

Index

Index	2
Document history.....	2
Pre-requirements	4
Step 1 – Extracting files from the ISO achieve.....	4
Step 2 – Copy image file to the USB key	12
Step 3 – Testing the USB key	14

Document history

Version	Date	Editor	Remarks
0.1	7-jan-2008	R. Lam	Draft
0.2	9-jan-2008	R. Lam	Finished the guide and published it
0.3	19-aug-2008	R. Lam	Rewrite some parts of guide
0.4	22-aug-2008	R. Lam	Finished the guide and published it

VMInfo.nl: Create an ESX 3i USB boot key

With this guide you can create step by step an USB key with VMware ESX 3i pre-installed on it.

One of the advantages of having ESX pre-installed on a USB key is that you don't need to have an hard drive installed in the system that you want to use ESX on, just use shared storage (SAN/NAS) for running the vm's and you're done.

One other advantage of using ESX on a USB key is that you don't need to install ESX just plug in the USB key and boot the system from USB storage and you're ready to use ESX, no installation is required.

I have to say that VMware is not supporting this feature so be careful with using this on production machines. However at my test environment I'm using ESX 3i from an USB key over 5 months without any problems, so it should work without any problem but don't expect support from VMware.

If you want to use this feature for production environments, you should take a look at solutions from your hardware supplier like Dell, HP and IBM they have solutions that is supported by both VMware and the hardware supplier, those solutions are work more or less the same as this guide describes. It's just ESX 3i on an SD-card or USB key.

Pre-requirements

- A free USB 2.0 port on a Windows machine
- An USB key of at least 1GB

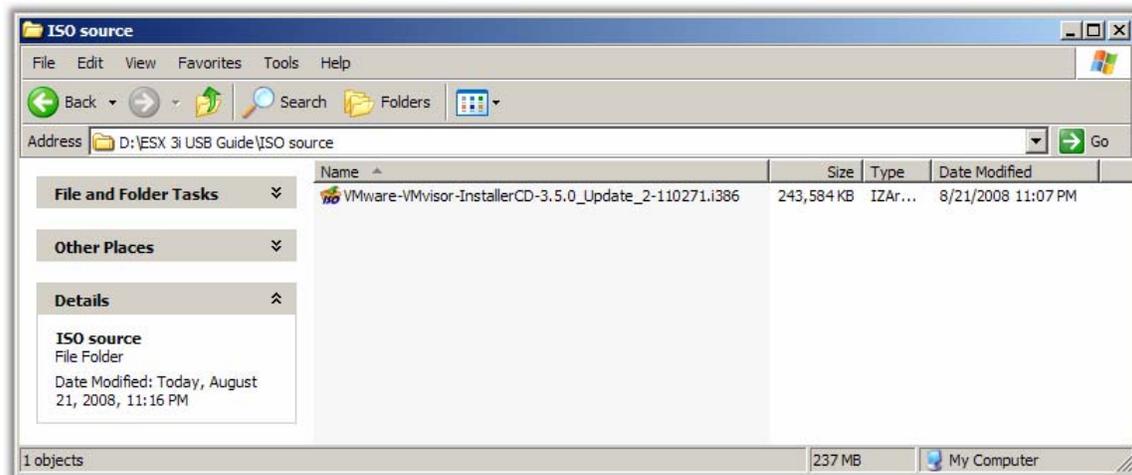
- IZArc – <http://www.izarc.org/download.html>
- WinImage – <http://www.winimage.com/download.htm>
- VMware ESX 3i (ISO) – www.vmware.com/download/vi/

Before we can begin creating a USB key we need to download/install IZArc and WinImage. I won't describe how to install those two apps because they are quite simple to install.

Download the VMware ESXi 3.5 Installable Update 2 ISO file (be sure that you download the ISO file after **13 Aug 2008** because of the license time bug).

