VMWARE CONSOLIDATED BACKUP

November 7-9, 2006

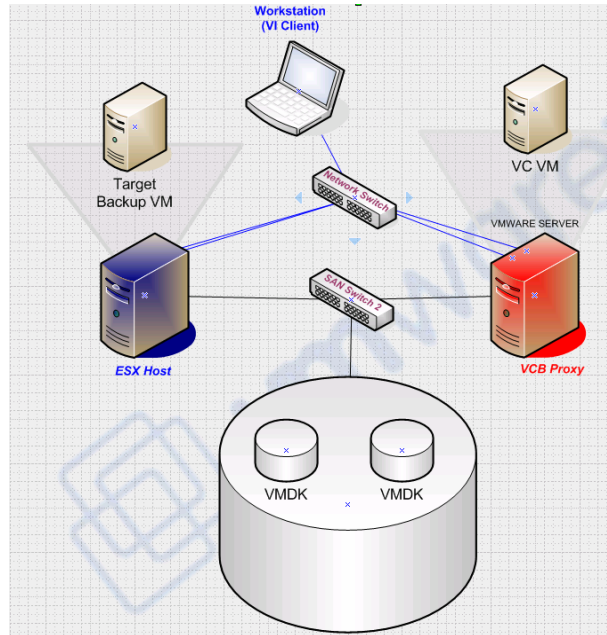## TABLE OF CONTENTS

TABLE OF CONTENTS

Lab 1 - Lab Introduction and Minimum Requirements Check

Hardware Requirements

The VCB proxy must be able to run Microsoft Windows 2003. In addition, the proxy requires the following hardware components:

- Network adapter (NIC)
- Fibre Channel host bus adapter (HBA)

Prerequisites

To be able to install Consolidated Backup on the VCB proxy, make sure that the following requirements are met:

- The proxy is running Microsoft Windows 2003. Consolidated Backup doesn't support any other versions of Windows on the proxy.

- Networking on the backup proxy is configured so that the proxy can establish a connection to VirtualCenter.

  If there is a firewall between the backup proxy and the VirtualCenter, the firewall must permit TCP/IP connections to VirtualCenter. By default, VirtualCenter expects incoming connections at TCP/IP port 902.

  For information on configuring Networking, see *Server Configuration Guide*.

- The third-party backup software to be used with Consolidated Backup is installed and correctly configured.

  Verify the configuration of the third-party backup software at this time by running a backup and restoration job on a local directory on the VCB proxy.

Verify Requirements and Pre-Requisites

Verify all the requirements listed here have been met prior to installing VCB on the server.

A. Log into the workstation.
   - Username is "Administrator"
   - Password is "vmware"
B. Establish a "RDP" session to the VCB Proxy machine **lab1-vcb***xx* where *xx* is the lab station number you are assigned to.
   - Username is "Administrator"
   - Password is "vmware"
C. Verify VCB setup file is located in folder on desktop.
D. Verify that you see (2) 200 Gig disks. 1 disk should be an NTFS volume named **Holding Tank**, and the other a healthy unknown partition.
E. Launch the Virtual Infrastructure Client and log in to VirtualCenter. The Virtualcenter name is **lab1-vc***xx* where *xx* is the lab station number you are assigned to.
   - Username is "Administrator"
   - Password is "vmware".
F. Verify there are 2 running virtual machines on the ESX host.
G. Verify the VCB Proxy is running Windows 2003SP1 or higher.
H. Verify the VCB Proxy has a Host Bus Adaptor and a Network Interface Card.

VMWORLD 2006

Lab 2 – VCB Installation

```
C:\WINDOWS\system32\cmd.exe

Microsoft Windows [Version 5.2.3790]
(C) Copyright 1985-2003 Microsoft Corp.

C:\Documents and Settings\Administrator>diskpart

Microsoft DiskPart version 5.2.3790.1830
Copyright (C) 1999-2001 Microsoft Corporation.
On computer: ISCSI

DISKPART> automount disable

Automatic mounting of new volumes disabled.

DISKPART> automount scrub

DiskPart successfully scrubbed the mount point settings in the system.

Automatic mounting of new volumes disabled.

DISKPART> exit

Leaving DiskPart...

C:\Documents and Settings\Administrator>exit_
```

Step 1 – Disabling Automatic Drive Letter Assignment

All versions of Windows except Windows 2003 Enterprise Edition and Windows 2003 Datacenter Edition automatically assign drive letters to each visible NTFS and file FAT volume. For Consolidated Backup, change this default behavior so that volumes are not automatically mounted on the proxy.

Note: We are running Windows Enterprise edition on this lab. therefore there is no need to run the commands provided in this section.

   A. Shut down the VCB Proxy.
   B. Disconnect the Windows Proxy from the SAN.
   C. Boot the VCB Proxy and log in with an account that has administrative privileges.
   D. Open a command line interface.
   E. Run the `diskpart` utility by typing

