

## 1. Install HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.5 (VIB file) if need))

This VIB file is used to update the HPE ProLiant Smart Array driver on an existing VMware vSphere 6.5 installation. VIB file version must be higher than the driver version already installed.

Installation:

VIB file is used to update the hpsa driver after the vSphere 6.5 OS is already installed.

esxupdate method does not work for installing drivers on vSphere 6.5.

Driver VIBs may be installed using the esxcli utility:

Configure the server for troubleshooting mode (enable vSphere shell, and enable SSH)

Use SCP to push new VIB file onto vSphere 6.5 server

```
>scp <vib location> <server's IP address>:/tmp
```

At vSphere 6.5 server's system console, select Alt-F1

Login to vSphere Shell as root

cd to /tmp

Copy the vib file to /var/log/vmware

```
>cp <VIB's current location in /tmp> /var/log/vmware
```

Install the VIB file using esxcli:

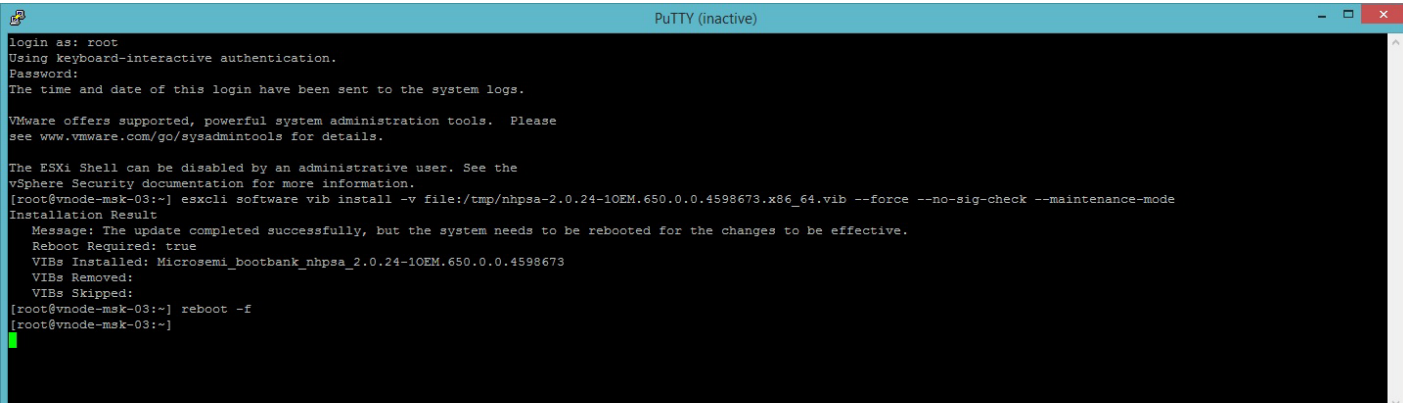
```
>esxcli software vib install -v file:<vib's location in /tmp> --force -no-sig-check -maintenance-mode
```

After install, you'll need to reboot

[https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX\\_667716d4a6854e73b718994cf1](https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX_667716d4a6854e73b718994cf1)

```
esxcli software vib install -v file:/tmp/nhpsa-2.0.24-10EM.650.0.0.4598673.x86_64.vib --force --no-sig-check --maintenance-mode
```

reboot -f



```
login as: root
Using keyboard-interactive authentication.
Password:
The time and date of this login have been sent to the system logs.

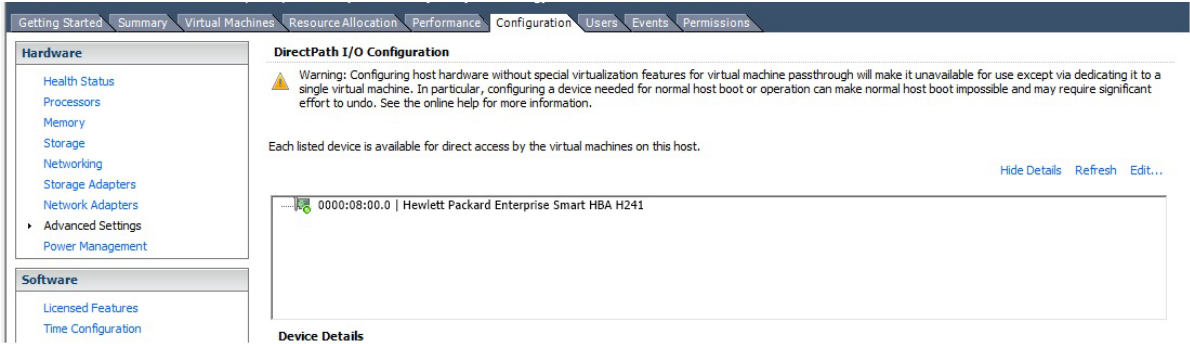
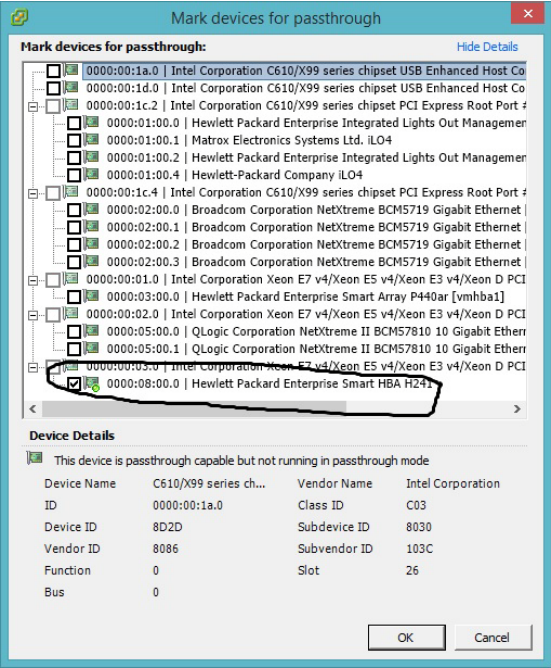
VMware offers supported, powerful system administration tools. Please
see www.vmware.com/go/sysadmintools for details.

The ESXi Shell can be disabled by an administrative user. See the
vSphere Security documentation for more information.
[root@vnode-msk-03:~] esxcli software vib install -v file:/tmp/nhpsa-2.0.24-10EM.650.0.0.4598673.x86_64.vib --force --no-sig-check --maintenance-mode
Installation Result
  Message: The update completed successfully, but the system needs to be rebooted for the changes to be effective.
  Reboot Required: true
  VIBs Installed: Microsemi_bootbank_nhpsa_2.0.24-10EM.650.0.0.4598673
  VIBs Removed:
  VIBs Skipped:
[root@vnode-msk-03:~] reboot -f
[root@vnode-msk-03:~]
```

## 2. Config passthru

### a. Config passthru for ESXI 6

ESXI 6



Reboot is required

(ESXI 6.5)