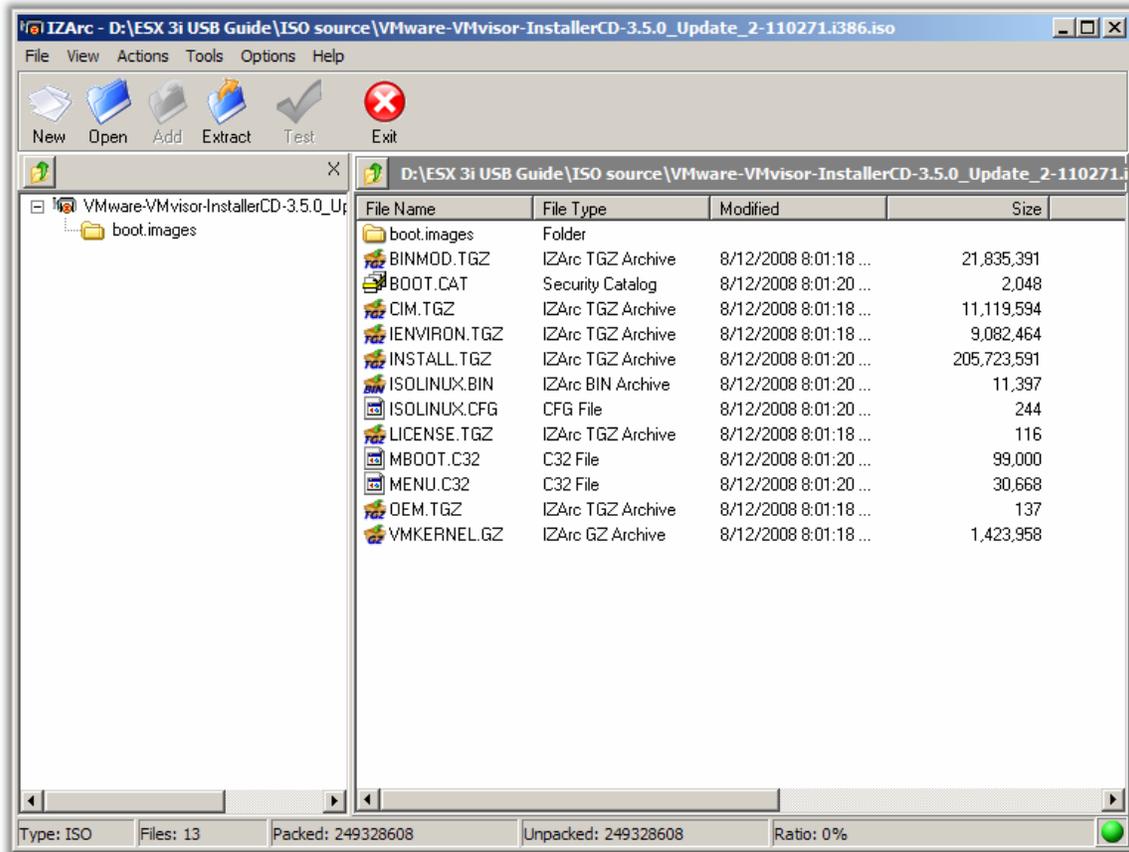
Step 1 – Extracting files from the ISO achieve

Open the VMware ESX 3i ISO with IZArc.



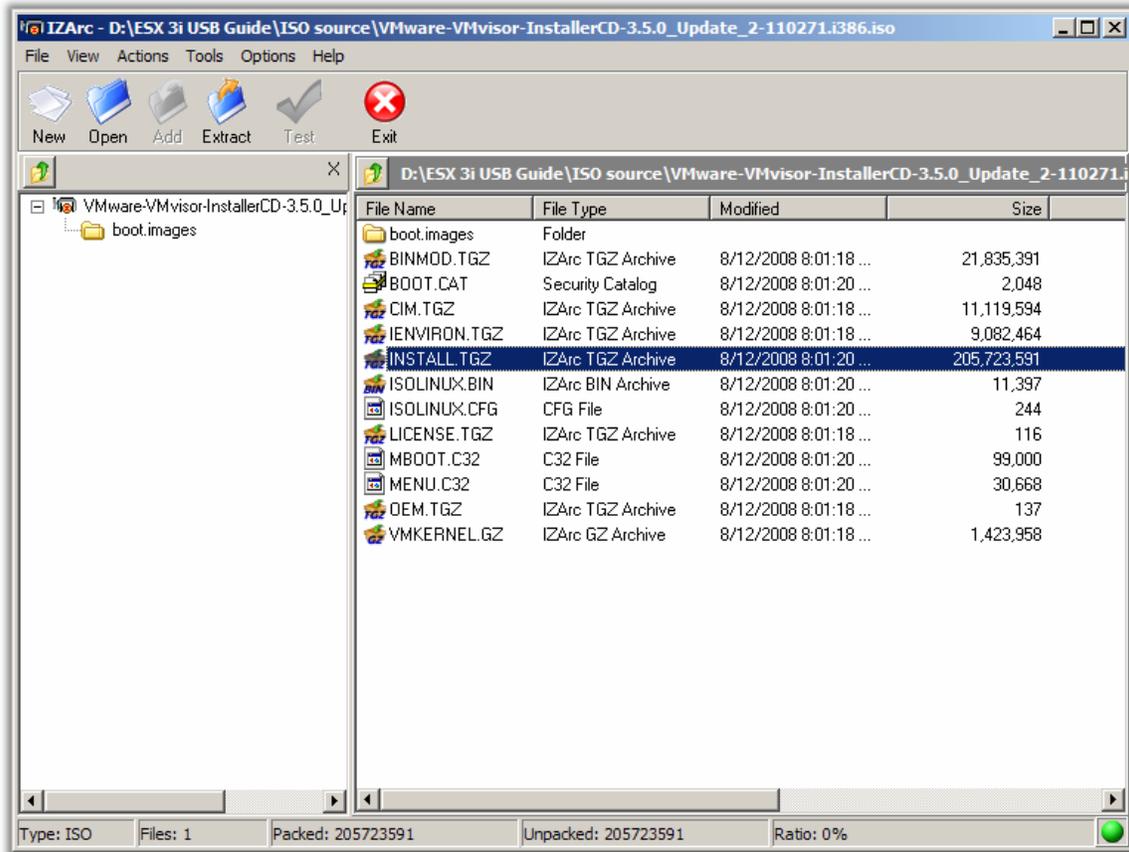
When IZArc have been installed correctly you should just double click on the ISO file and it should open with IZArc.

