



Citrix XenServer Conversion Manager 1.0 Guide: Converting from VMware to XenServer

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Citrix XenServer Conversion Manager 1.0 Guide: Converting from VMware to XenServer

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Version: Citrix XenServer Conversion Manager 1.0

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Introduction

Citrix XenServer Conversion Manager helps you convert workloads from VMware to XenServer by copying batches of VMware virtual machines into your XenServer environment.

XenServer Conversion Manager makes conversion easier. It allows you to:

- Convert multiple virtual machines in one simple wizard
- Map network settings between VMware and XenServer so your converted virtual machines will come up with the proper network settings
- Choose the storage location where you would like your new XenServer virtual machines to run

Getting started with XenServer Conversion Manager is easy. All you need to do is import the XenServer Conversion Manager Virtual Appliance into your XenServer host or pool, install the XenServer Conversion Manager Console on a windows machine, and follow a simple wizard. This is described throughout this guide and in the *XenServer Conversion Manager Help*.

It should be noted that XenServer Conversion Manager does not remove or change your existing VMware environment. Virtual machines are duplicated onto your XenServer environment and not removed from VMware.

Learning XenServer

Before you can convert your environment, you may need to learn some XenServer basics. To become familiar with XenServer, if you are not already, consider reading the [XenServer 6.1 Quick Start Guide](#).

To use XenServer Conversion Manager, you will need to know the following:

- How to set up a basic XenServer environment, including installing XenServer. See the [XenServer 6.1 Quick Start Guide](#) and the [XenServer 6.1 Installation Guide](#).
- How to create a network in XenServer and, quite possibly, how to assign an IP address to a NIC. This is discussed in this guide and also in the [XenServer 6.1 Quick Start Guide](#).
- How to connect to storage. This is discussed in this guide and also in the [XenServer 6.1 Quick Start Guide](#).

XenServer documentation, Knowledge Center articles, and white papers are available from the Citrix Knowledge Center at support.citrix.com. Additional resources for learning about XenServer are available through Citrix TV and the [XenServer Design Kit](#) on Citrix Community (community.citrix.com). Training is available through Citrix Education.

Comparing VMware and XenServer Terminology

The following table summarizes the approximate XenServer equivalent for common VMware features, concepts, and components:

VMware Term	XenServer Equivalent
VMware vSphere Client	XenCenter (the management console for XenServer)
Cluster / Resource Pool	Resource Pool
Data Store	Storage Repository
vMotion	XenMotion
Distributed Resource Scheduling (DRS)	Workload Balancing
High Availability (HA)	High Availability (HA)

VMware Term	XenServer Equivalent
vCenter Converter	XenConvert, XenServer Conversion Manager
Role Based Access Control (RBAC)	Role Based Access Control (RBAC)

Conversion Overview

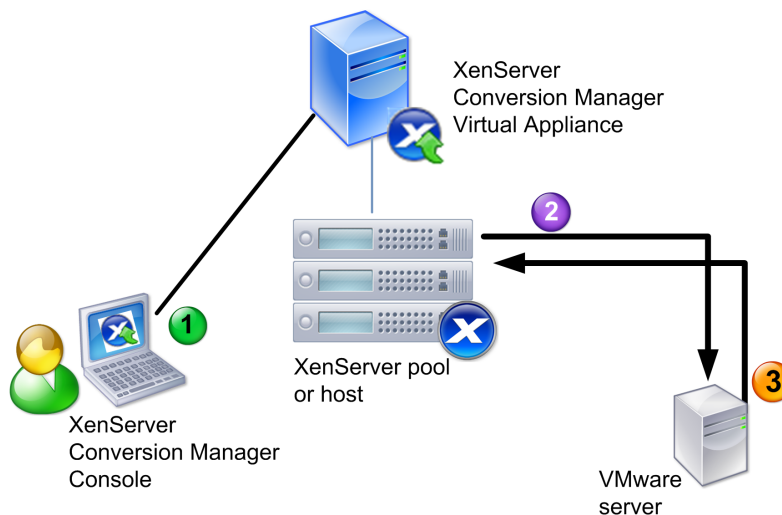
XenServer Conversion Manager creates a copy of each targeted virtual machine and, when it has converted it to a XenServer VM with comparable networking and storage connectivity, imports it into your XenServer pool or host.

You can use XenServer Conversion Manager to convert as few as one or two virtual machines or perform batch conversions of an entire environment.

The XenServer Conversion Manager conversion process requires four items:

- **XenServer Conversion Manager Console.** XenServer Conversion Manager Console is the user interface where you set conversion options and control conversion. You install this console on your Windows local desktop. XenServer Conversion Manager requires a connection to XenServer and the XenServer Conversion Manager Virtual Appliance, which is a virtual appliance where the conversion is actually performed.
- **XenServer Conversion Manager Virtual Appliance.** The XenServer Conversion Manager Virtual Appliance is, essentially, a prepackaged virtual machine you import into the XenServer host or pool where you want to run the converted virtual machine(s). The virtual appliance converts the copies of the VMware virtual machines into the XenServer virtual-machine format and imports these copies into the XenServer pool or host.
- **XenServer stand-alone host or pool.** This host or pool is the XenServer environment where you want to run the converted virtual machines.
- **VMware server.** XenServer Conversion Manager requires a connection to a VMware server that manages the virtual machines you want to convert. This connection can be to a vCenter Server, ESXi Server, or ESX Server. The virtual machines are not removed from the VMware server. Instead, the XenServer Conversion Manager Virtual Appliance makes a copy of these virtual machines and converts them to XenServer virtual-machine format.

The following illustration shows the relationships between these components.



This illustration shows how (1) XenServer Conversion Manager communicates with XenServer Conversion Manager Virtual Appliance, (2) the XenServer Conversion Manager Virtual Appliance authenticates with the VMware server, and (3) the VMware server responds to the XenServer Conversion Manager Virtual Appliance during conversion.

The VMware server communicates with the XenServer Conversion Manager Virtual Appliance only when the appliance queries the VMware server for environment information (VMs and networks) and disk data throughout the conversion.



Summary of How to Convert Virtual Machines

You can configure the XenServer Conversion Manager and start to convert virtual machines in just a few easy steps:

1. Download the XenServer Conversion Manager Virtual Appliance and the XenServer Conversion Manager Console from MyCitrix.com.
2. Import the XenServer Conversion Manager Virtual Appliance into XenServer (using XenCenter).
3. Configure the XenServer Conversion Manager Virtual Appliance using XenCenter.
4. Install the XenServer Conversion Manager Console.
5. From the XenServer Conversion Manager Console, launch the conversion wizard and start to convert virtual machines.

The sections that follow explain these steps. A subset of the information in this guide is available in the XenServer Conversion Manager Help, which appears in the XenServer Conversion Manager Console.



