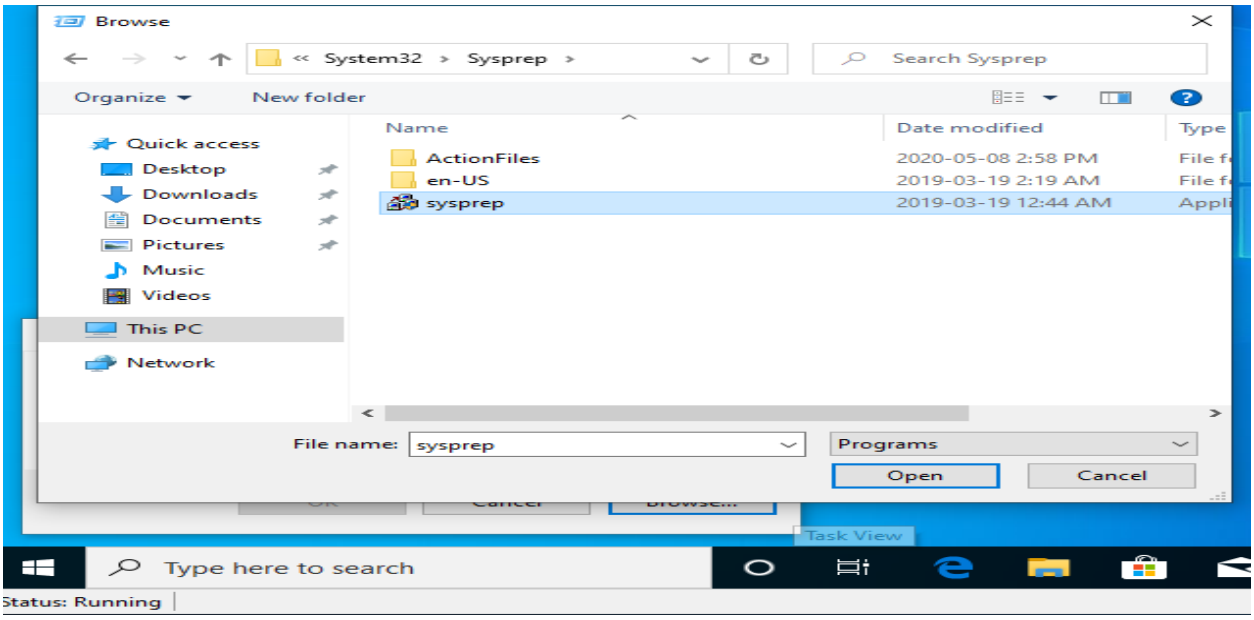

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Leave everything to us
Don't turn off your PC
Status: Running

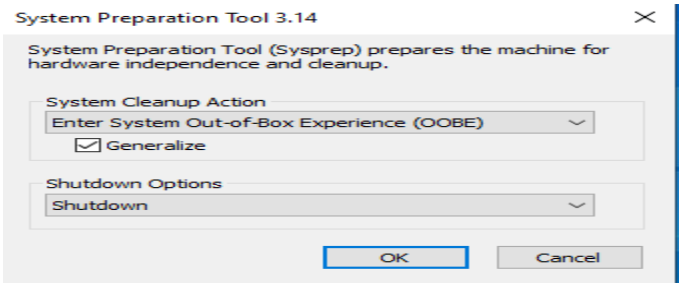

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Windows stays up to date to help protect you in an online world
Don't turn off your PC
Status: Running

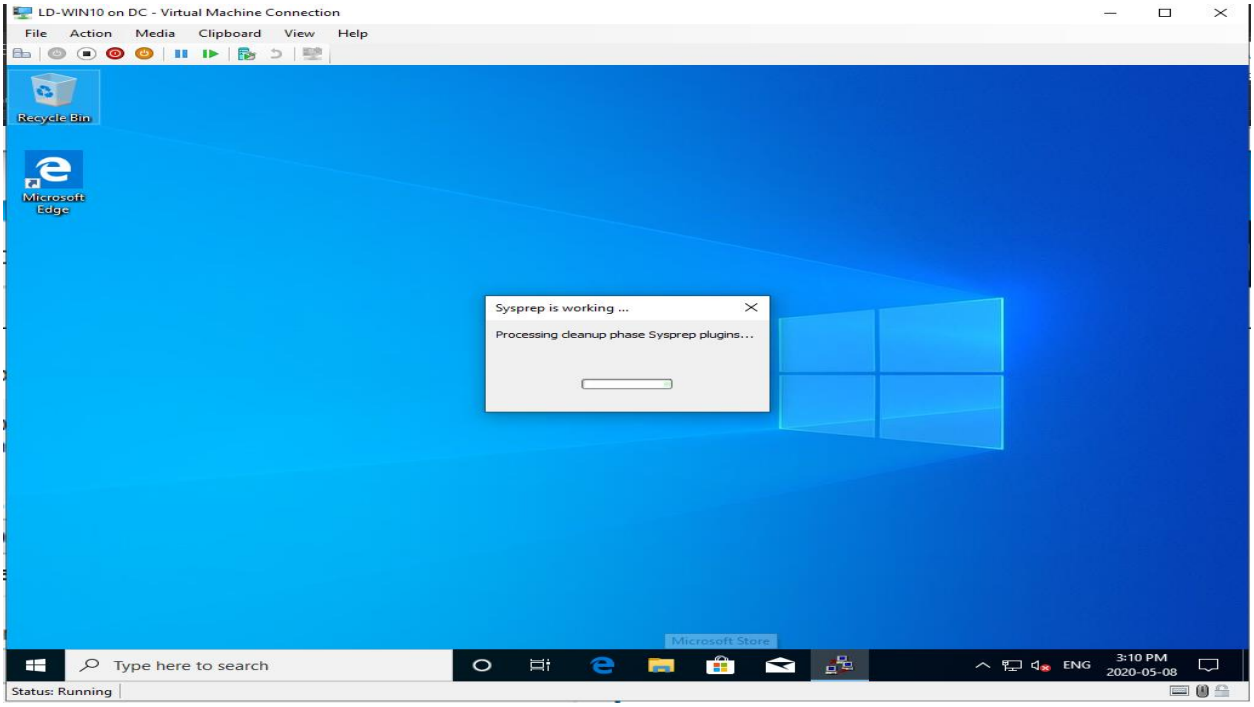

LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
LDTEST
Welcome
Status: Running


LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Recycle Bin
Microsoft Edge
Settings
Home
Find a setting
Update & Security
Windows Update
Delivery Optimization
Windows Security
Backup
Troubleshoot
Recovery
Activation
Find my device
For developers
Windows Update
Updates available
Last checked: Today, 2:01 PM
2020-04 Cumulative Update for Windows 10 Version 1909 for x64-based Systems (KB4549951)
Status: Pending install
Windows Malicious Software Removal Tool x64 - March 2020 (KB890830)
Status: Pending install
2020-02 Cumulative Update for .NET Framework 3.5 and 4.8 for Windows 10 Version 1909 for x64 (KB4537572)
Status: Pending install
Optional updates available
• 2020-04 Cumulative Update for Windows 10 Version 1909 for x64-based Systems (KB4550945)
Download and install
Pause updates for 7 days
Visit Advanced options to change the pause period
Change active hours
Type here to search
ENG
2:10 PM
2020-05-08
Status: Running


LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
Working on updates
19% complete
Don't turn off your computer
Status: Running

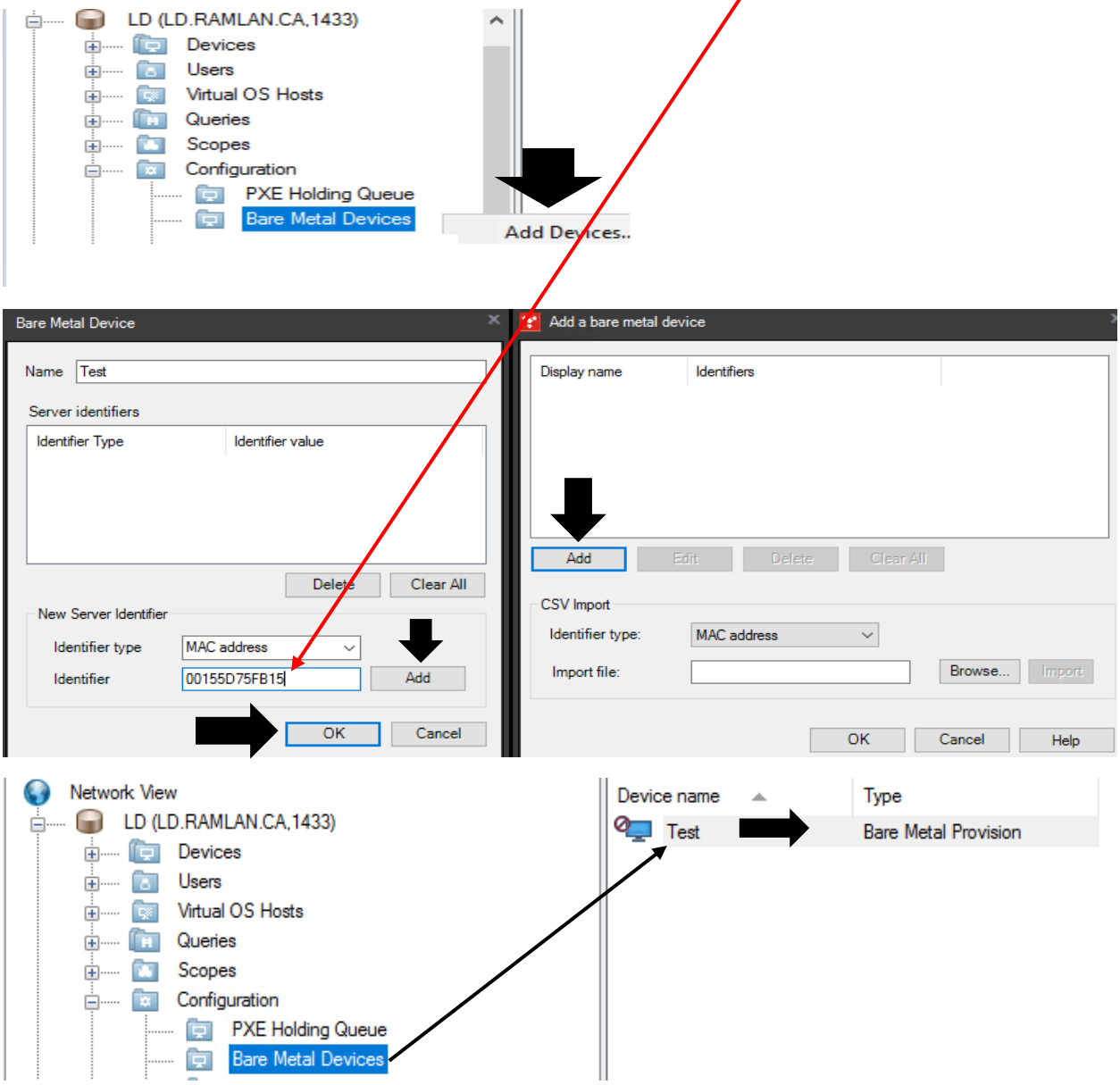




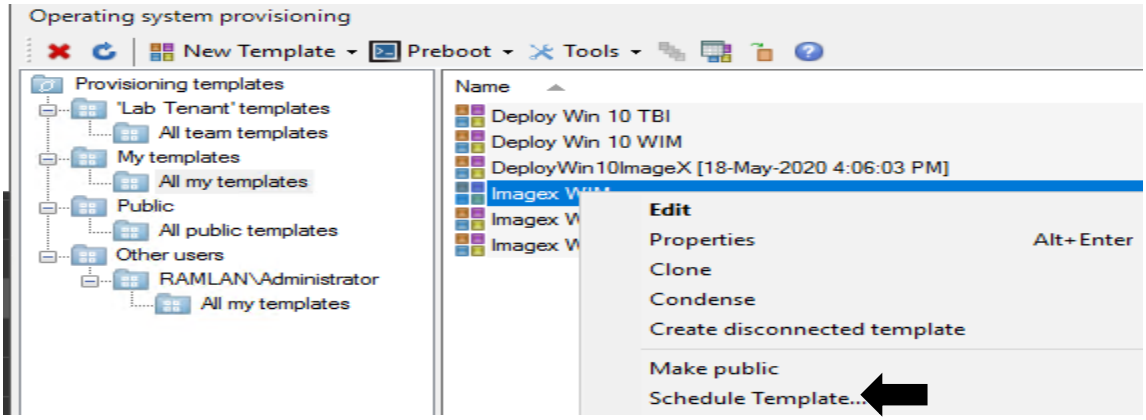


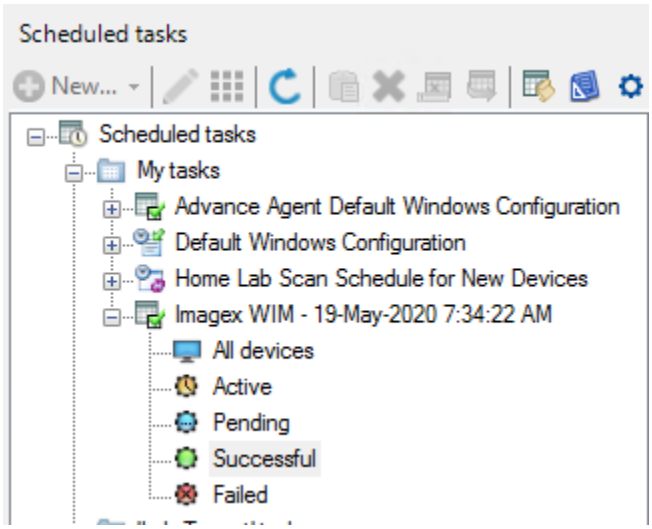
I have installed all the updates. Will not be removing any built-in store apps. Will not be installing Office 2019. So, the image is bare minimum. The system is not joined to domain and LanDesk agent is not installed.

4. Add Bare Metal Device entry. Now use the same Mac address (00155D75FB15) we used for building a VM earlier (**see above page 3 to page 17**)