VMInfo.nl: Create an ESX 3i USB boot key



Once opened you should see the files as shown here above.

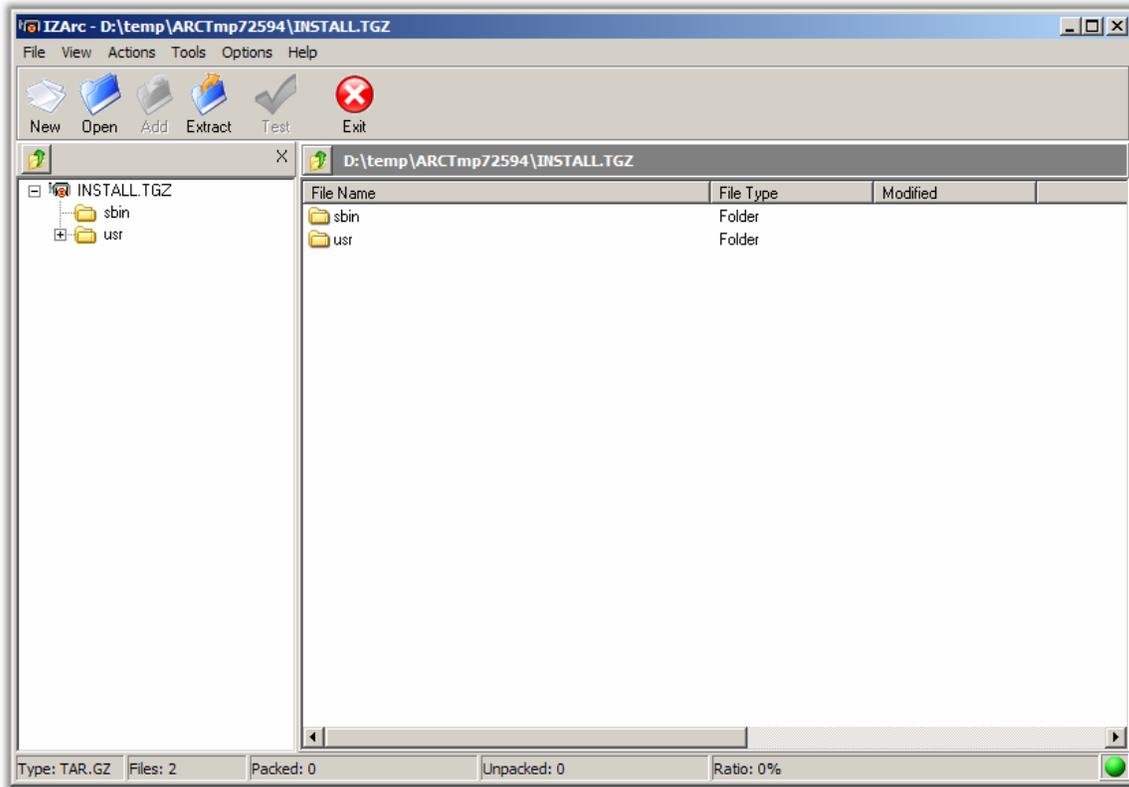
VMInfo.nl: Create an ESX 3i USB boot key



Select and open the file INSTALL.TGZ, you can open this by double click on the file.