Preparing Your Environment

Before you can begin converting your VMware environment, you must create and prepare the *target* XenServer stand-alone host or environment, where you will ultimately want to run the converted VMware virtual machines. Preparing your environment might include the following activities:

1. Defining a strategy for the way in which you will convert your VMware environment. Do you just want to convert 1 or 2 VMs? Will you convert your entire environment? Will you create a pilot first to ensure your configuration is correct? Will you run both environments in parallel? Do you want to maintain your existing cluster design when you convert to XenServer?
2. Planning your networking configuration. Do you want to connect to the same physical networks? Do you want to simplify or change your networking configuration?
3. Installing XenServer on the hosts you want in the pool. Ideally, you should have the NICs on the hosts plugged in to their physical networks before you begin installation.
4. Creating a pool and performing any basic networking configuration. For example, you will need to:
 - Configure a network to connect to the VMware cluster on the XenServer host (if the cluster is not on the same network as the XenServer host).
 - Configure a network to connect to the storage array. That is, if you are using IP-based storage, create a XenServer network that connects to the physical network where the storage array resides.
 - Create a pool and add hosts to this pool.
5. (For shared storage and XenServer pools.) Preparing the shared storage where you want store the virtual disks and creating a connection to the storage, known as a Storage Repository (SR) on the pool.
6. (Optional.) Although not a requirement for conversion, you may want to configure the administrator accounts on the XenServer pool to match those on the VMware server. For information about configuring Role-based Access Control for Active Directory accounts, see the *XenCenter Help* or the *XenServer Administrator's Guide*.

Installing XenServer and Creating a Pool

Before you can convert VMware virtual machines, you must have created the XenServer pool (or stand-alone host) where you will want to run the converted virtual machines. This pool must have networking configured so it can connect to VMware server. Likewise, you may want to configure the same physical networks on the XenServer pool that you have in the VMware cluster or simplify your networking configuration. If you want to run the converted virtual machines in a pool, you must add the shared storage to the pool by creating a storage repository before conversion.

If you are new to XenServer, you can learn about XenServer basics, including basic installation and configuration, by reading the *XenServer 6.1 Quick Start Guide*. For in-depth networking information, see *Designing XenServer 6.1 Network Configurations*.

XenServer Environment Considerations

Before installing XenServer and importing the virtual appliance, consider the following factors that may change your conversion strategy:

- **Selecting the host where you want to run the XenServer Conversion Manager Virtual Appliance.** You must import the virtual appliance into the stand-alone host or into a host in the pool where you will eventually run the converted virtual machines.

For pools, you can run the virtual appliance on any host in the pool, provided its storage meets the storage requirements.

- **The storage configured for the pool or host where you want to run the converted virtual machines must meet specific requirements.** If you want to run your newly converted virtual machines in a pool, their virtual disks must be stored on shared storage. However, if the converted virtual machines will run on a single stand-alone host (not a pool) their virtual disks can use local storage.



If you want to run the converted virtual machines in a pool, you must have added the shared storage to the pool by creating a storage repository.

- **Guest operating systems supported for conversion.** XenServer Conversion Manager supports converting VMware virtual machines running all of the Windows guest operating systems that XenServer supports. Linux operating systems are not supported. For a list of Windows guest operating systems XenServer supports, see the [Citrix XenServer 6.1 Virtual Machine User's Guide](#).

Meeting Networking Requirements

To convert VMware virtual machines, the XenServer Conversion Manager Virtual Appliance needs connectivity to a physical network or VLAN that can contact the VMware server. (In the information that follows, this network is referred to as the "VMware network.")

If the VMware server is on a different physical network than the hosts in the XenServer pool, you need to add the network to XenServer before running the conversion wizard.

Mapping Your Existing Network Configuration

Existing VMware Networks

XenServer Conversion Manager includes features that can reduce the amount of manual networking configuration you need to perform after you convert from your existing VMware virtual machines to XenServer. For example, XenServer Conversion Manager will:

- **Preserve virtual MAC addresses** on the VMware virtual machines and re-use them in the resulting XenServer virtual machines. Preserving the MAC addresses associated with virtual network adapters (virtual MAC addresses) may:
 - Help preserve IP addresses in environments using DHCP
 - Be useful for software programs whose licensing references the virtual MAC addresses
- **Map (virtual) network adapters** XenServer Conversion Manager can map VMware networks onto XenServer networks so that after the virtual machines are converted their virtual network interfaces will be connected accordingly. XenServer networks you can choose include standard physical networks (known as External Networks), VLANs, single-server private networks, and cross-server private networks.

For example, if you map VMware 'Virtual Network 4' to XenServer 'Network 0,' then any virtual machine you converted that had a virtual adapter connected to VMware 'Virtual Network 4' will be connected to 'Network 0' once it is converted. XenServer Conversion Manager does not convert or migrate any hypervisor network settings; the wizard only alters a converted VM's virtual network interface connections based on the mappings provided.

Note:

You do not need to map all of your VMware networks on to corresponding XenServer networks. If desired, you can change the networks the virtual machines use or reduce and/or consolidate the number of networks in your new XenServer configuration.

To gain the maximum benefit from these features, Citrix recommends the following:

- Before installing XenServer, plug the hosts into the networks on the switch (that is, the ports) that you will want to configure on the host.
- Ensure the XenServer pool can see the networks you want detected. Specifically, plug the XenServer hosts into switch ports that can access the same networks as the VMware cluster.

While it may be easier to plug the XenServer NICs into the same (corresponding) networks as those on the VMware hosts, this is not required. If you want to change the NIC/network association, you can plug a XenServer NIC into a different physical network.

Preparing for the XenServer Conversion Manager Networking Requirements

When you perform conversion, you must create a network connection to the network where the VMware server resides. XenServer Conversion Manager uses this connection for conversion traffic between the XenServer host and the VMware server.

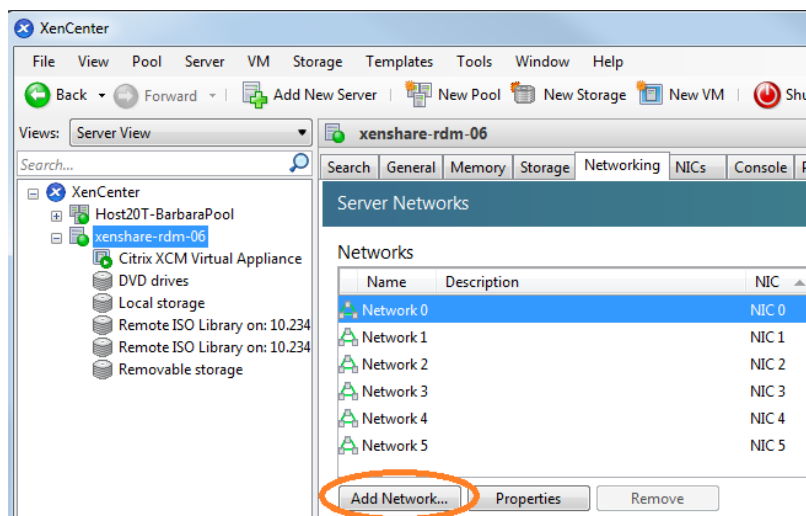
To create this network connection, you must perform two tasks:

- When you import the XenServer Conversion Manager Virtual Appliance, you must specify the network you added for conversion traffic as a virtual network interface. You can do so by configuring **interface 1** so it connects to that network.
- Before you run the conversion wizard, you must add the network connecting VMware and XenServer to the XenServer host where you want to run the converted VMs.