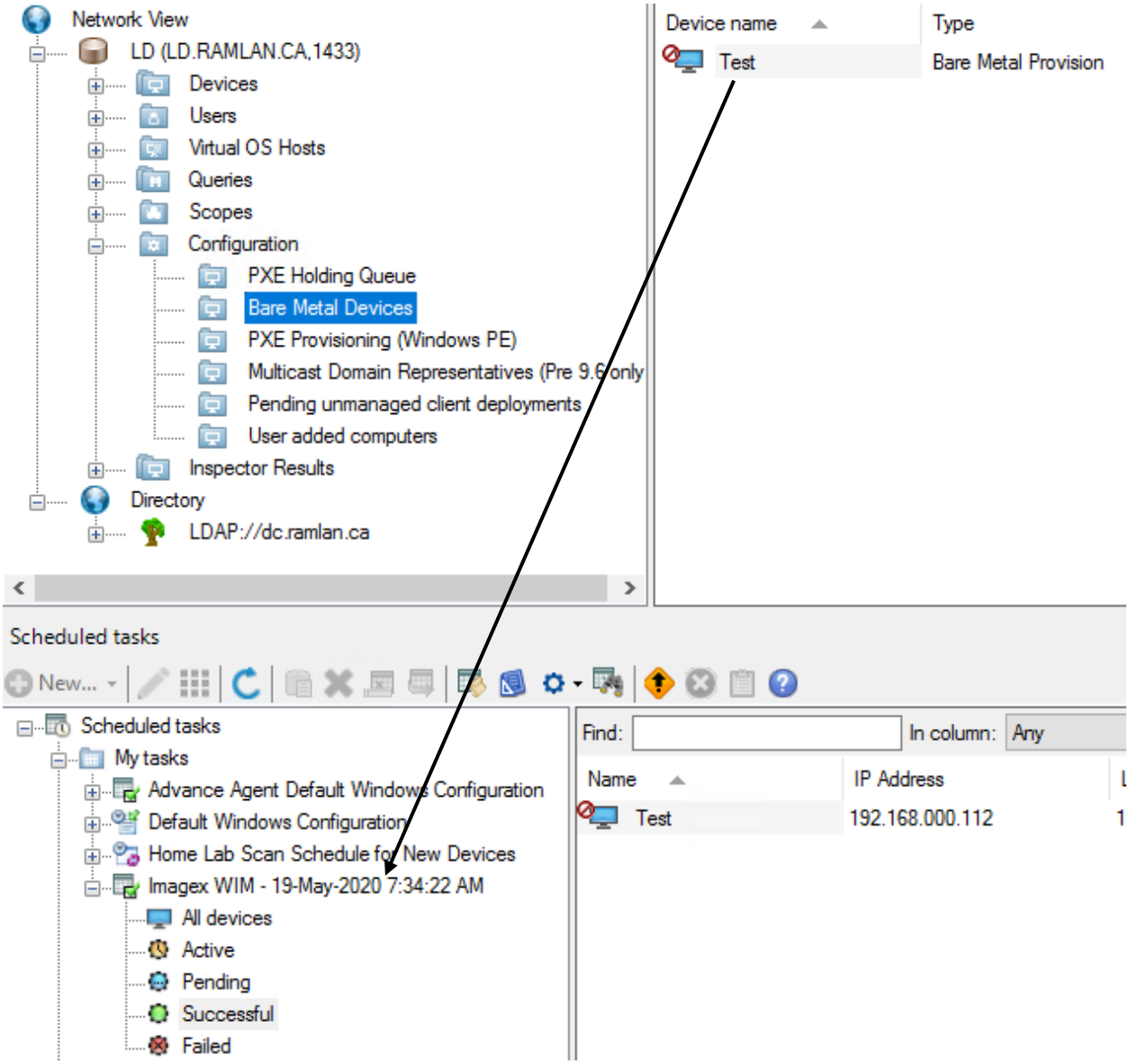


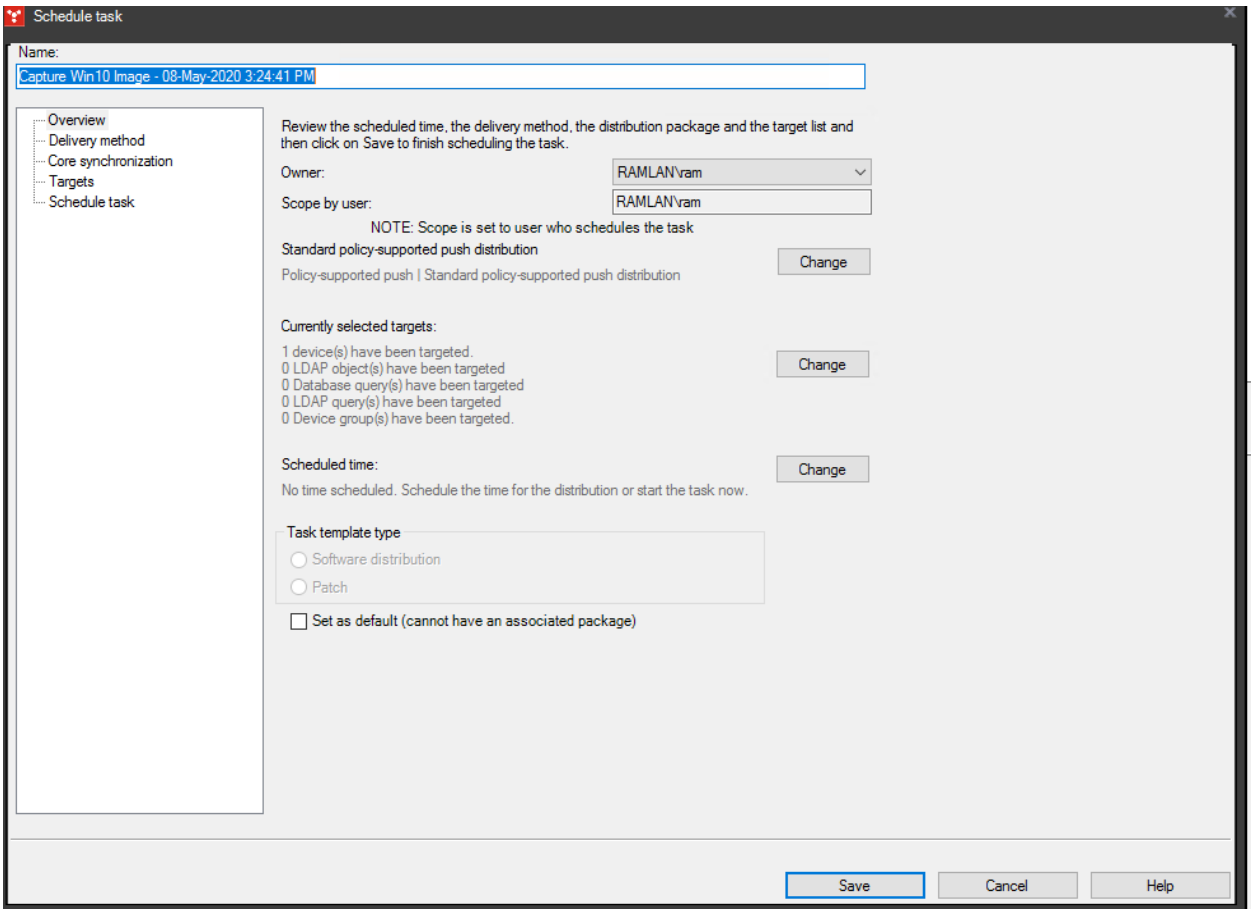
5. Schedule Task

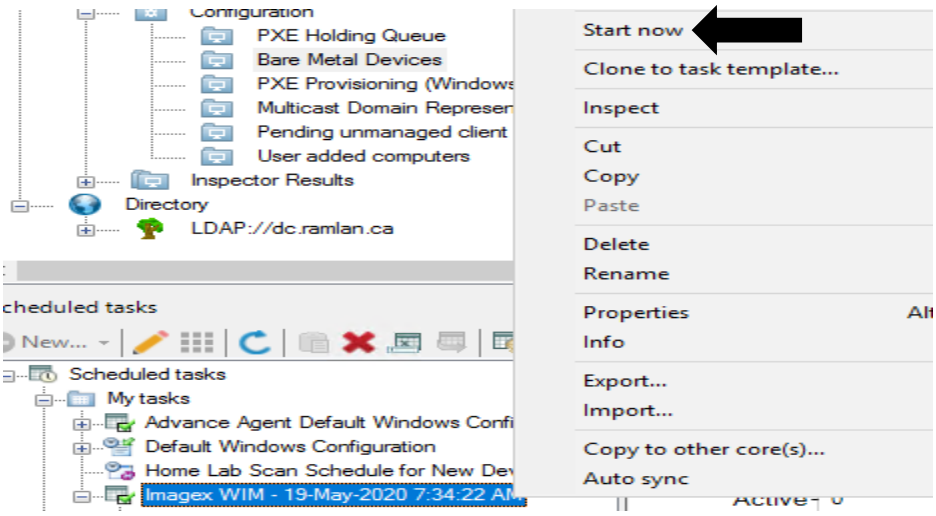


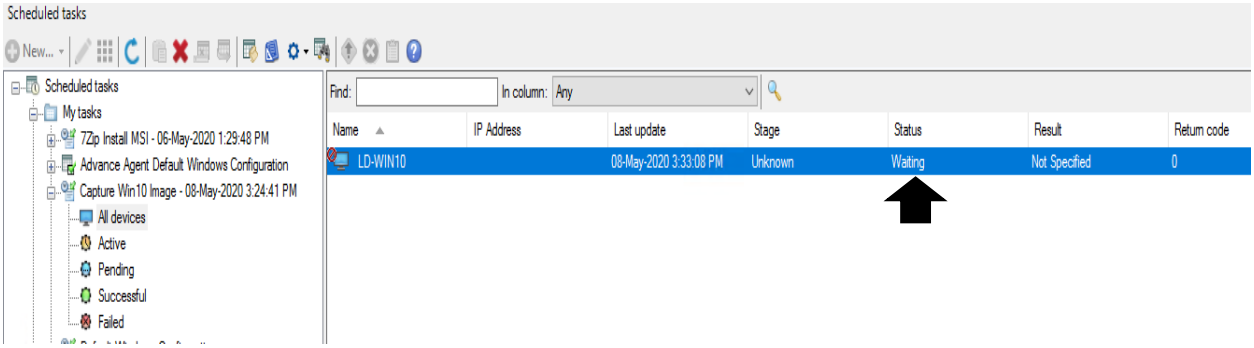


Drag and drop the Bare Metal device that was created previously.

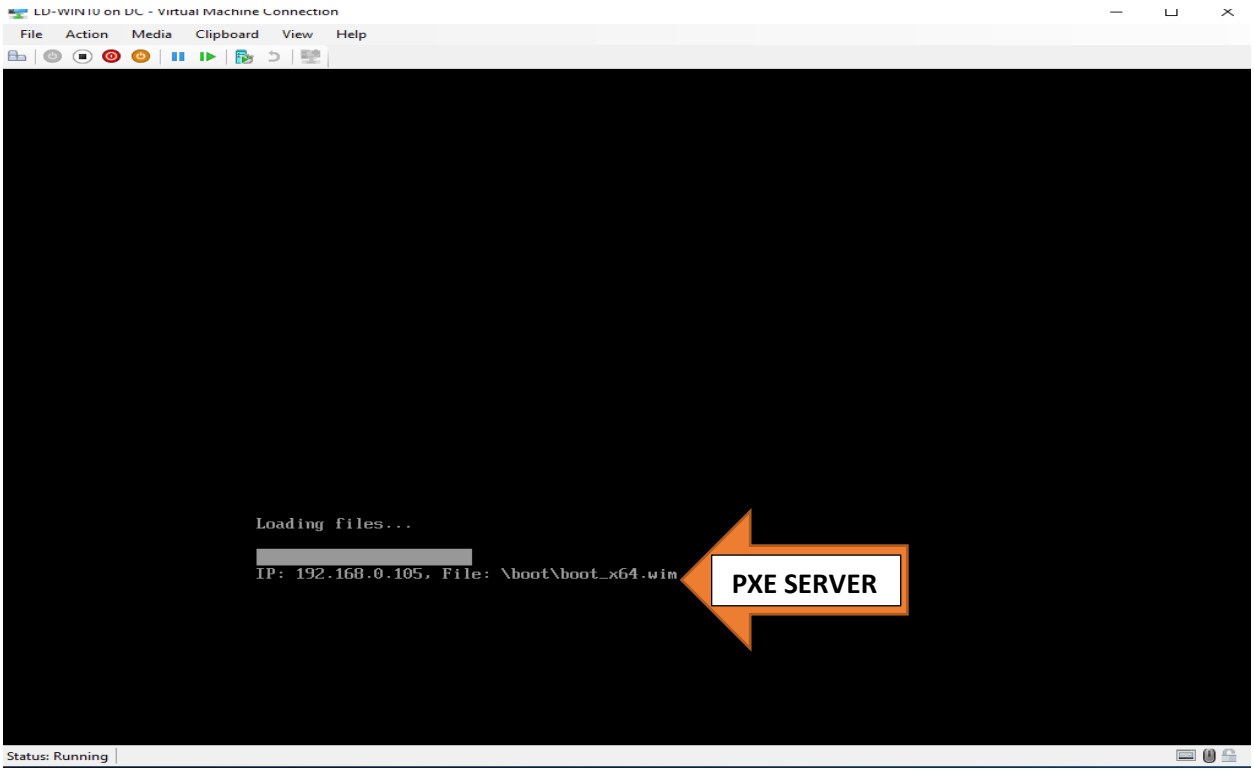


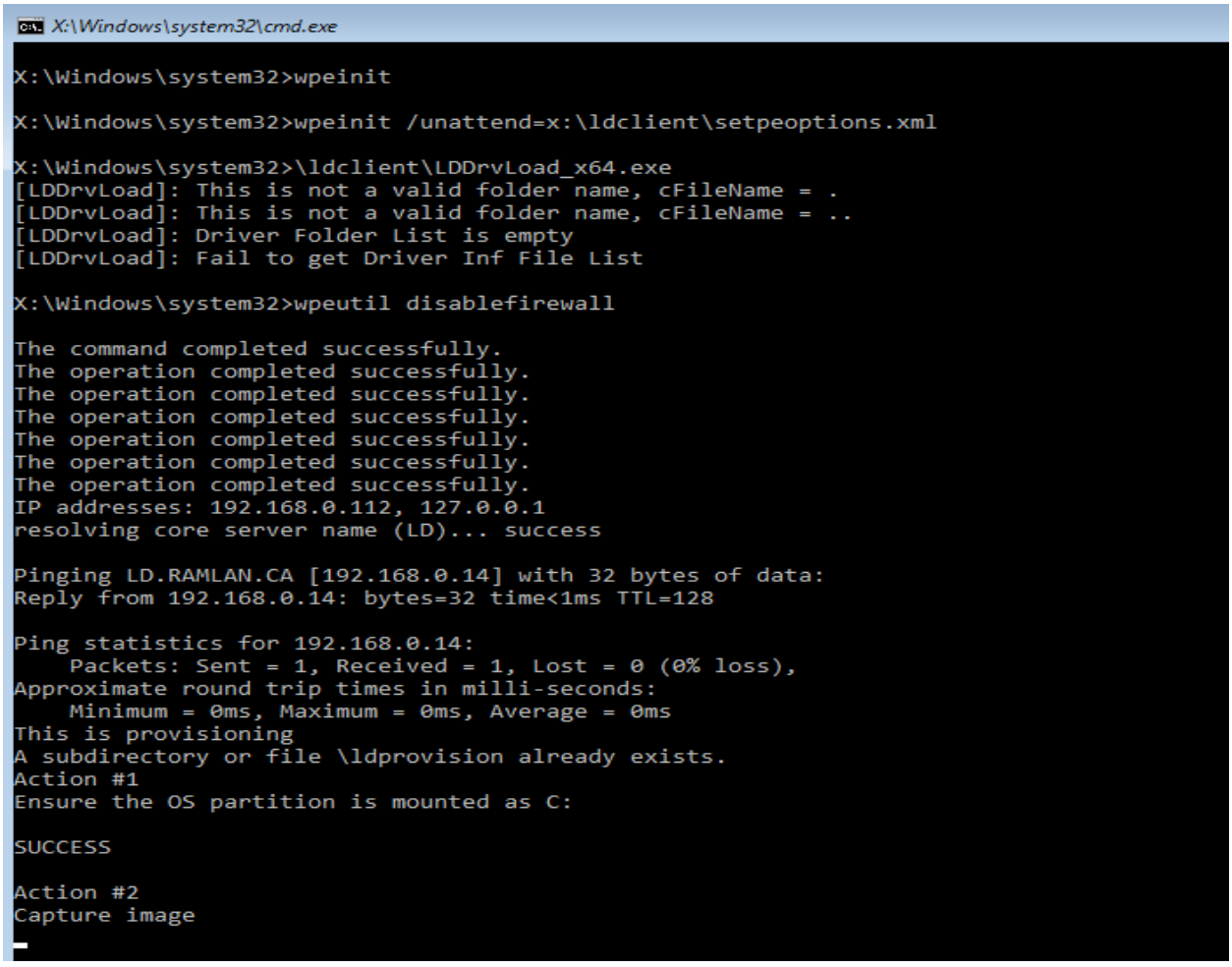

Schedule task
Name:
Capture Win10 Image - 08-May-2020 3:24:41 PM
Overview
Delivery method
Core synchronization
Targets
Schedule task
Review the scheduled time, the delivery method, the distribution package and the target list and then click on Save to finish scheduling the task.
Owner:
RAMLAN\vram
Scope by user:
RAMLAN\vram
NOTE: Scope is set to user who schedules the task
Standard policy-supported push distribution
Policy-supported push | Standard policy-supported push distribution
Change
Currently selected targets:
1 device(s) have been targeted.
0 LDAP object(s) have been targeted
0 Database query(s) have been targeted
0 LDAP query(s) have been targeted
0 Device group(s) have been targeted.
Change
Scheduled time:
No time scheduled. Schedule the time for the distribution or start the task now.
Change
Task template type
Software distribution
Patch
Set as default (cannot have an associated package)
Save
Cancel
Help

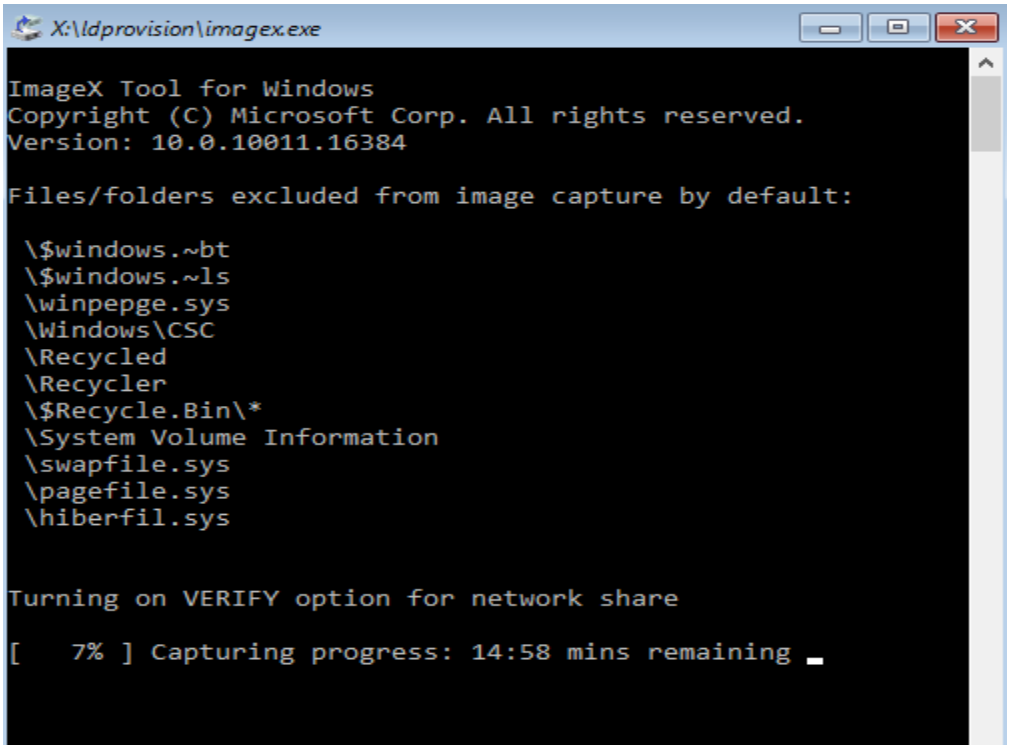

PXE Holding Queue
Bare Metal Devices
PXE Provisioning (Windows
Multicast Domain Represer
Pending unmanaged client
User added computers
Inspector Results
Directory
LDAP://dc.ramlan.ca
Start now
Clone to task template...
Inspect
Cut
Copy
Paste
Delete
Rename
Properties
Info
Export...
Import...
Copy to other core(s)...
Auto sync
New...
Scheduled tasks
My tasks
Advance Agent Default Windows Confi
Default Windows Configuration
Home Lab Scan Schedule for New Dev
Imagex WIM - 19-May-2020 7:34:22 AM