Note: it could take some time to open the file, when opened it should appear in a new window.

VMInfo.nl: Create an ESX 3i USB boot key

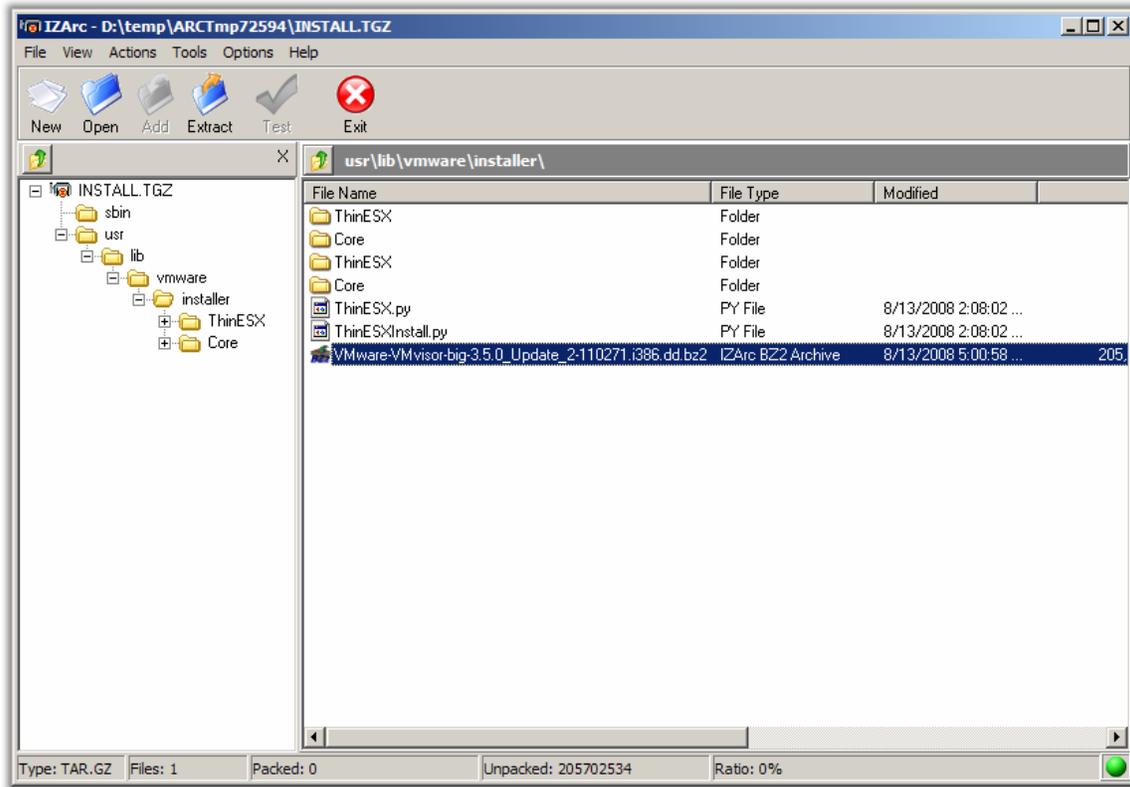


Open the following path.



"usr \ lib \ vmware \ installer"