By default, when you import the XenServer Conversion Manager Virtual Appliance, XenCenter creates one virtual network interface, which is associated with Network 0 and NIC0 (also known as eth0). However, by default, XenServer Setup configures NIC0 as the *management interface*, a NIC used for XenServer management traffic. As a result, when adding a network for conversion, you may want to select a NIC other than NIC0. Selecting another network may improve performance in busy pools. For more information about the management interface, see the *XenCenter Help, Designing XenServer 6.1 Network Configurations*, or *XenServer Administrator's Guide*.

To add a network to XenServer

1. In the **Resource** pane in XenCenter, select the pool where you intend to run XenServer Conversion Manager.
2. Click the **Networking** tab.
3. Click **Add Network**.



4. On the **Select Type** page, select **External Network**, and click **Next**.
5. On the **Details** page, enter a meaningful name for the network (for example, "VMware network") and description.
6. On the **Interface** page, specify the following:
 - **NIC.** Select the NIC that you want XenServer to use to create the network. You must select the NIC that is plugged in to the physical or logical network of the VMware server.
 - **VLAN.** If the VMware network is a VLAN, enter the VLAN ID (or "tag").
 - **MTU.** If the VMware network uses jumbo frames, enter a value for the Maximum Transmission Unit (MTU) between 1500 to 9216. Otherwise, leave the MTU box at its default value of 1500.

Do not select the **Automatically add this network to new virtual machines** check box.

7. Click **Finish**.

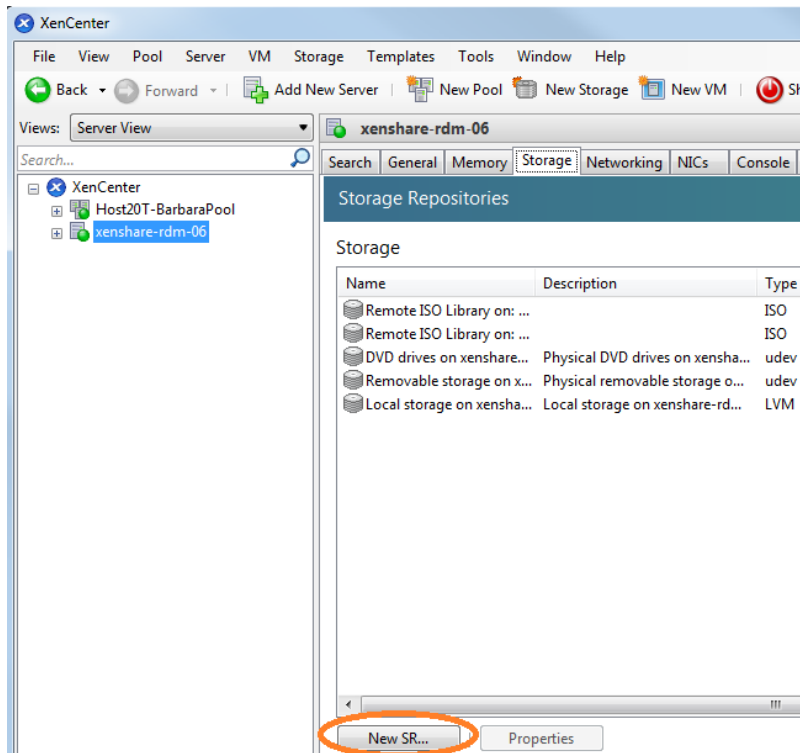
Meeting Storage Requirements

Before you convert batches of VMware virtual machines, consider your storage requirements. Converted virtual machine disks are stored on a XenServer *storage repository*, which is essentially a storage container.

This storage repository should be large enough to contain the virtual disks for all the converted virtual machines you want to run in that pool. For converted machines that will only run on a stand-alone host that is not in a pool, you can specify either local or shared storage as the location for the converted virtual disks. For converted machines running in pools, you must specify shared storage.

To create a storage repository

1. In the **Resource** pane in XenCenter, select the pool where you intend to run the XenServer Conversion Manager Virtual Appliance.
2. Click the **Storage** tab.
3. Click **New SR** and follow the directions in the wizard. For additional instructions, press **F1** to display the online help.



XenServer Requirements

You can run virtual machines converted with this release of XenServer Conversion Manager on the following versions of XenServer:

- XenServer 6.1

VMware Requirements

XenServer Conversion Manager can convert VMware virtual machines from the following versions of VMware:

- vCenter Server 4.0 and 4.1
- vSphere 4.0 and 4.1



Preparing to Import the Virtual Appliance

Before importing the virtual appliance, note the following information and make the appropriate changes to your environment, as applicable. Also, check the XenServer Conversion Manager release notes for additional, late-breaking, release-specific requirements.

Downloading the Virtual Appliance

The XenServer Conversion Manager Virtual Appliance is packaged in an .xva format. You can download the virtual appliance from [MyCitrix.com](https://mycitrix.com). When downloading the file, save it to a folder on your local hard drive (typically, but not necessarily, on the computer where XenCenter is installed). After the .xva is on your hard drive, you can import it into XenCenter.

Virtual Appliance Prerequisites

The XenServer Conversion Manager Virtual Appliance requires a minimum of:

- XenServer 6.1
- Disk space: 4GB of disk space
- Memory: 1GB (will use up to 2GB if available)
- Virtual CPU allocation: 1 VCPU

Importing and Configuring the XenServer Conversion Manager Virtual Appliance

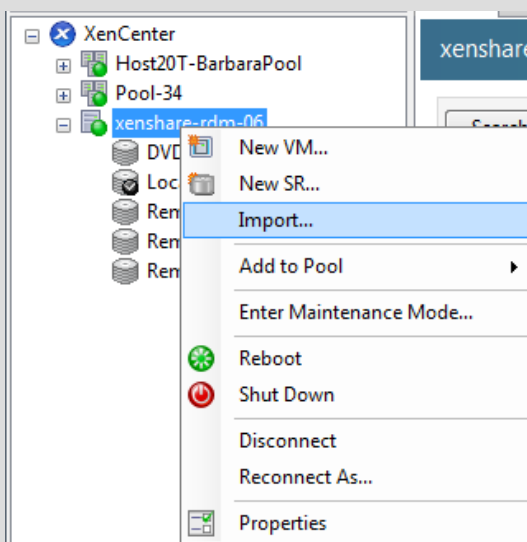
The XenServer Conversion Manager Virtual Appliance is a single pre-installed virtual machine designed to run on a XenServer host. Before importing it review the prerequisite information and considerations in [the section called "Preparing to Import the Virtual Appliance"](#).