SystemHardwareLicensingPackagesServicesSecurity & users

PCI DevicesPower Management

Toggle passthroughConfigure SR-IOVReboot hostRefresh

<input type="checkbox"/>	Address	Description	Parent	SR-IOV	Passthrough
<input type="checkbox"/>	0000:00:03.0	Intel Corporation Xeon E7 v4/Xeon E5 v4/Xeon E3 v4/Xeon D PCI Express Root Port 3	None	Not capable	Not capable
<input checked="" type="checkbox"/>	0000:08:00.0	Hewlett Packard Enterprise Smart HBA H241	0000:00:03.0	Not capable	Active
<input type="checkbox"/>	0000:00:03.1	Intel Corporation Xeon E7 v4/Xeon E5 v4/Xeon E3 v4/Xeon D PCI Express Root Port 3	None	Not capable	Not capable
<input type="checkbox"/>	0000:00:03.2	Intel Corporation Xeon E7 v4/Xeon E5 v4/Xeon E3 v4/Xeon D PCI Express Root Port 3	None	Not capable	Not capable
<input type="checkbox"/>	0000:00:03.3	Intel Corporation Xeon E7 v4/Xeon E5 v4/Xeon E3 v4/Xeon D PCI Express Root Port 3	None	Not capable	Not capable
<input type="checkbox"/>	0000:00:04.0	Intel Corporation Xeon E7 v4/Xeon E5 v4/Xeon E3 v4/Xeon D Crystal Beach DMA Chan...	None	Not capable	Not capable
<input type="checkbox"/>	0000:00:04.1	Intel Corporation Xeon E7 v4/Xeon E5 v4/Xeon E3 v4/Xeon D Crystal Beach DMA Chan...	None	Not capable	Not capable
<input type="checkbox"/>	0000:00:04.2	Intel Corporation Xeon E7 v4/Xeon E5 v4/Xeon E3 v4/Xeon D Crystal Beach DMA Chan...	None	Not capable	Not capable

b. Config passthru For Virtual server windows 2016

Edit setting for Virtual server windows 2016 ---add hardware

For ESXI 6

srv-tech - Virtual Machine Properties

HardwareOptionsResources

Show All DevicesAdd...Remove

Hardware	Summary
Memory	4096 MB
CPUs	4
Video card	Video card
VMCI device	Deprecated
SCSI controller 0	LSI Logic SAS
CD/DVD drive 1	[vnode-msk-03_local] I...
Hard disk 1	Virtual Disk
Floppy drive 1	Client Device
Network adapter 1	Vlan1

Virtual Machine Version: 11

Memory Configuration

Memory Size: 4 GB

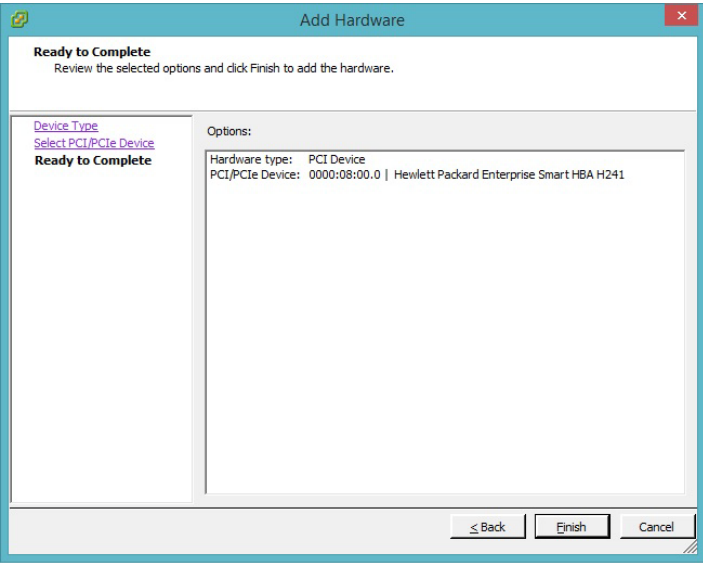
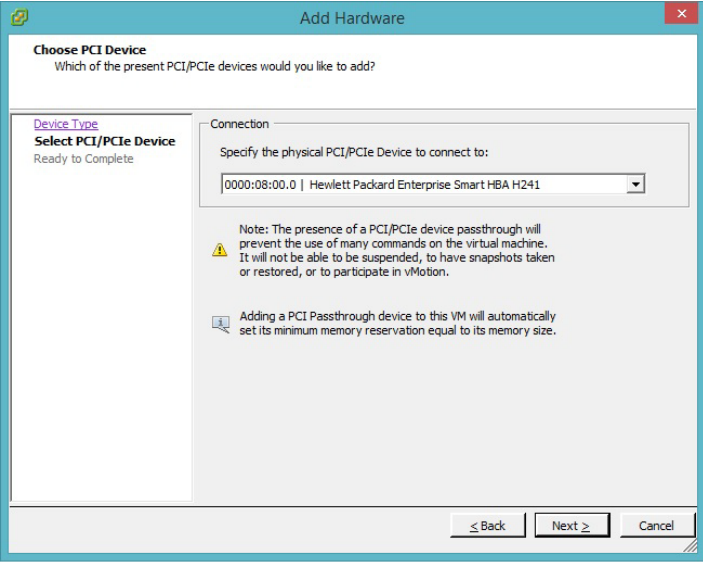
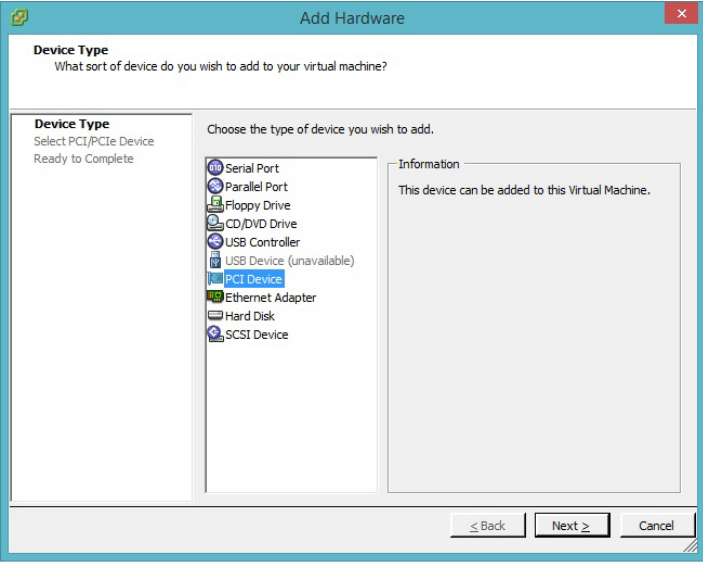
2 TB1 TB512 GB256 GB128 GB64 GB32 GB16 GB8 GB4 GB2 GB1 GB512 MB256 MB128 MB64 MB32 MB16 MB8 MB4 MB

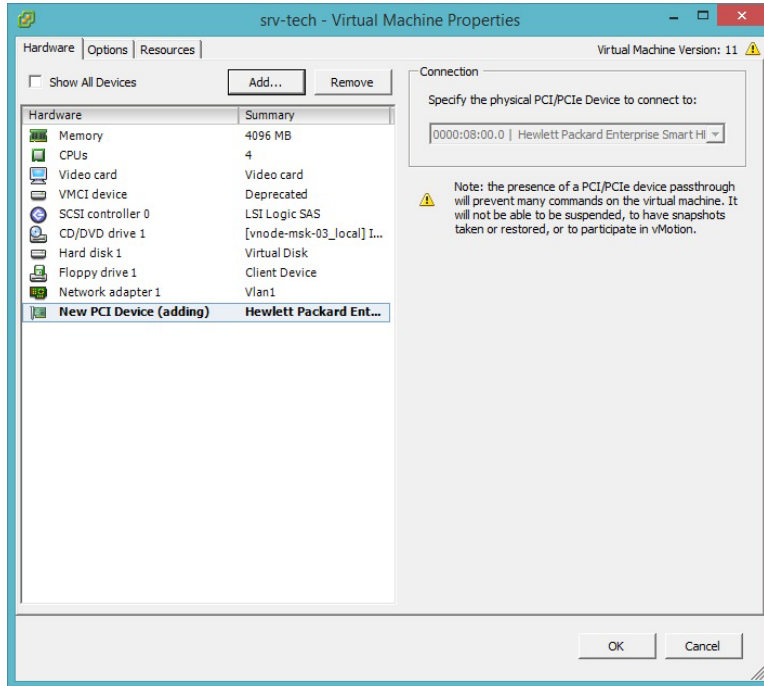
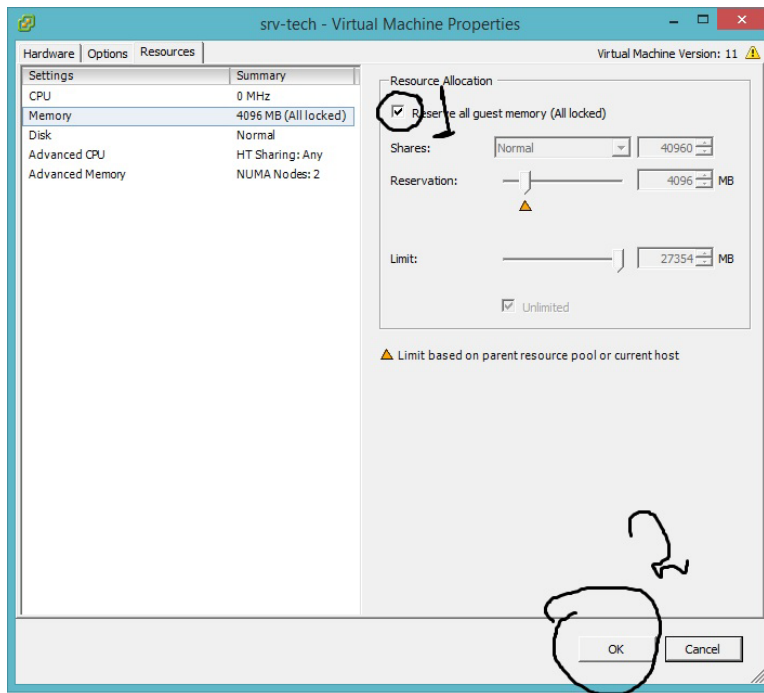
Maximum recommended for this guest OS: 4080 GB.