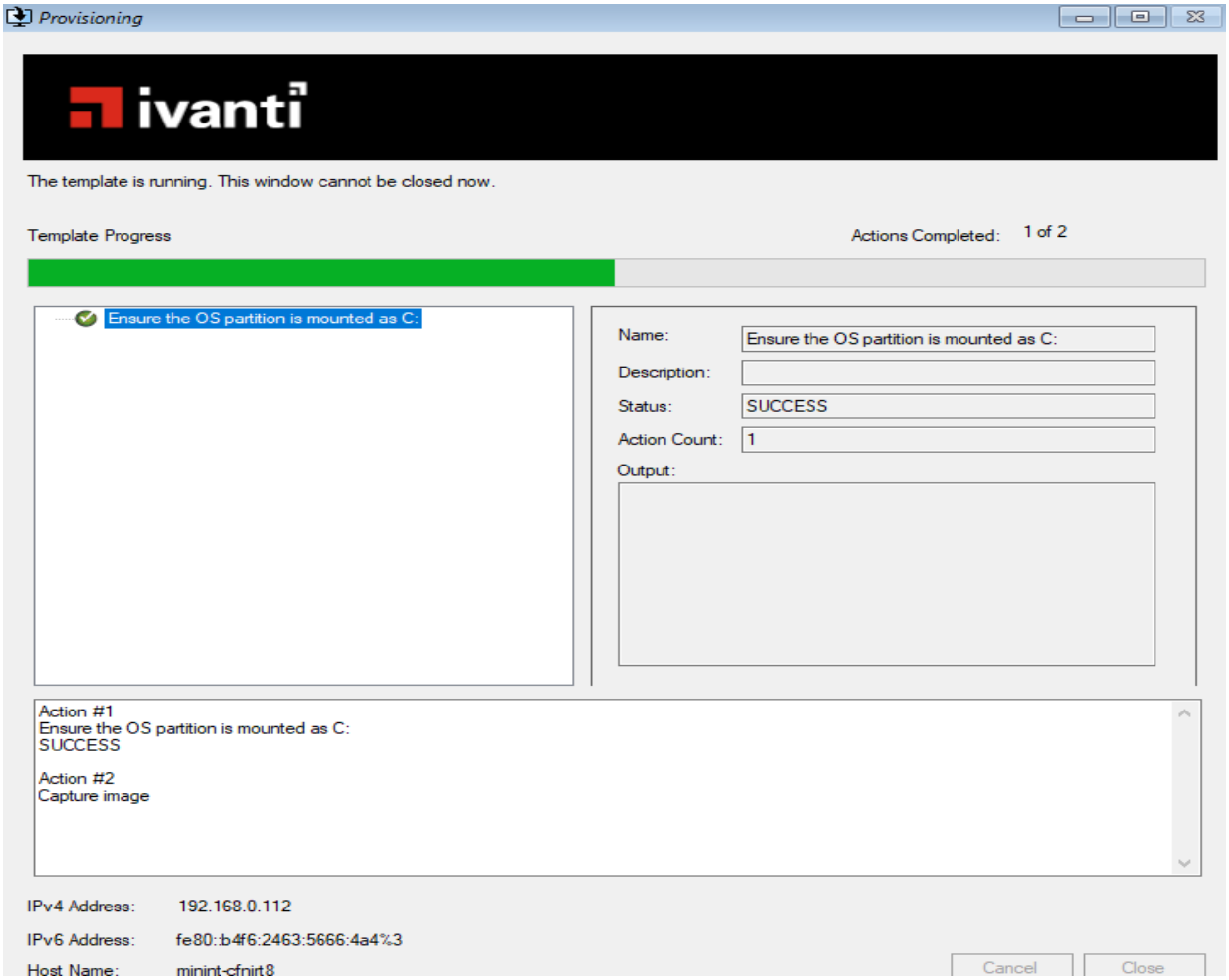

Scheduled tasks
New...
Scheduled tasks
My tasks
7Zip Install MSI - 06-May-2020 1:29:48 PM
Advance Agent Default Windows Configuration
Capture Win10 Image - 08-May-2020 3:24:41 PM
All devices
Active
Pending
Successful
Failed
Find:
In column:
Any
Name
IP Address
Last update
Stage
Status
Result
Return code
LD-WIN10
08-May-2020 3:33:08 PM
Unknown
Waiting
Not Specified
0

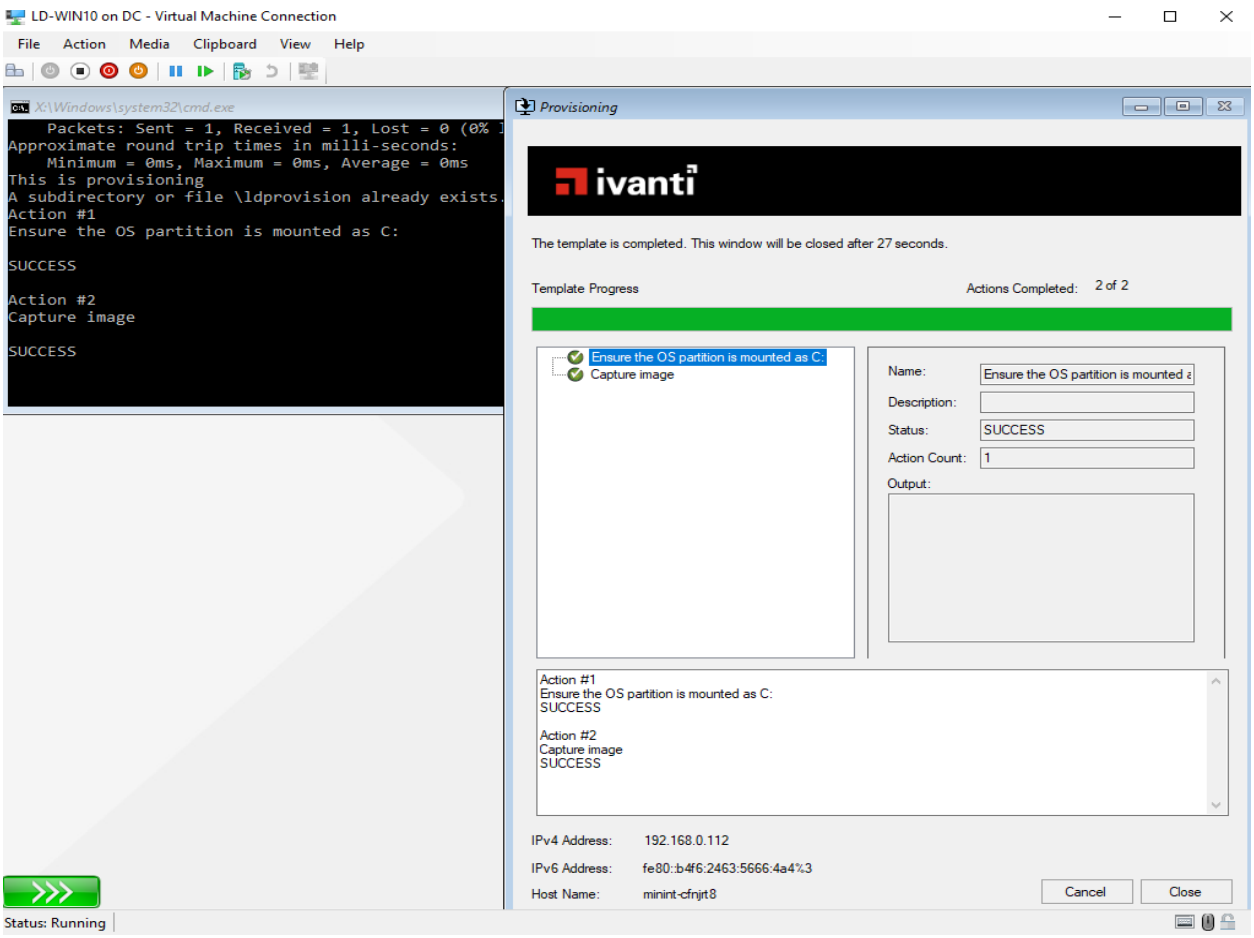
6. Network Boot – F12

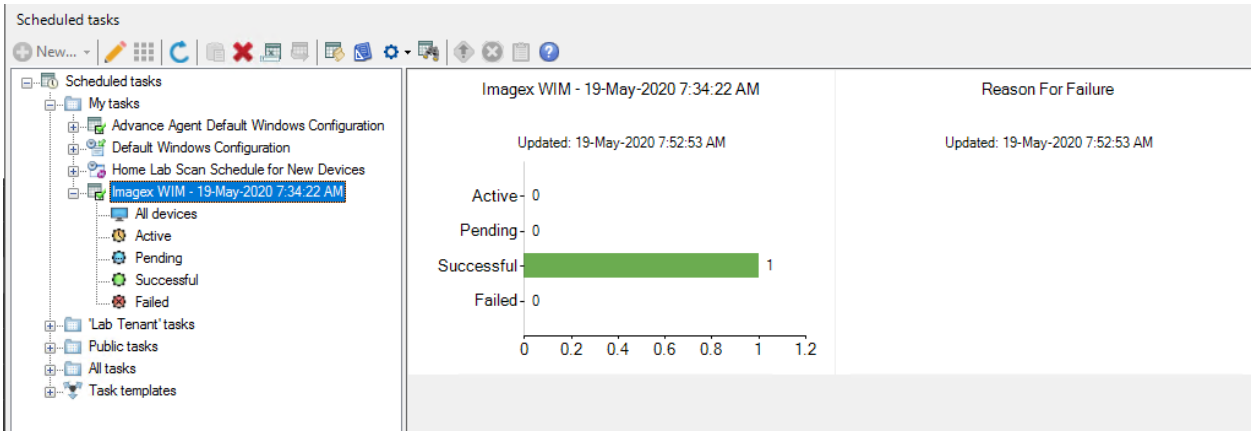


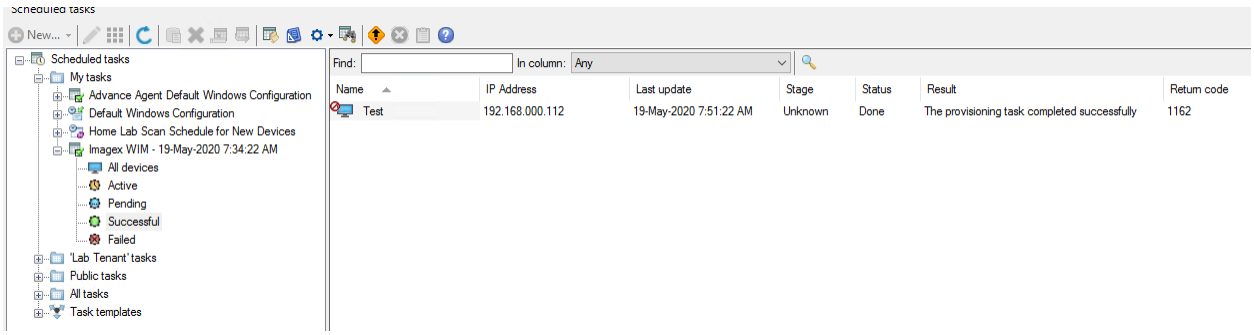



X:\ldprovision\imagex.exe
ImageX Tool for Windows
Copyright (C) Microsoft Corp. All rights reserved.
Version: 10.0.10011.16384
Files/folders excluded from image capture by default:
\$windows.~bt
\$windows.~ls
\winpepge.sys
\Windows\CSC
\Recycled
\Recycler
\$Recycle.Bin*
\System Volume Information
\swapfile.sys
\pagefile.sys
\hiberfil.sys
Turning on VERIFY option for network share
[7%] Capturing progress: 14:58 mins remaining

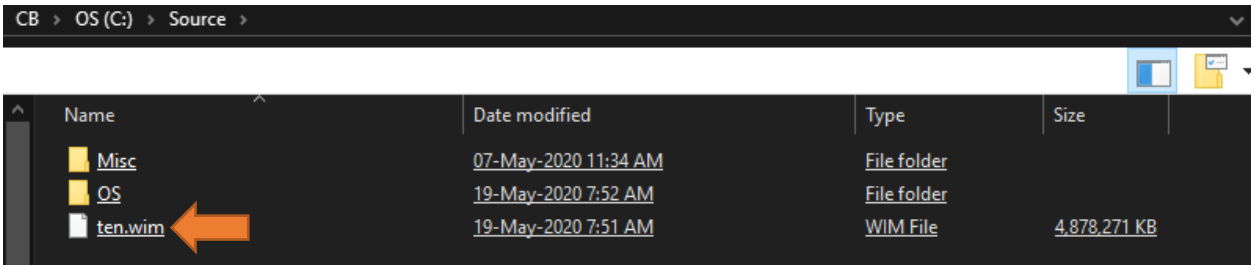

Provisioning
ivanti
The template is running. This window cannot be closed now.
Template Progress
Actions Completed: 1 of 2
Ensure the OS partition is mounted as C:
Name: Ensure the OS partition is mounted as C:
Description:
Status: SUCCESS
Action Count: 1
Output:
Action #1
Ensure the OS partition is mounted as C:
SUCCESS
Action #2
Capture image
IPv4 Address: 192.168.0.112
IPv6 Address: fe80::b4f6:2463:5666:4a4%3
Host Name: minint-cfnirt8
Cancel
Close


LD-WIN10 on DC - Virtual Machine Connection
File Action Media Clipboard View Help
X:\Windows\system32\cmd.exe
Packets: Sent = 1, Received = 1, Lost = 0 (0%
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
This is provisioning
A subdirectory or file \ldprovision already exists.
Action #1
Ensure the OS partition is mounted as C:
SUCCESS
Action #2
Capture image
SUCCESS
Provisioning
ivanti
The template is completed. This window will be closed after 27 seconds.
Template Progress
Actions Completed: 2 of 2
Ensure the OS partition is mounted as C:
Capture image
Name: Ensure the OS partition is mounted a
Description:
Status: SUCCESS
Action Count: 1
Output:
Action #1
Ensure the OS partition is mounted as C:
SUCCESS
Action #2
Capture image
SUCCESS
IPv4 Address: 192.168.0.112
IPv6 Address: fe80::b4f6:2463:5666:4a4%3
Host Name: minint-cfnjrt8
Cancel
Close
Status: Running

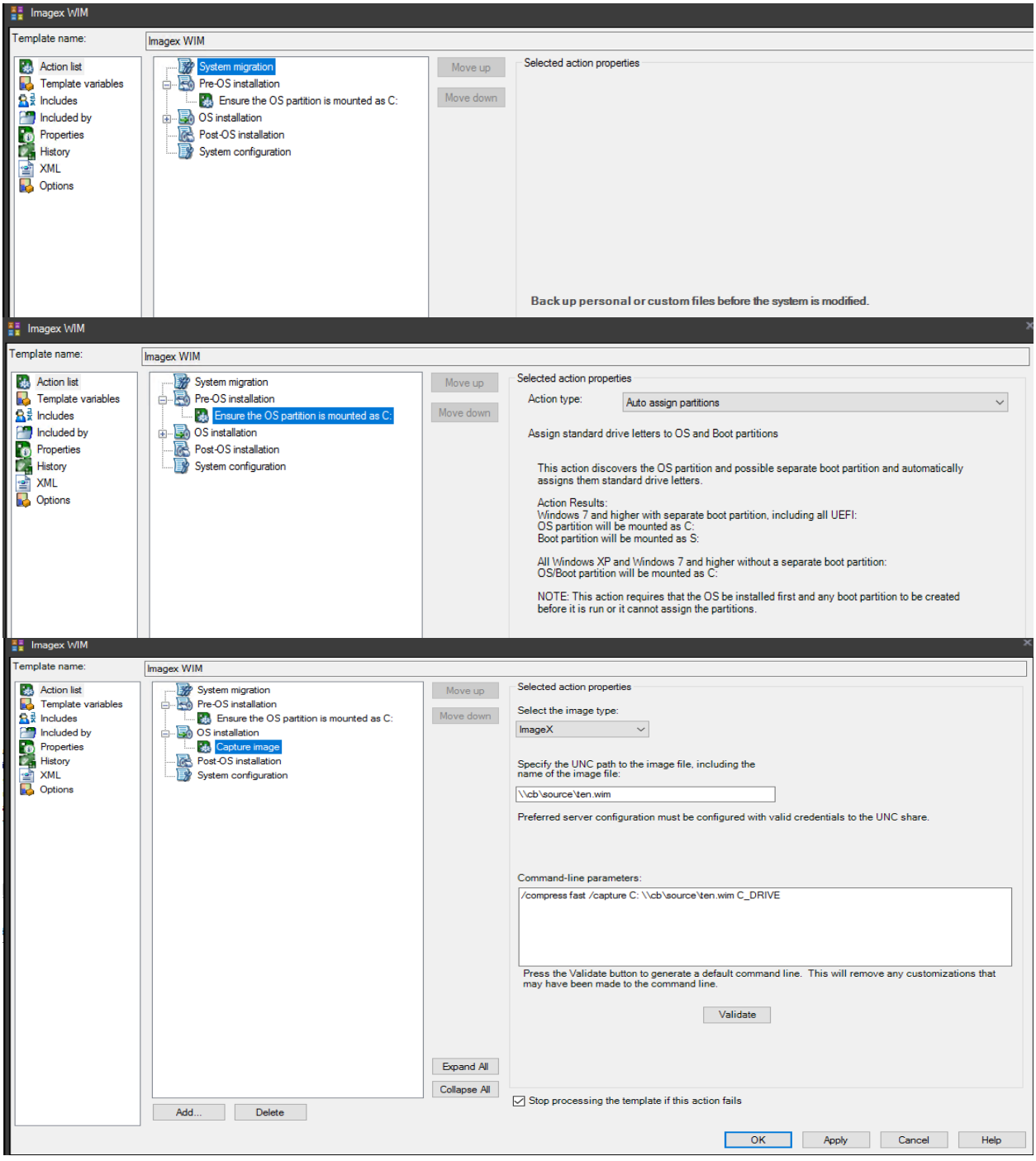

Scheduled tasks
New...
Scheduled tasks
My tasks
Advance Agent Default Windows Configuration
Default Windows Configuration
Home Lab Scan Schedule for New Devices
Imagex WIM - 19-May-2020 7:34:22 AM
All devices
Active
Pending
Successful
Failed
'Lab Tenant' tasks
Public tasks
All tasks
Task templates
Imagex WIM - 19-May-2020 7:34:22 AM
Updated: 19-May-2020 7:52:53 AM
Active 0
Pending 0
Successful 1
Failed 0
0 0.2 0.4 0.6 0.8 1 1.2
Reason For Failure
Updated: 19-May-2020 7:52:53 AM