       `diskpart`

   F. Disable the automatic drive letter mapping by typing:

       `automount disable`

   G. You can clean out previously mapped entries stored in the registry by typing:

       `automount scrub`

   H. Type `exit` and press Enter.
   I. Type `exit` again to quit the command prompt session.
   J. Shut down the VCB Proxy.
   K. Re-connect the Windows Proxy to the SAN.
   L. Boot the VCB Proxy.
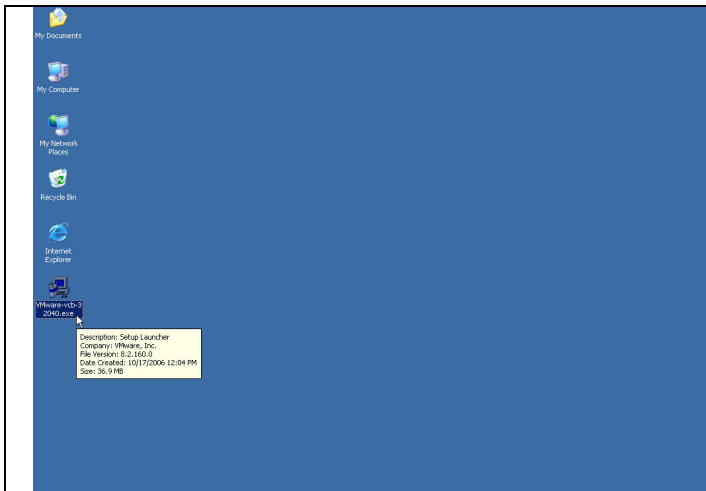
	Step 2 - Installing the Framework A. Log in with an account that has administrative privileges. B. Double click the icon called `VCB Setup` located on the desktop. C. Launch the setup by double-clicking on the file named **`VMware vcb-32040.exe.`**
	Step 3 – Open File-Security Warning A. Acknowledge the security warning by clicking on "Run".
	Step 4 – Welcome to the Installation Wizard A. Begin the installation of the Framework by clicking "Next"
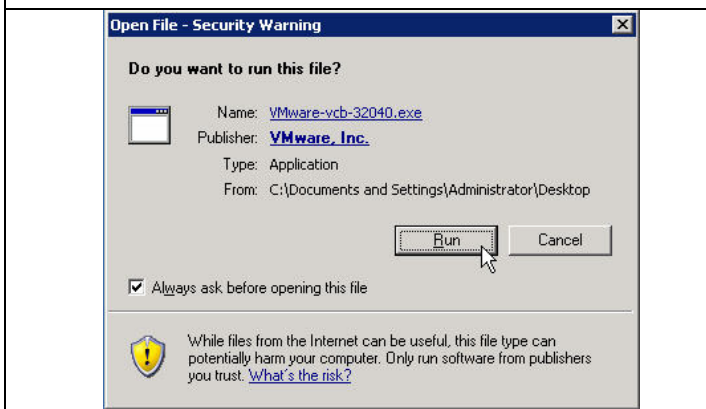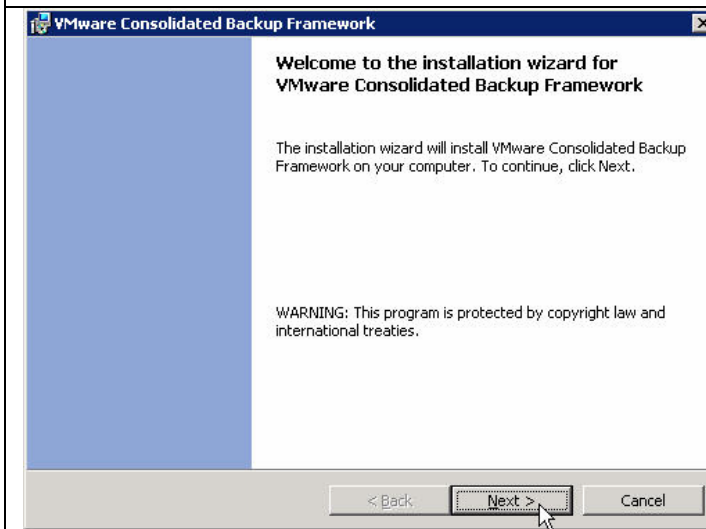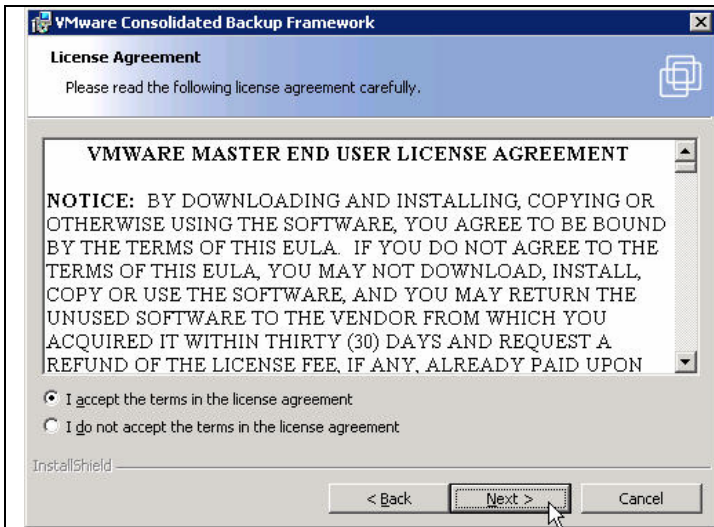
Step 5 – Accept the EULA

A. Accept the End User License Agreement by clicking the radio button next to "I accept the terms in the license agreement" and click "Next"
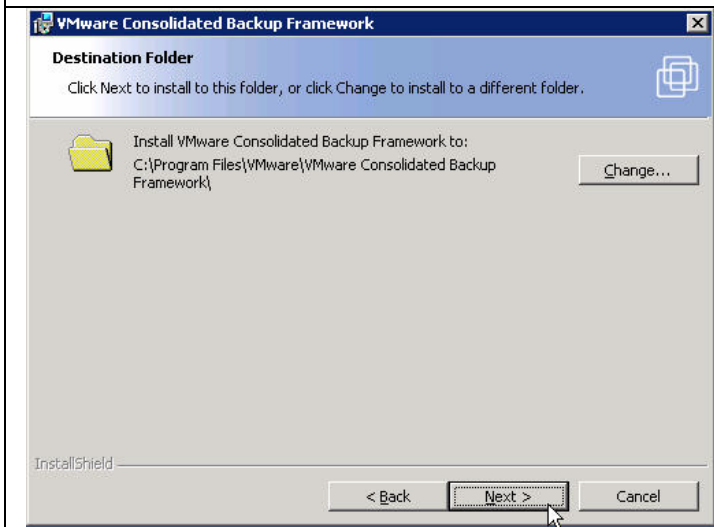
Step 6 – Choose Destination Folder

