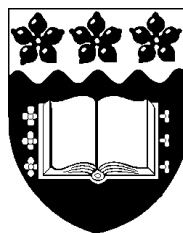


**School Of
Electrical, Computer &
Telecommunications Engineering
UOW**

Virtual Machine User Guide

**SECTE
Procedures**



Version: 1.0



Document Owner: IT Support, SECTE

Author: Andrej Jausnik

Document Control:

Version	Date	Author	Reason
1.0	18/02/08	Andrej Jausnik	Initial Procedures to run VMware

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Starting a virtual machine

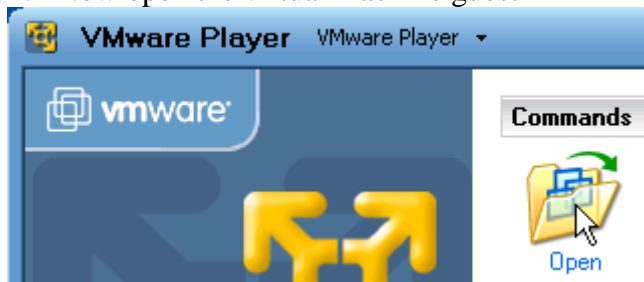
1. Start the VMware Player by clicking on the desktop icon or the quick launch bar pictured below.



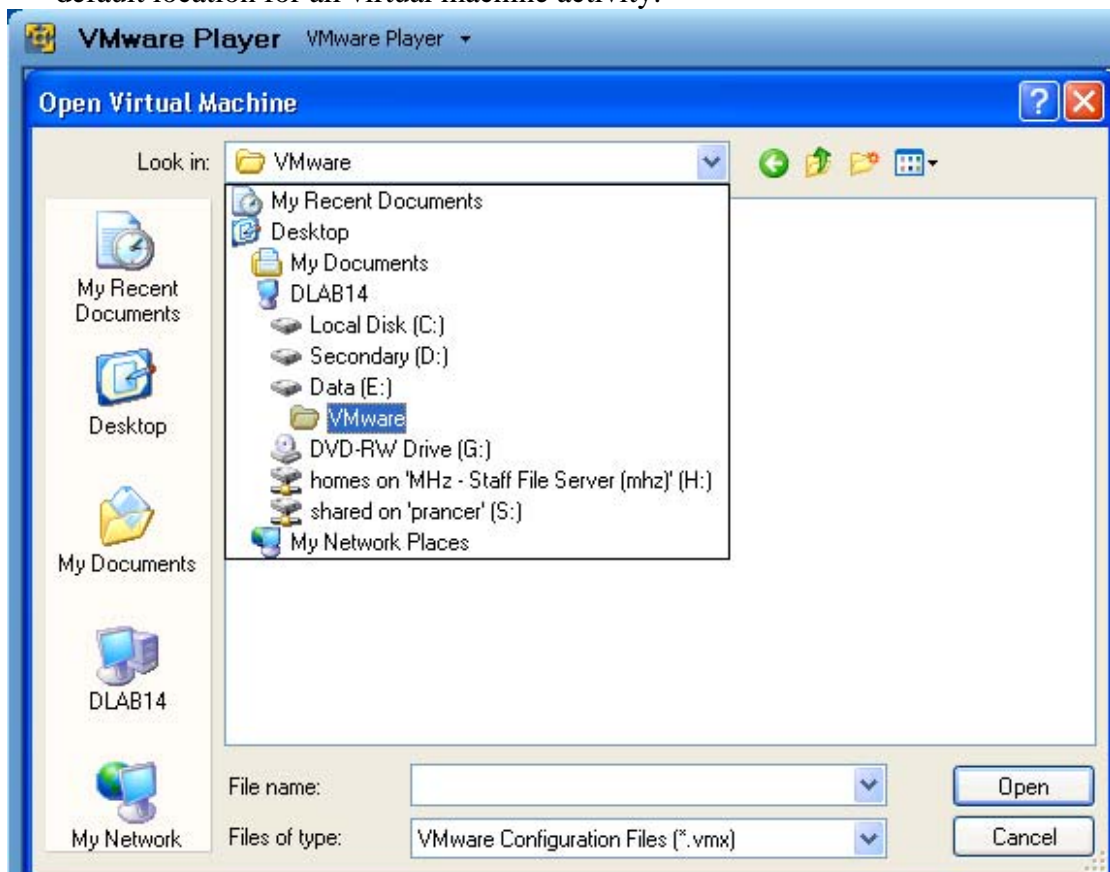
- a.
- b. Alternatively open the VM Machine Guest icon on the desktop and start the machine by clicking on the .vmx file.