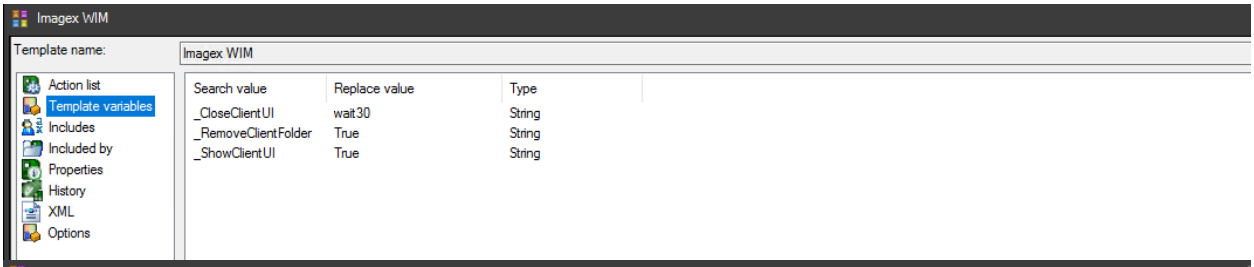

Scheduled tasks
New...
Scheduled tasks
My tasks
Advance Agent Default Windows Configuration
Default Windows Configuration
Home Lab Scan Schedule for New Devices
Imagex WIM - 19-May-2020 7:34:22 AM
All devices
Active
Pending
Successful
Failed
'Lab Tenant' tasks
Public tasks
All tasks
Task templates
Find:
In column: Any
Name
IP Address
Last update
Stage
Status
Result
Return code
Test
192.168.000.112
19-May-2020 7:51:22 AM
Unknown
Done
The provisioning task completed successfully
1162

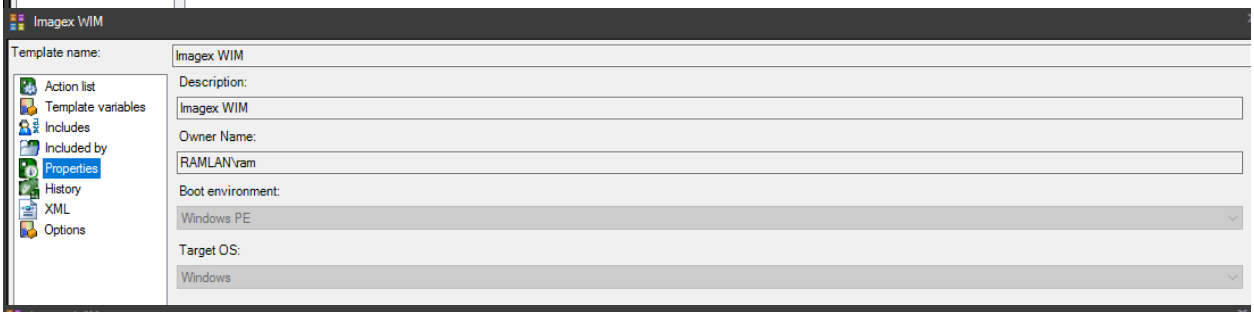
The captured imaged is saved on the Preferred Server (CB.RAMLAN.CA)

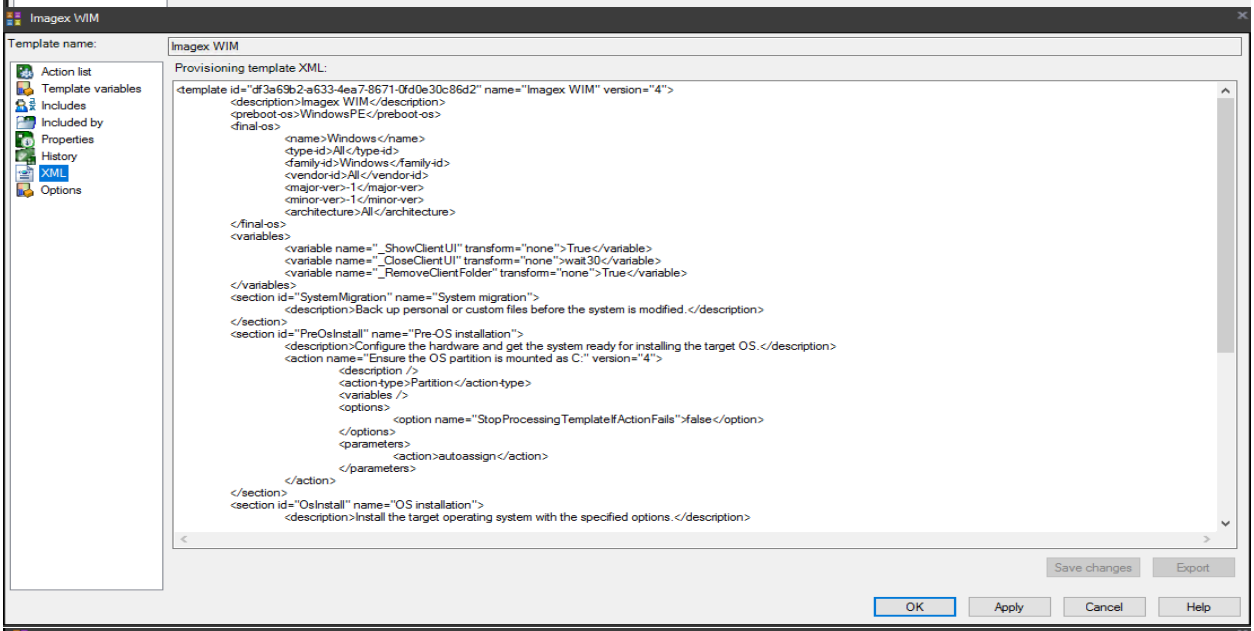


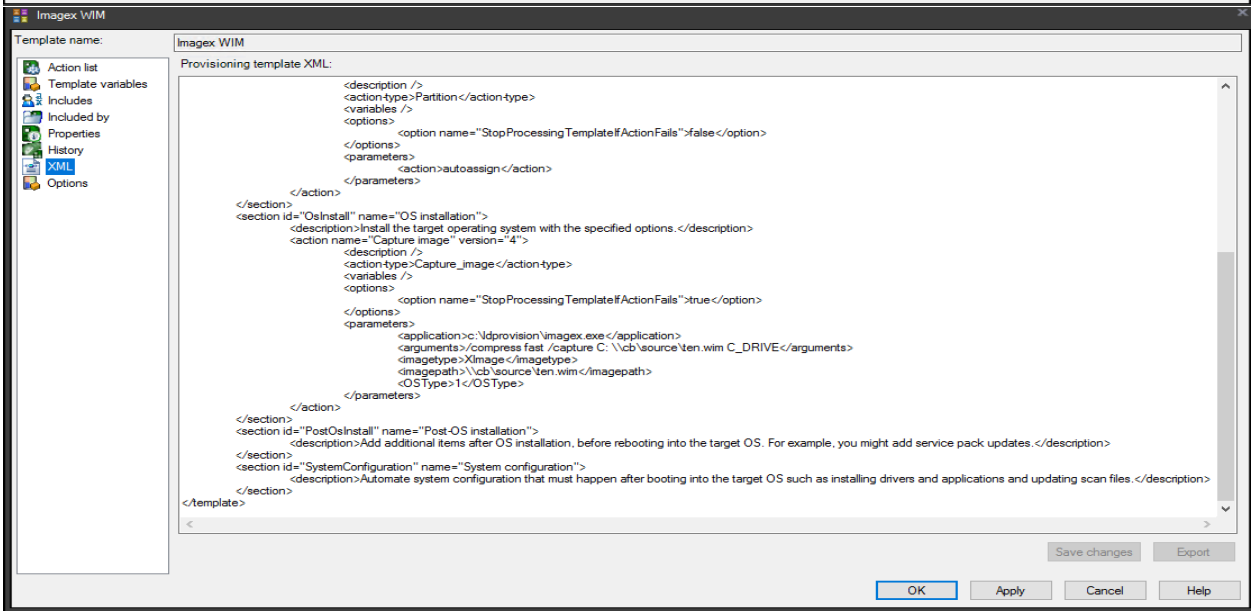
Here are the task sequence details

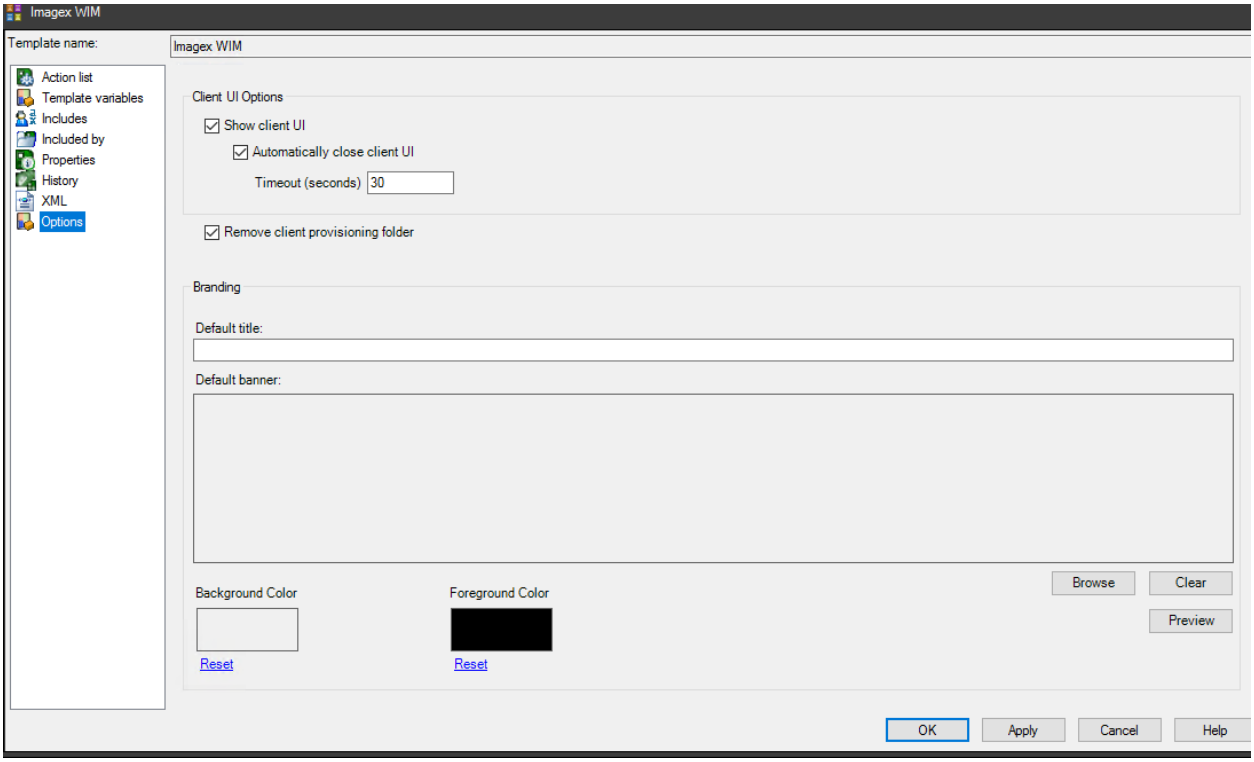



Imagex WIM
Template name:
Imagex WIM
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Search value
Replace value
Type
_CloseClientUI
wait30
String
_RemoveClientFolder
True
String
_ShowClientUI
True
String


Imagex WIM
Template name:
Imagex WIM
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Description:
Imagex WIM
Owner Name:
RAMLAN\ram
Boot environment:
Windows PE
Target OS:
Windows


Imagex WIM
Template name:
Imagex WIM
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Provisioning template XML:
<template id="df3a69b2-a633-4ea7-8671-0fd0e30c86d2" name="Imagex WIM" version="4">
<description>Imagex WIM</description>
<preboot-os>WindowsPE</preboot-os>
<final-os>
<name>Windows</name>
<type-id>All</type-id>
<family-id>Windows</family-id>
<vendor-id>All</vendor-id>
<major-ver>-1</major-ver>
<minor-ver>-1</minor-ver>
<architecture>All</architecture>
</final-os>
<variables>
<variable name="_ShowClientUI" transform="none">True</variable>
<variable name="_CloseClientUI" transform="none">wait30</variable>
<variable name="_RemoveClientFolder" transform="none">True</variable>
</variables>
<section id="SystemMigration" name="System migration">
<description>Back up personal or custom files before the system is modified.</description>
</section>
<section id="PreOsInstall" name="Pre-OS installation">
<description>Configure the hardware and get the system ready for installing the target OS.</description>
<action name="Ensure the OS partition is mounted as C:" version="4">
<description />
<action-type>Partition</action-type>
<variables />
<options>
<option name="StopProcessingTemplateIfActionFails">false</option>
</options>
<parameters>
<action>autoassign</action>
</parameters>
</action>
</section>
<section id="OsInstall" name="OS installation">
<description>Install the target operating system with the specified options.</description>
Save changes
Export
OK
Apply
Cancel
Help


Imagex WIM
Template name:
Imagex WIM
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Provisioning template XML:
<description />
<action-type>Partition</action-type>
<variables />
<options>
<option name="StopProcessingTemplateIfActionFails">false</option>
</options>
<parameters>
<action>autoassign</action>
</parameters>
</action>
</section>
<section id="OsInstall" name="OS installation">
<description>Install the target operating system with the specified options.</description>
<action name="Capture image" version="4">
<description />
<action-type>Capture_image</action-type>
<variables />
<options>
<option name="StopProcessingTemplateIfActionFails">true</option>
</options>
<parameters>
<application>c:\ldprovision\imagex.exe</application>
<arguments>/compress fast /capture C: \\cb\source\ten.wim C_DRIVE</arguments>
<imagetype>XImage</imagetype>
<imagepath>\\cb\source\ten.wim</imagepath>
<OSType>1</OSType>
</parameters>
</action>
</section>
<section id="PostOsInstall" name="Post-OS installation">
<description>Add additional items after OS installation, before rebooting into the target OS. For example, you might add service pack updates.</description>
</section>
<section id="SystemConfiguration" name="System configuration">
<description>Automate system configuration that must happen after booting into the target OS such as installing drivers and applications and updating scan files.</description>
</section>
</template>
Save changes
Export
OK
Apply
Cancel
Help



This concludes build and capture Windows 10 Enterprise version.