Maximum recommended for best performance: 32540 MB.

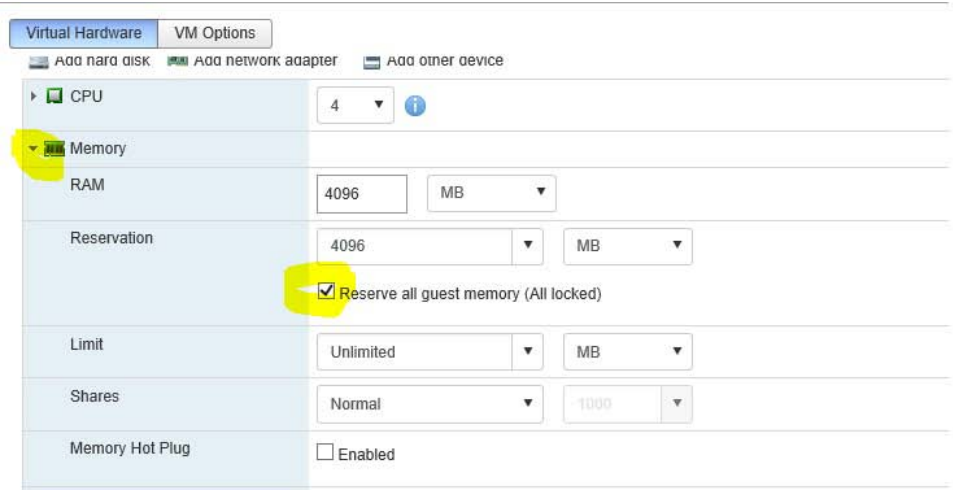
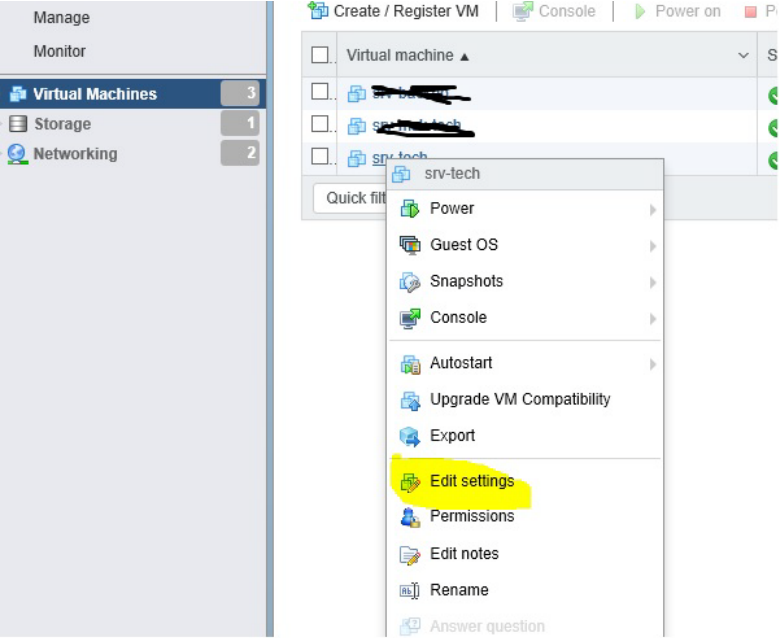
Default recommended for this guest OS: 4 GB.

Minimum recommended for this guest OS: 512 MB.





For ESXI 6.5



Virtual Hardware

VM Options

Add hard disk

Add network adapter

Add other device

CPU	4	
Memory	4096	MB
Hard disk 1	200	GB
SCSI Controller 0	LSI Logic SAS	
SATA Controller 0		
USB controller 1	USB 2.0	
Network Adapter 1	Vlan1	<input checked="" type="checkbox"/> Connect
CD/DVD Drive 1	Datastore ISO file	<input checked="" type="checkbox"/> Connect

Virtual Hardware

VM Options

Add hard disk

Add network adapter

Add other device

CPU	4	
Memory	4096	
Hard disk 1	200	
SCSI Controller 0	LSI	
SATA Controller 0		
USB controller 1	USB	
Network Adapter 1	Vlan1	
CD/DVD Drive 1	Datastore ISO file	

