

# VMware

??x86????????1998?????????  
??????????

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# Import Virtualbox ova Image

## Export from Virtualbox

?? VM ??? \*.ova image

- ??? OVF1.0?(???)
- ???????(?:??? vmware ??????????????????)

## Import to vSphere 6 Server

1. ?? VMware-ovftool: <https://www.dropbox.com/s/k925gfb2zn4ffgw/ovftool.zip?dl=0>
2. ? \*.ova ??? OVF ??(????????? \*.ovf, \*.mf, \*.vmdk)
3. ? vSphere Web ?? Deploy OVF Template????????????????? \*.ovf ? \*.vmdk
4. ?? vCenter ?????????????????? ESXi ???

OVFTool ??

```
"C:\Program Files\VMware\VMware OVF Tool\ovftool.exe" --lax source.ova target.ovf
```

Deploy OVF template

vSphere ESXi Web)

[deploy\\_ovf-esxi.png](#)

vCenter Web)

[deploy\\_ovf-vcenter.png](#)

## F.A.Q

Error: No supported hardware versions



Issues detected with selected template. Details: - -1 : -1:VALUE\_ILLEGAL: No supported hardware versions among [virtualbox-2.2]; supported: [vmx-04, vmx-07, vmx-08, vmx-09, vmx-10, vmx-11, vmx-12, vmx-13].

??:

?? \*.ovf ???????

```
<System>
  <vssd:ElementName>Virtual Hardware Family</vssd:ElementName>
  <vssd:InstanceID>0</vssd:InstanceID>
  <vssd:VirtualSystemIdentifier>graylog#95</vssd:VirtualSystemIdentifier>
  <vssd:VirtualSystemType>virtualbox-2.2</vssd:VirtualSystemType>
</System>
```

?? VirtualSystemType ? virtualbox-2.2 ?? vmx-07 ????????????

Error: No space left for device '7' on parent controller '5'.

“ Line 85: No space left for device '7' on parent controller '5'.  
Line 66: Unsupported virtual hardware device 'AHCI'.

Solution: ??????? vmx-?? ???

Error: The checksum(s) from the provided manifest file do not match

“ The checksum(s) from the provided manifest file do not match the content of file(s): zabbix5.ovf.

Solution: ????? \*.ovf ?????????? \*.mf?

Error: Value “PIIX4” of ResourceSubType element not found in [#]

“ 48:7:VALUE\_ILLEGAL: Value “PIIX4” of ResourceSubType element not found in [].  
57:7:VALUE\_ILLEGAL: Value “PIIX4” of ResourceSubType element not

found in [].

85:7:VALUE\_ILLEGAL: Value "5" of Parent element does not refer to a ref of type DiskControllerReference.

75:7:VALUE\_ILLEGAL: Value "4" of Parent element does not refer to a ref of type DiskControllerReference.

Solution: vCenter ESX Host Web

vmx

	ESX version
vmx-07	ESX 4.0
vmx-10	ESX 5.5
vmx-13	ESX 6.5

## Reference

- [Deploy a Virtual Machine from an OVF or OVA File in the VMware Host Client](#)
- [Migrate virtual machine from Oracle VirtualBox to Esxi 5.5](#)
- [VM VirtualBox VMware ESXi](#)

# ESXi Bug Fix & Upgrade

????? ESX ????

## ? SSH ??

? SSH Client ?? vSphere ????????????

“ NOTE: vSphere ???????????? SSH ???

????/??????

????????/??? esxi6.5uX-mgmt-bundle-3.4.5-8.zip ??? vSphere ?????? datastore?

- ?????? Bug??? \*-bundle-\*.zip
- ?????ESXi ???????? \*-depot.zip

“ NOTE:

- ??? vSphere ?????????????/????????????????
- zip ??????????
- ?? ESX ?????????? \*.iso ???

??????????

vSphere ????

```
[root@tpeitpesx-a02:~] esxcli system version get
```

```
Product: VMware ESXi
```

```
Version: 6.5.0
```

```
Build: Releasebuild-10719125
```

```
Update: 2
```

```
Patch: 67
```

vSphere ????

```
[root@tpeitpesx-a02:~] esxcli software profile get
(Updated) HPE-ESXi-6.5.0-Update1-iso-650.U1.10.1.3.3
Name: (Updated) HPE-ESXi-6.5.0-Update1-iso-650.U1.10.1.3.3
Vendor: Hewlett Packard Enterprise
Creation Time: 2019-06-14T03:16:25
Modification Time: 2019-06-14T03:16:35
Stateless Ready: True
Description:
```

2019-06-14T03:16:25.647136+00:00: The following VIBs are installed:

```
ilo 650.10.3.0.2-1OEM.650.0.0.4240417
nmlx4-rdma 3.16.11.6-1OEM.650.0.0.4598673
scsi-iscsi-linux-92 1.0.0.2-3vmw.650.0.0.4564106
sata-sata-sil 2.3-4vmw.650.0.0.4564106
shim-libata-9-2-2-0 6.5.0-0.0.4564106
```

...