VMInfo.nl: Create an ESX 3i USB boot key

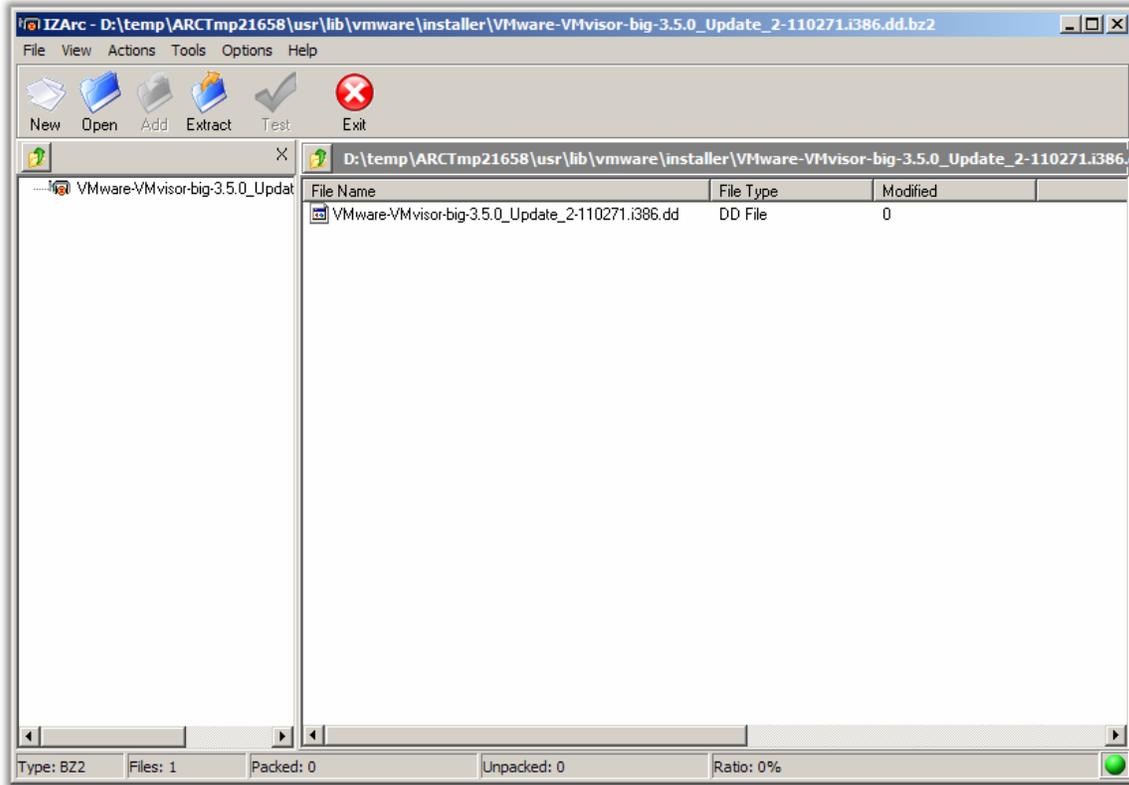


You should see the files and directories as shown here above.

Select and open the file "**VMware-VMvisor-big-3.5.0_Update_2-110271.i386.dd.bz2**", you should just double click on this file to open it.

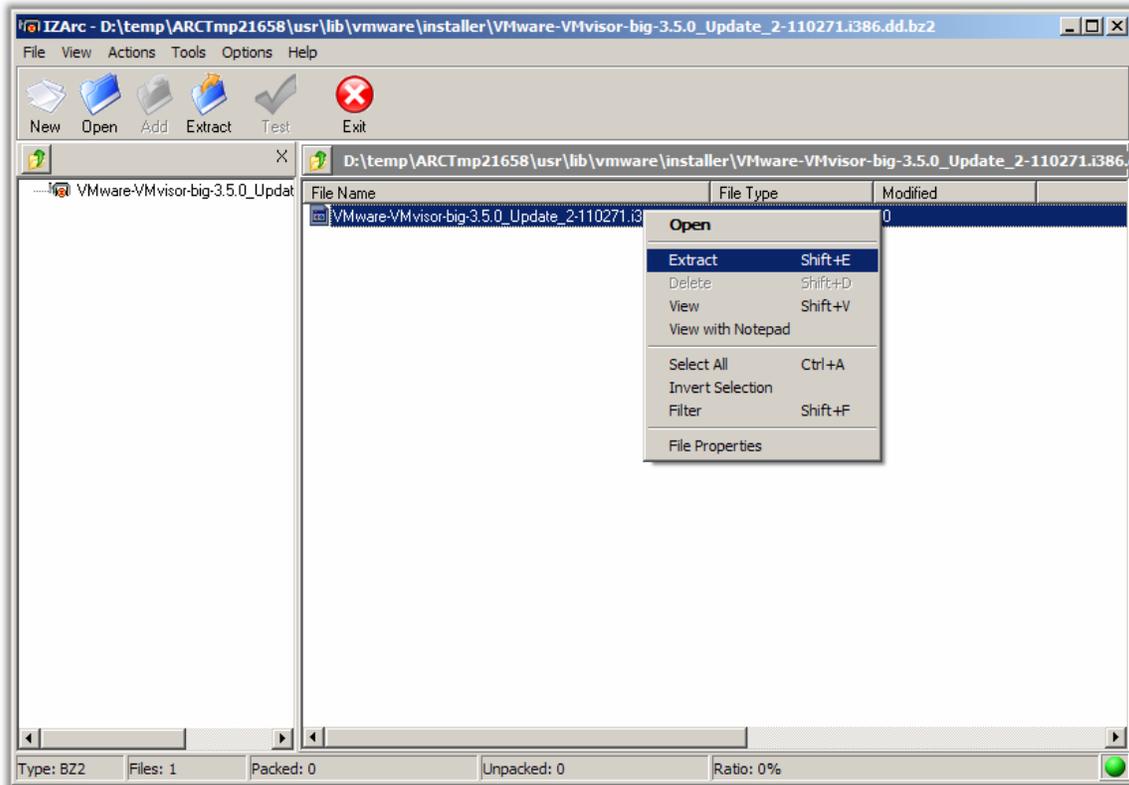
Note: it could take some time to open the file, when opened it should appear in a new window.