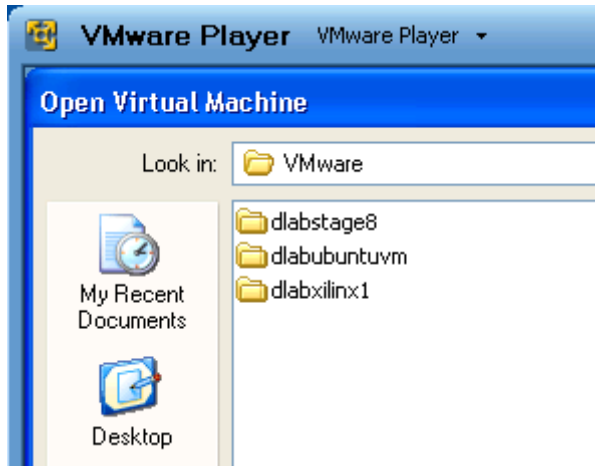
2. Now open the virtual machine guest



3. Browse to the HostComputerName\E:\Vmware. Note: The E: drive is the default location for all virtual machine activity.

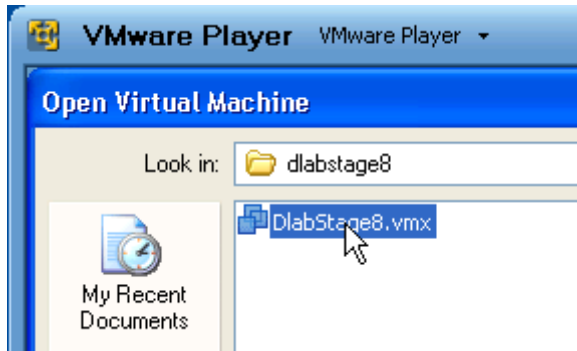


4. At the Parent directory of E:\VMware you will find a list of all the virtual machines available for use.

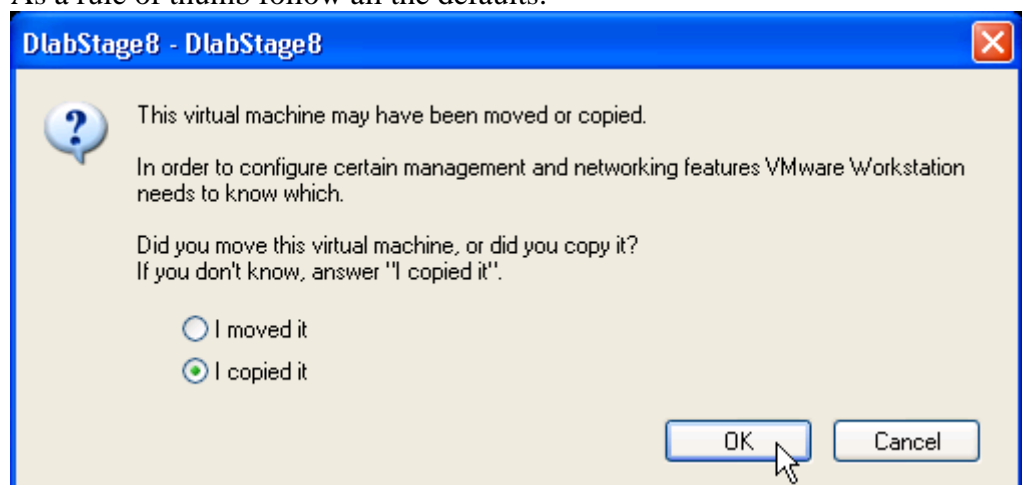


5. Note the naming convention of the directories. Dlabstage8 – stage # being that part of the build process. The stage with the highest name being the latest release... More on this later.

