

convert VMware Server VM to ESX 3.0.1 VM

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[rjsetford](#) 54 posts since

May 31, 2007 Hi all,

Just getting into the VM game and could with a bit of help.

I have three VMs (2 x win2k and 1 win2k3) running on a VMware Server 1 server.

Is it possible to convert these into VM's that will run under ESX specifically VI3?

Thanks,

Richard



[esiebert7625](#) 6,794 posts since

Oct 23, 2006 **1. Re: convert VMware Server VM to ESX 3.0.1 VM** May 31, 2007 8:09 AM

Yes you can use Converter for this, I just documented the procedure.

fyi...if you find this post helpful, please award points using the Helpful/Correct buttons...thanks

How can I migrate my VMware Server VM#s to ESX?

There are several methods for doing this that are listed below:

Method 1 # VMware Converter running directly on VMware Server (Cold clone)

Install VMware Converter on to the VMware Server and reboot if prompted

Shutdown the VM to be converted

Run Converter and select Import Machine

Click Next at the Welcome screen and Next again at the Source screen

Select #Standalone virtual machine, backup or disk image# as your source and click Next

Browse to your VM#s vmx file and click Next

Select either #Import all disks and maintain size# or #Select volumes and resize to save or add space#, select your volumes and enter a new disk size if necessary and click Next

Click Next at the Destination screen

Select #VMware ESX Server or VirtualCenter virtual machine# as your destination and click Next

At the destination login screen enter your VC/ESX server name and login credentials and click Next

Enter a Virtual Machine name and folder and click Next

Select a Host/Cluster and click Next then select a Datastore and click Next

Enter your NIC information and click Next then click Next again at the customization screen

Click Finish when it completes

convert VMware Server VM to ESX 3.0.1 VM ...

Edit your new VM#s settings and remove any extra hardware if not needed, ie. USB devices, serial and parallel devices, Floppy drive and change the SCSI adapter to LSI Logic if needed

Power on your new VM and uninstall VMware tools (VMware server version)

Restart server

Remove old virtual machine hardware

o Open CMD prompt and type #SET DEVMGR_SHOW_NONPRESENT_DEVICES=1# and then #DEVMGMT.MSC#

o Select #Show Hidden Devices# from top menu

o Remove old greyed-out non-present hardware, ie. old processor, disk drives, IDE/SCSI controllers, storage volumes, etc.

Reboot and install VMware tools (ESX version) and you are finished

Method 2- VMware Converter running directly on Virtual Machine (Hot clone)

Install VMware Converter on to the Virtual Machine and reboot if prompted

Run Converter and select Import Machine

Click Next at the Welcome screen and Next again at the Source screen

Select #Physical Computer# as your source and click Next

Select #This local machine# and click Next

Select either #Import all disks and maintain size# or #Select volumes and resize to save or add space#, select your volumes and enter a new disk size if necessary and click Next

Click Next at the Destination screen

Select #VMware ESX Server or VirtualCenter virtual machine# as your destination and click Next

At the destination login screen enter your VC/ESX server name and login credentials and click Next

Enter a Virtual Machine name and folder and click Next

Select a Host/Cluster and click Next then select a Datastore and click Next

Enter your NIC information and click Next then click Next again at the customization screen

Click Finish when it completes

Edit your new VM#s settings and remove any extra hardware if not needed, ie. USB devices, serial and parallel devices, Floppy drive and change the SCSI adapter to LSI Logic if needed

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Reboot and install VMware tools (ESX version) and you are finished



[esiebert7625](#) 6,794 posts since

Oct 23, 2006 [2](#). **Re: convert VMware Server VM to ESX 3.0.1 VM** May 31, 2007 8:14 AM

convert VMware Server VM to ESX 3.0.1 VM ...

Alternately if your VM's have SCSI virtual drives you can just copy the vmdk file to the ESX server using WinSCP and then use vmkfstools -i to import it. Then create a new VM and tell it to use an existing drive. If it has an IDE drive you have to convert it to SCSI first. See these links...

<http://www.vmware.com/community/thread.jspx?messageID=620362򗝊>

http://kb.vmware.com/selfservice/microsites/search.do?cmd=displayKC&docType=kc&externalId=1881&sliceId=1&docTypeID=DT_KB_1_1&dialogID=7626758&stateId=0%20



[rjsetford](#) 54 posts since

May 31, 2007 3. **Re: convert VMware Server VM to ESX 3.0.1 VM** May 31, 2007 8:29 AM

in response to: [esiebert7625](#) Many, Many thanks.

I'll give that a try.

Nice one



[esiebert7625](#) 6,794 posts since

Oct 23, 2006 4. **Re: convert VMware Server VM to ESX 3.0.1 VM** May 31, 2007 4:08 PM

in response to: [rjsetford](#) I just documented this procedure also that I mentioned above...

Method 3 # Use FastSCP and vmkfstools to copy the disk to ESX and convert it to VMFS3 format

If your Server VM uses IDE disks you will have to convert them to SCSI disks prior to using this method since ESX does not support IDE hard drives. To convert your disks to IDE follow the steps in this VMware knowledge base article: <http://kb.vmware.com/kb/1881> Once you complete the conversion to SCSI you can proceed with the below steps.