VMInfo.nl: Create an ESX 3i USB boot key

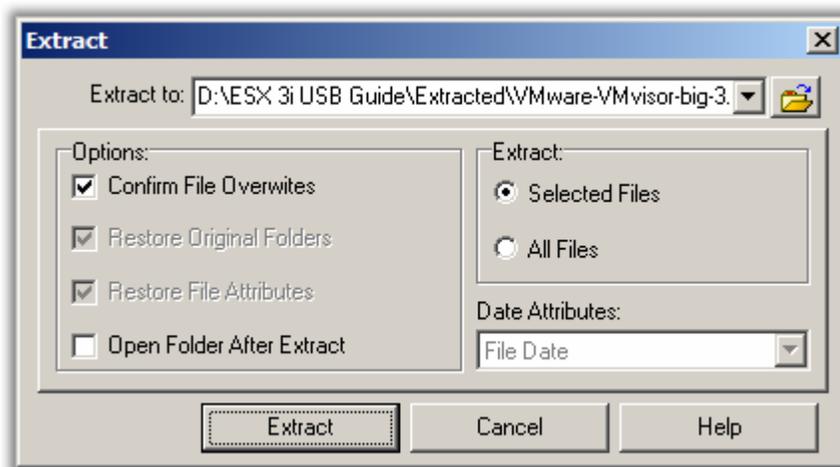


Once opened you should see the file "VMware-VMvisor-big-3.5.0_Update_2-110271.i386.dd" as shown here above.

VMInfo.nl: Create an ESX 3i USB boot key



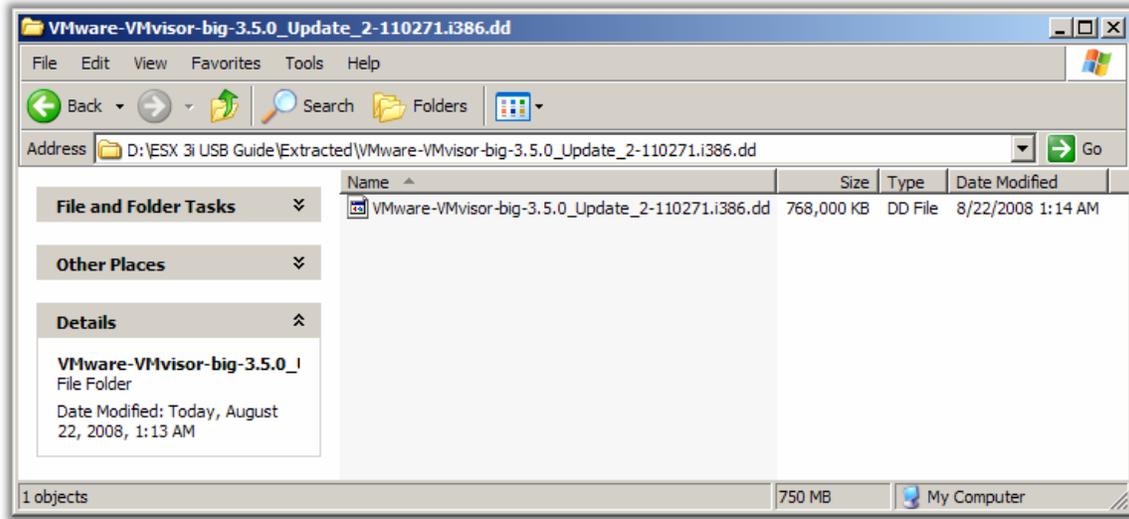
Select and right click on the file “VMware-VMvisor-big-3.5.0_Update_2-11072.i386.dd” and click on **Extract**.