6. Select the latest .vmx file in this case dlabstage8.vmx and click OK.



7. Note: the VM takes about 30 seconds to start properly.
8. First time operation starting instructions are as follows...
 - a. As a rule of thumb follow all the defaults.

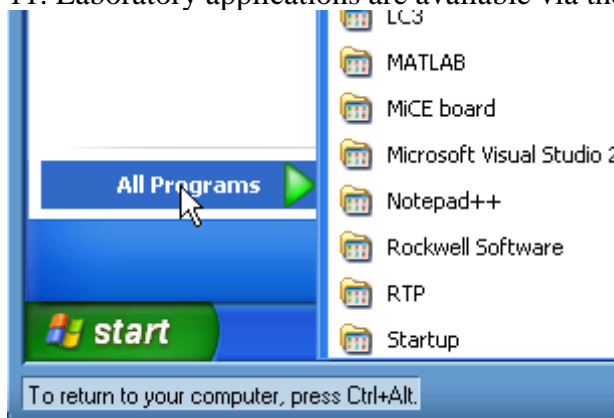


9. After starting the guest VM, performance should be as if you are using the host machine.

10. VM features and usage are available from the F1 Help manual.



11. Laboratory applications are available via the standard windows start menu.



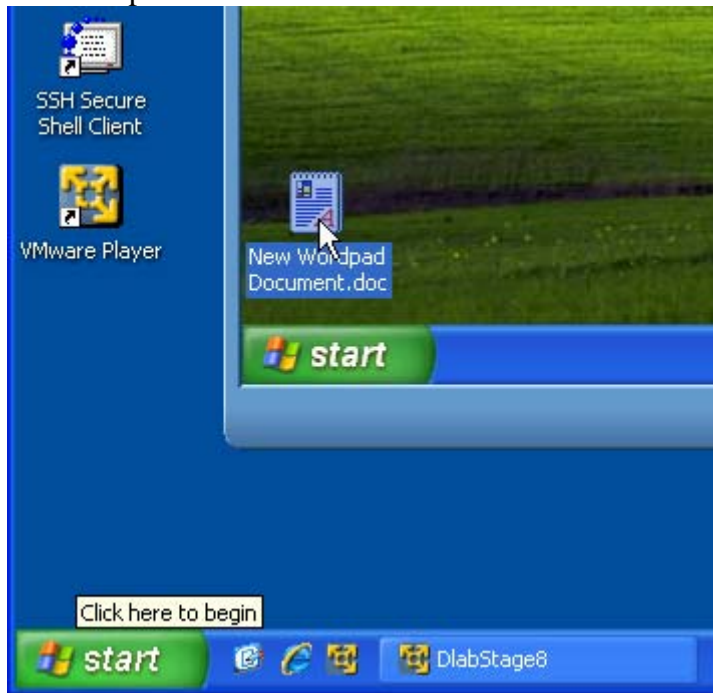
12. In the virtual machine all Windows XP techniques apply.

VM File copies to and from guest to host

Drag and Drop method

Simplest way is to drag and drop from guest to host machine.

1. Locate the file on guest machine, in this case it is on the desktop called New Wordpad Document.doc



2. Click and drag to the host desktop.

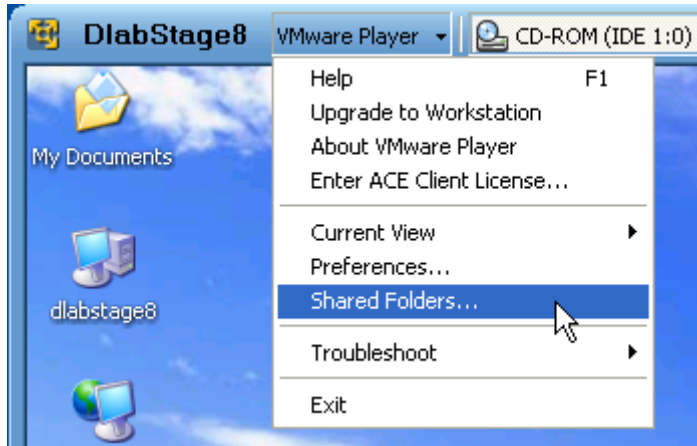


3. Note you can also do this in reverse from host to guest using any viable file/directory location available on the guest machine.