CD/DVD drive

Floppy drive

Serial port

Parallel port

USB controller

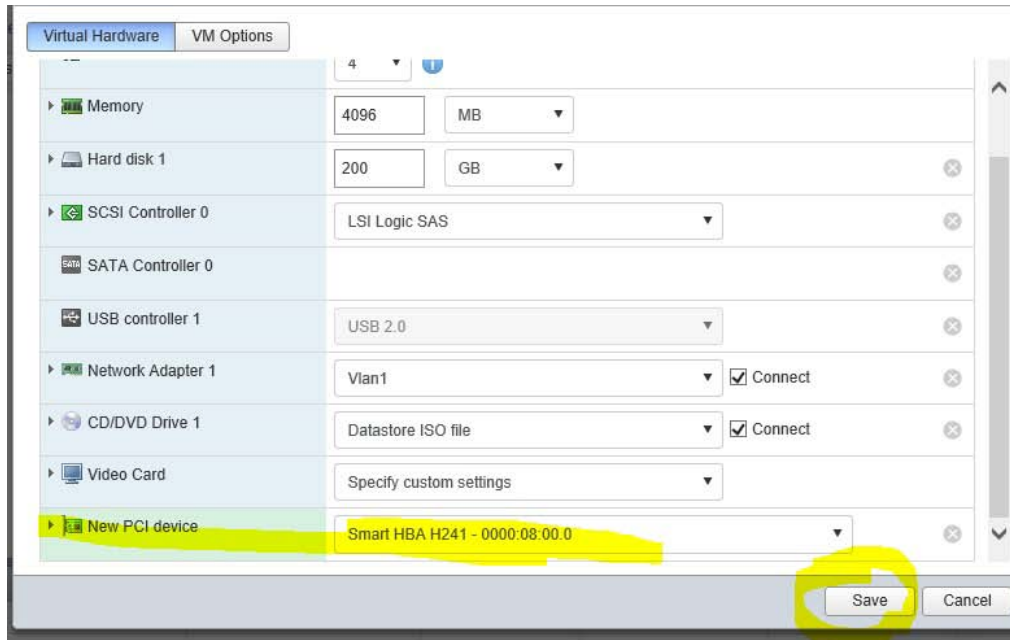
USB device

Sound controller

PCI device

SCSI controller

SATA controller



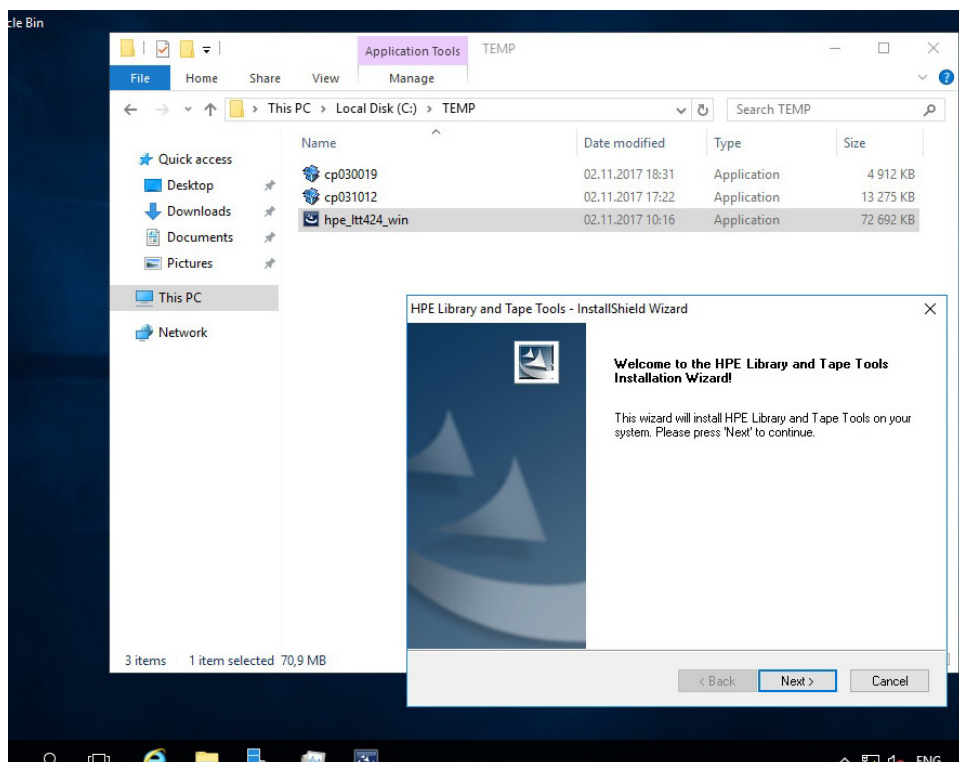
### 3. Install HPE Library and Tape Tools, HP Smart Storage Administrator, drivers on Virtual server windows 2016

Power On virtual server

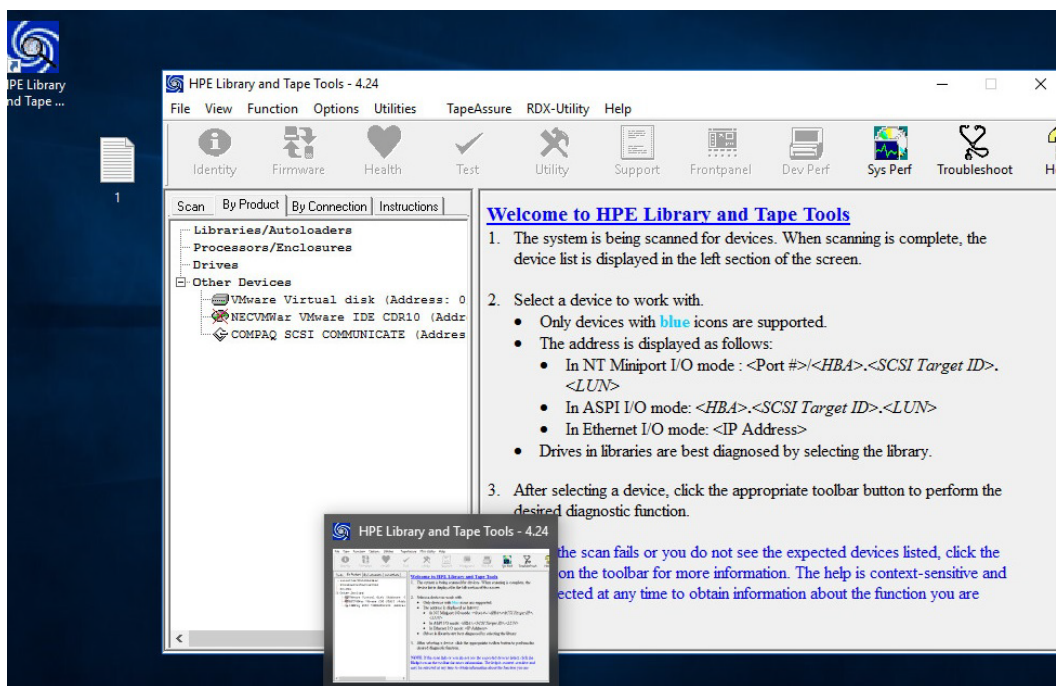
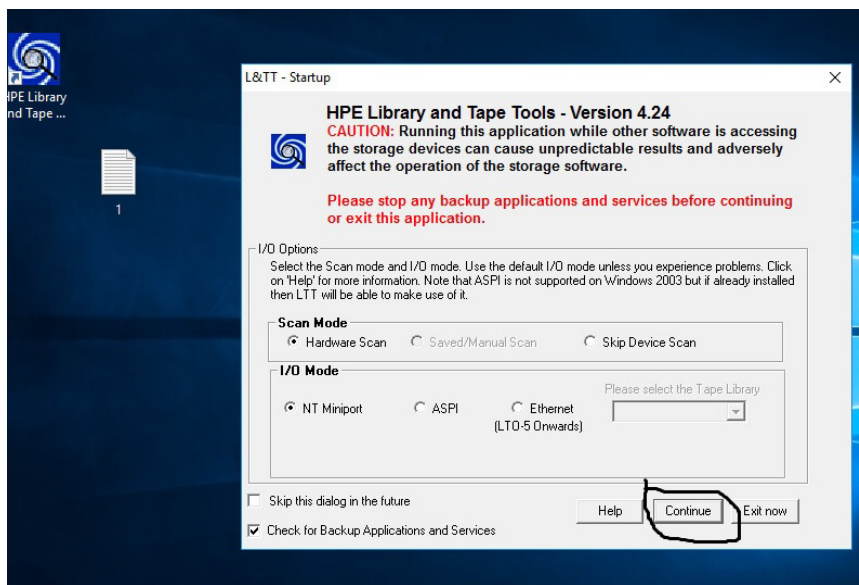
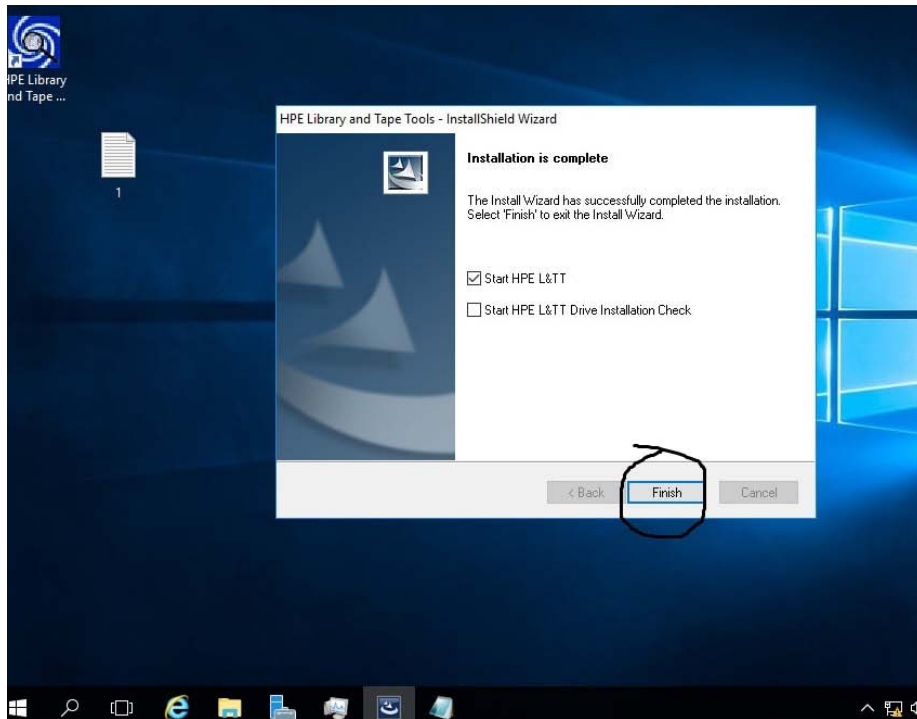
#### a. Install HPE Library and Tape Tools 4.24