...

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HPE Custom Image Profile for ESXi 6.5.0 ISO

VIBs: amsd 650.11.4.0-18.4240417, ata-libata-92 3.00.9.2-16vmw.650.0.0.4564106, ...

#### “ TIP:

- ????? ISO ??????????????????
- ?????????? profile ??????????????

????/??????

????: /vmfs/volumes/{your-datastore-name}/{path-to-the-file}

```
[root@tpeitpesx-a02:~] esxcli software sources vib list -d /vmfs/volumes/LocalDisk/Patches/esxi6.5uX-mgmt-bundle-3.4.
```

5-8.zip

Name	Version	Vendor	Creation Date	Acceptance Level	Status
amsd	650.11.4.5-18.4240417	HPE	2019-07-19	PartnerSupported	Update
fc-enablement	650.3.4.0.10-4240417	HPE	2019-03-12	PartnerSupported	Installed

cru	650.6.5.10.4-1OEM.650.0.0.4240417	HPE	2018-04-04	PartnerSupported	Installed
ilo	650.10.3.0.2-1OEM.650.0.0.4240417	HPE	2018-03-29	PartnerSupported	Installed
smx-provider	650.03.15.00.4-4240417	HPE	2018-08-29	VMwareAccepted	Installed

“ TIP: ????????\*\*????\*?? amsd ??? bug  
 ?????

Before: **amsd 650.11.4.0-18.4240417**

After: **amsd 650.11.4.5-18.4240417**

????/???

1. ???????????? VMs
2. ????? Maintenance Mode
3. ?????/???
4. ????
5. ????? Maintenance Mode
6. ??? VMs

??/? **Maintenance Mode** (???? GUI ??)

# □

vim-cmd hostsvc/maintenance\_mode\_enter

# □

vim-cmd hostsvc/maintenance\_mode\_exit

????/???

“ ??? update?? install

?? [“esxcli software vib”  
 commands to patch an ESXi 6.x/7.x host \(2008939\) \(vmware.com\)](#)

- install : ?????/????
- update : ???????
- -d : .zip ?
- -v : .vib ?

```
esxcli software vib update --dry-run -d "/vmfs/volumes/LocalDisk/Patches/esxi6.5uX-mgmt-bundle-3.4.5-8.zip"
esxcli software vib update -d "/vmfs/volumes/LocalDisk/Patches/esxi6.5uX-mgmt-bundle-3.4.5-8.zip"
```

```
esxcli software vib install --dry-run -d "/vmfs/volumes/LocalDisk/Patches/ESXi670U3-18828794-HPE-Gen9plus-depot.zip"
```

```
esxcli software vib install -d "/vmfs/volumes/LocalDisk/Patches/ESXi670U3-18828794-HPE-Gen9plus-depot.zip"
```

??????

??  ???????

```
esxcli software vib list | grep amsd
```



# ESXi Commands

Check whether the /tmp directory is full

```
vdf | grep tmp
```

## System Module

```
esxcli system module list
```

```
esxcli system module set --enabled=false --module=<module-name>
```

```
esxcli system module set --enabled=true --module=<module-name>
```

## ???? vmx

```
“ ?? OVF ?? VM ?????????????????????? vmx ???????????
```

```
sound.autoDetect = "TRUE"  
sound.virtualDev = "hdaudio"  
sound.fileName = "-1"  
sound.present = "TRUE"  
sound.pciSlotNumber = "35"
```

## ???? vmx ???????????????? VM

```
# Find the Vmid for the affected VM
```

```
vim-cmd vmsvc/getallvms
```

```
# Reload configuration for the VM
```

```
vim-cmd vmsvc/reload <Vmid-of-VM>
```

## Network

```
[root@tpeitpexb95:~] esxcli network ip interface list
```

```
vmk0
```

```
Name: vmk0
```

```
MAC Address: 80:30:e0:3b:a0:c4
```

Enabled: true  
Portset: vSwitch0  
Portgroup: Management Network  
Netstack Instance: defaultTcpipStack  
VDS Name: N/A  
VDS UUID: N/A  
VDS Port: N/A  
VDS Connection: -1  
Opaque Network ID: N/A  
Opaque Network Type: N/A  
External ID: N/A  
MTU: 1500  
TSO MSS: 65535  
RXDispQueue Size: 1  
Port ID: 33554442

#### vmk1

Name: vmk1  
MAC Address: 00:50:56:6b:5c:ed  
Enabled: true  
Portset: vSwitch1  
Portgroup: FT1  
Netstack Instance: defaultTcpipStack  
VDS Name: N/A  
VDS UUID: N/A  
VDS Port: N/A  
VDS Connection: -1  
Opaque Network ID: N/A  
Opaque Network Type: N/A  
External ID: N/A  
MTU: 1500  
TSO MSS: 65535  
RXDispQueue Size: 1  
Port ID: 50331654