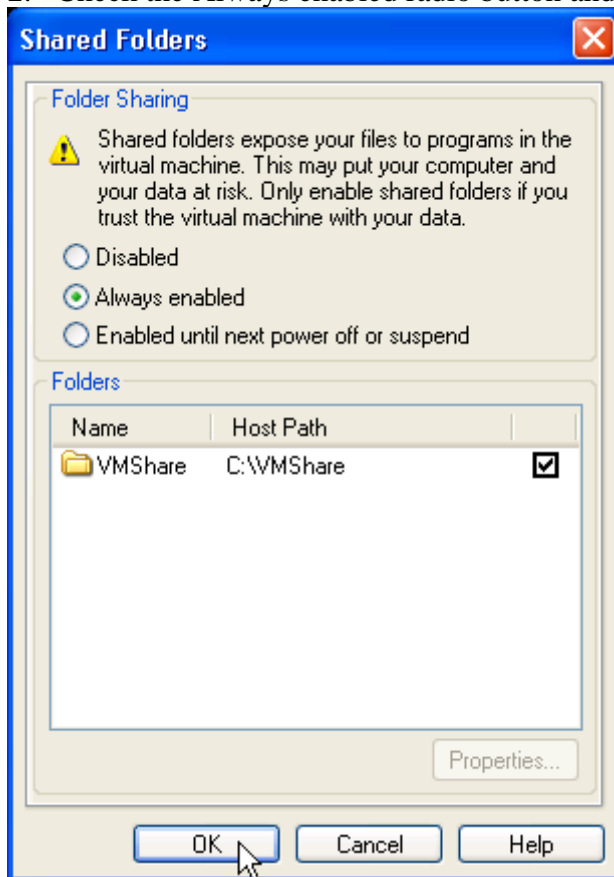
Shared folder method (Host < > Guest)

Shared folders exist between Host and Guest, though they require further configuration as they are disabled by default for a new VM guest. *Note: this will only be required the first time the guest OS is started for that VM guest.*

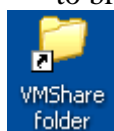
1. Select the Shared Folders... preferences on the guest machine are shown below.



2. Check the Always enabled radio button and click OK.



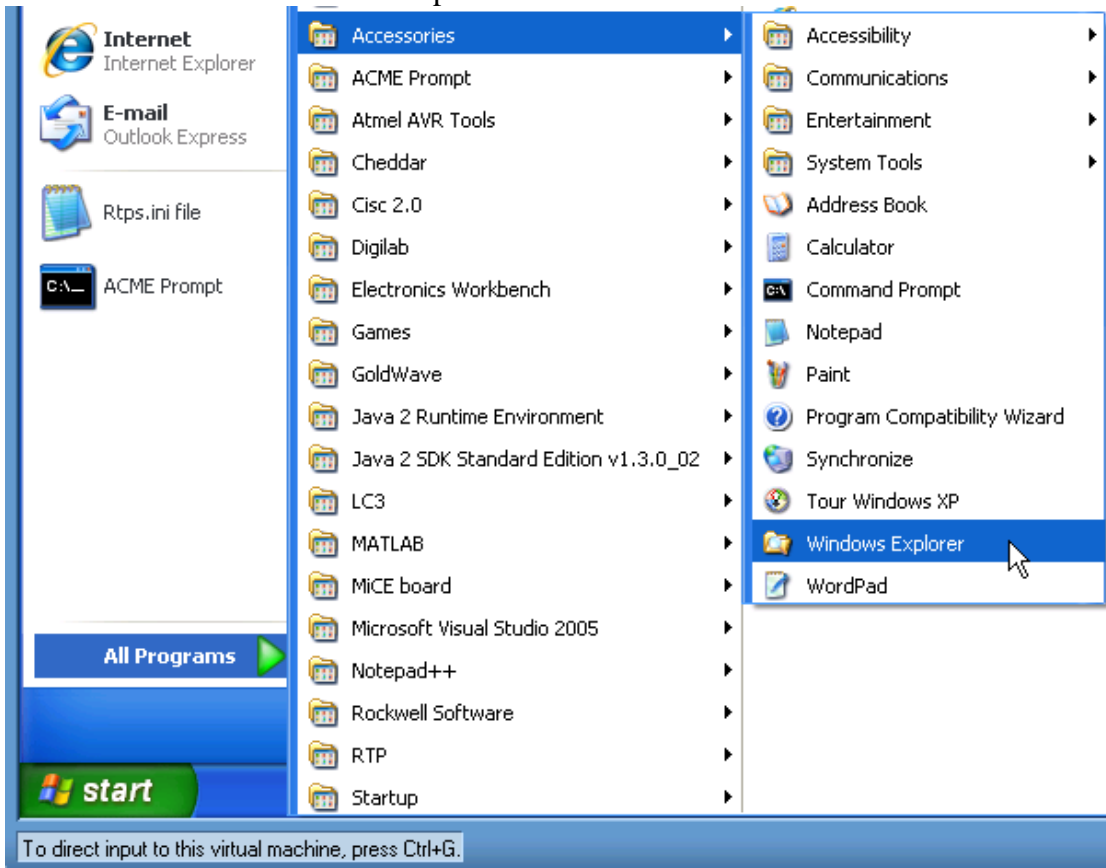
3. You will note the share folder path listed above points to the host machine.
4. If the shared folders aren't active from host <> guest then restart the guest.
5. Notice the **VMShare folder** shortcut on the Host machine desktop select this to browse to the file share between host and guest machine.