HPE Library and Tape Tools is a collection of storage hardware management and diagnostic tools for tape mechanisms and tape automation products. HPE Library and Tape Tools assembles these tools into a single, convenient program.

[https://support.hpe.com/hpsc/swd/public/detail?sp4ts.oid=1009019479&swItemId=MTX\\_7d605c7dec8b47c8a5c631794b&swEnvOid=4184](https://support.hpe.com/hpsc/swd/public/detail?sp4ts.oid=1009019479&swItemId=MTX_7d605c7dec8b47c8a5c631794b&swEnvOid=4184)





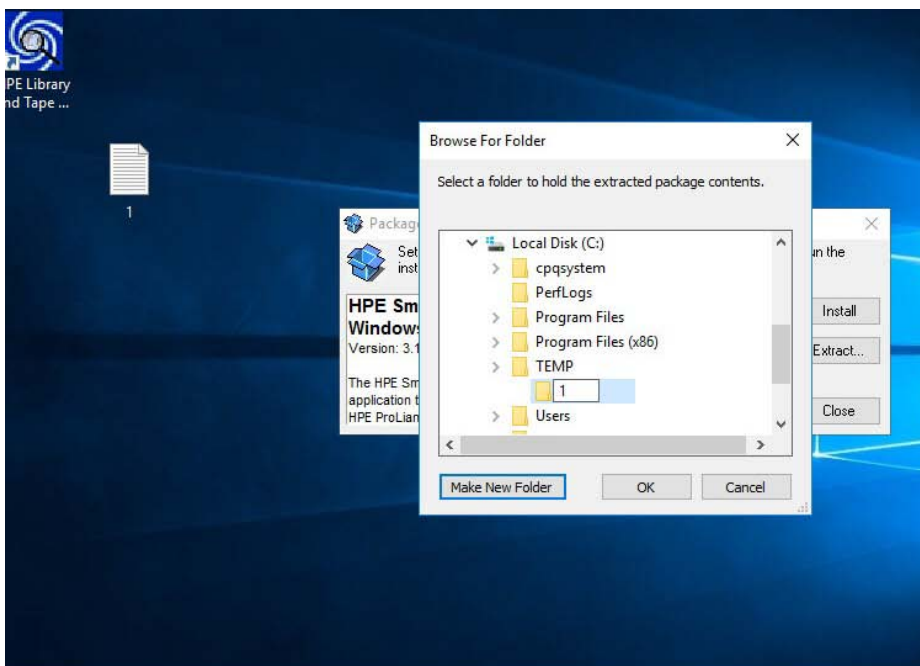


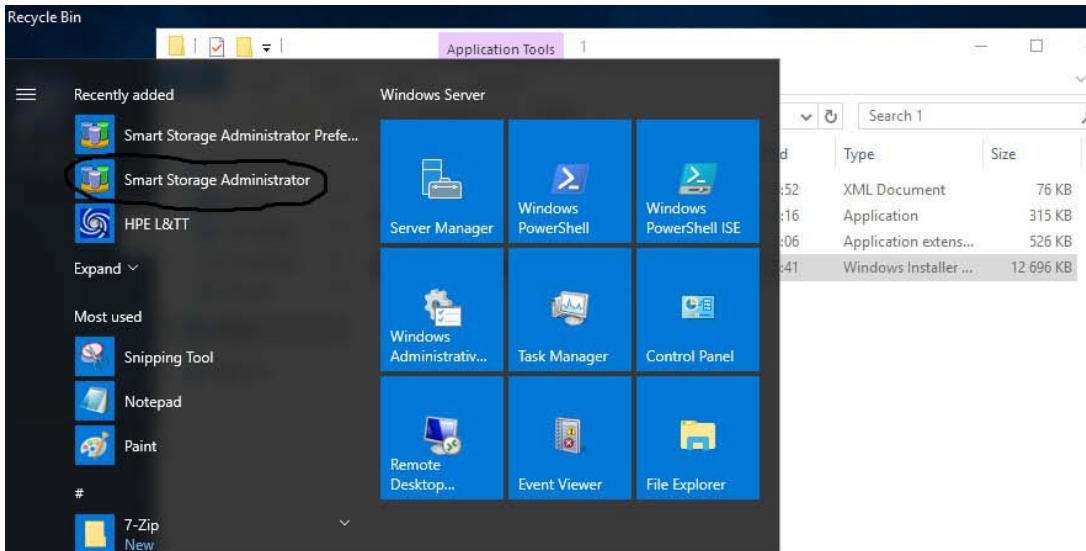
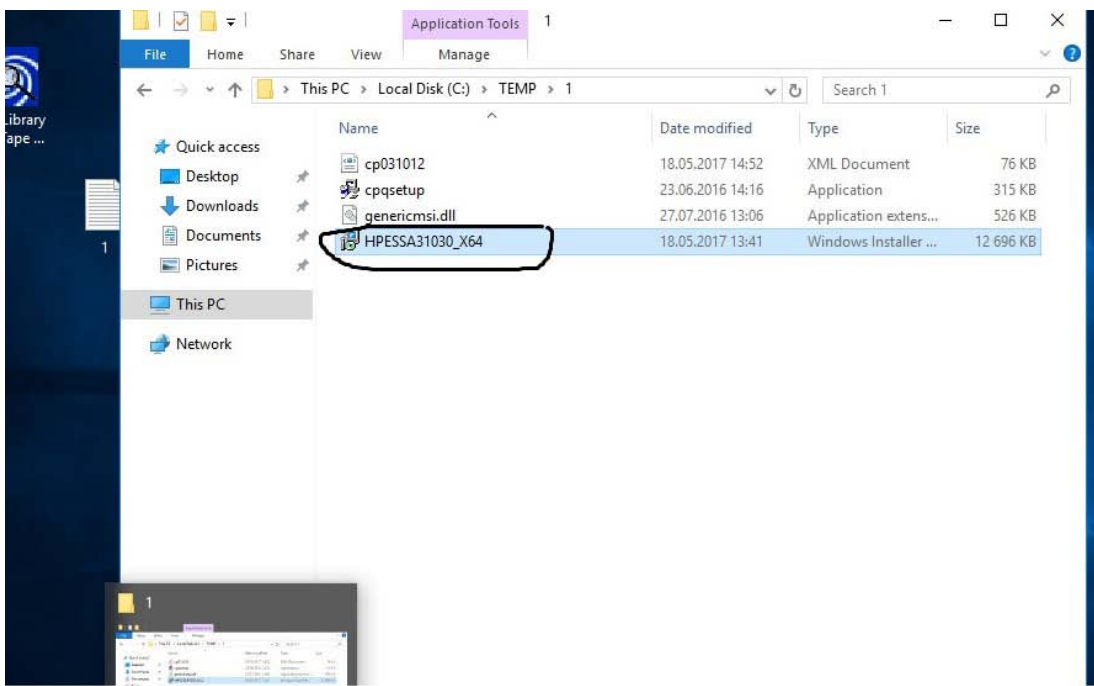
b. Install HPE Smart Storage Administrator (HPE SSA) for Windows 64-bit Package