Choose a directory to extract the file to, and click on **Extract**.

Note: this could take some time to complete.

VMInfo.nl: Create an ESX 3i USB boot key

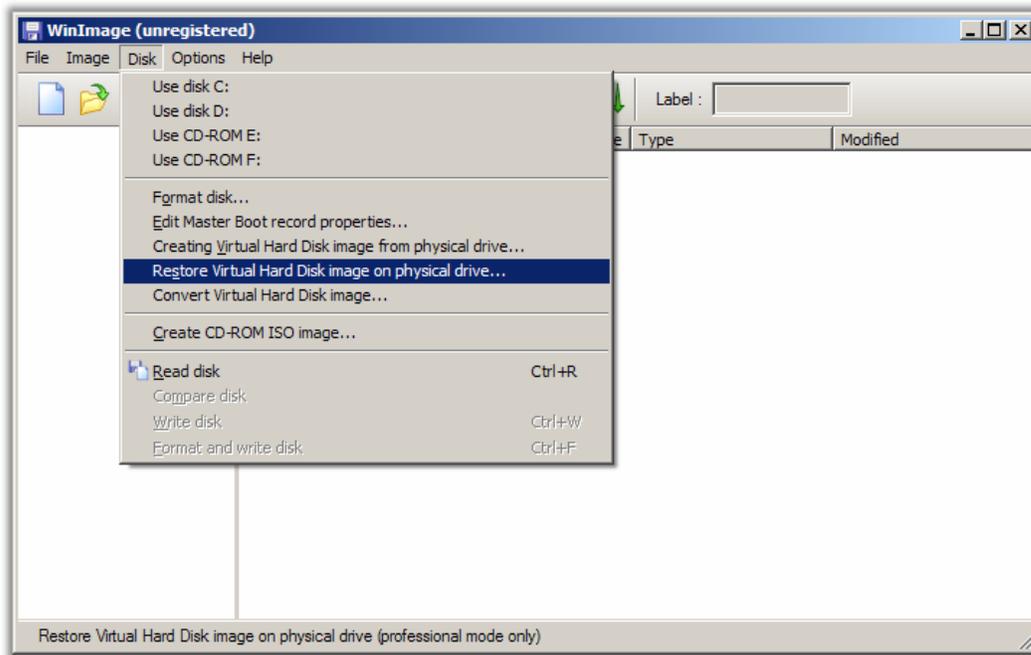


When the extraction has been completed you should see a file as shown here above.

Step 2 – Copy image file to the USB key

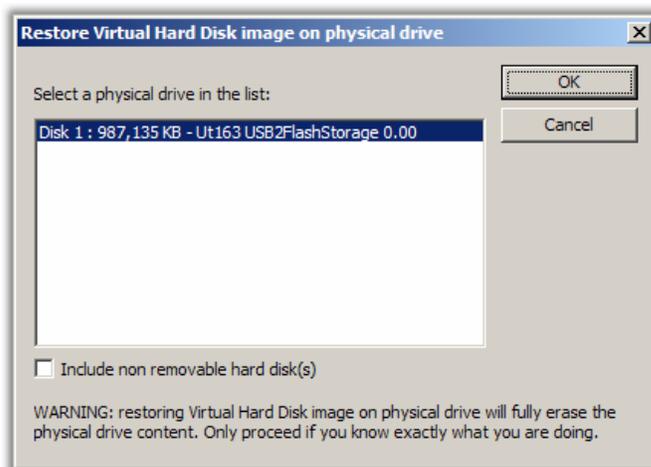
To “restore” the “**VMware-VMvisor-big-3.5.0_Update_2-110271.i386.dd**” file we need WinImage.

Note: When you start WinImage you will see that this is actually an evaluation version of WinImage, but that’s okay because it still have all the functionality that we need to restore the image, it’s just limited in time (30 days).