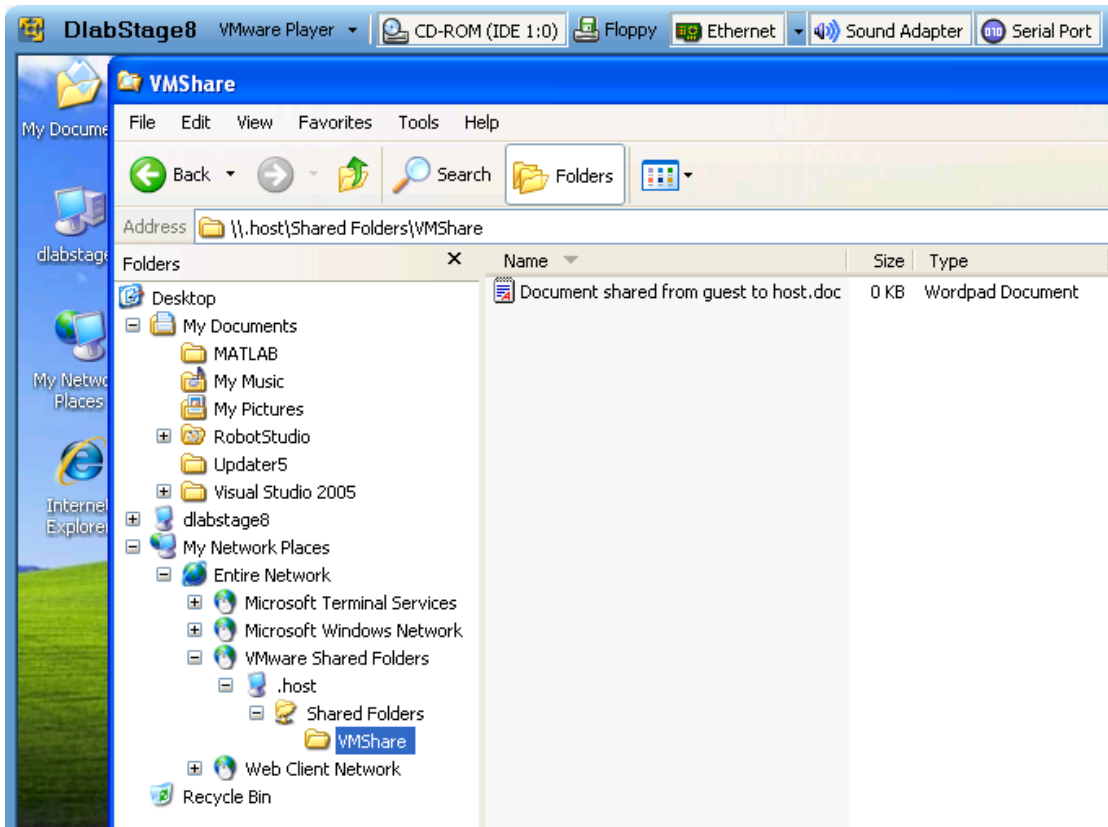
6. Notice the **VMShare on host** shortcut on the Guest VM desktop select this to browse to the file share between guest and host machine.