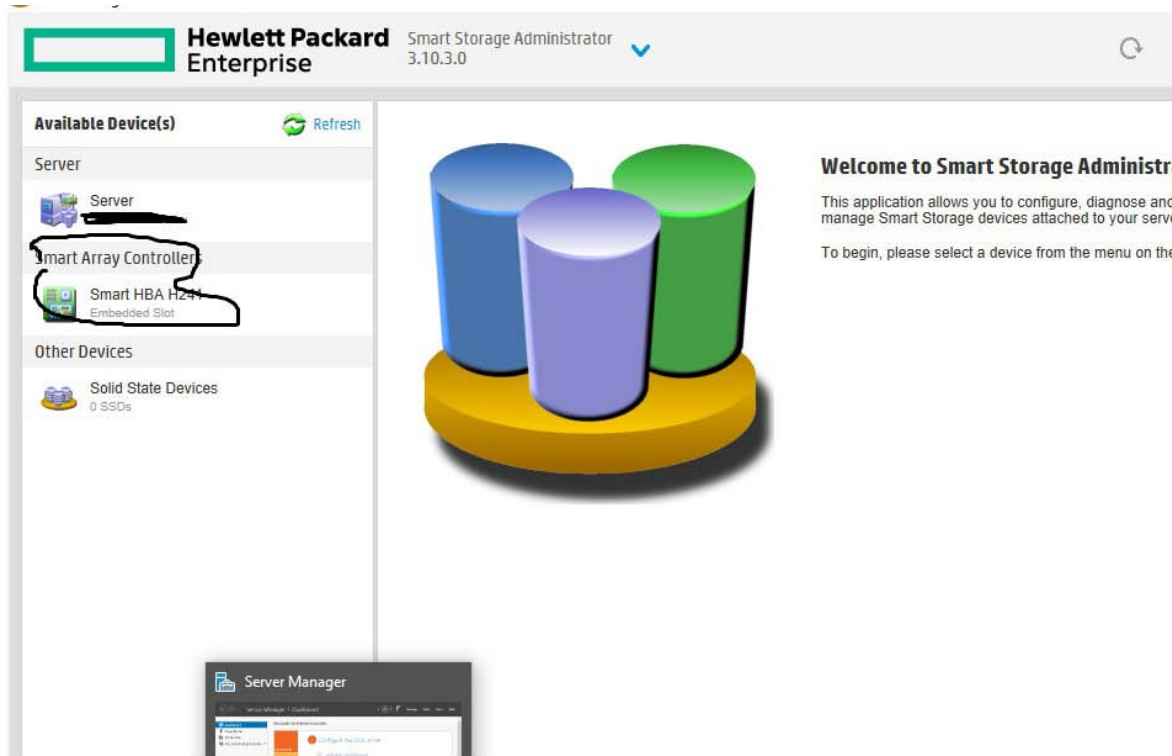
The HP Smart Storage Administrator (HP SSA) helps you configure, manage, diagnose, and monitor HP ProLiant Smart Array Controllers and now other storage devices as well, such as host bus adapters (HBAs), HP Storage controllers, and future devices such as SCSI Express drives, and SAS switch devices. HP SSA replaces the existing HP Array Configuration Utility, or ACU, with an updated design and will deliver new features and functionality for various Smart Storage initiatives as they come online. HP SSA will allow you to configure and manage your storage as before, but now with additional features, abilities, and supported devices.

Existing ACU scripts should only need to make minimal changes such as calling the appropriate binary or executable in order to maintain compatibility.

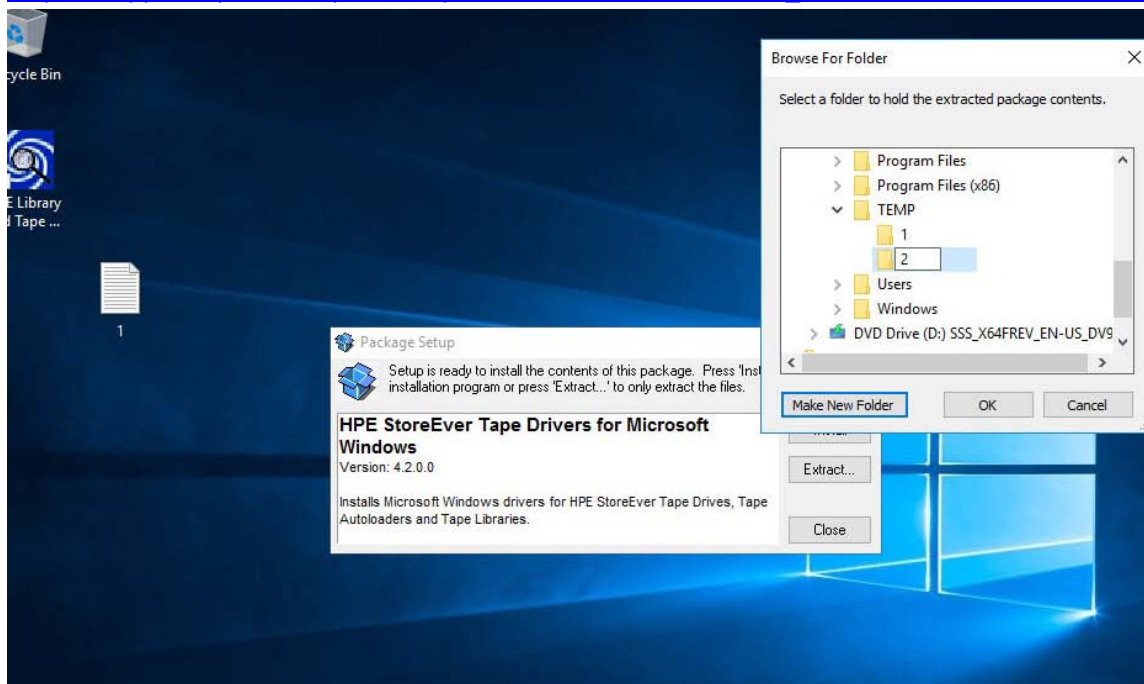
[https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX\\_fac66a01809546579a9c3fd050](https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX_fac66a01809546579a9c3fd050)