Importing the Virtual Appliance into XenCenter

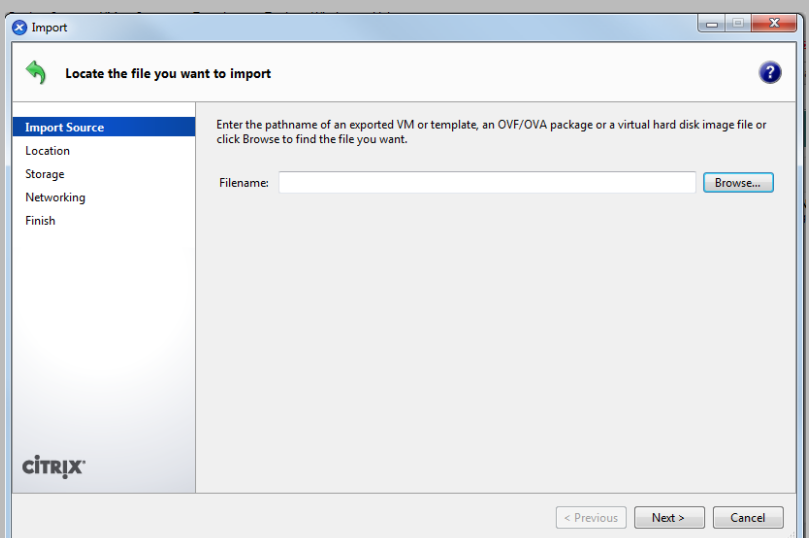
Import the XenServer Conversion Manager Virtual Appliance into the pool or host where you will ultimately want to run the converted virtual machines. To import the XenServer Conversion Manager Virtual Appliance, use the XenCenter Import wizard.

To import the virtual appliance into XenCenter

1. Open XenCenter. Right-click on the pool (or host) into which you want to import the virtual appliance package, and select **Import**.



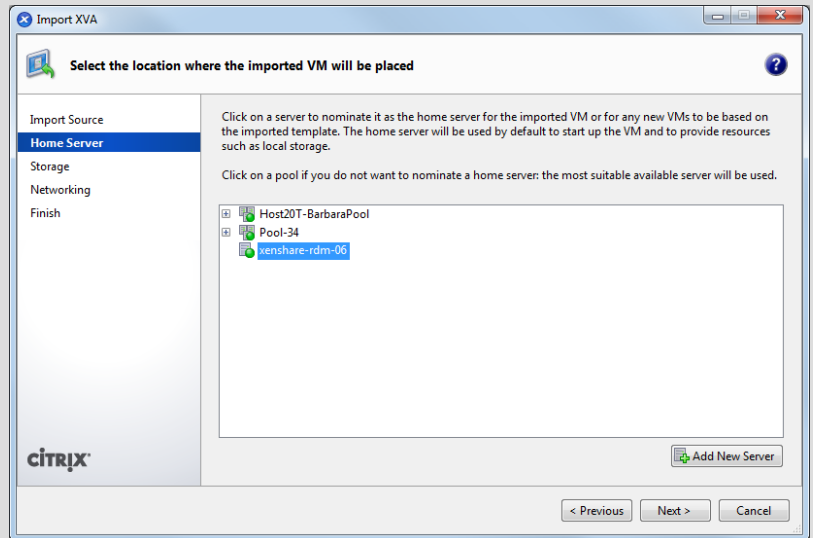
2. Browse to the virtual appliance package.



3. Select the pool or *home server* where you want to run the XenServer Conversion Manager Virtual Appliance.

A home server is the host that provides the resources for a VM in a pool. XenServer always attempts to start the VM on that host if it can before trying other hosts.

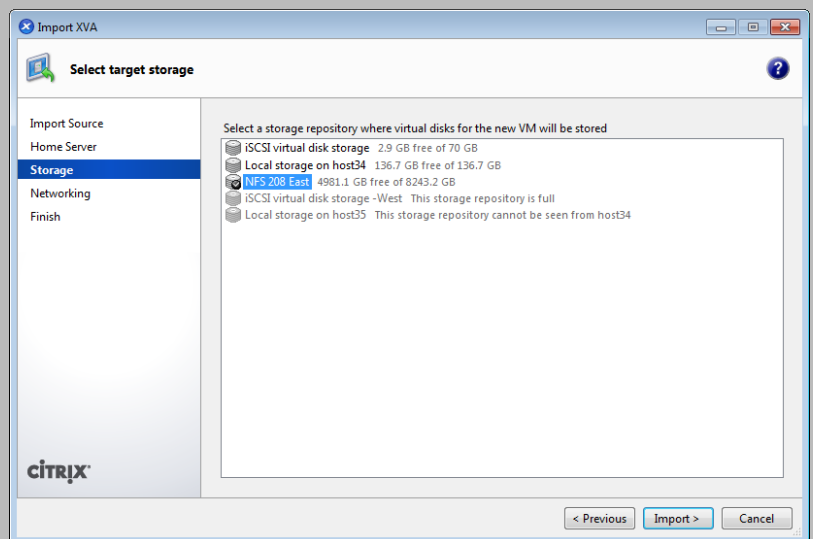
If you select a host, the XenServer Conversion Manager Virtual Appliance uses this host as its home server. If you select the pool, the virtual appliance will automatically start on the most suitable host in that pool.



4. Choose a storage repository on which to store the virtual disk for the XenServer Conversion Manager Virtual Appliance.

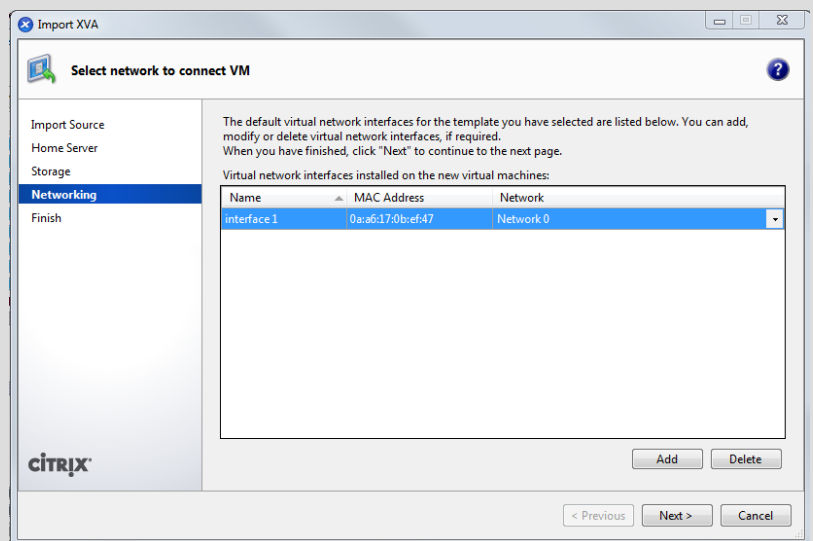
To add a storage repository to the pool, see [the section called "Meeting Storage Requirements"](#)

You can choose either local or shared storage.