#### vmk2

Name: vmk2  
MAC Address: 00:50:56:62:26:d7  
Enabled: true  
Portset: vSwitch1

Portgroup: FT2  
Netstack Instance: defaultTcpipStack  
VDS Name: N/A  
VDS UUID: N/A  
VDS Port: N/A  
VDS Connection: -1  
Opaque Network ID: N/A  
Opaque Network Type: N/A  
External ID: N/A  
MTU: 1500  
TSO MSS: 65535  
RXDispQueue Size: 1  
Port ID: 50331655

[root@tpeitpexb95:~] esxcli network ip interface ipv4 get

Name	IPv4 Address	IPv4 Netmask	IPv4 Broadcast	Address Type	Gateway	DHCP	DNS
vmk0	10.14.1.95	255.255.248.0	10.14.7.255	STATIC	10.14.0.254	false	
vmk1	192.168.101.7	255.255.255.0	192.168.101.255	STATIC	0.0.0.0	false	
vmk2	192.168.103.7	255.255.255.0	192.168.103.255	STATIC	0.0.0.0	false	

[root@tpeitpexb95:~] esxcli network ip route ipv4 list

Network	Netmask	Gateway	Interface	Source
default	0.0.0.0	10.14.0.254	vmk0	MANUAL
10.14.0.0	255.255.248.0	0.0.0.0	vmk0	MANUAL
192.168.101.0	255.255.255.0	0.0.0.0	vmk1	MANUAL
192.168.103.0	255.255.255.0	0.0.0.0	vmk2	MANUAL

# vCenter Patch

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- [VMware vCenter Server 6.7 Update 3n Release Notes](#)
- [Product Patches - VMware Customer Connect](#)

????

1. ?? Patch file: `VMware-vCenter-Server-Appliance-6.7.0.48000-18010531-patch-FP.iso`
2. ?? \*.iso ? vCenter VM ???????? datastore ? (*Recommend: ??? Patches ??*)
3. ?? vCenter VM ????? ESXi Host
4. ?? ESXi Web Admin (*NOTE: ??? vCenter Web*)
5. ? vCenter VM ??
6. ? vCenter VM ????????
7. ??? vCenter VM
8. ?? vCenter VM ????? patch ? iso ?
9. ????? SSH ?? vCenter VM
10. ????? Patch ??
11. ?? vCenter VM ???

## Patch Commands

```
# To stage the ISO:
software-packages stage --iso

# To see the staged content:
software-packages list --staged

#To install the staged rpms:
software-packages install --staged
```

# vCenter ??

?? root ??

?????? ESXi ??? VMware Host Client????????????? VMware Remote Console ????? vCenter Server Appliance ? Console ??????PHOTON????????????e?????????????

??GNU GRUB??????????? `rw init=/bin/bash` ??????????F10?????????????

??????? root ???????????????? `mount -o remount,rw /` ??????????????????????

????? `passwd` ????????? root ???????

??????????????? `umount /` ???????????????????? `reboot -f` ???????????? vCenter Server Appliance?

root ???????

[????????????????????](#)

## vCenter Backup & Restore

????????? VM snapshot????????????????????

????????? VMware Appliance Management Interface (`https://<FQDN-of-VCSA>:5480/`)?

?????????????????

- FTP(s)
- NFS
- SFTP
- SMB
- HTTPS

???????????

1. ?????????? VCSA ISO ????
2. ?????????????????????? Windows ??? (VM ?????)??????????? vCenter ?? (VCSA) ???????
3. Windows ??????? VCSA ISO ????? `vcsa-ui-install/win32/installer.exe` ?????/??????

?????

- [vCenter Server Appliance 6.7 File-Based Backup and Restore Walkthroughs - VMware vSphere Blog](#)
- [New vCenter Server Appliance File-Based Backup / Restore Walkthroughs - VMware vSphere Blog](#)

# vCenter Converter

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VMware vCenter Converter Standalone

Home: <https://www.vmware.com/products/converter.html>

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?: Error 1053

“ Error 1053: The service did not respond to the start or control request in a timely fashion .

????? KB: <https://kb.vmware.com/s/article/64993>

1. Click the **Start** button, then click **Run**, type **regedit**, and click **OK**.
2. In the **Registry Editor**, click the registry subkey  
HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control.
3. In the details pane, locate the **ServicesPipeTimeout** entry, right-click that entry and then select **Modify**.  
**Note:** If the **ServicesPipeTimeout** entry does not exist, you must create it by selecting **New** on the **Edit** menu, followed by the **DWORD Value**, then typing **ServicesPipeTimeout**, and clicking **Enter**.
4. Click **Decimal**, enter the new timeout value in milliseconds, and then click **OK**. (Modify the value to a larger one. Here is no recommended value, adjust this value accordingly.)
5. Restart the computer.
6. Manual start vCenter Converter Agent/Server/Worker service in Windows Service Manager. If the service is still failed to start with Windows event 7009, increase the "ServicesPipeTimeout" value.