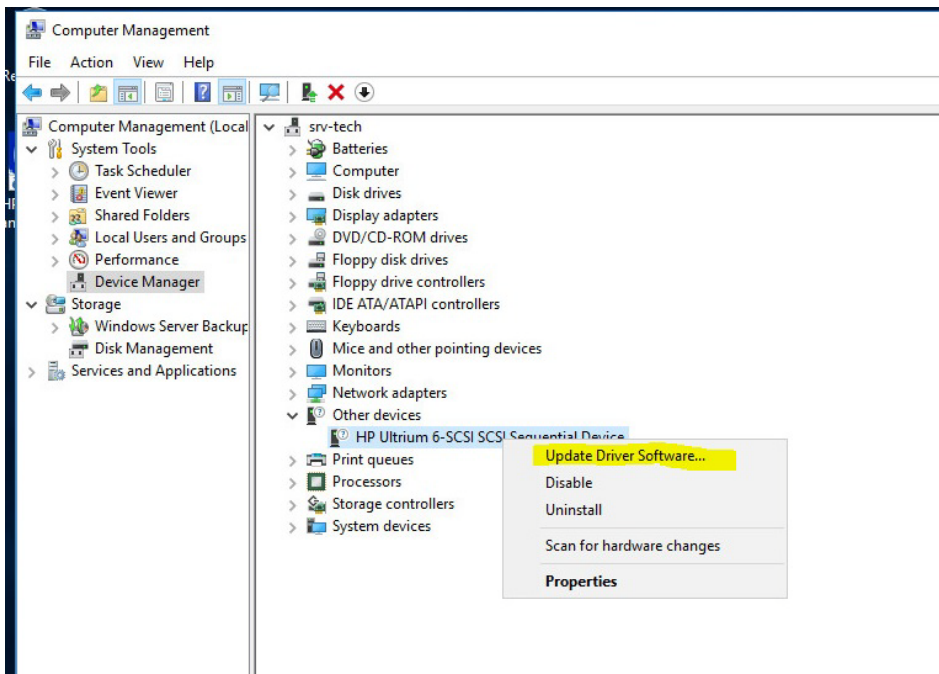
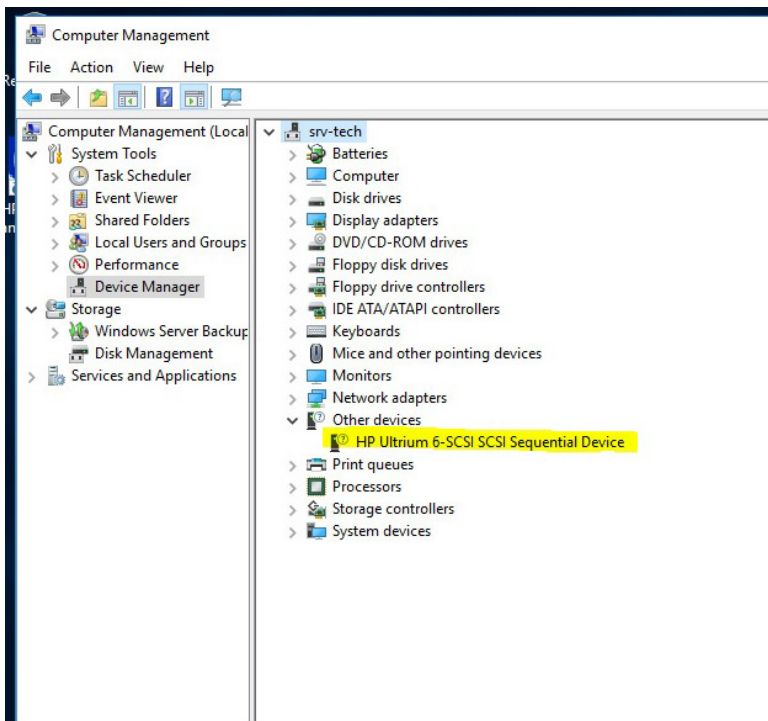




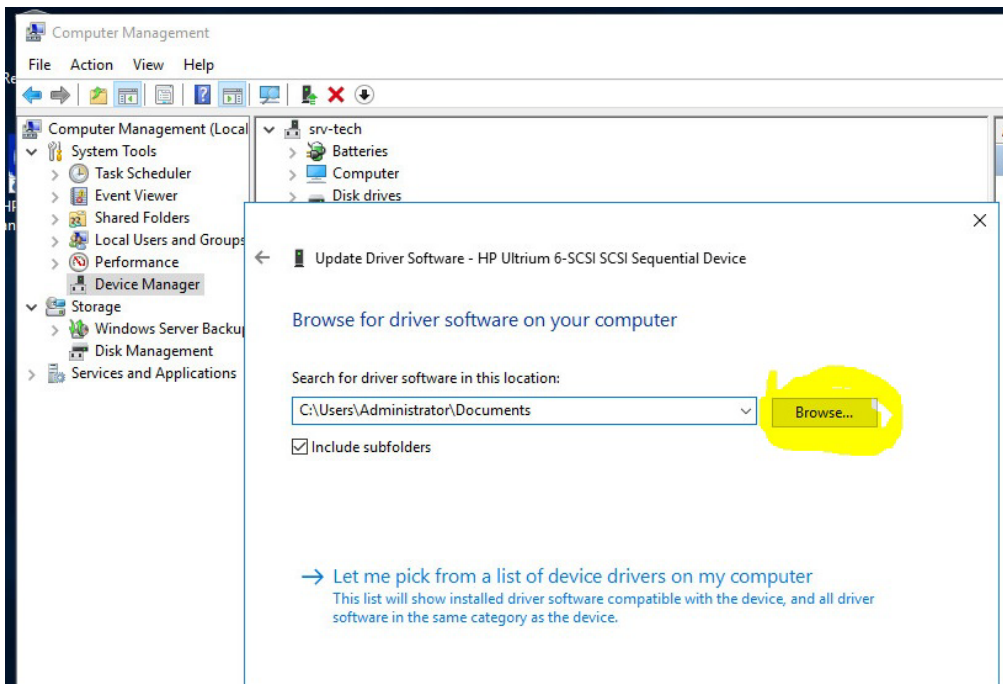
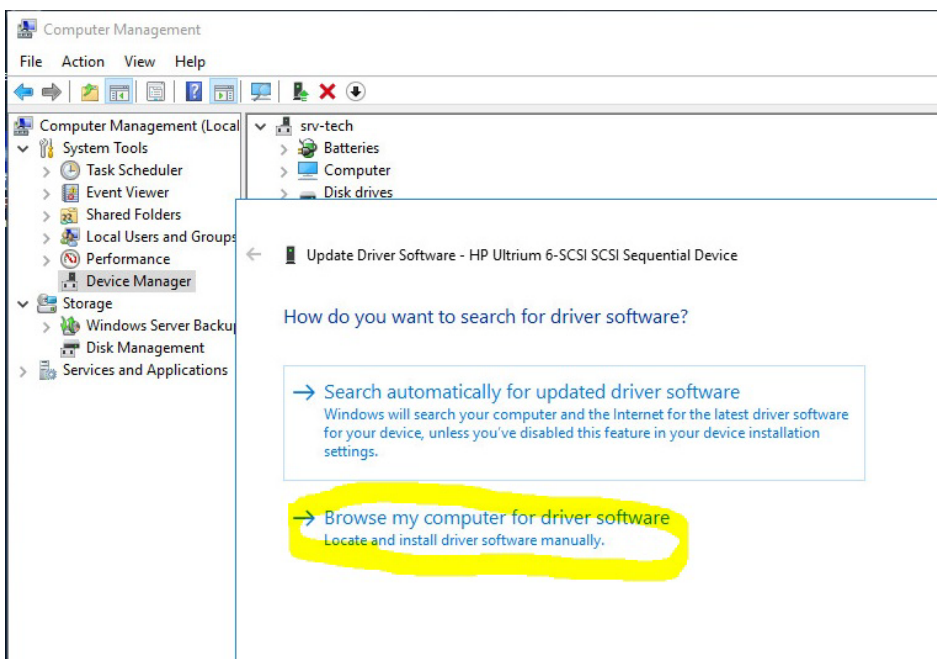