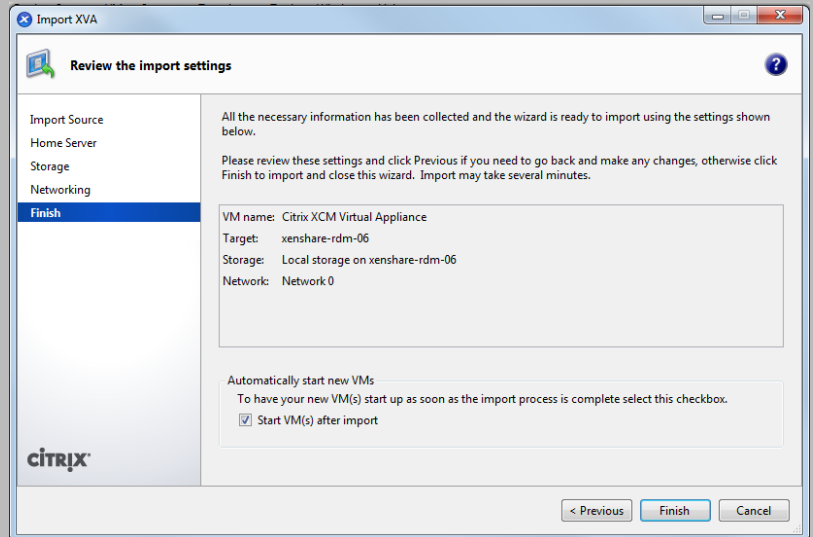


5. Make sure the network you want to use for conversion (the one that connects the VMware server to the XenServer host) is selected as the network associated with **interface 1** ("virtual NIC 1").

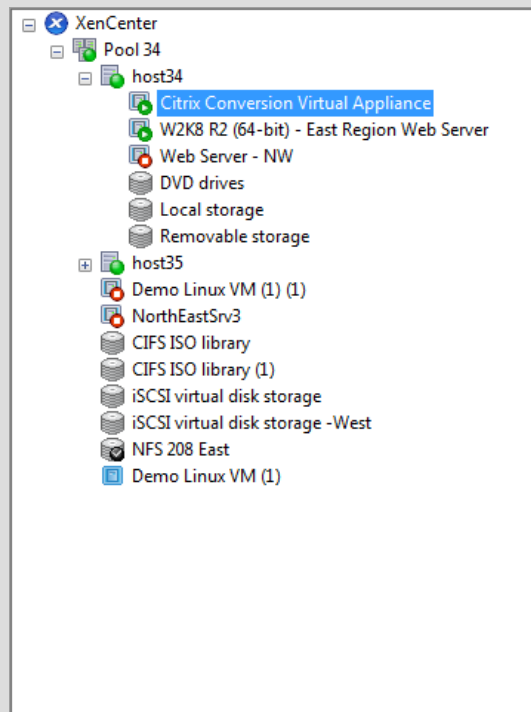
- If the correct network does not appear beside **interface 1**, use the drop-down menu in the **Network** column to select a different network.
- If you have not added the VMware network and it is on a different physical network than the pool, exit the wizard, add the network to the pool, and rerun the wizard. See [To add a network to XenServer](#).



6. Leave the **Start VM(s) after import** check box enabled, and click **Finish** to import the virtual appliance.



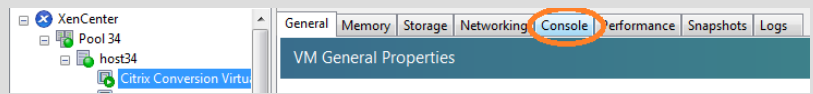
7. After you finish importing the .xva file, the XenServer Conversion Manager Virtual Appliance appears in the **Resource** pane in XenCenter.



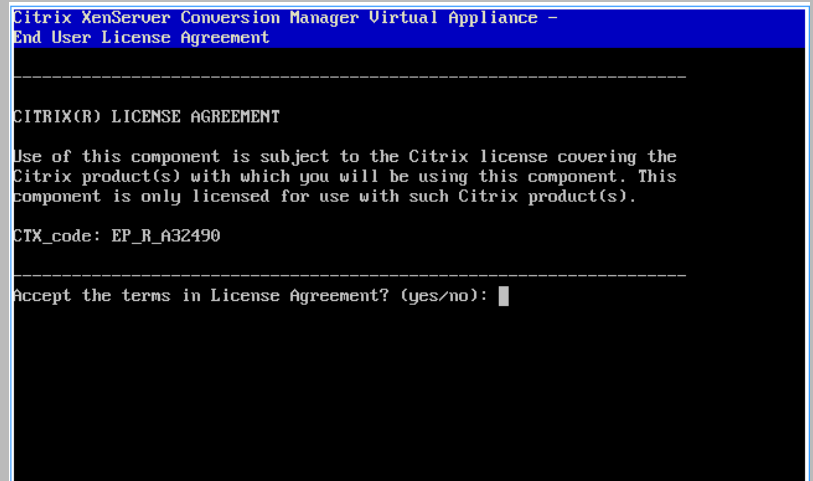
Configuring the XenServer Conversion Manager Virtual Appliance

After you finish importing the XenServer Conversion Manager Virtual Appliance, you must configure it before you can use it to convert VMware virtual machines by following the prompts in the XenCenter **Console** tab.