A. Choose your destination folder, and click "Next"
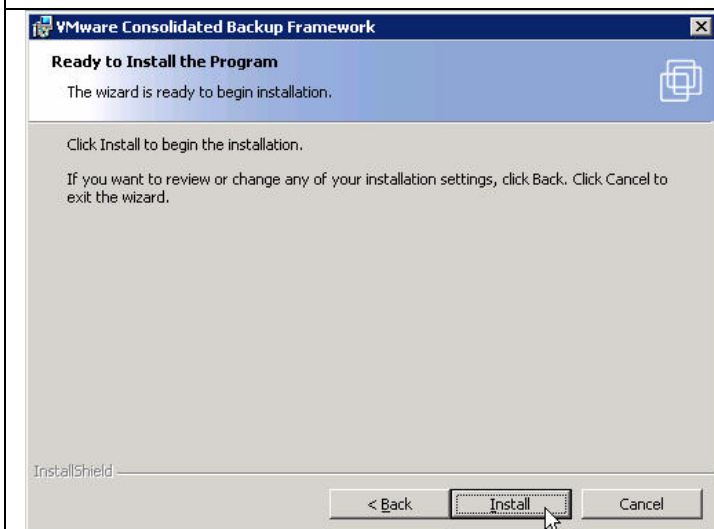
Step 7 – Begin the Installation

A. Continue the installation by clicking "Install"

Security Alert - Driver Installation The driver software you are installing for: VMware Virtual Volume Storage Bus has been signed with Authenticode(TM) technology. The publisher's identity has been verified, and the driver has not been modified since it was published. Published by: VMware, Inc. Date published: 9/26/2006 Publisher authenticity verified by VeriSign Class 3 Code Signing 2004 CA However, this driver cannot be tested by Microsoft Windows Hardware Quality Labs to verify its compatibility with this version of Windows. (Tell me more about this testing.) Do you trust this publisher and want to install the driver? [Yes] [No] [More Info]	**Step 8 – Install the VMware Virtual Volume Storage Bus driver** A. Acknowledge that you wish to install the driver by clicking "Yes"
VMware Consolidated Backup Framework **Installation Wizard Completed** The installation wizard has successfully installed VMware Consolidated Backup Framework. Click Finish to exit the wizard. [< Back] [Finish] [Cancel]	**Step 9 – Completing the Install Wizard** A. Finish the installation wizard by clicking "Finish"
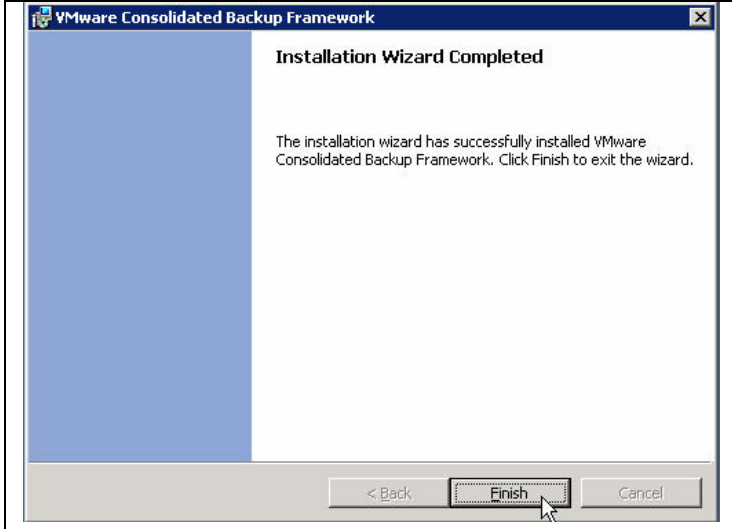
Lab 3 – Perform a Full Image Backup

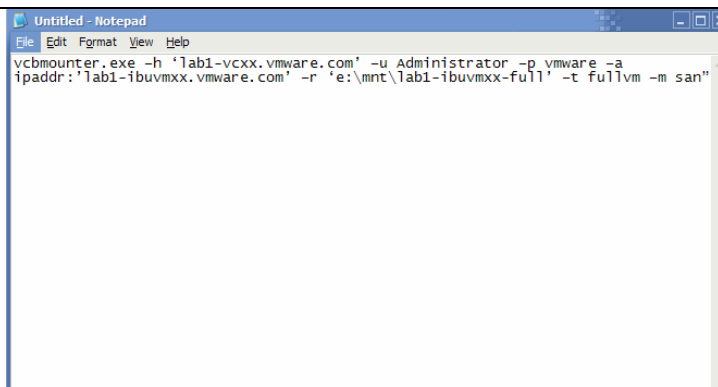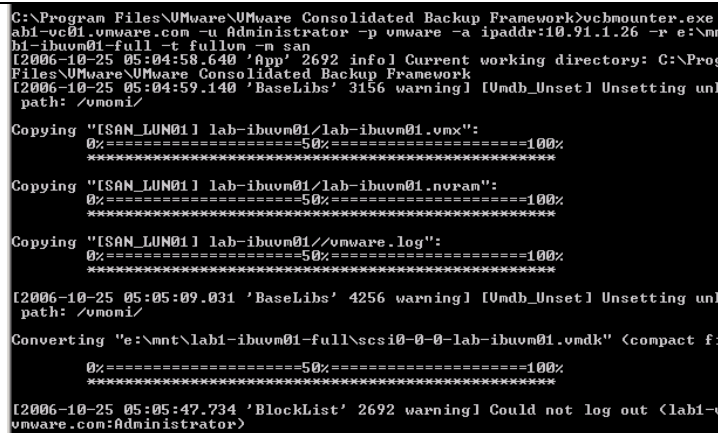|	
Remote Desktop Connection window with Computer field: lab-vcbXX.vmware.com	**Step 1 – Connect to the VCB Proxy** If you haven't established a RDP connection to the VCB Proxy, please do so by performing the steps below otherwise proceed to Step 2. A. Double click the VCB Proxy Remote Desktop Shortcut located on the desktop.