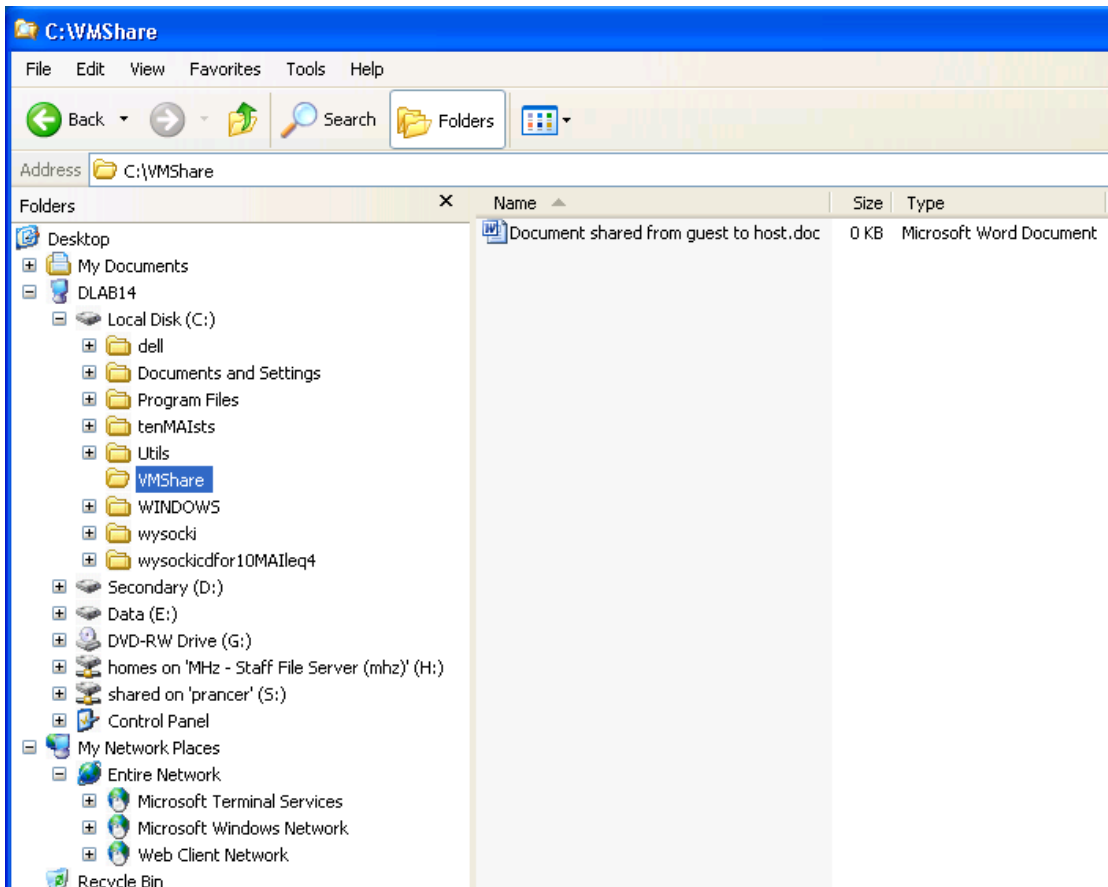
7. The corresponding folder location on the guest machine is visible under Start > Accessories > Windows Explorer



8. My Network Places > Entire Network > VMware Shared Folders > .host > Shared Folders > VMShare. The Shared document is created on the guest machine.



9. And the Shared document is now also visible on the host machine

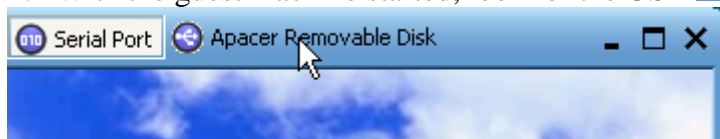



VM USB guest and host connectivity

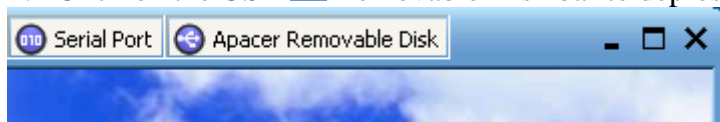
On any workstation VM features and usage are available from the F1 Help manual.

