Convert XenServer 5.5 Linux VM (CentOS 5) with xentools installed to VMWare ESX.

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Since I didn't find any steps to convert a XenServer Linux vm to ESX I decided to write my own to help other people migrate from XS to VMWare ESX.

Prerequisites: You need a CentOS rescue cd in your VMWare datastore.
Please do this on a testing machine first to verify that the following steps will work for your VM.
You need to know how to change the bios settings in the vm to make it boot from a cd-rom
Work with a CentOS rescue CD
Read thoroughly each step. If something doesn't work out email me.

Put VMWare Converter standalone .tar.gz file on the server you want to migrate.
Install vmware converter on a local machine which you will use to convert your VM. I installed it on my laptop and did a local installation.
install vmware converter on source machine:
tar zxvf VMware-converter-4.0.1-161434.tar.gz
vmware-converter-distrib/vmware-install.pl
Read the license agreement, select yes for all the yes/no questions and accept the default paths and ports.

The following steps are done from my laptop:
Open VMWare Converter client and select Convert Machine
Insert the IP and password credentials from the source server like below and select Linux for OS family:
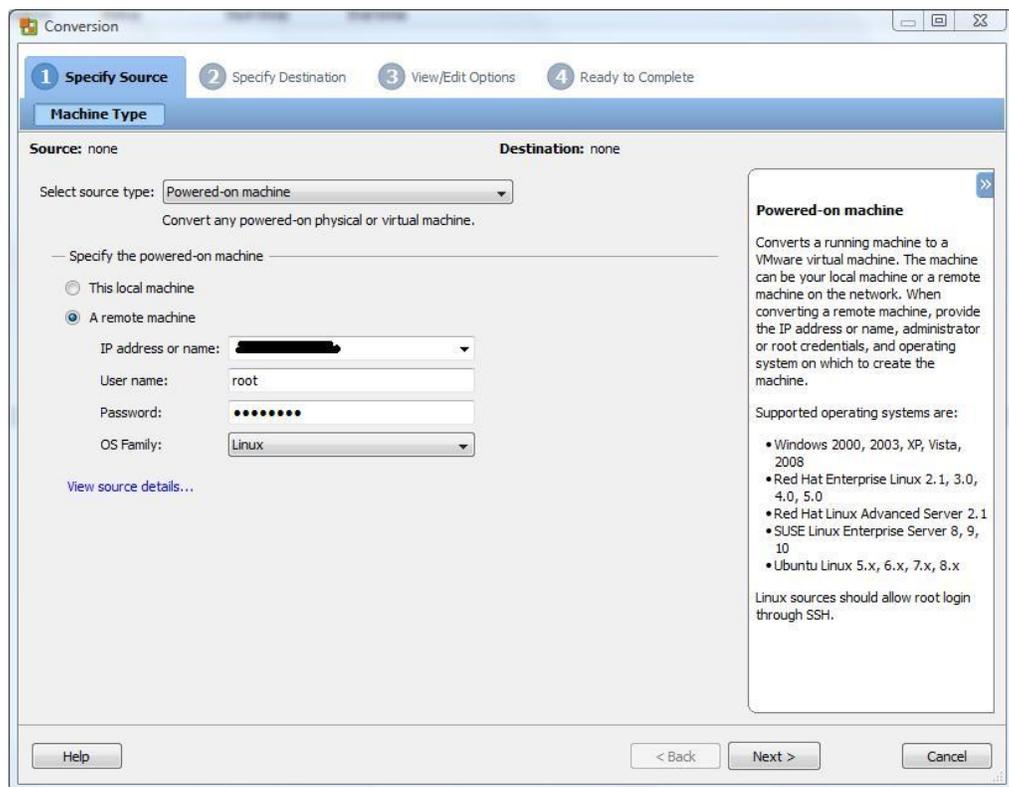
Enter your ESX ip and password credentials:
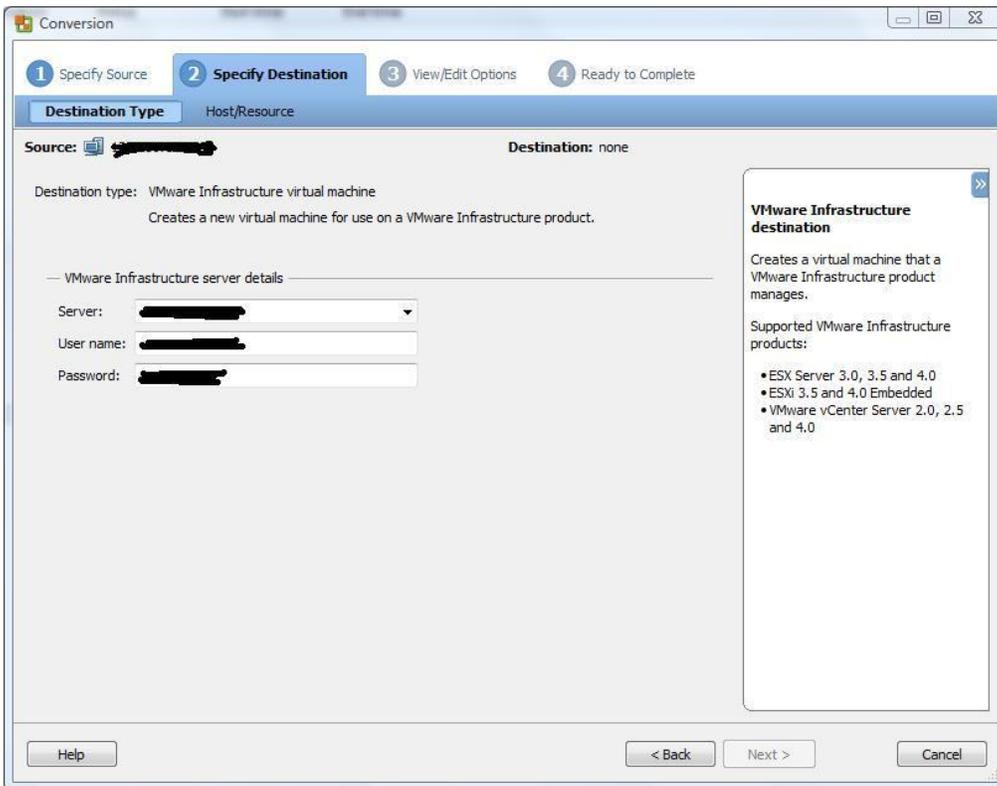
Select your datastore and click next:
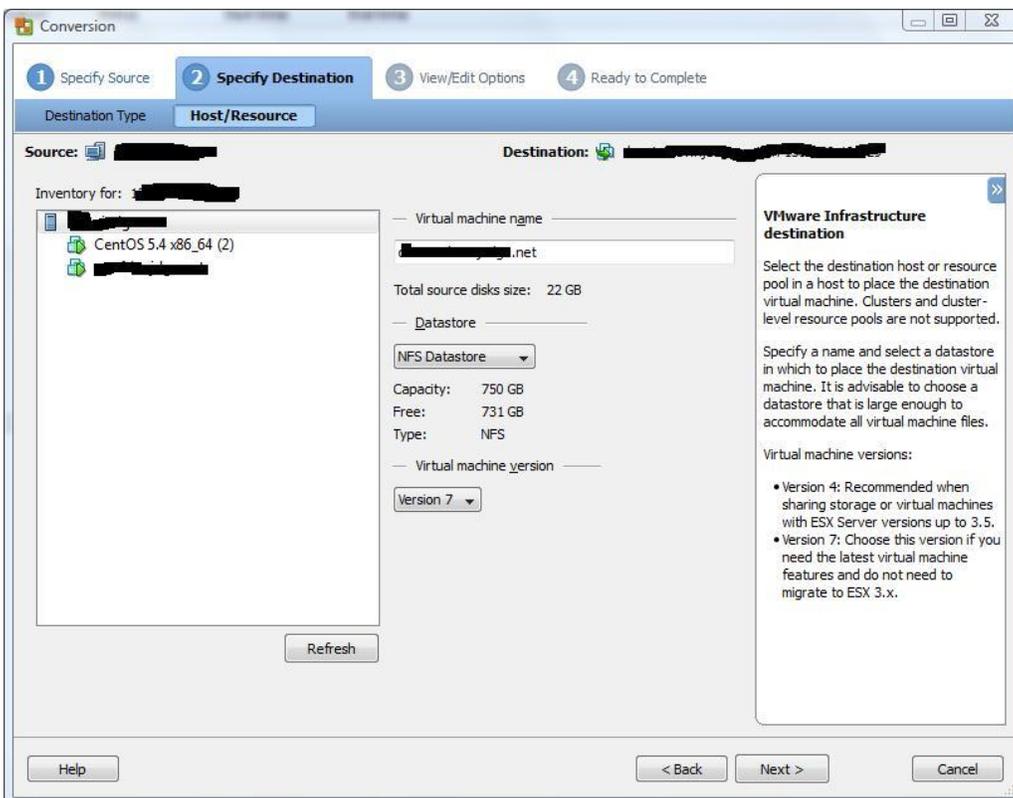
Click Edit on Helper VM Network and give it a static ip.
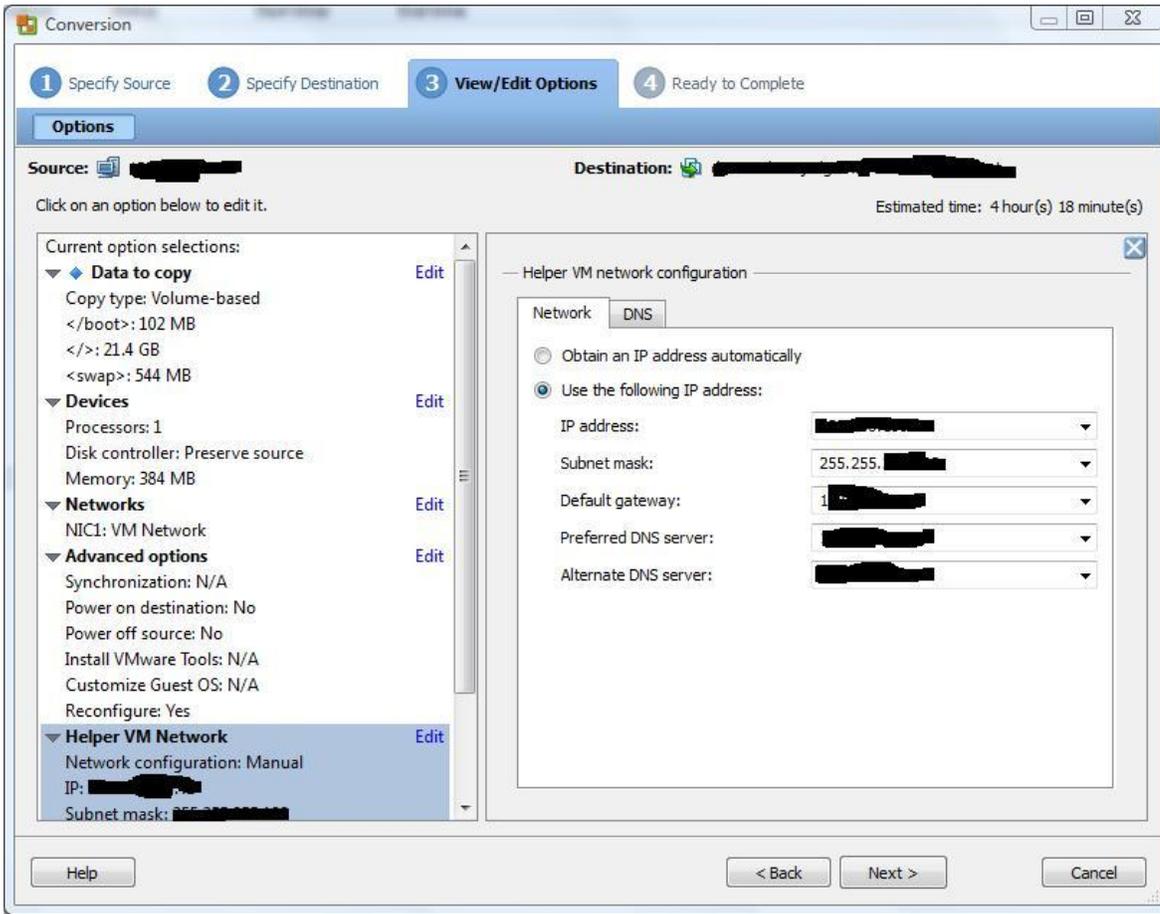
If you notice in Data to Copy on the left side, vmware converts your logical volumes into regular partitions.