Untitled - Notepad window containing:
`vcbmounter.exe –h 'lab1-vcxx.vmware.com' –u Administrator –p vmware –a`
`ipaddr:'lab1-ibuvmxx.vmware.com' –r 'e:\mnt\lab1-ibuvmxx-full' –t fullvm –m san"`
	Step 2 – Create vcb-full-image-backup file
	
	A. Open Notepad by clicking "Start", "Run" and typing "Notepad" and press "Enter"
	B. Type command (all one line)
	
	   `vcbmounter.exe`
	   `–h lab1-vcxx.vmware.com`
	   `–u Administrator –p vmware`
	   `–a ipaddr:10.91.102.2xx`
	   `–r e:\mnt\lab1-ibuvmxx-full`
	   `–t fullvm –m san`
	
	C. Save the file with file in **c:\program files\vmware\vmware** consolidated backup framework:
	
	File name: vcb-full-image-backup.bat
	File type: ANSI
	
	D. Exit Notepad.

Command prompt window showing:
`C:\Program Files\VMware\VMware Consolidated Backup Framework>vcbmounter.exe`
`ab1-vc01.vmware.com –u Administrator –p vmware –a ipaddr:10.91.1.26 –r e:\mnt`
`b1-ibuvm01-full –t fullvm –m san`
`[2006-10-25 05:04:58.640 'App' 2692 info] Current working directory: C:\Prog`
`Files\VMware\VMware Consolidated Backup Framework`
`[2006-10-25 05:04:59.140 'BaseLibs' 3156 warning] [Vmdb_Unset] Unsetting unk`
`path: /vmomi/`
 	
`Copying "[SAN_LUN01] lab-ibuvm01/lab-ibuvm01.vmx":`
  `0%===================50%===================100%`
  `****************************************************`
 	
`Copying "[SAN_LUN01] lab-ibuvm01/lab-ibuvm01.nvram":`
  `0%===================50%===================100%`
  `****************************************************`
 	
`Copying "[SAN_LUN01] lab-ibuvm01//vmware.log":`
  `0%===================50%===================100%`
  `****************************************************`
 	
`[2006-10-25 05:05:09.031 'BaseLibs' 4256 warning] [Vmdb_Unset] Unsetting unk`
`path: /vmomi/`
 	
`Converting "e:\mnt\lab1-ibuvm01-full\scsi0-0-0-lab-ibuvm01.vmdk" (compact fi`
  `0%===================50%===================100%`
  `****************************************************`
 	
`[2006-10-25 05:05:47.734 'BlockList' 2692 warning] Could not log out (lab1-v`
`vmware.com:Administrator)`
	Step 3 - Run vcb-full-backup script
	
	A. From a command prompt, navigate to **c:\Program Files\VMware\VMware** Consolidated Backup Framework and run
	
	   `vcb-full-image-backup.bat`
	
	NOTE: Ignore the "Unsetting unknown path…" and "Could not log out" error messages

Lab 4 – Perform a File Level Backup

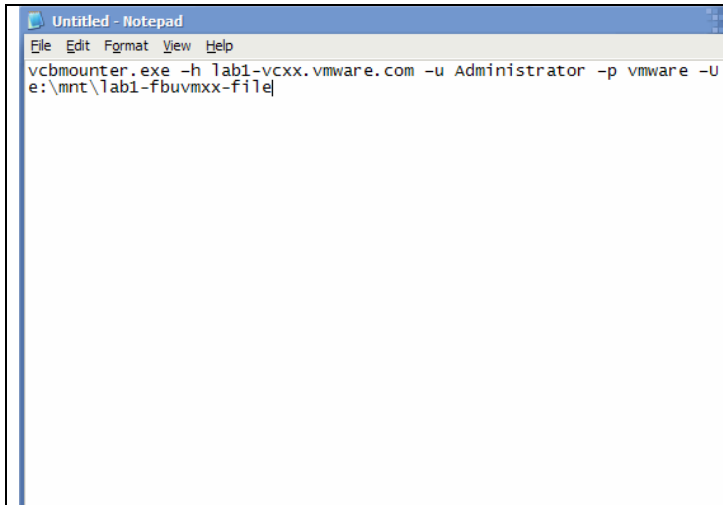|	

vcb-prebackup.bat - Notepad
File Edit Format View Help
 	
vcbmounter.exe –h lab1–vc01.vmware.com –u Administrator –p vmware –a
ipaddr:10.91.1.5 –r e:\mnt\lab1-fbuvm01-file –t file –m san
	Step 1 – Create vcb-pre-backup file
	
	NOTE: Make sure you are still on the VCB Proxy Server.
	