1. After importing the XenServer Conversion Manager Virtual Appliance, click the **Console** tab.

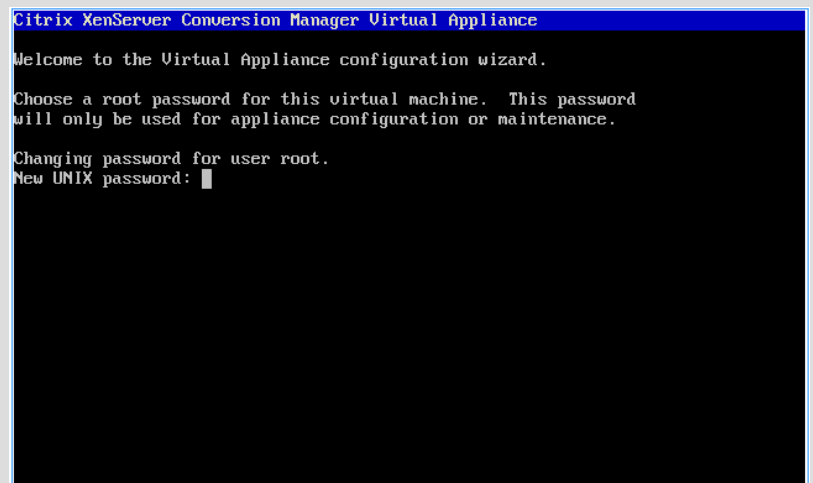


2. Enter **yes** to accept the terms of the license agreement. To decline the EULA, enter **no**.

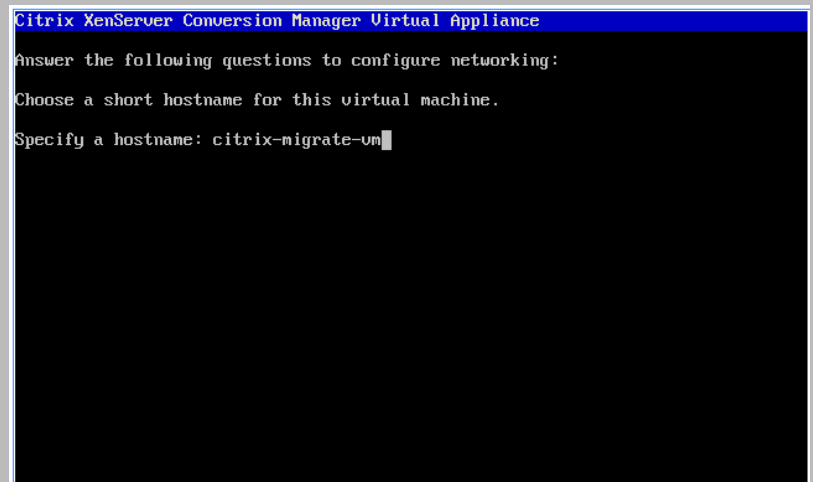


3. Enter and confirm a new root password for the XenServer Conversion Manager Virtual Appliance. Citrix recommends selecting a strong password.

Note: When you enter the password, the console does not display placeholders, such as asterisks, for the characters.



4. Enter a hostname for the XenServer Conversion Manager Virtual Appliance.



5. Enter the domain suffix for the virtual appliance.

For example, if the fully qualified domain name (FQDN) for the virtual appliance will be citrix-migrate-vm.domain4.bedford4.ctx4, then enter domain4.bedford4.ctx4.

```
Citrix Conversion Virtual Appliance
Answer the following questions to configure networking:
Choose a short hostname for this virtual machine.
Specify a hostname: citrix-migrate-vm
Enter the domain suffix for this machine. e.g. mydomain.com: domain4.bedford4.ctx4
```

6. Enter **y** to use DHCP to obtain the IP address automatically for the XenServer Conversion Manager Virtual Appliance. Otherwise, enter **n** and then enter a static IP address, subnet mask, and gateway for the virtual machine.

```
Citrix Conversion Virtual Appliance
Answer the following questions to configure networking:
Choose a short hostname for this virtual machine.
Specify a hostname: citrix-xenmigrate-upx
Enter the domain suffix for this machine. e.g. mydomain.com: domain4.bedford4.ctx4
Do you want to use DHCP to configure the network settings? (y/n):
```

8. Enter **y** when prompted if the hostname and networking settings are correct. After pressing **Enter**, the XenServer Conversion Manager Virtual Appliance finishes configuring the appliance.

```
Citrix Conversion Virtual Appliance
Confirm your network settings:
Hostname: citrix-migrate-upx
Domain name: domain4.bedford4.ctx4
DHCP: Yes
Are these settings correct? (y/n): y
```

9. If you successfully configured the appliance, a login prompt appears.

```
Citrix XenServer Conversion Manager Virtual Appliance
Citrix XenServer Conversion Manager Virtual Appliance configuration is complete.
Starting conusuc.exe [ OK ]
Starting monit: monit: generated unique Monit id d259d970b0af9b8e0f96e491acbbdb
c and stored to '/var/monit/id'
Starting monit daemon
Monit start delay set -- pause for 240s
[ OK ]
The Citrix XenServer Conversion Manager Service is running at 10.234.224.188
[ OK ]

Citrix XenServer Conversion Manager Virtual Appliance v1.0.0-618
citrix-migrate-vm login: █
```

After you finish configuring the XenServer Conversion Manager Virtual Appliance, continue on to install XenServer Conversion Manager Console, as explained in [Installing the XenServer Conversion Manager Console](#).



Installing the XenServer Conversion Manager Console

After configuring the XenServer Conversion Manager Virtual Appliance, install the XenServer Conversion Manager Console on your local workstation. The XenServer Conversion Manager Console is the user interface where you perform most conversion tasks. From the XenServer Conversion Manager Console, you can launch a conversion wizard that lets you select VMware virtual machines for conversion.

System Requirements

Operating Systems

You can run the XenServer Conversion Manager Console on one of the following operating systems:

- Windows 7
- Windows Server 2008 R2
- Windows Server 2008

Software Requirements

Microsoft .NET Framework 4.0

Hard Drive Space Required for Installation

4MB

Installing the XenServer Conversion Manager Console

The XenServer Conversion Manager Console is typically installed on the same computer where you run XenCenter.

Note:

Before installing the XenServer Conversion Manager Console, remove any other versions of the console from your computer.

To install the XenServer Conversion Manager Console

1. Right-click **XenServerConversionManagerConsoleSetup.exe**, and select **Run as administrator**.
2. On the **Welcome to the Citrix XenServer Conversion Manager Setup Wizard** page, click **Next**.
3. Review the license agreement and click **I Agree** to accept the terms of the agreement.
4. On the **Choose Install Location** page, choose where you want to install the XenServer Conversion Manager Console and click **Install**.

By default, the XenServer Conversion Manager Console is installed in C:\Program Files (x86)\Citrix\XCM.

5. Click **Finish**.

To remove the XenServer Conversion Manager Console

1. Open the Windows **Control Panel**.
2. Open **Programs and Features**.
3. Select **Citrix XenServer Conversion Manager**.
4. Click **Uninstall**.

Converting VMware Virtual Machines

When you convert VMware virtual machines, they are imported into the XenServer pool or stand-alone host where you are running the XenServer Conversion Manager Virtual Appliance. Converted virtual machines retain their original VMware settings for virtual processor and virtual memory.

Using XenServer Conversion Manager to convert virtual machines requires the following tasks:

1. Starting the XenServer Conversion Manager Console.
2. Connecting to a XenServer host.
3. Starting the wizard to start new conversion job, which requires specifying VMware server credentials and selecting virtual machines and the storage repository.