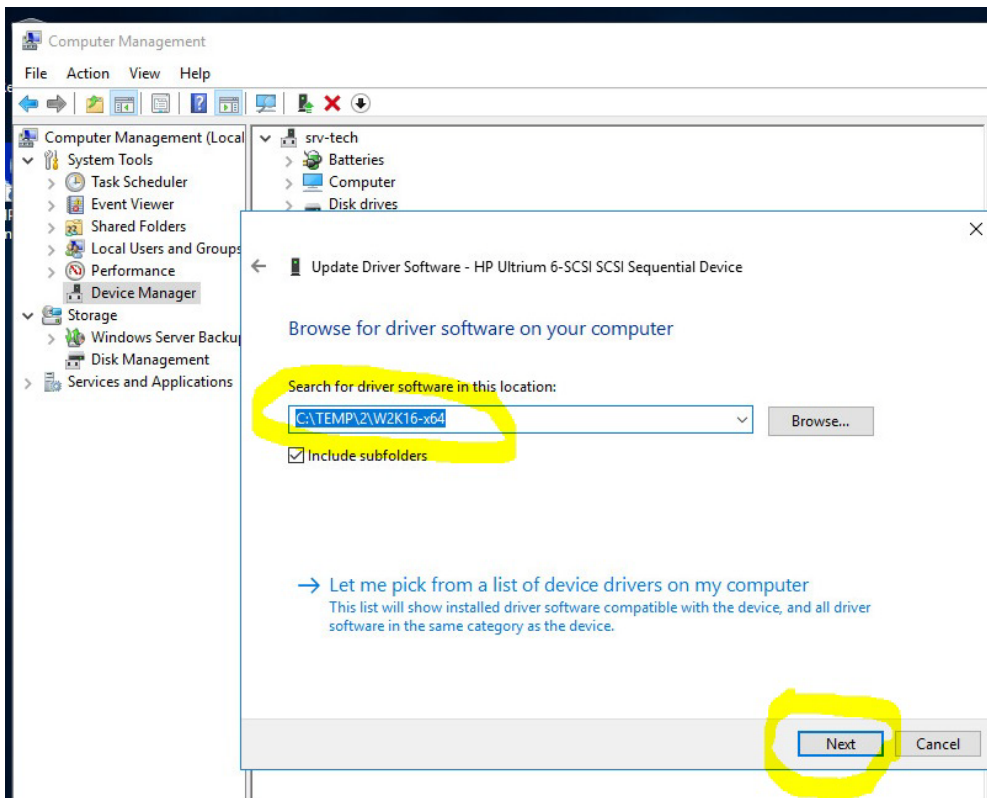
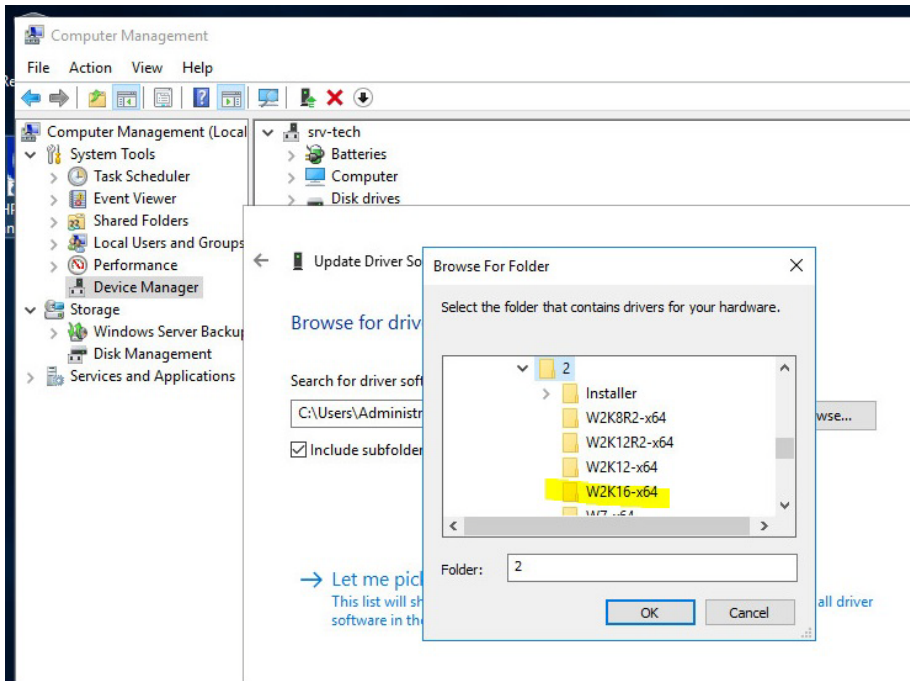
- c. Installs Microsoft Windows drivers for HPE StoreEver Tape Drives, Tape Autoloaders and Tape Libraries.  
[https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX\\_7e9f343865d1445e92cfbaf0b1#tab2](https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX_7e9f343865d1445e92cfbaf0b1#tab2)

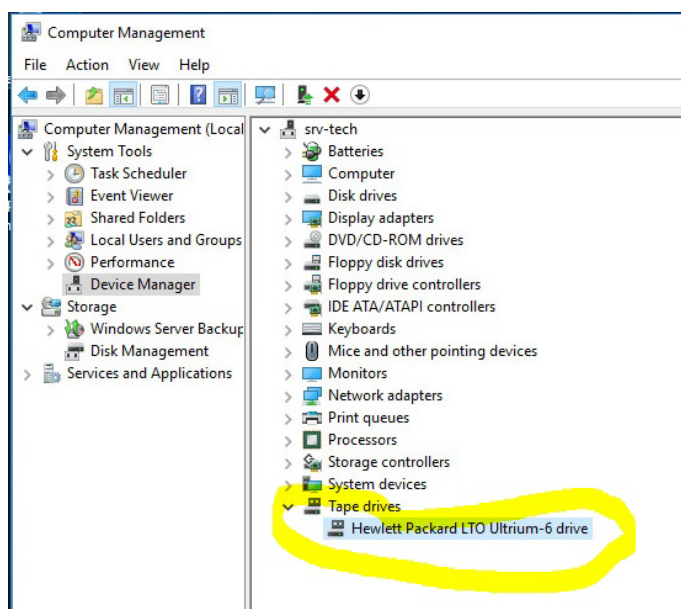
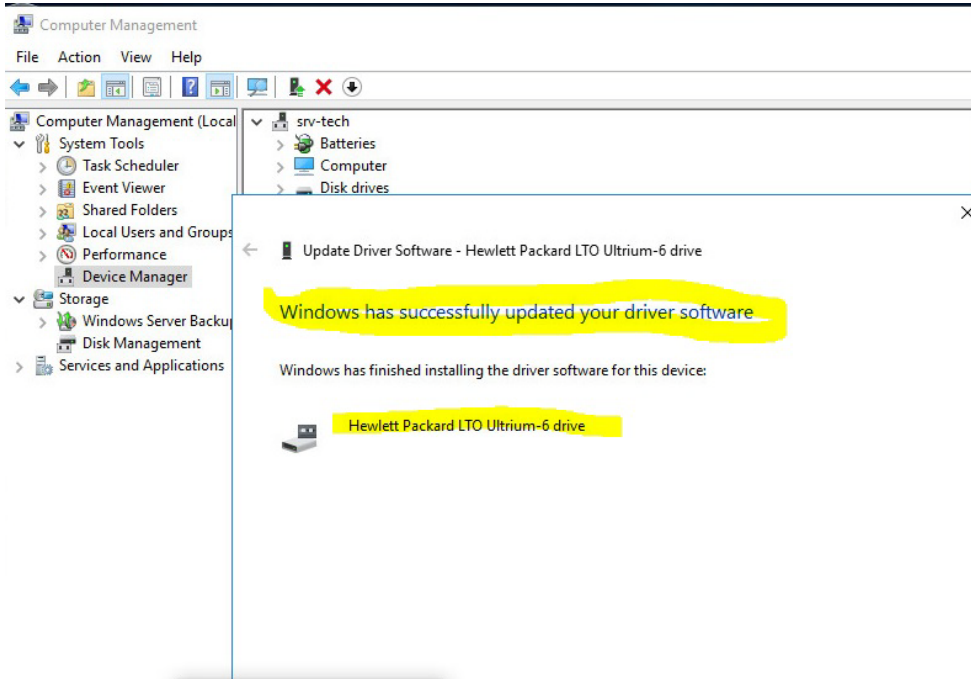














## 4. Check with HPE Library and Tape Tools