	A. Create a new file with notepad, and enter (all one line)
	
	   vcbmounter.exe
	   –h lab1-vc*xx*.vmware.com
	   –u Administrator –p vmware
	   –a ipaddr:10.91.101.2*xx*
	   –r e:\mnt\lab1-fbuvm*xx*–file –t file
	   –m san
	B. Save the file with file in `c:\program files\vmware\vmware` consolidated backup framework:
	
	File name: `vcb-pre-backup.bat`
	File type: ANSI
	
	C. Exit Notepad.
	
	NOTE: The command entered in the text file will normally be integrated into your backup software. It is shown here for demonstration only

C:\Program Files\VMware\VMware Consolidated Backup Framework>vcb-prebackup.bat C:\Program Files\VMware\VMware Consolidated Backup Framework>vcbmounter.exe –h l ab1-vc01.vmware.com –u Administrator –p vmware –a ipaddr:10.91.1.5 –r e:\mnt\lab 1-fbuvm01-file –t file –m san [2006-10-25 05:38:32.453 'App' 5260 info] Current working directory: C:\Program Files\VMware\VMware Consolidated Backup Framework [2006-10-25 05:38:32.953 'BaseLibs' 6028 warning] [Vmdb_Unset] Unsetting unknown path: /vmomi/ Opened disk: blklst://snapshot-61[SAN_LUN01] lab1-fbu/lab1-fbu.vmdk@lab1-vc01.vm ware.com?xxxx/xxxx Proceeding to analyze volumes Done mounting Volume 1 mounted at e:\mnt\lab1-fbuvm01-file\digits\1 (mbSize=4086 fsType=NTFS) Volume 1 also mounted on e:\mnt\lab1-fbuvm01-file\letters\C C:\Program Files\VMware\VMware Consolidated Backup Framework>_	**Step 2 – Run the vcb-pre-backup file** A. Open a command line by clicking "Start", "Run" and typing `cmd` and press enter B. Change Directory to: `c:\program files\vmware\vmware consolidated backup framework` C. Run `vcb-pre-backup.bat` D. Wait until it has finished

Lab 5 – Create a Post Backup Batch File

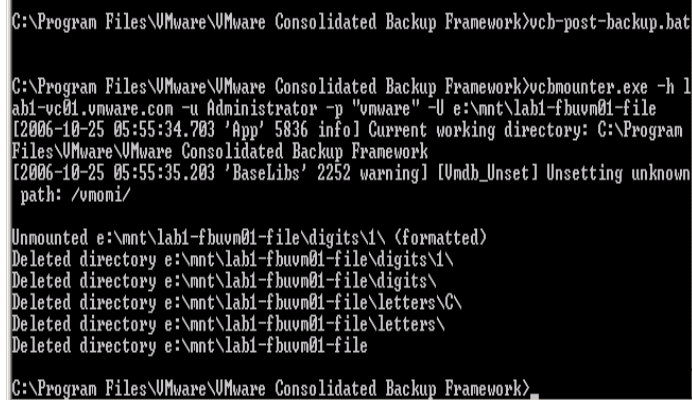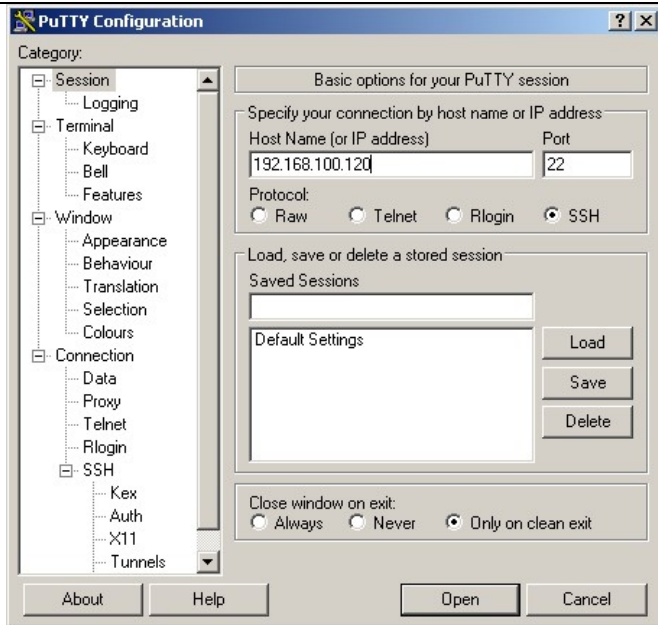|	

Untitled - Notepad
File Edit Format View Help
vcbmounter.exe –h lab1-vcxx.vmware.com –u Administrator –p vmware –U
e:\mnt\lab1-fbuvmxx-file|
	Step 1 – Create a post backup batch file
	
	Once the backup has been completed, the mount point created earlier in the `vcb-pre-backup`.bat file **will need to be removed**. This can be performed by performing the following steps:
	
	A. Open notepad.
	B. Type (all one line)
	
	   vcbmounter.exe –h lab1-vcxx.vmware.com –u Administrator –p vmware –U e:\mnt\lab1-fbuvmxx-file
	
	C. Save the file with file in `c:\program files\vmware\vmware` consolidated backup framework:
	
	   File name: `vcb-post-backup.bat`
	   File type: ANSI
	
	D. Exit Notepad.

C:\Program Files\VMware\VMware Consolidated Backup Framework>vcb-post-backup.bat C:\Program Files\VMware\VMware Consolidated Backup Framework>vcbmounter.exe –h l ab1-vc01.vmware.com -u Administrator -p "vmware" -U e:\mnt\lab1-fbuvm01-file [2006-10-25 05:55:34.703 'App' 5836 info] Current working directory: C:\Program Files\VMware\VMware Consolidated Backup Framework [2006-10-25 05:55:35.203 'BaseLibs' 2252 warning] [Vmdb_Unset] Unsetting unknown path: /vmomi/ Unmounted e:\mnt\lab1-fbuvm01-file\digits\1\ (formatted) Deleted directory e:\mnt\lab1-fbuvm01-file\digits\1\ Deleted directory e:\mnt\lab1-fbuvm01-file\digits\ Deleted directory e:\mnt\lab1-fbuvm01-file\letters\C\ Deleted directory e:\mnt\lab1-fbuvm01-file\letters\ Deleted directory e:\mnt\lab1-fbuvm01-file C:\Program Files\VMware\VMware Consolidated Backup Framework>_	**Step 2 – Run the vcb-post-backup file** A. Open a command line by clicking "Start", "Run" and typing `cmd` and press "Enter". B. Change Directory to: `c:\program files\vmware\vmware consolidated backup framework` C. Run `vcb-post-backup.bat` D. Wait until it has finished