Download FastSCP (http://www.veeam.com/veeam_fast_scp.asp) and install on the VMware Server, FastSCP requires the dot net framework 2.0 so download and install this first if you do not have it (<http://www.microsoft.com/downloads/details.aspx?FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5&displaylang=en>), alternately you can use WinSCP (<http://winscp.net/eng/index.php>) which is a bit slower than FastSCP

Once FastSCP is installed run it, click #Add Server# enter your ESX server name/IP, the default port of 22, username and password and click Finish

Connect to your ESX server, browse to your /vmfs/volumes/<volume name> and select New Folder and call it #temp# or whatever you want

Shutdown the VM from Server that you will be copying the vmdk file from

Using Windows Explorer, browse to your vmdk files and select both the descriptor vmdk file (small file) and the data vmdk file (-flat large file)

Paste these into your temp directory on the ESX server and the transfer will begin

Once the transfer completes login to your ESX service console and change to your temp directory, ie. cd /vmfs/volumes/<volume name>/temp

To import the file to VMFS3 format type #vmkfstools #i <source file name> <destination file name># the file name is the name of the small descriptor vmdk file, ie. #vmkfstools #i Win2003vm1.vmdk Win2003vm1-new.vmdk#. This create a new copy of your source vmdk file in VMFS3 format, it will automatically create both the descriptor and the data vmdk files

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Create a new VM on your ESX server, select Custom and then select the VM#s configuration. When you get to Select a Disk choose #Use an Existing Disk# and browse to you destination file name you selected above.

Power on your new VM and you should be all set, you can delete your original source file from the temp directory

Optionally you can move your vmdk files from the temp directory to the VM#s directory that it created.

o Shutdown your VM.

o Login to the Service Console

o Change to your VM#s directory, ie. cd /vmfs/volumes/<volume name>/myVM1

o Copy file from the temp directory to the VM#s directory using vmkfstools, ie. vmkfstools #i /vmfs/volumes/<volume name>/temp/Win2003vm1-new.vmdk myVM1.vmdk This will make a copy of your vmdk file in your VM#s directory, you can also change the destination file name to match your VM#s name.

o In the VI Client, edit your VM#s settings, remove the current hard disk (don#t delete it yet) and add new new hard disk, select #Use an Existing Disk# and browse to the new vmdk file in your VM#s directory.

o Power on the VM and if it boots OK you can delete the original virtual disk, you can use FastSCP for this or right-click on your Datastore in the VI Client and select #Browse your Datastore# with the VI Client to delete the two original virtual disk files



[rjsetford](#) 54 posts since

May 31, 2007 5. **Re: convert VMware Server VM to ESX 3.0.1 VM** Jul 4, 2007 5:59 AM

in response to: [esiebert7625](#) One question I meant to ask was this:

What's the difference between BusLogic and LSI Logic SCSI adaptors?

Is there a preferred adaptor for use on ESX hosts?

Thanks,

Richard



[esiebert7625](#) 6,794 posts since

Oct 23, 2006 6. **Re: convert VMware Server VM to ESX 3.0.1 VM** Jul 4, 2007 6:06 AM

in response to: [rjsetford](#) They are basically 2 different virtual hardware SCSI adapters. BusLogic adapters should be used with Windows 2000 VM's and LSI Logic should be used for Windows 2003/XP VM's. There is a slight performance difference between the two with LSI being the better adapter. Some OS's like Win2K will not support the LSI adapter.

ESX Server 2 Storage Subsystem Performance in ESX Server: Buslogic vs. LSI Logic -

http://www.vmware.com/pdf/ESX2_Storage_Performance.pdf



[rjsetford](#) 54 posts since

May 31, 2007 7. **Re: convert VMware Server VM to ESX 3.0.1 VM** Jul 4, 2007 6:12 AM


in response to: [esiebert7625](#) once again, many thanks



[Ajay Nabh](#) 95 posts since

convert VMware Server VM to ESX 3.0.1 VM ...

Jun 5, 2008 8. **Re: convert VMware Server VM to ESX 3.0.1 VM** Jun 5, 2008 6:13 PM

 in response to: [esiebert7625](#)


Thanks for this artical. it sure is a help.

Ajay Nabh



[cosy](#) 102 posts since

Apr 24, 2006 9. **Re: convert VMware Server VM to ESX 3.0.1 VM** Jun 27, 2008 5:59 AM

 in response to: [Ajay Nabh](#)

HI All,

Just install 2 x ESX on VMWaorkstation and add openfiler NAS to this. Now I got One VM Image and got 4 VMDK files (Exchange 2003)

I create 1 200 GB LUN and connect to ESX through ISCSI. ESX got 20GB Local HDD.

Where do i need to put those 4 x VMDK files? if i put all onto NAS is that going to boot/start that vm?

Or do i need to put OS VMDK on to 20GB HDD and rest onto NAS? If so how do i connect back to those disk bit confuse lol



[Ajay Nabh](#) 95 posts since

Jun 5, 2008 10. **Re: convert VMware Server VM to ESX 3.0.1 VM** Jun 29, 2008 2:22 PM

 in response to: [cosy](#)

Hi Cosy

as far as I think you can boot from NAS. good idea would be to put you data vmdk on NAS and OS vmdk on local HDD. I hope you are nor running this system for production!!!


Cheers

Ajay



[odensebib](#) 1 posts since

Dec 11, 2007 11. **Re: convert VMware Server VM to ESX 3.0.1 VM** Feb 23, 2009 6:17 AM

 in response to: [esiebert7625](#)

[esiebert7625](#)

Thanks a lot man. I used metode 2 and it worked like a charme 😊



[bigchief](#) 1 posts since

Nov 19, 2008 12. **Re: convert VMware Server VM to ESX 3.0.1 VM** Feb 25, 2009 12:16 PM

Interested in this topic since this is similar to what I'm planning on doing. However, what if you are using the same box for the ESX server (I'm want to move my VM's off the box, rebuild it as an ESX server, then set everything back up). What is the recommended way of doing this. I may have a SAN by the time I set this plan in action if that makes things easier.