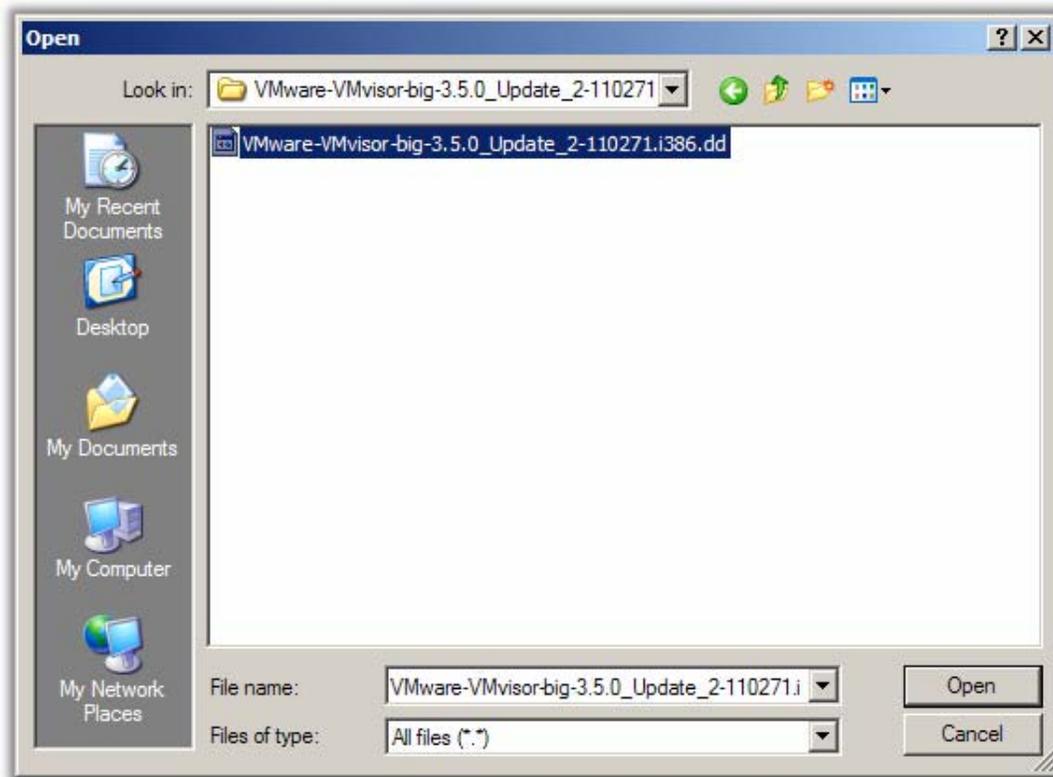


First connect the USB key to you’re machine, and make sure you have saved all the data and that de USB stick is formatted.

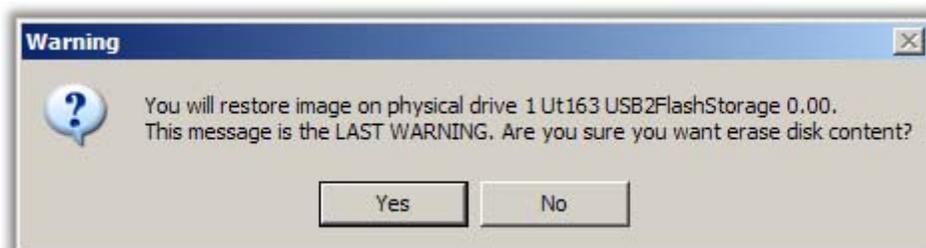
Open **Disk** in the menu and click on **Restore Virtual Hard Drive image on physical drive...**



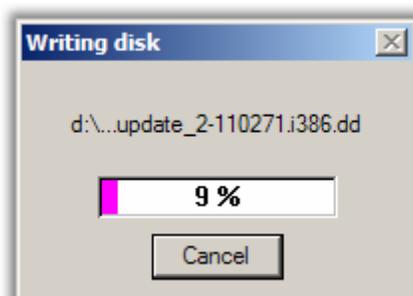
Select the USB key and click on **OK**.



Browse to the extracted file and choose on "Files of type: All files (*.*)" select "VMware-VMvisor-big-3.5.0_Update_2-110271.i386.dd" and click on Open.



Click on **Yes** to begin the restore.



This action could take up to a few minutes to complete. When the screen disappears the restore is completed successfully.

Step 3 – Testing the USB key

To test if the USB key is working correctly inserts the key in an available USB port on you're machine and let the machine boot from the USB key.

If it's working fine you should see that VMware ESX 3i is booting and after a few seconds the console is displayed, configure the IP settings and try to connect to the ESX host with the VMware VI Client, if this is working you are pretty sure that you're USB key have been successfully deployed.

If you have problems booting ESX from the USB key or ESX is crashing than probably there's was something wrong during the restore of the file to the USB key. In this case redo step 2.

Note: If you're machine have an internal USB port available it's better to connect the USB key on that port, so the key is better protected. For example if the USB key is being disconnected from the machine when ESX is running it will crash and so does you're vm's running on this host.