Lab 6 – Restore a Virtual Machine Using Virtual Machine Importer
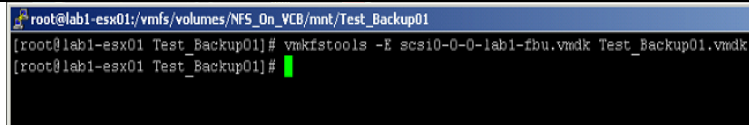
|	
	Step 1 - Install VMimporter 2.0 A. Setup files are located in the "Importer 2.0" folder on the desktop of your workstation. B. Run the Windows Installer
	Step 2 - Establish SSH connection to ESX Server. C. Double click Putty on your Desktop D. Enter you ESX Server IP address and click "Open"

	Step 3 - Rename VMDK file using `vmkfstools`
	
	A. Change Directory:
	
	`cd /mnt/SMB_on_VCB/mnt/lab1-ibuvmxx-full`
	
	B. Enter the following command:
	
	`vmkfstools –E scsi0-0-0-lab1-ibuvmXX.vmdk Test_Backup01.vmdk`
	
	C. Press "Enter"
	D. Close the Putty Session.

VMWORLD 2006
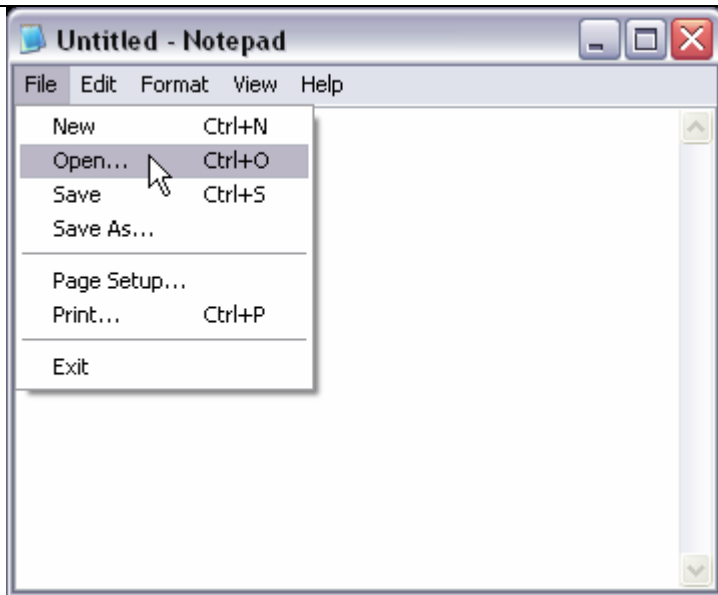
	Step 4 - Edit VMX file A. Open Notepad. B. Click "File", "Open" and navigate to `E:\mnt\lab1-ibuvmXX-full\lab1-ibuvmXX.vmx`
	Step 5 - Edit VMX file (continued) A. Modify the name of the `vmdk` file on the line that begins with `scsi0:0.filename` to `Test_Backup01.vmdk` B. Save the file and exit Notepad. C. Minimize the VCB Remote Desktop session
	Step 6 – Map Drive to VCB Proxy from workstation A. Map Drive Z:\ to \\lab1-vcbXX\e$
	Step 7 – Launch VMware Virtual Machine Importer A. Double click on the "VMware Virtual Machine Importer" icon on the desktop of your workstation.
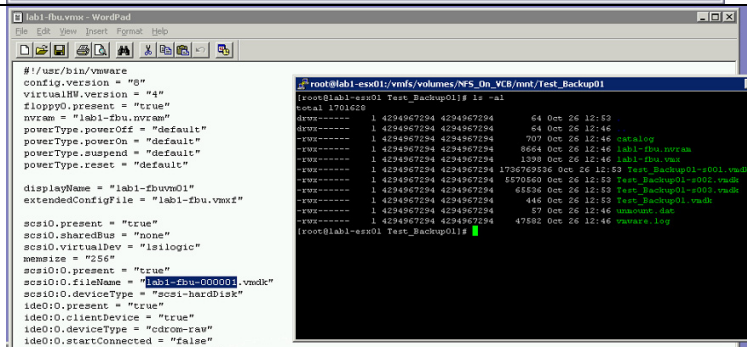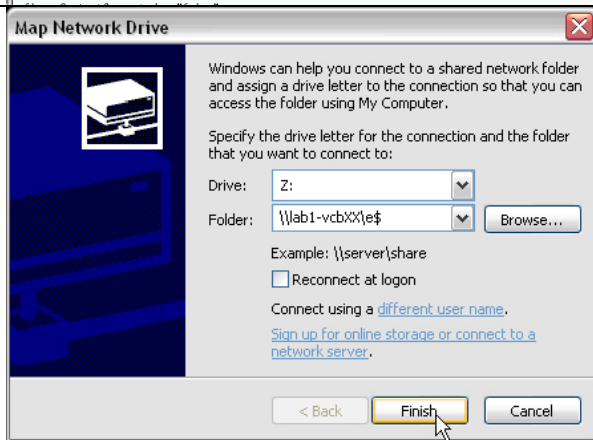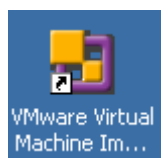
VMware Virtual Machine Importer Welcome to the VMware Virtual Machine Importer This wizard helps you move virtual machines among VMware Workstation, VMware Player, VMware Server, GSX, ESX, and VirtualCenter servers. You can also use the Virtual Machine Importer to import virtual machines from Microsoft Virtual PC and Virtual Server, and to create virtual machines from images created by Symantec LiveState or Ghost 9. To continue, click Next. **VM Importer** < Back Next > Cancel	**Step 8 – VMImporter installation** A. Click "Next"