Click Next and on the next window click Finish and let it do the transfer:
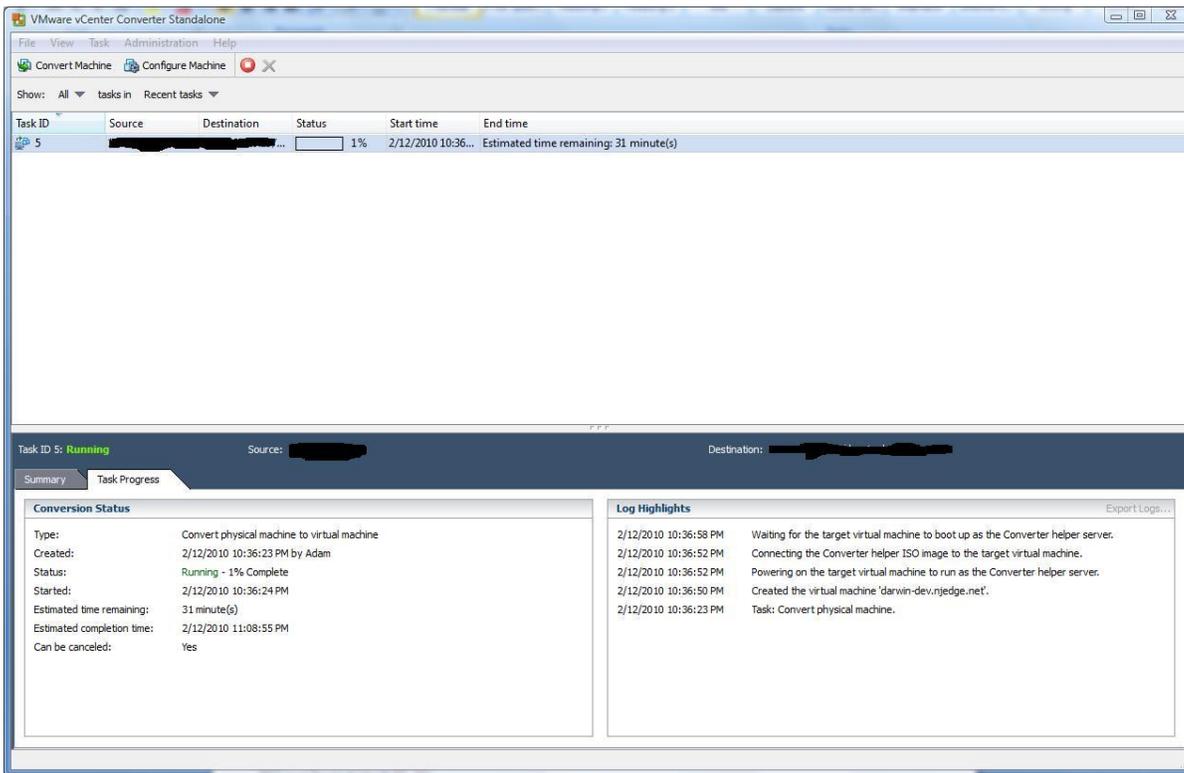
After the conversion completes open your VMWare vsphere client and login to your ESX.
Edit the settings for the virtual machine by assigning the CentOS dvd iso from the datastore and click on Connect at power on.
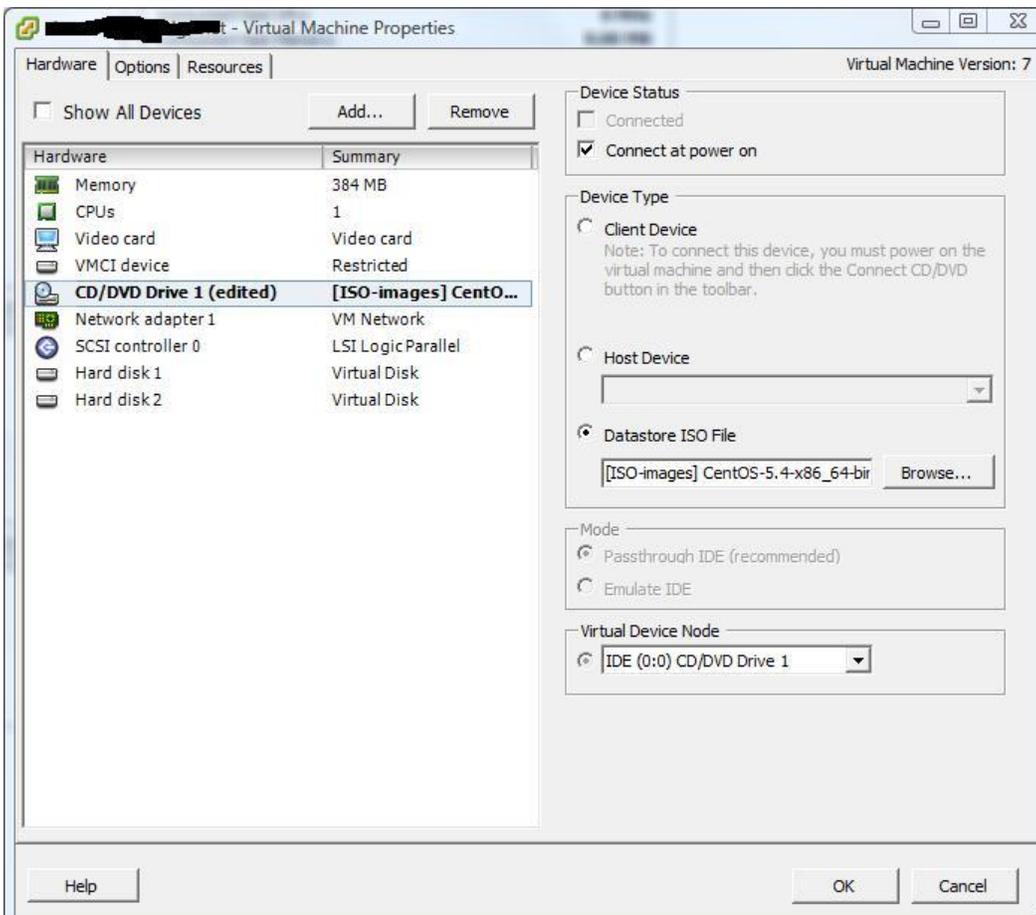
You need to open a console and boot the VM you converted.
Press F2 to make the vm go to bios and change the Boot order to boot first from a cd-rom. I had to reset the vm a few times to catch the console to accept F2 and go to bios.
Save your bios changes and exit.
When you boot the vm type **linux rescue**
Select your language and select yes to enable the network interfaces and yes to configure eth0
Enable IPv4 support
Do a manual address configuration and insert your IP, netmask, your gateway and dns on the next steps.
Select Continue on the next step and then Ok
chroot /mnt/sysimage
I had to copy/paste a couple of things so I enabled ssh on the rescued vm to do things quicker.
/etc/init.d/sshd start
ssh as root to the ip you configured while you was setting up the rescue cd network.