<C:\Program Files\VMware\VMware layer\help\wwhelp\wwhimpl\js\html\wwhelp.htm>

1. Insert the USB device
2. With the guest machine started, look for the USB  Removable Disk bar



3. The bar in the above state means the USB device is connected to the Host
4. Click on the USB  Removable Disk bar to depress it



5. The USB device is now connected to the Guest.
6. It basically toggles the USB device between the host and the guest.

[Removable Devices Preferences](#)

Removable devices preferences let you specify how you connect and disconnect devices such as floppy disk drives, CD or DVD drives, Ethernet adapters, and sound devices available for use in VMware Player. Select one of the following:

Show on toolbar — To disconnect and reconnect the devices shown on the toolbar, click a device's icon to toggle it off and on. A device with a depressed icon is •connected. If the device appears level with the toolbar, it is disconnected.

Show as menu — To disconnect and reconnect the devices from the Devices menu, choose the name of a device to toggle it off and on. A check mark next to the name of a device indicates that it is connected. If there is no check mark, the device is •disconnected.

For information on disconnecting and reconnecting removable devices, see

[Controlling Removable Devices.](#)

[Controlling Removable Devices](#)

Your virtual machine might have access to some of the devices attached to your host computer, such as the floppy disk drive, CD or DVD drive, and the Ethernet adapter. Depending on the preferences you set (see [Removable Devices Preferences](#)), these devices appear on the toolbar or on the Devices menu.

To disconnect and reconnect the devices shown on the toolbar, click a device's icon to toggle it off and on. A device with a depressed icon is connected. If the device appears level with the toolbar, it is disconnected.

To disconnect and reconnect the devices from the Devices menu, choose the name of a device to toggle it off and on. A check mark next to the name of a device indicates that it is connected. If there is no check mark, the device is disconnected.

Only one machine — either the host computer or the virtual machine — can use disk drives and USB devices at any one time. If your virtual machine is configured to use the device, and if you want to use that device directly on your host computer, make sure it is disconnected from the virtual machine. The Ethernet adapter can be shared by the host computer and the virtual machine.

VM Locations and Recovery procedures

By design all the virtual machine images will be stored on the E:\ drive of the laboratory machine. The naming convention of the directories and virtual machine images are as follows:

Directory Locations

E:\VMware directory is the production directory with Read/Write access for all to use.

E:\VMware.bak directory is a Read Only access for restoring to the last known working build stage of a virtual machine.

Production Virtual Machine Locations

Dlabstage8 – stage # being that part of the build process. This gives administrators, staff and students the capability of rolling forward or backward on any newly released builds in case there are complications. If the new rollout build # is not working appropriately then # minus 1 can be used for lab work.

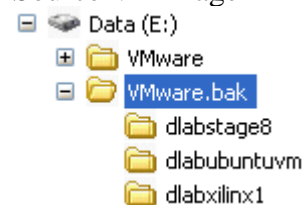
Recovery Procedures

To fully recover a VM to its original state, simply copy the vm specific directory and all its files from VMware.bak directory to the VMware directory. This process can be done by any user that has a valid SECTE login account.

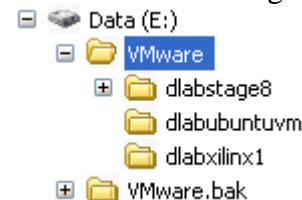
An automated script has been created to enable this file copy to happen. Simply run VM Recovery from the desktop to start with a brand new virtual machine image.



Source VMimage



Destination VMimage



Application availability

Host Machine

Microsoft Office 2003

PuTTY

SSH Secure Shell

VMware Player

PSCAD 4.2.0

Guest Virtual Machine

ABB Industrial Robotics Studio

AMCE Prompt

Atmel AVR Tools

Cheddar

Cisc

Digilab

Electronics Workbench

Goldwave

LC3

MATLAB

MiCE board

Microsoft Visual Studio 2005

Notepad++

Rockwell Software

RTP

TTintro1

VCDemo

WinAVR

Xilinx ISE6