VMware Virtual Machine Importer **Source System Information** What do you want to import? Source ⊙ Import a standalone virtual machine A virtual machine for VMware Workstation, VMware Player, VMware Server, GSX Server, Microsoft Virtual PC/Virtual Server, or a Symantec LiveState image. ○ Import an ESX Server virtual machine A virtual machine from VMware ESX Server or VMware VirtualCenter 2. ○ Adapt an existing virtual machine If you have used third-party imaging software to restore into a virtual machine, adapts the restored image for VMware virtual hardware. < Back Next > Cancel	**Step 9 – Source System Information** A. Select "Import a standalone virtual machine" and click "Next"
VMware Virtual Machine Importer **Specify the Source for Your Virtual Machine** Browse to the virtual machine or image you wish to import. Source VM or image: [ ] Browse... < Back Next > Cancel	**Step 10 - Specify Source** A. Click "Browse" to locate the source VM…
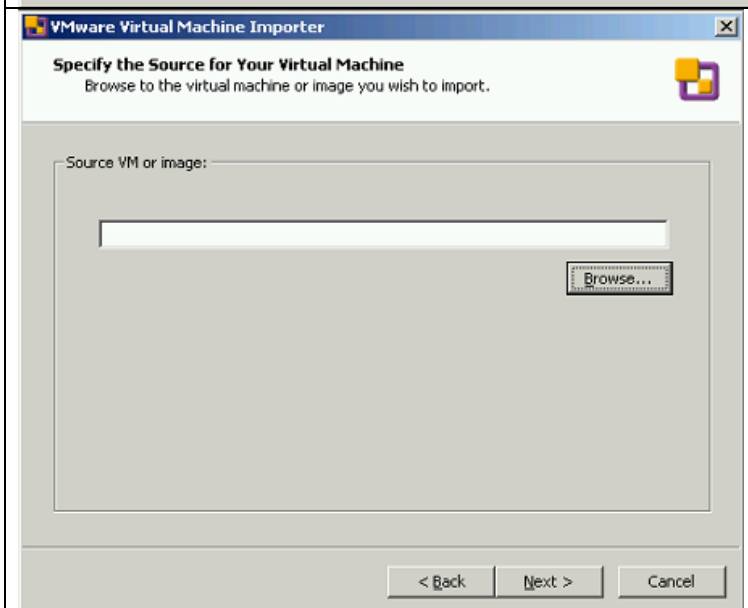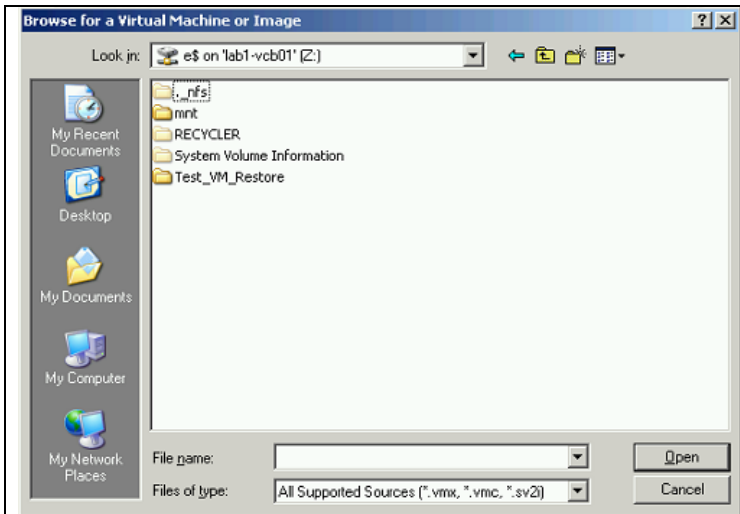
	Step 11 - Specify Source (continued) A. Navigate to Z:\mnt\lab1-ibuvmXX-full\
	Step 12 - Specify Source (continued) A. Click on "lab1-ibumvXX.vmx" and click "Open"
	Step 13 - Specify source (continued) A. Verify the source VM is correct and click "Next"
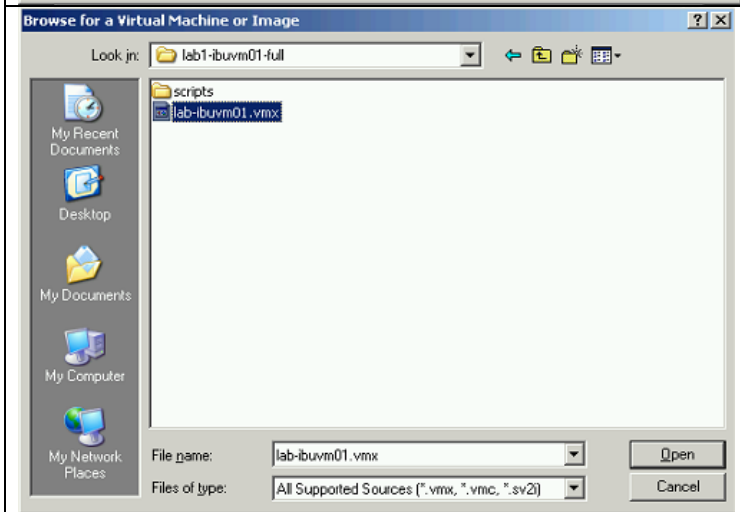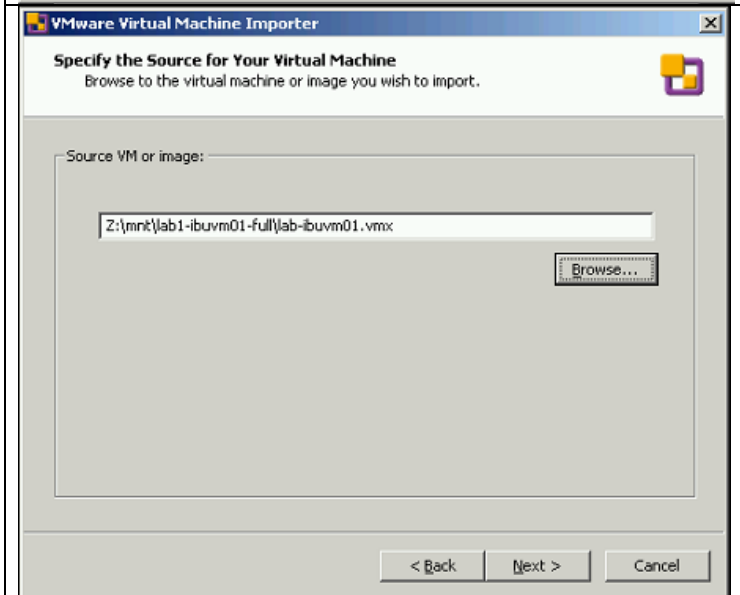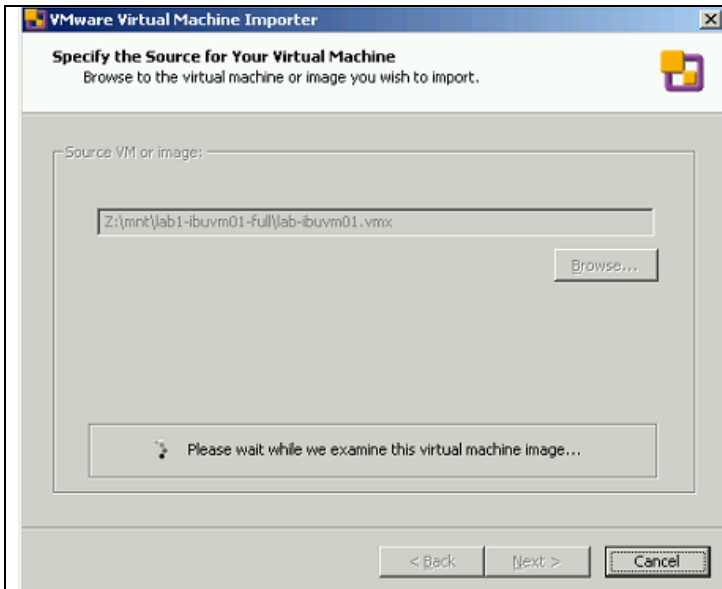
Step 14 - Specify source (continued)