Deploying Windows 10 - WIM

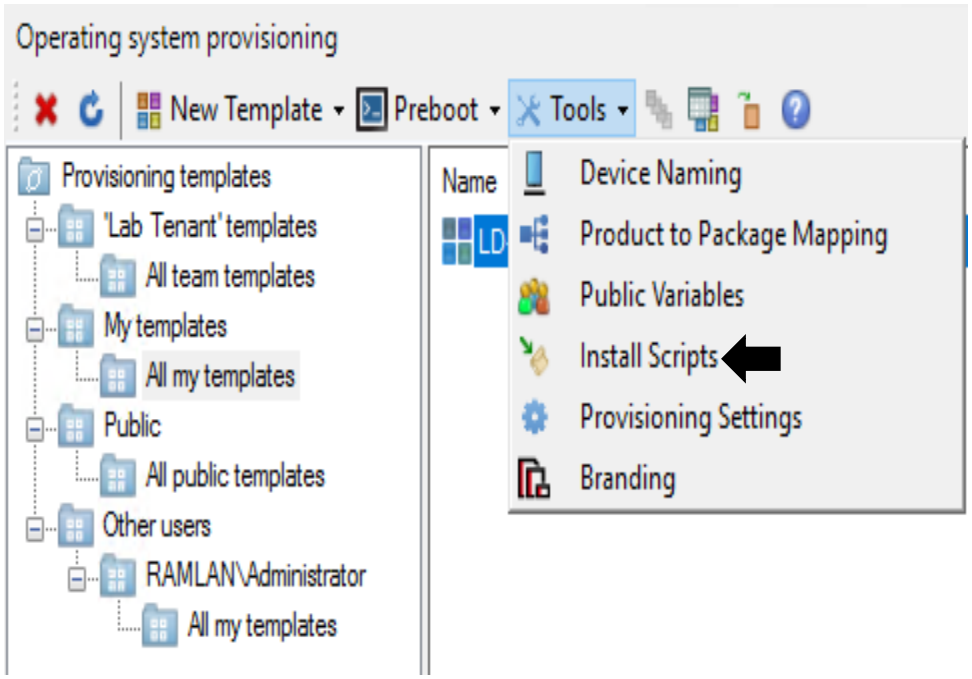
I will be using below link as reference for writing this blog.

https://forums.ivanti.com/s/article/How-to-Deploy-a-Windows-10-Image-with-ImageX#jive_content_id_Capture_Windows_10_Image

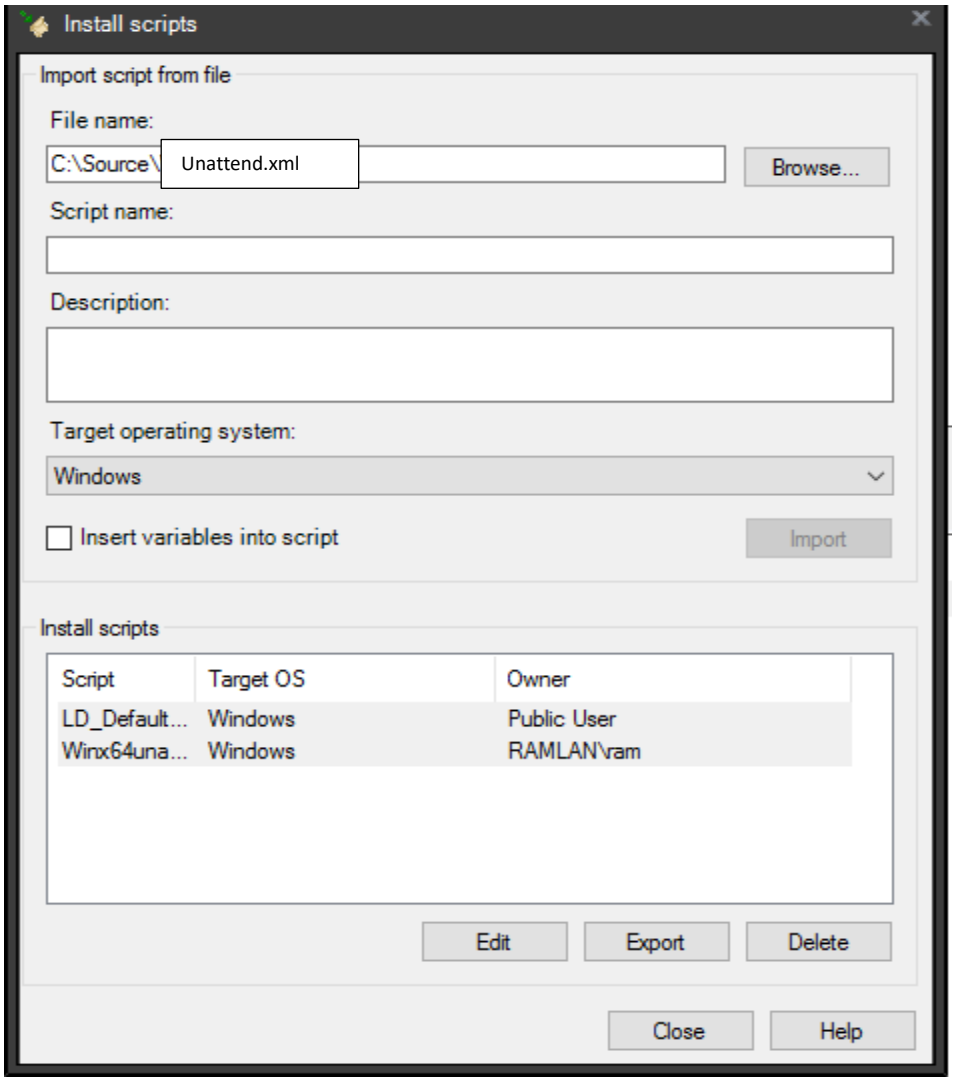
Overview – Deploying Windows 10

- Capture the Windows 10 image
- Import the UNATTEND.XML file
- Import the Provisioning Template
- Modify the Imported Provisioning Template
- Enter the Variables
- Add Drivers for Hardware Independent Imaging (HII)
- Add Devices to be Imaged
- Add the Image Server as a Preferred Server
- Schedule the Template and start the Task
- Network Boot the Devices and Wait for the Task to Complete
- Alternate Method to Start a Provisioning Template on a Computer

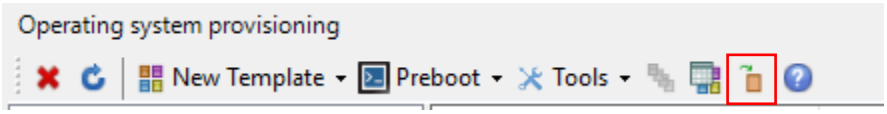
1. Capture Windows 10 Image – See above (**Page 1 to Page 26**)
2. Import UNATTEND.XML file – Download the file from above link (the file is at the bottom of the page)



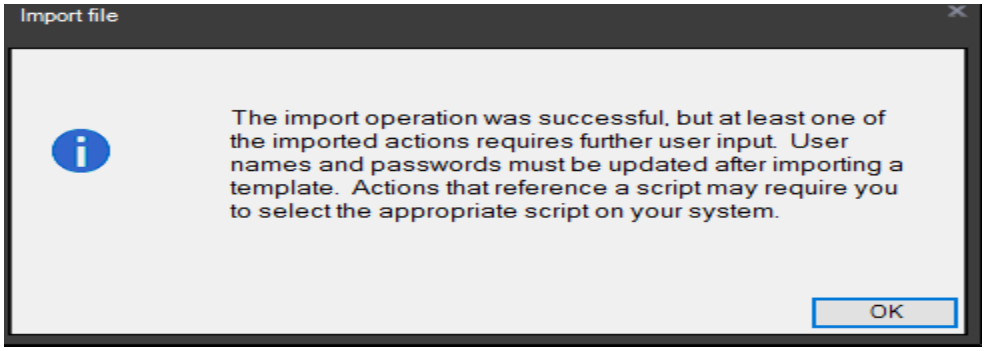
Click browse to import the script, name it, description it, click Import and Close.

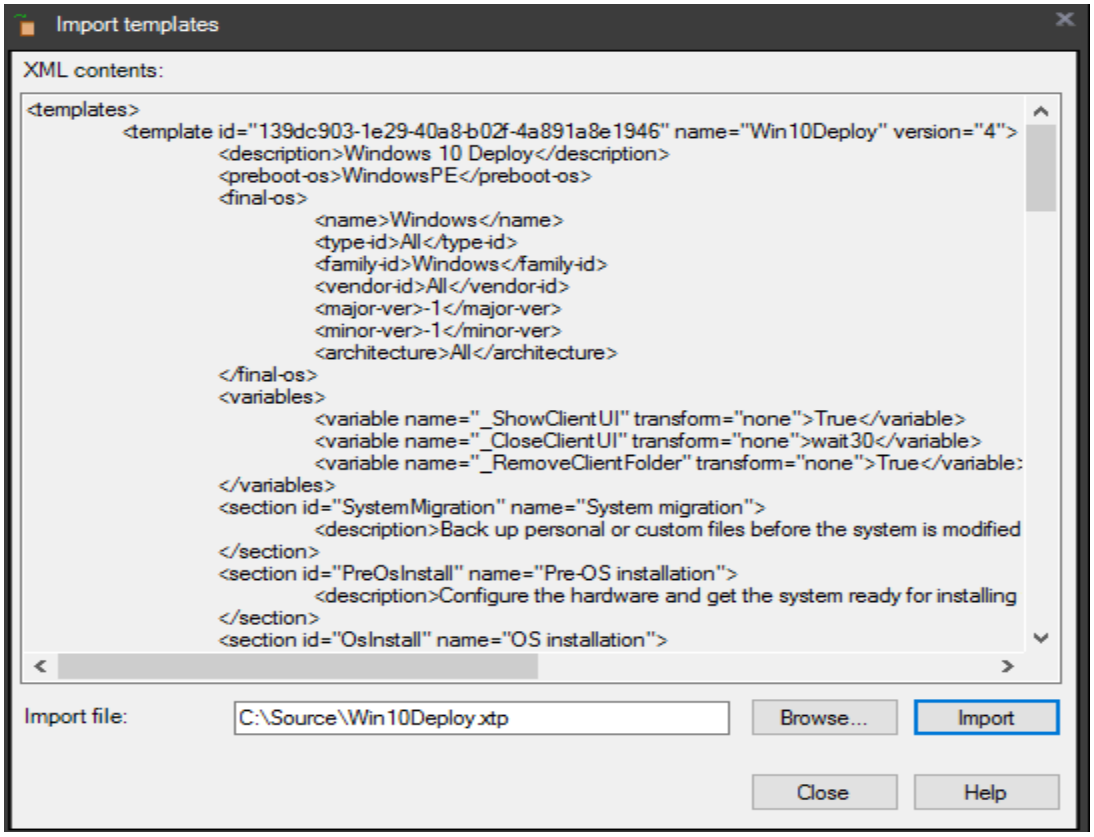


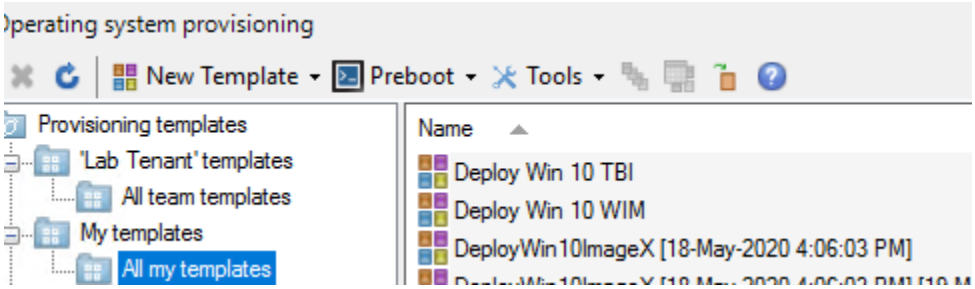
3. Import the provisioning template



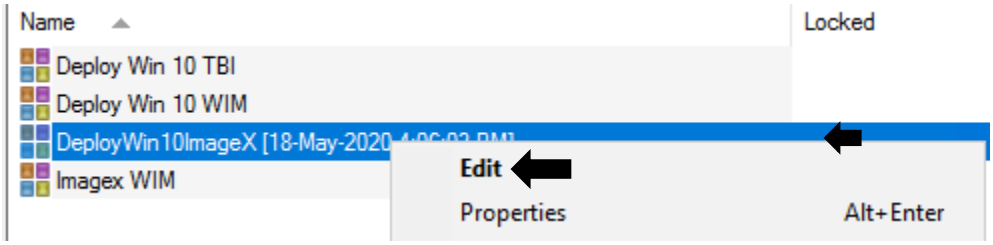
Brose the file, click import, close

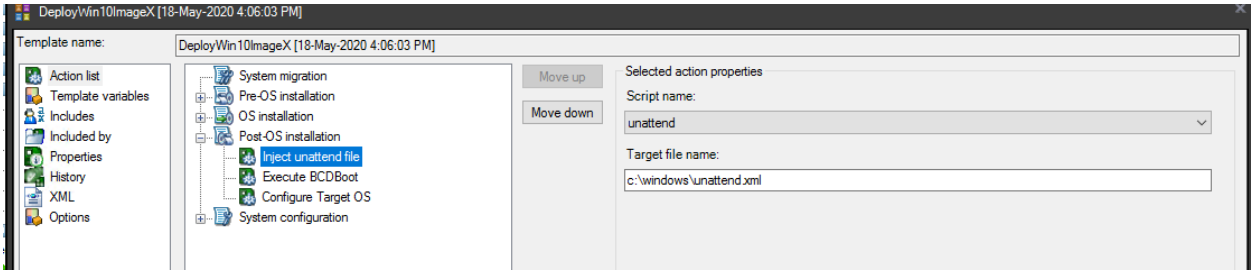


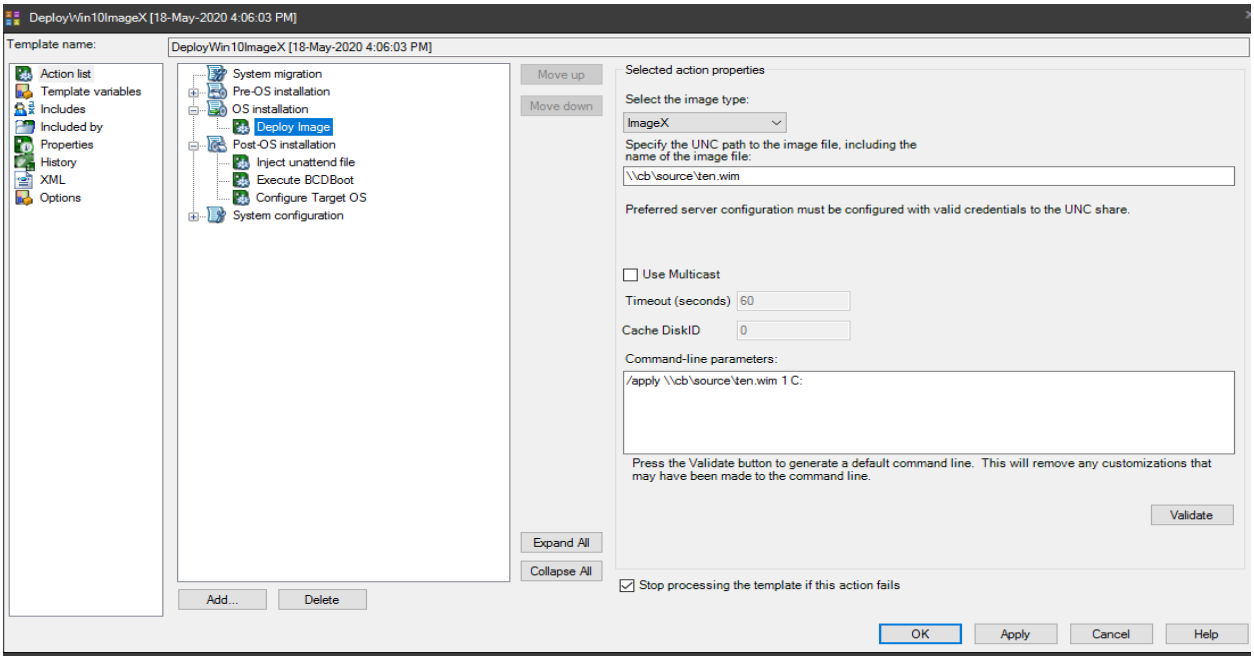


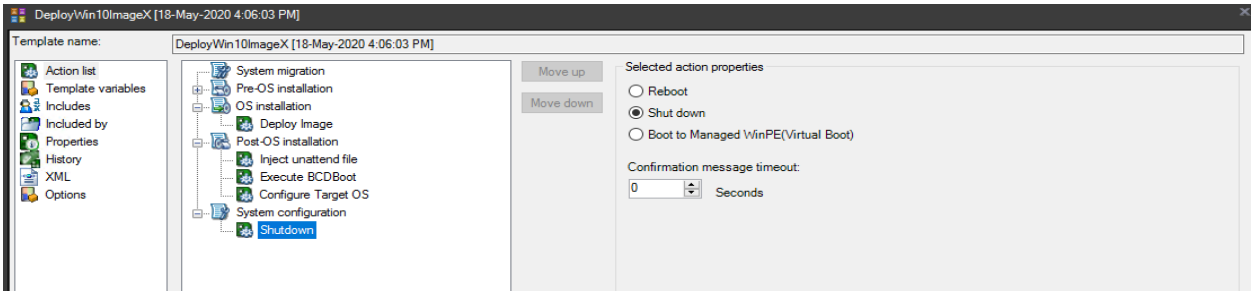


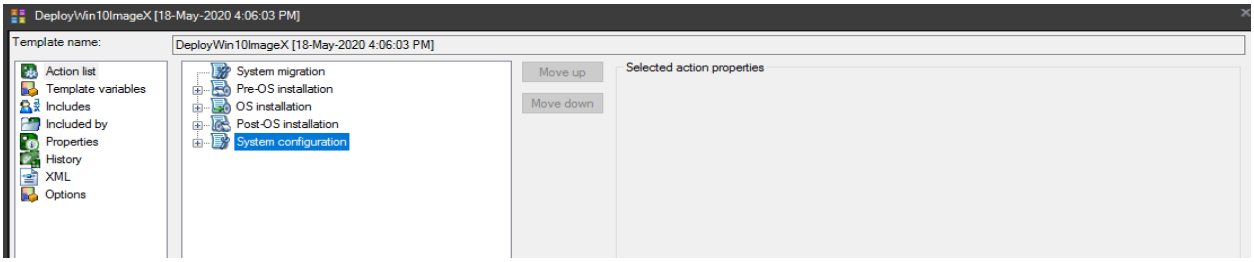
4. Modify the imported provisioning template