Note:

XenServer Conversion Manager does not require the source virtual machines to have VMware Tools installed. You can perform conversion on VMware virtual machines regardless of whether or not they have VMware Tools installed.

Task 1: Starting the XenServer Conversion Manager Console

To convert VMware virtual machines, begin by opening the XenServer Conversion Manager Console and then connect to a XenServer host.

To start the XenServer Conversion Manager Console

1. From the Windows **Start** menu, select **All Programs > Citrix > Citrix XenServer Conversion Manager**.
2. Continue on to [To connect to a XenServer host](#).

Note:

Running only one instance of XenServer Conversion Manager per computer is supported.

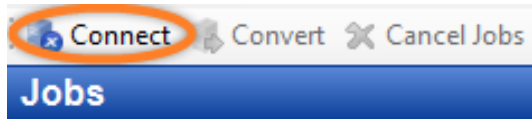
Task 2: Connecting to a XenServer Host

When you start the XenServer Conversion Manager Console, you must connect it to a XenServer host.

Before you begin, have on hand the credentials for the XenServer pool (or stand-alone host)—either the root account credentials or a Role-Based Access Control (RBAC) account with the Pool Admin role configured.

To connect to a XenServer host

1. If the **Connect to XenServer** dialog is not visible, click the **Connect** button in the toolbar.



2. In the **Connect to XenServer** dialog, enter the following information:
 - **Server.** Enter the IP address or Fully Qualified Domain Name (FQDN) for the XenServer host where you imported the XenServer Conversion Manager Virtual Appliance. You can find the IP address by selecting the host, which is the first host listed for the pool in the XenCenter resource pane, and clicking the **Search** tab.
 - **User name.** Enter the user name for a XenServer account for the pool (or stand-alone host). This account must be either the root account for the host or pool or have a RBAC role of Pool Admin.

For information about RBAC, see the *XenCenter Help* or the *XenServer Administrator's Guide*.

- **Password.** Enter the password for that account.

After you successfully connect to the XenServer host, the **Jobs** screen of the XenServer Conversion Manager Console appears.

Task 3: Starting a New Conversion Job

Before you begin this procedure, make sure you have the credentials for the VMware server containing the virtual machines you want to convert. This procedure requires you connect the XenServer Conversion Manager Console to the VMware server.

Before beginning this procedure, you must have added a storage repository to the XenServer pool (or host) that will run the converted virtual machines. This repository must contain enough space for the converted virtual disks. You also need to have networks on the XenServer pool (or host) for the networks the converted virtual machines will use.

To convert VMware virtual machines

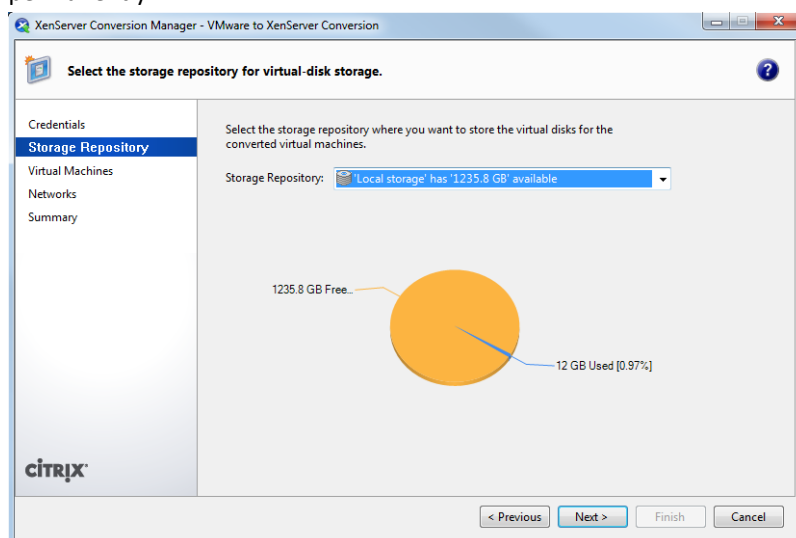
1. Click the **Convert** button in the Jobs screen.



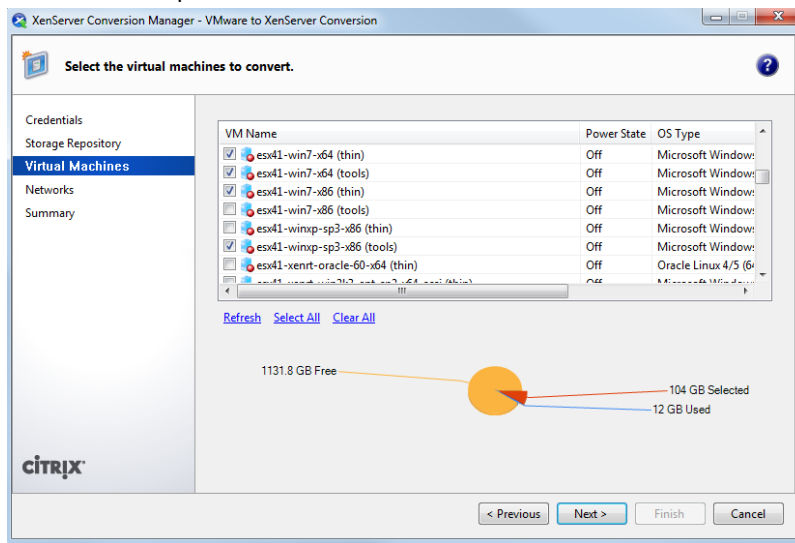
2. On the **Credentials** page, enter the following and then click **Connect**:

- **Server.** Enter the IP address or FQDN for the VMware server that contains the virtual machines you want to convert to XenServer.
- **User name.** Enter a valid user name for this VMware server. This account must either be a VMWARE admin account or have a Root role.
- **Password.** Enter the password for the user account you specified in the **User name** box.

3. On the **SR Selection** page, select the storage repository you want to use during conversion. This storage repository is where the virtual machines and the virtual disks that you are creating will be stored permanently.