Edit /etc/modprobe.conf and make it look like this:

alias eth0 pcnet32   # some VMs might need e1000
alias scsi_hostadapter mptbase
alias scsi_hostadapter1 mptspi
alias scsi_hostadapter2 ata_piix

Modify /etc/inittab by adding a hash in front of the line containing the xen console(line 45) and make it look like below. I uncommented 3 ttys:

Run gettys in standard runlevels
#co:2345:respawn:/sbin/agetty xvc0 9600 vt100-nav
1:2345:respawn:/sbin/mingetty tty1
2:2345:respawn:/sbin/mingetty tty2
3:2345:respawn:/sbin/mingetty tty3
#4:2345:respawn:/sbin/mingetty tty4
#5:2345:respawn:/sbin/mingetty tty5
#6:2345:respawn:/sbin/mingetty tty6

We need to install a regular kernel to replace kernel-xen and load the vmware needed modules.

yum install kernel.x86_64 # One of the VMs had CentOS 5.3 so I did a yum update while I was in rescue mode to install the newest kernel and update it to 5.4

Remove the Xen kernels:

rpm -qa | grep kernel-xen | xargs rpm -e

edit /etc/grub.conf and delete **console=xvc0** at the end of kernel /vmlinuz-2.6.18-164.11.1.el5 ro root=/dev/sdb1

power off the VM

Edit the VM settings and uncheck Connect at power on from the CD.

Start the vm and check if your server boots normally.

Remove the Citrix .repo file:
rm -f /etc/yum.repos.d/Citrix.repo

Install vmware tools:
vi /etc/yum.repos.d/vmware-tools.repo and paste the following (this is for x86_64 so change it to i386 if you use a 32 bit CentOS)

[vmware-tools]
name=VMware Tools for Red Hat Enterprise Linux $releasever . $basearch
baseurl=http://packages.vmware.com/tools/esx/4.0latest/rhel5/x86_64

enabled=1
gpgcheck=1

yum install vmware-tools –nogpgcheck # VMWare should sign their RPMs. Also note the double-dash.
reboot

Uninstall vmware converter from the converted VM:
/usr/bin/vmware-uninstall-converter.pl

The only downside I found in this conversion is that VMWare Converter removes the logical volumes and makes them regular partitions.

-Adam