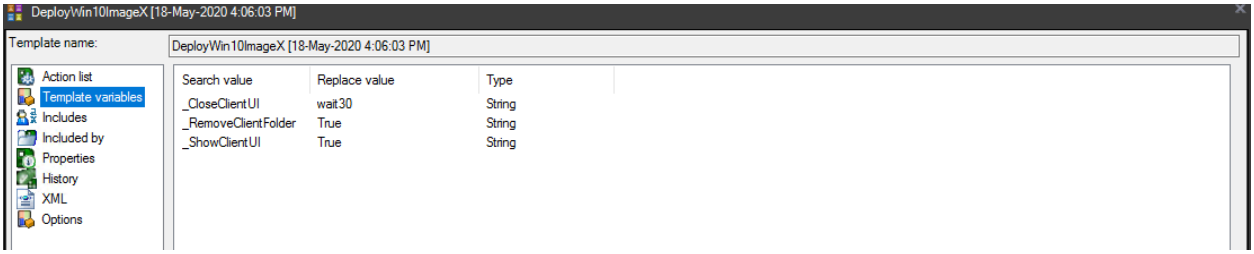


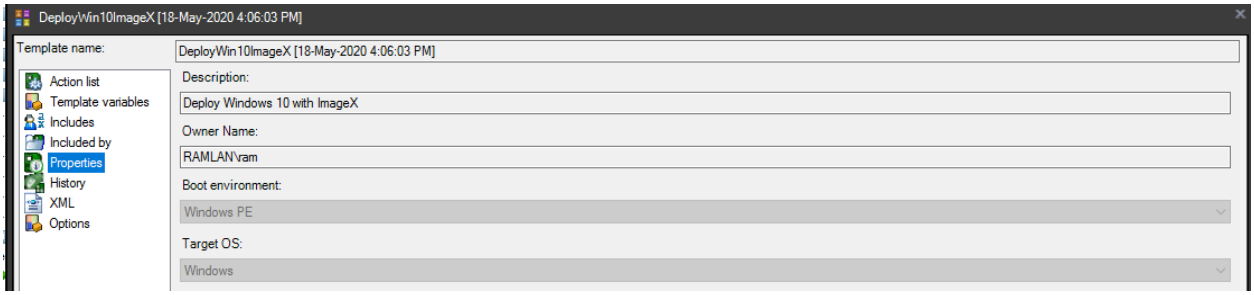


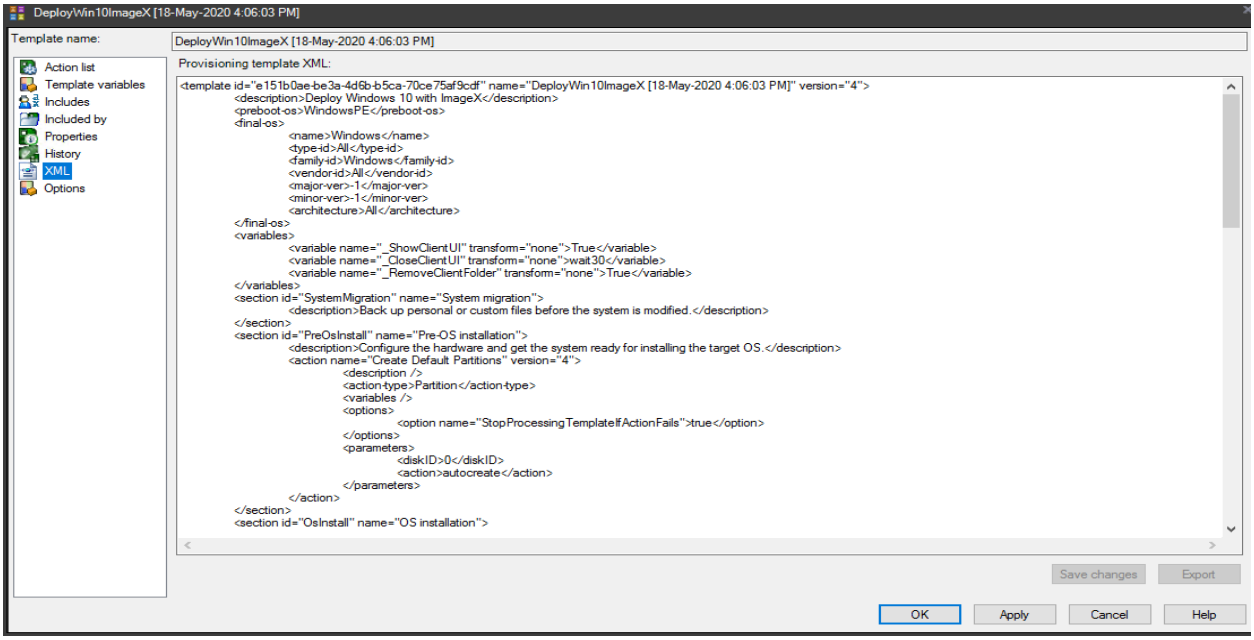

DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
System migration
Pre-OS installation
OS installation
Deploy Image
Post-OS installation
Inject unattend file
Execute BCDBoot
Configure Target OS
System configuration
Move up
Move down
Add...
Delete
Expand All
Collapse All
Selected action properties
Select the image type:
ImageX
Specify the UNC path to the image file, including the name of the image file:
\\cb\source\ten.wim
Preferred server configuration must be configured with valid credentials to the UNC share.
Use Multicast
Timeout (seconds) 60
Cache DiskID 0
Command-line parameters:
/apply \\cb\source\ten.wim 1 C:
Press the Validate button to generate a default command line. This will remove any customizations that may have been made to the command line.
Validate
Stop processing the template if this action fails
OK
Apply
Cancel
Help

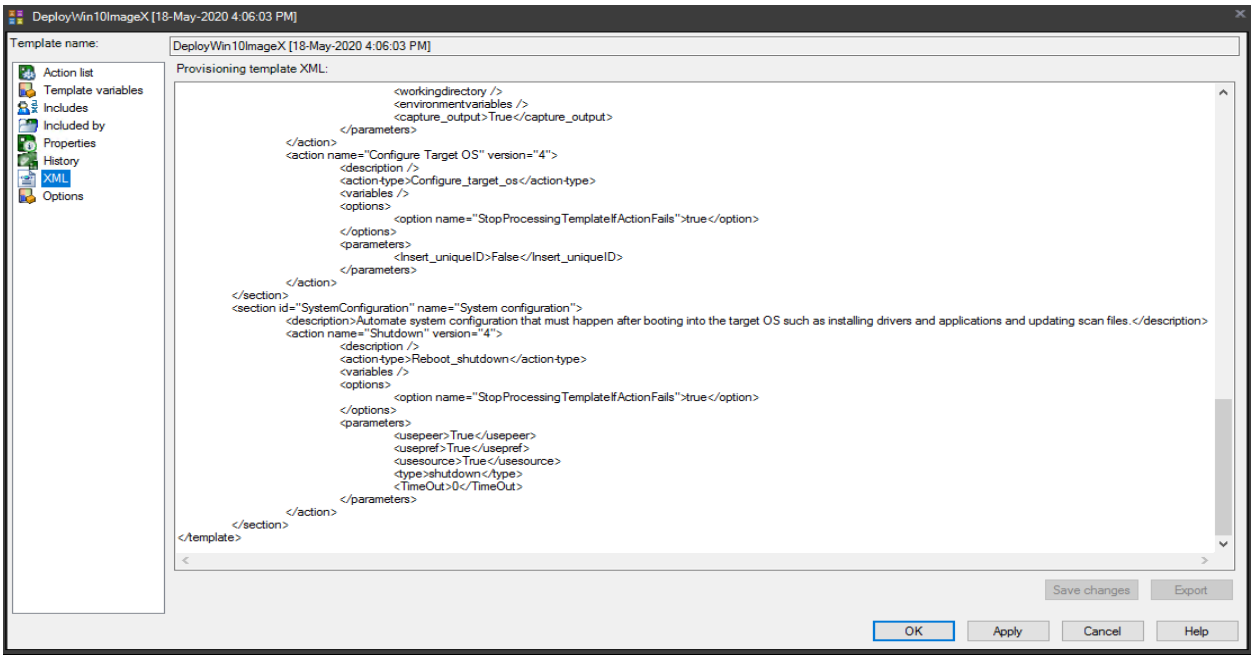

DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
System migration
Pre-OS installation
OS installation
Deploy Image
Post-OS installation
Inject unattend file
Execute BCDBoot
Configure Target OS
System configuration
Shutdown
Move up
Move down
Selected action properties
Reboot
Shut down
Boot to Managed WinPE(Virtual Boot)
Confirmation message timeout:
0
Seconds

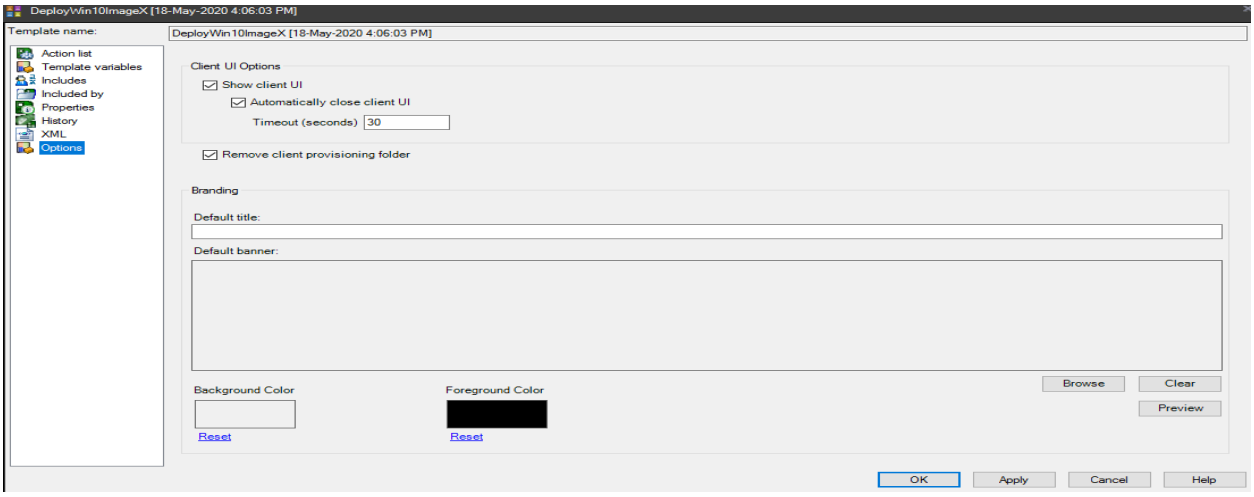

DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
System migration
Pre-OS installation
OS installation
Post-OS installation
System configuration
Move up
Move down
Selected action properties


DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Search value
Replace value
Type
_CloseClientUI
wait30
String
_RemoveClientFolder
True
String
_ShowClientUI
True
String

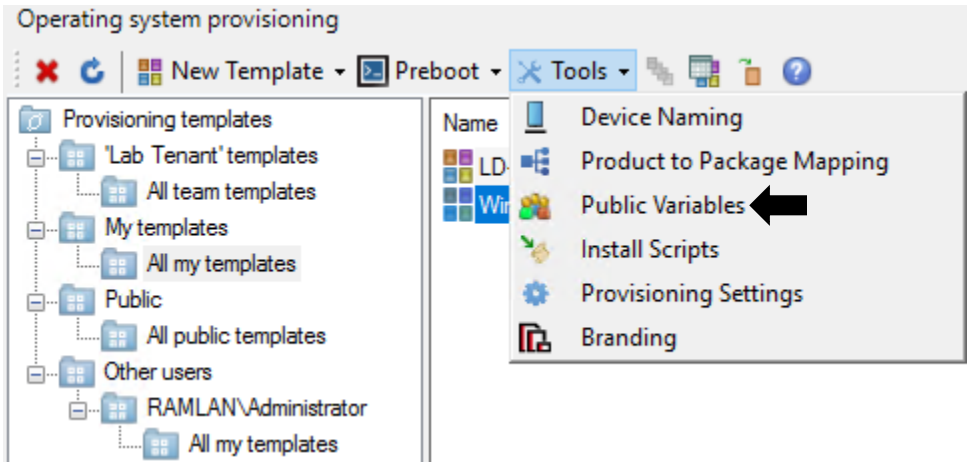

DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Description:
Deploy Windows 10 with ImageX
Owner Name:
RAMLAN\ram
Boot environment:
Windows PE
Target OS:
Windows

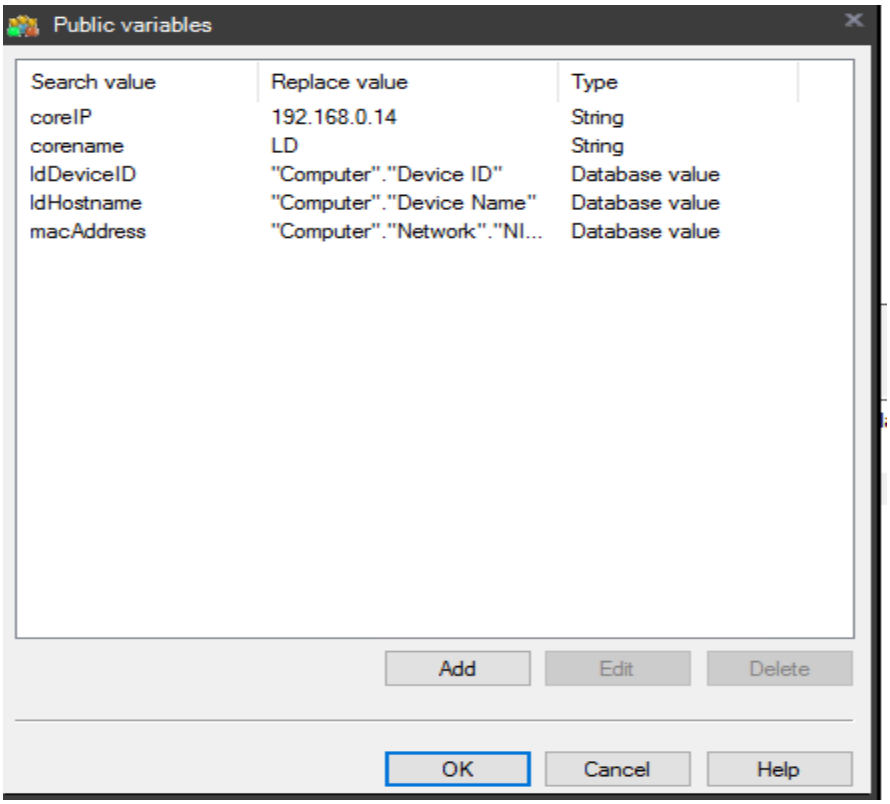

DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Provisioning template XML:
<template id="e151b0ae-be3a-4d6b-b5ca-70ce75af9cdf" name="DeployWin10ImageX [18-May-2020 4:06:03 PM]" version="4">
<description>Deploy Windows 10 with ImageX</description>
<preboot-os>WindowsPE</preboot-os>
<final-os>
<name>Windows</name>
<type-id>All</type-id>
<family-id>Windows</family-id>
<vendor-id>All</vendor-id>
<major-ver>-1</major-ver>
<minor-ver>-1</minor-ver>
<architecture>All</architecture>
</final-os>
<variables>
<variable name="_ShowClientUI" transform="none">True</variable>
<variable name="_CloseClientUI" transform="none">wait30</variable>
<variable name="_RemoveClientFolder" transform="none">True</variable>
</variables>
<section id="SystemMigration" name="System migration">
<description>Back up personal or custom files before the system is modified.</description>
</section>
<section id="PreOsInstall" name="Pre-OS installation">
<description>Configure the hardware and get the system ready for installing the target OS.</description>
<action name="Create Default Partitions" version="4">
<description />
<action-type>Partition</action-type>
<variables />
<options>
<option name="StopProcessingTemplateIfActionFails">true</option>
</options>
<parameters>
<diskID>0</diskID>
<action>autocreate</action>
</parameters>
</action>
</section>
<section id="OsInstall" name="OS installation">
Save changes
Export
OK
Apply
Cancel
Help

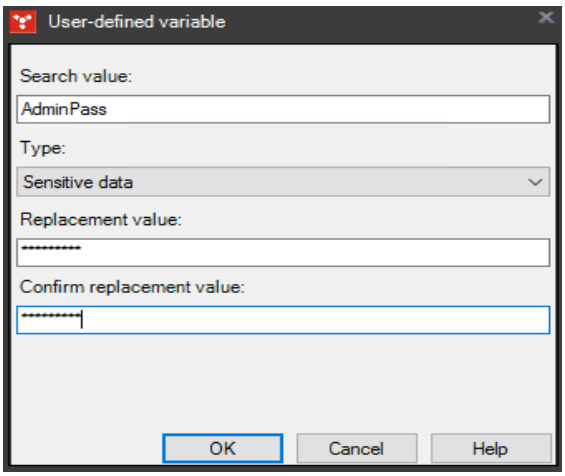

DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Provisioning template XML:
<workingdirectory />
<environmentvariables />
<capture_output>True</capture_output>
</parameters>
</action>
<action name="Configure Target OS" version="4">
<description />
<action-type>Configure_target_os</action-type>
<variables />
<options>
<option name="StopProcessingTemplateIfActionFails">true</option>
</options>
<parameters>
<Insert_uniqueID>False</Insert_uniqueID>
</parameters>
</action>
</section>
<section id="SystemConfiguration" name="System configuration">
<description>Automate system configuration that must happen after booting into the target OS such as installing drivers and applications and updating scan files.</description>
<action name="Shutdown" version="4">
<description />
<action-type>Reboot_shutdown</action-type>
<variables />
<options>
<option name="StopProcessingTemplateIfActionFails">true</option>
</options>
<parameters>
<usepeer>True</usepeer>
<usepref>True</usepref>
<usesource>True</usesource>
<type>shutdown</type>
<TimeOut>0</TimeOut>
</parameters>
</action>
</section>
</template>
Save changes
Export
OK
Apply
Cancel
Help

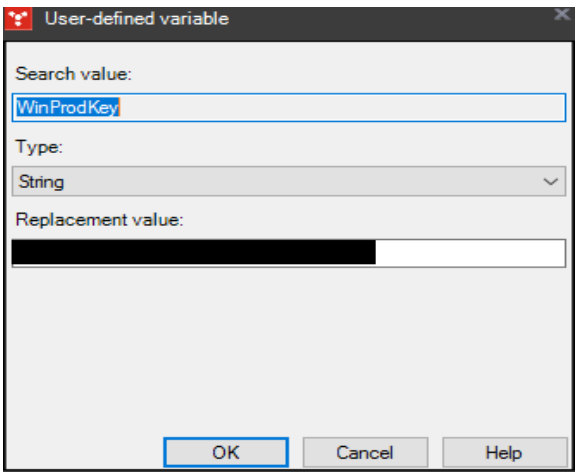

DeployWin10ImageX [18-May-2020 4:06:03 PM]
Template name:
DeployWin10ImageX [18-May-2020 4:06:03 PM]
Action list
Template variables
Includes
Included by
Properties
History
XML
Options
Client UI Options
Show client UI
Automatically close client UI
Timeout (seconds) 30
Remove client provisioning folder
Branding
Default title:
Default banner:
Browse
Clear
Preview
Background Color
Foreground Color
Reset
Reset
OK
Apply
Cancel
Help