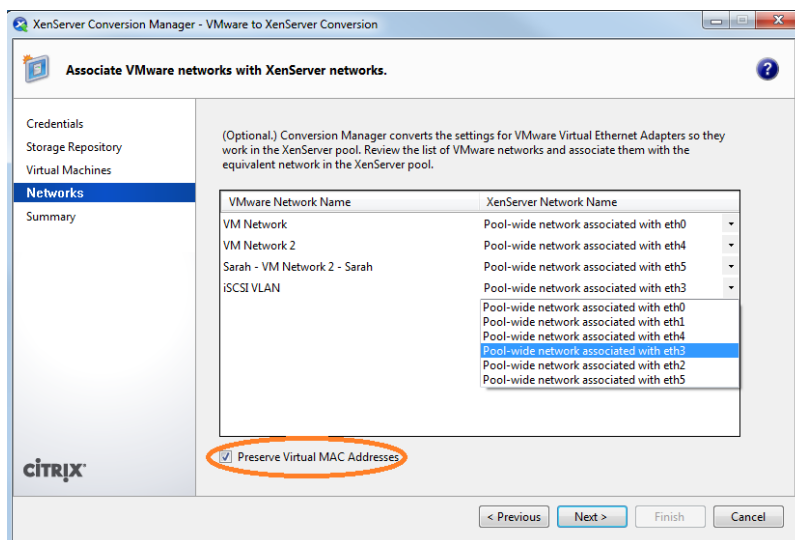


- On the **VM Selection** page, select the VMware virtual machines you want to convert, and click **Next**. You can select multiple machines.



As you select virtual machines to convert, the red-pie wedge increases to indicate what proportion of the available storage the converted virtual machines' virtual disks will consume.

- (Optional.) On the **Network Options** page, do one or more of the following tasks to specify how XenServer Conversion Manager converts the virtual network adapters in the virtual machines it is converting:
 - Change any of the XenServer networks the VMware network adapters are mapped to.** XenServer Conversion Manager detects the virtual network adapters on the virtual machines being converted and lets you associate those adapters with networks in XenServer. After conversion, the new virtual machines will have virtual network interfaces that connect to the XenServer networks you specified in this step.
 - Accept the default network mappings.** You can want leave the networks on this page at their default settings.
 - Select the Preserve Virtual MAC Address check box.** XenServer can automatically generate virtual MAC addresses when you create or import virtual machines. However, you may want to preserve your the virtual MAC addresses on your VMware virtual machines because it may help, for example, preserve IP addresses in environments using DHCP. For more information, see [the section called "Preparing for the XenServer Conversion Manager Networking Requirements"](#).



- On the **Summary** page, review the conversion details and click **Finish**. While the conversion is in progress, the status appears in the **Jobs** page.



Task 4: Steps After Conversion

After conversion, open XenCenter and perform the following steps on your newly converted virtual machines:

1. On Windows virtual machines, depending on your Microsoft licensing model, you may need to reactivate the virtual machine's Windows license since the Windows operating system perceives the conversion as a hardware change.
2. On Windows virtual machines, install XenServer Tools to obtain high-speed I/O for enhanced disk and network performance. XenServer Tools also enable certain functions and features, including cleanly shutting down, rebooting, suspending, and live migrating VMs.

If you are working with a VM that does not have XenServer Tools installed, a **Tools not installed** message in red text will be visible on the **General** tab in the properties pane.

- For Windows VMs, you can double-click on this text to switch to the VM console, load the Tools ISO, and launch the Tools installation wizard.

Note:

XenServer Tools must be installed on each virtual machine for the virtual machine to have a fully-supported configuration. Although virtual machines function without XenServer Tools, their performance is reduced.

Additional Conversion Tasks

This topic lists additional tasks you may want to perform when converting virtual machines. These tasks include clearing jobs, saving a summary of jobs, retrying jobs, canceling jobs, and displaying the log file.

To clear all jobs

- From the **Jobs** menu, select **Clear Jobs**.

To save a summary of jobs

- From the **File** menu, click **Save Job Summary Jobs**.

To retry a job

- Click **Retry jobs**.

Note:

Retry jobs only is enabled for failed or cancelled jobs.

To cancel a job

- Click **Cancel jobs**.

Note:

Cancel jobs is only enabled for queued or running jobs.

To save the XenServer Conversion Manager application log file

1. From the **Help** menu, select **Save Support Log Files**.
2. If prompted, specify where you want to store the log files for XenServer Conversion Manager Console (XCMUI.log) and XenServer Conversion Manager Virtual Appliance (XCM.log) logs.

To display conversion details

1. Select the job in the XenServer Conversion Manager **Jobs** window.



2. In the **Job Summary** pane, click the **Get additional log information** link.

XenServer Conversion Manager Console retrieves the log from the XenServer Conversion Manager Virtual Appliance and displays the result in a text editor.

Appendix A. Troubleshooting Conversion

This section provides information about troubleshooting the conversion process and converted virtual machines.

Problems Starting a Converted Virtual Machine

In general, conversion runs extremely smoothly and XenServer Conversion Manager converts virtual machines without any issues. However, in some rare cases, you may receive errors when attempting to open converted virtual machines. The following sections provide some tips on resolving errors and other issues.

Blue Screen with Windows STOP code 0x0000007B

This particular stop code indicates that XenServer Conversion Manager was unable to configure a Windows device that is critical to boot in XenServer for the first time. Save the logs and send them to Citrix Technical Support for further guidance.

Windows Product Activation

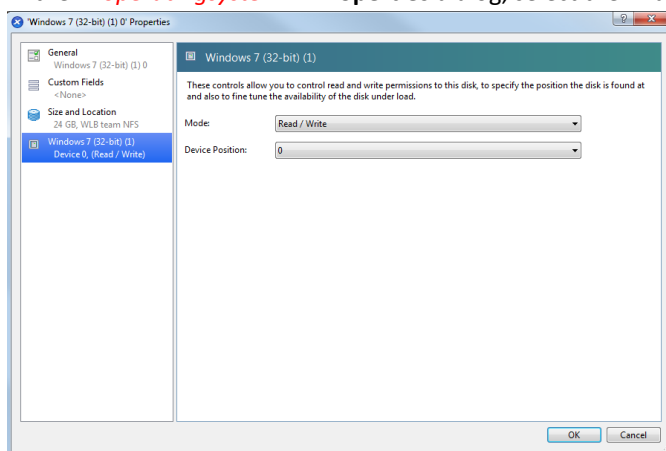
Depending on your licensing model, an error message may appear when you attempt to start a Windows virtual machine prompting you to reactivate Windows. See [the section called “Task 4: Steps After Conversion”](#) for more information.

Unable to Boot VMware SCSI Disk

If a VMware VM boots from a SCSI disk but also contains one or more IDE hard disks, the VM might not boot when you convert it to XenServer. The reason is that the migration process assigns the IDE hard disks lower device numbers than SCSI disks; however, XenServer boots from the hard disk assigned to device 0. To resolve this problem, rearrange the virtual-disk position in XenCenter so that the virtual machine boots from the virtual disk that contains the operating system.

To change the position of the virtual disk containing the operating system

1. In the XenCenter resource pane, select the powered off guest virtual machine.
2. Select the **Storage** tab.
3. In the **Virtual Disks** screen, select the virtual disk containing the operating system, and click **Properties**.
4. In the **<<operatingsystem>> Properties** dialog, select the final tab to display device options.



5. From the **Device Position** drop-down menu, select **0**. Click **OK**, and exit the dialog.