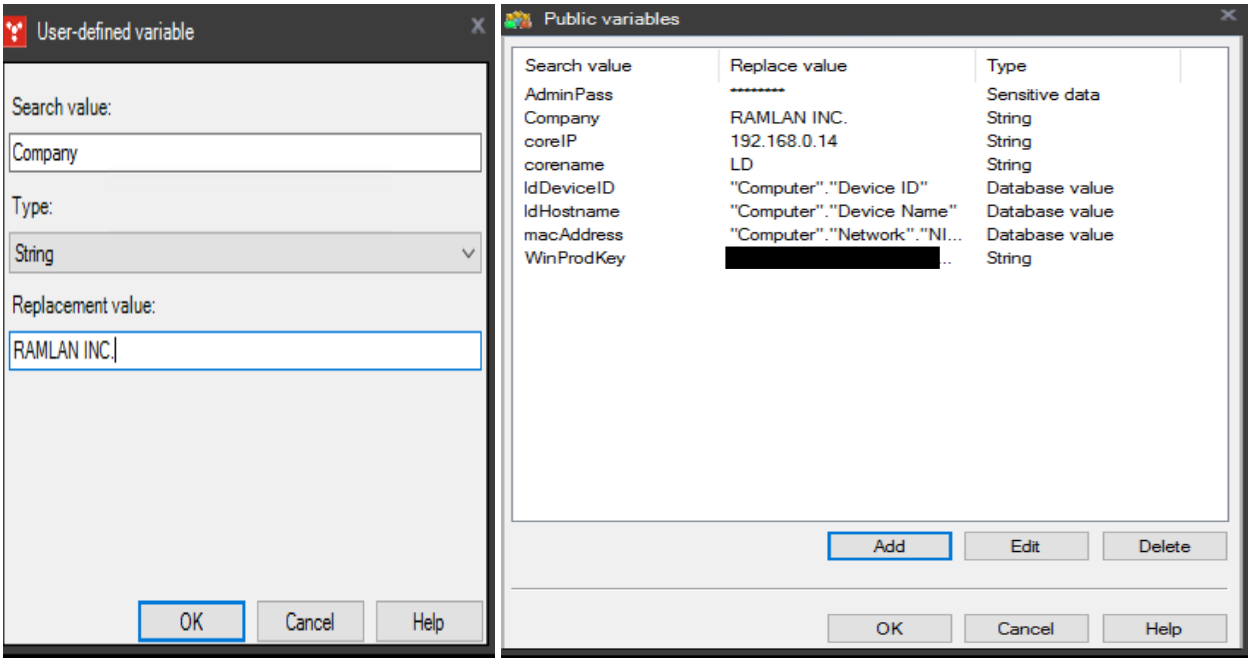
5. Enter the variables





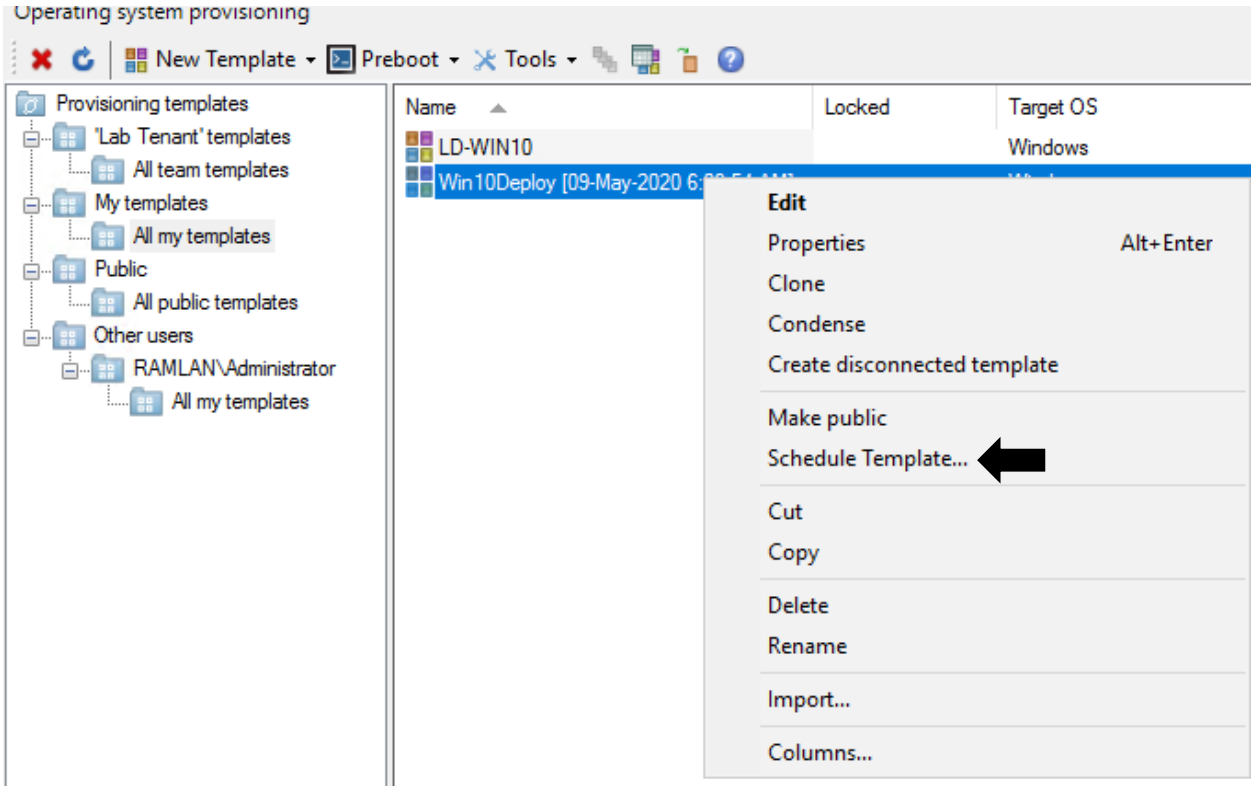


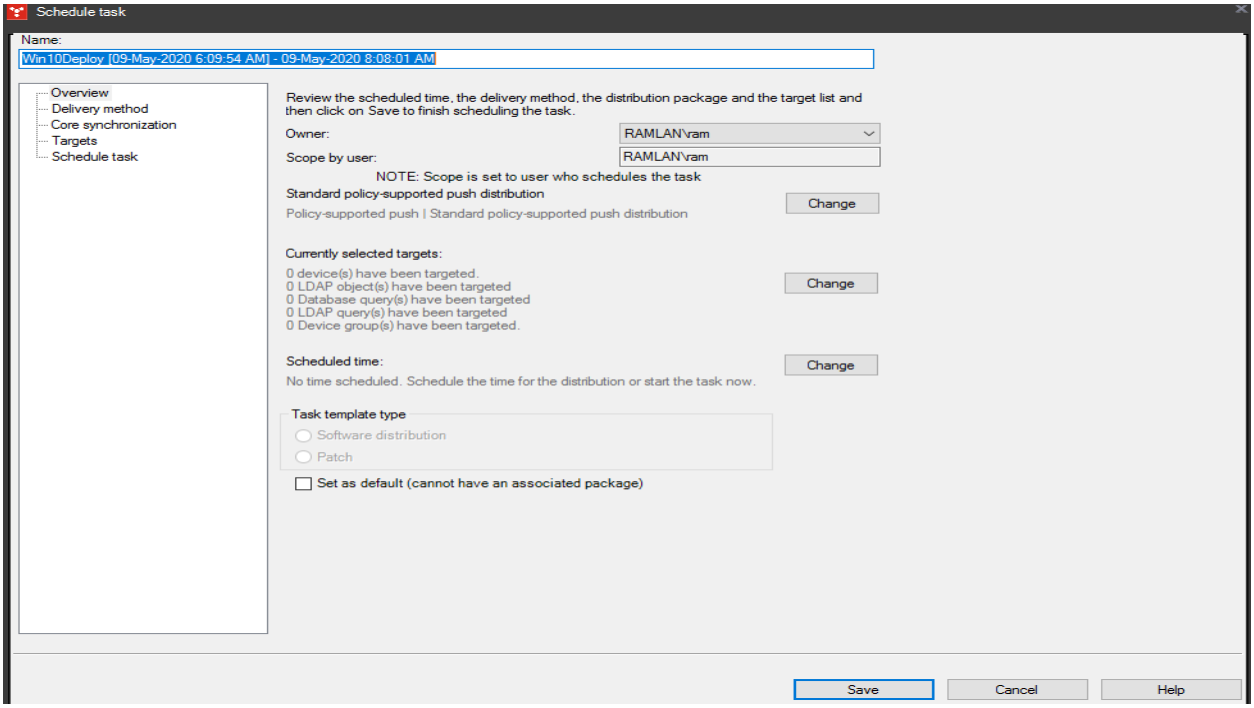




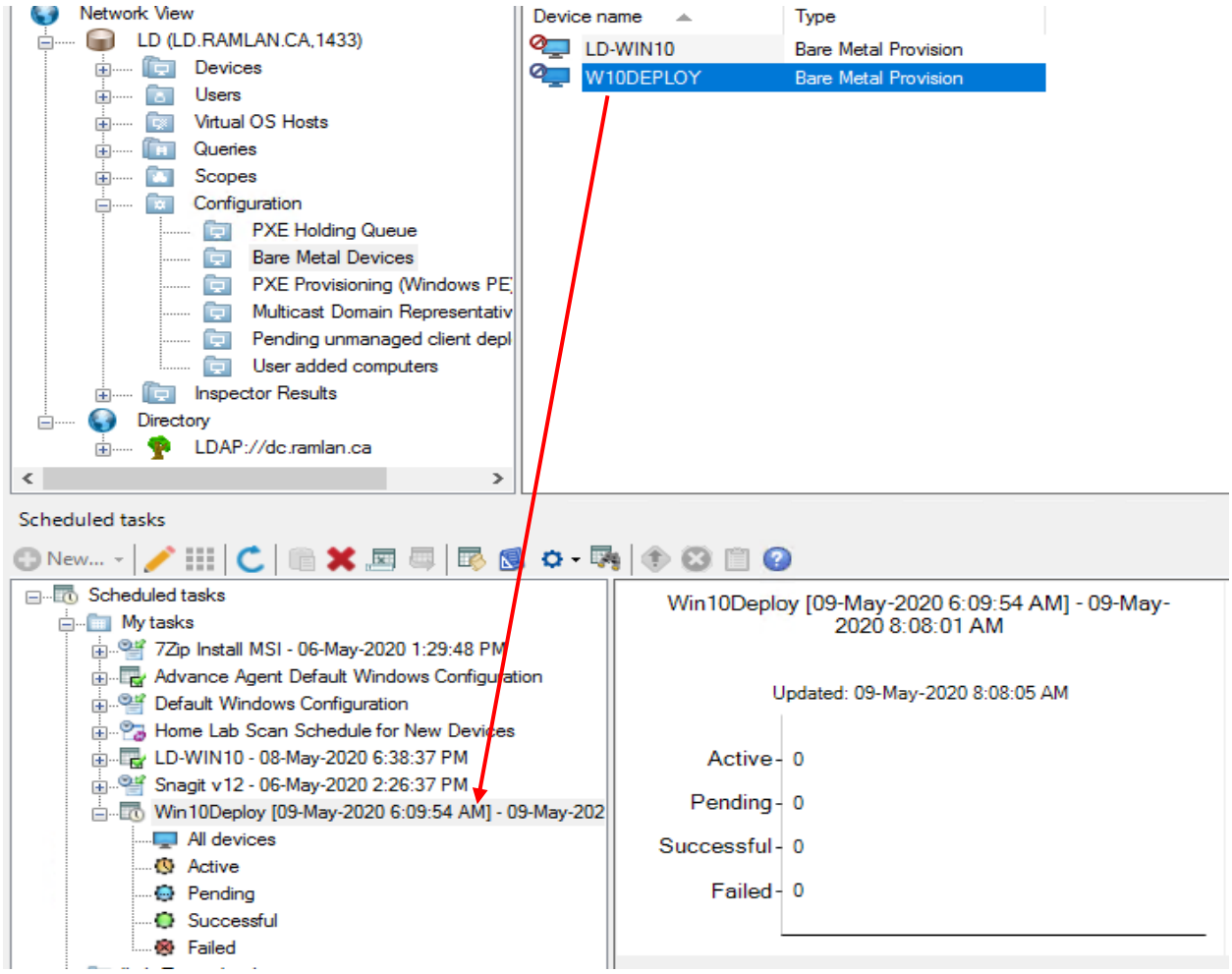
I will skip these steps are they are not required.

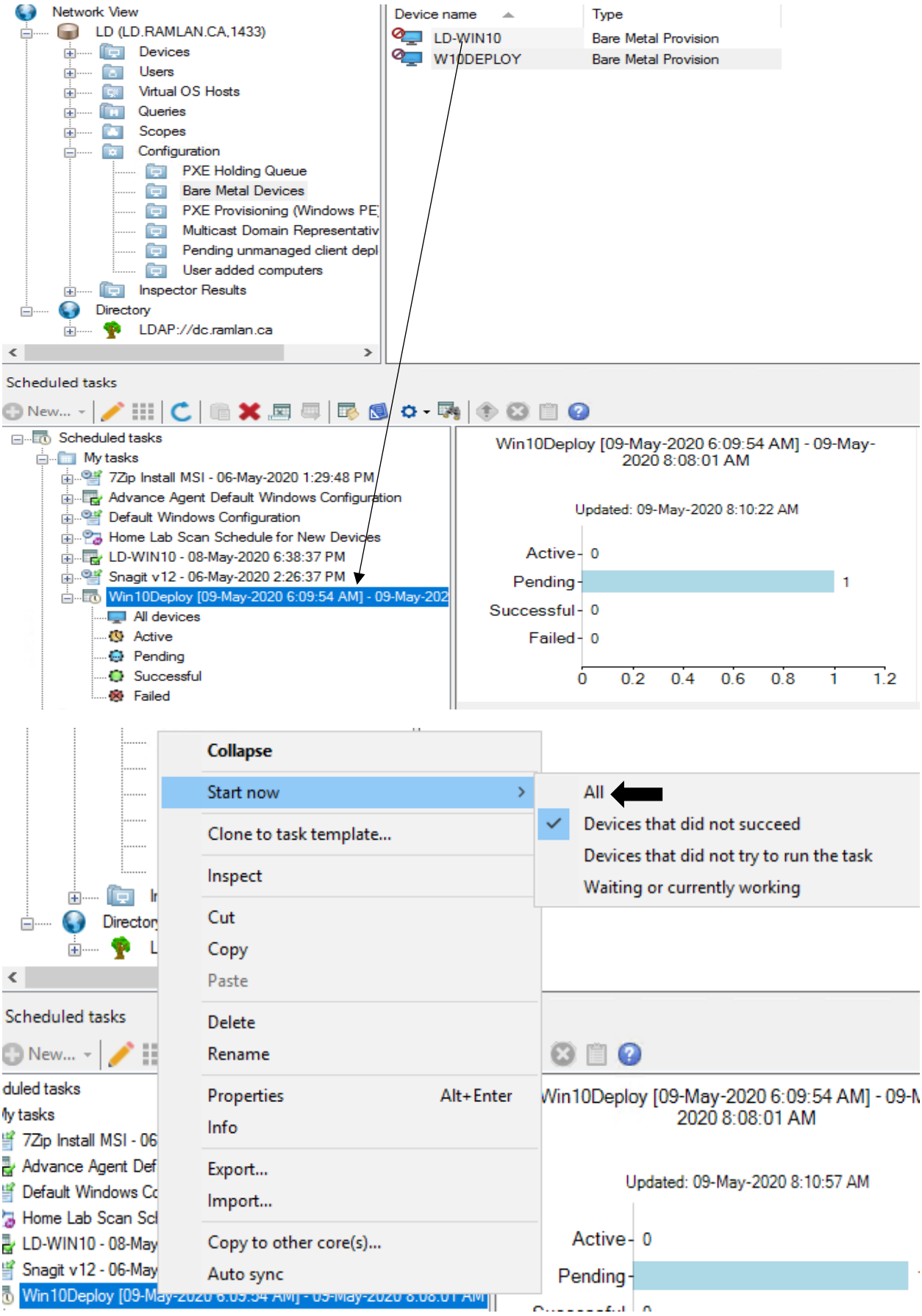
6. Add Drivers for Hardware Independent Imaging (HII) – This was deleted from template
7. Add Devices to be Imaged – Old device is in All Device Collection LD-WIN10 All devices
8. Add the Image Server as a Preferred Server – This step was done in Part 2 blog
9. Schedule the Template and start the Task

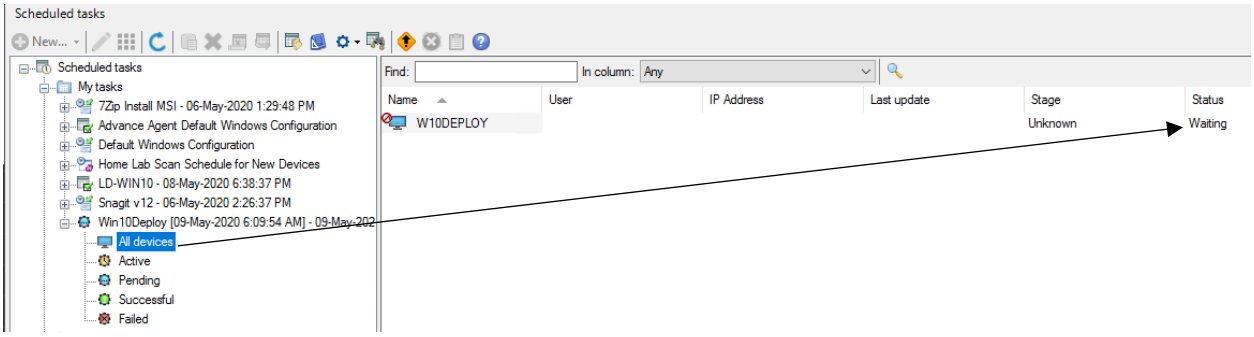




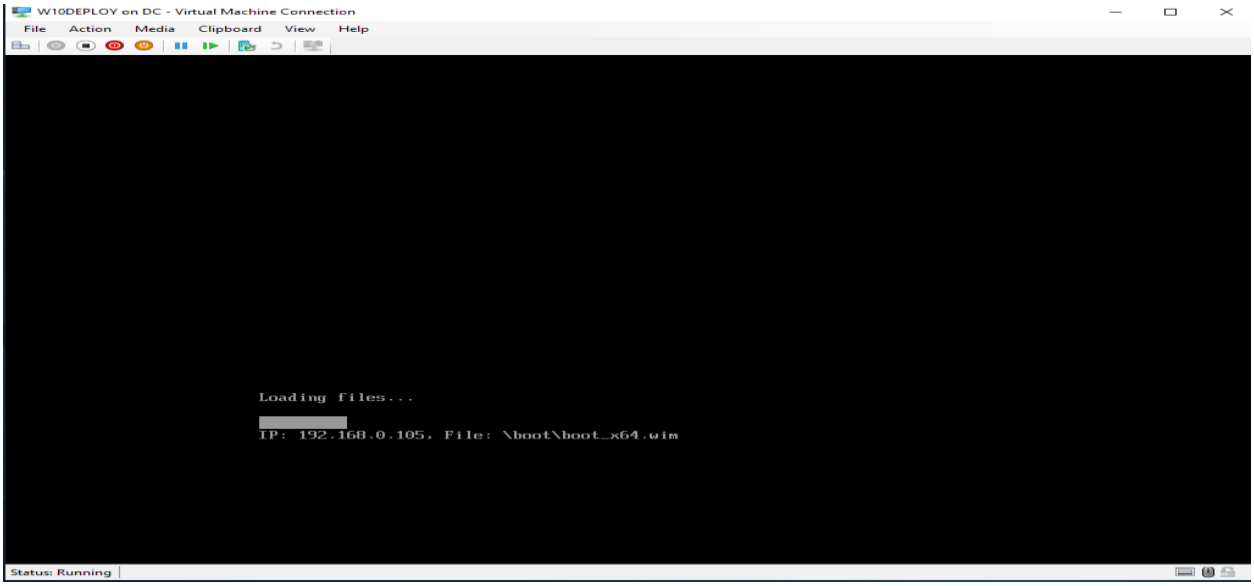
Drag and Drop W10DEPLOY device

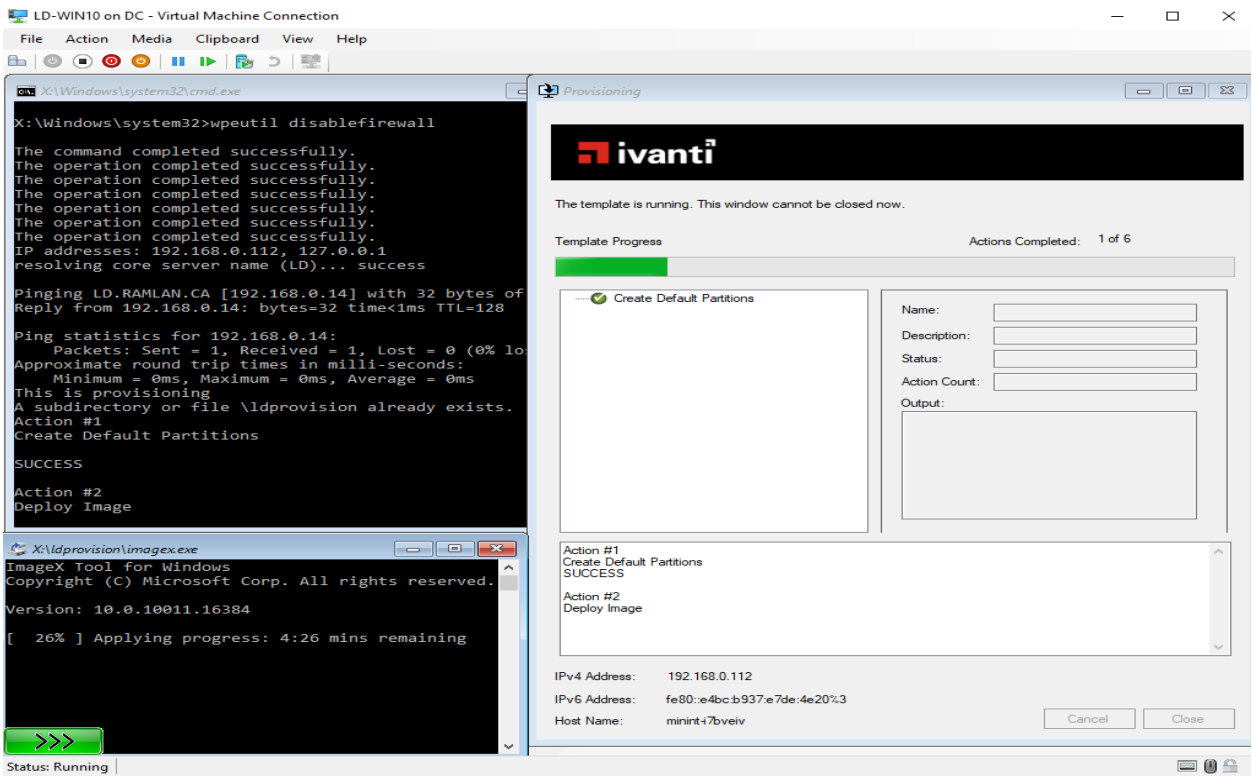


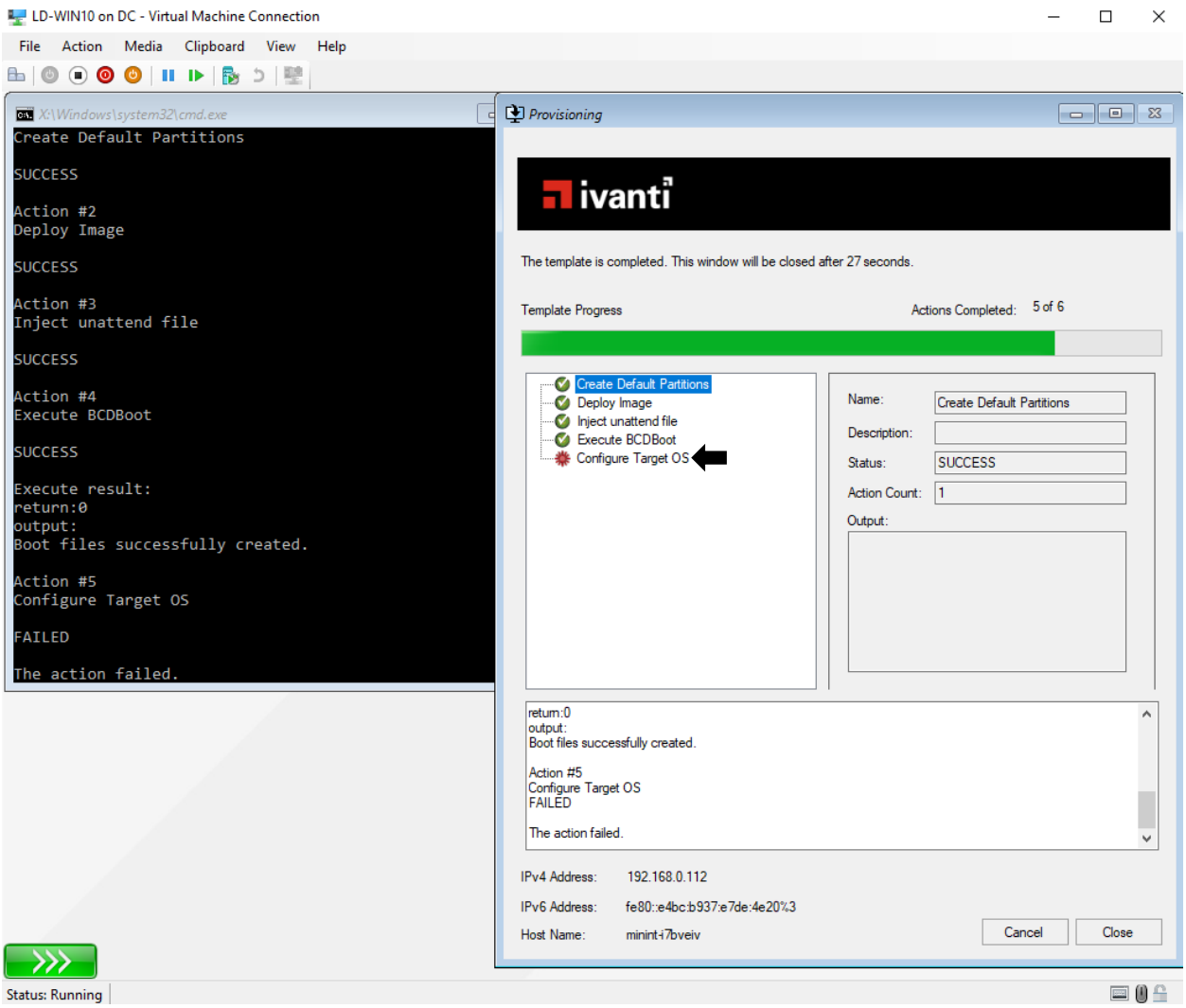

Network View
LD (LD.RAMLAN.CA,1433)
Devices
Users
Virtual OS Hosts
Queries
Scopes
Configuration
PXE Holding Queue
Bare Metal Devices
PXE Provisioning (Windows PE)
Multicast Domain Representativ
Pending unmanaged client depl
User added computers
Inspector Results
Directory
LDAP://dc.ramlan.ca
Device name
Type
LD-WIN10
Bare Metal Provision
W10DEPLOY
Bare Metal Provision
Scheduled tasks
New...
Scheduled tasks
My tasks
7Zip Install MSI - 06-May-2020 1:29:48 PM
Advance Agent Default Windows Configuration
Default Windows Configuration
Home Lab Scan Schedule for New Devices
LD-WIN10 - 08-May-2020 6:38:37 PM
Snagit v12 - 06-May-2020 2:26:37 PM
Win10Deploy [09-May-2020 6:09:54 AM] - 09-May-202
All devices
Active
Pending
Successful
Failed
Win10Deploy [09-May-2020 6:09:54 AM] - 09-May-2020 8:08:01 AM
Updated: 09-May-2020 8:10:22 AM
Active 0
Pending 1
Successful 0
Failed 0
0 0.2 0.4 0.6 0.8 1 1.2
Collapse
Start now
Clone to task template...
Inspect
Cut
Copy
Paste
Delete
Rename
Properties Alt+Enter
Info
Export...
Import...
Copy to other core(s)...
Auto sync
All
Devices that did not succeed
Devices that did not try to run the task
Waiting or currently working
Updated: 09-May-2020 8:10:57 AM
Active 0
Pending



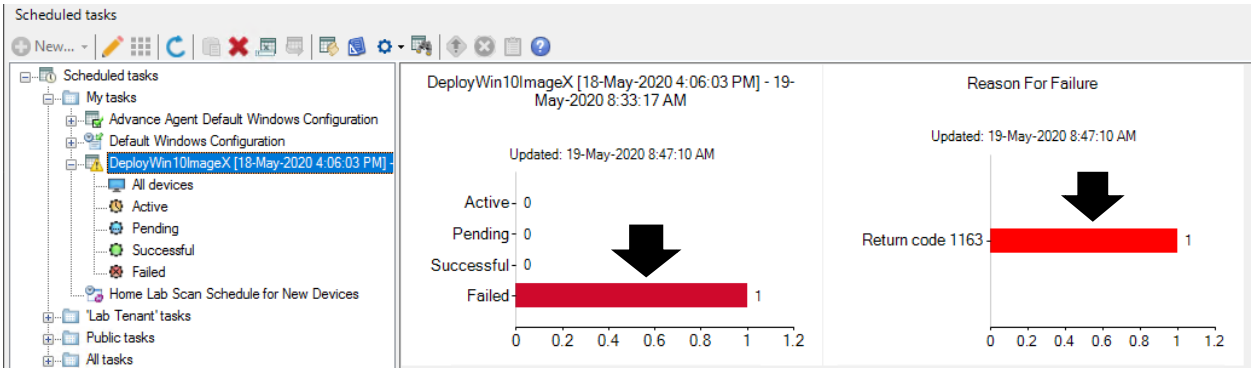
10. Network Boot – F12

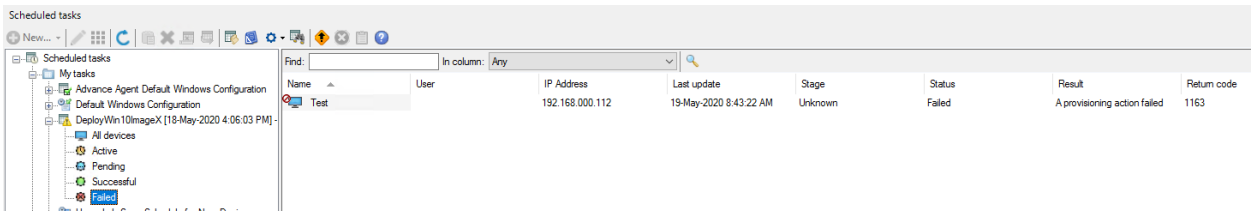




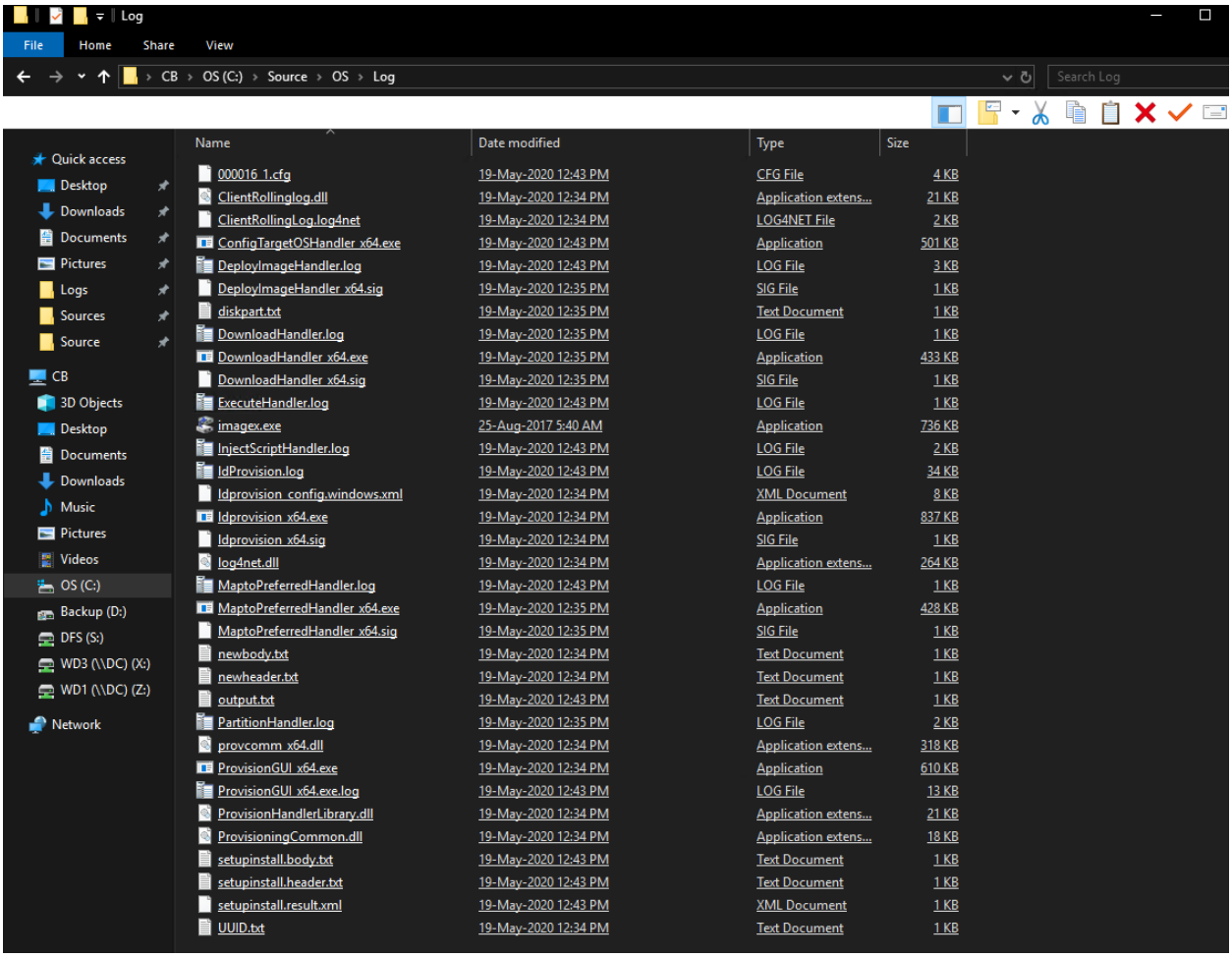


When, I looked at the deployment status – it says FAILED. Not sure why the scheduled status shows failed return code 1163. Need to search for solution through Google. I have opened support ticket with Ivanti today.





I was able to get all the logs and saved it for Support reference.



Thanks

Ram Lan
9th May 2020