A. The virtual machine image is being examined, no action is required on your part.
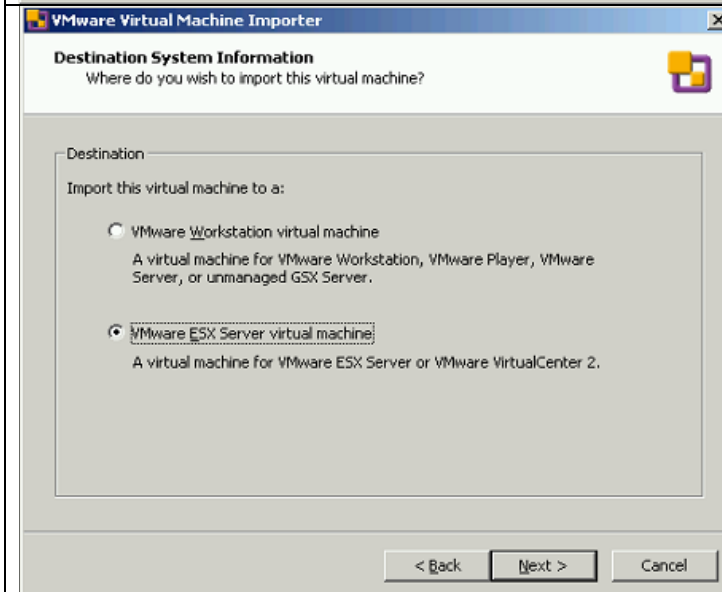
Step 15 - Destination System Information

A. Click on "VMware ESX Server virtual machine" and click "Next"
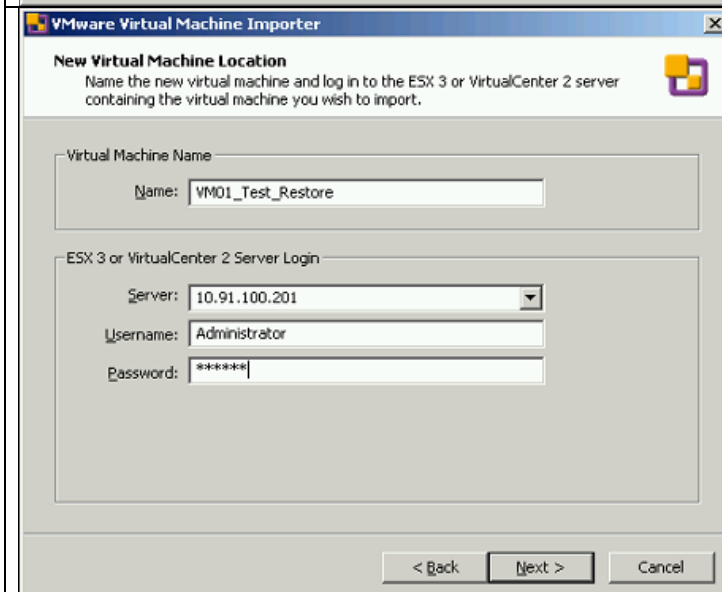
Step 16 - New Virtual Machine Location

A. In the Name field,

   VM01_Test_Restore

B. In the Server field, type in the name of the VirtualCenter server (**lab1-vcxx**)
C. In the Username field, type "Administrator"
D. In the password field, type "vmware"
E. Click "Next"
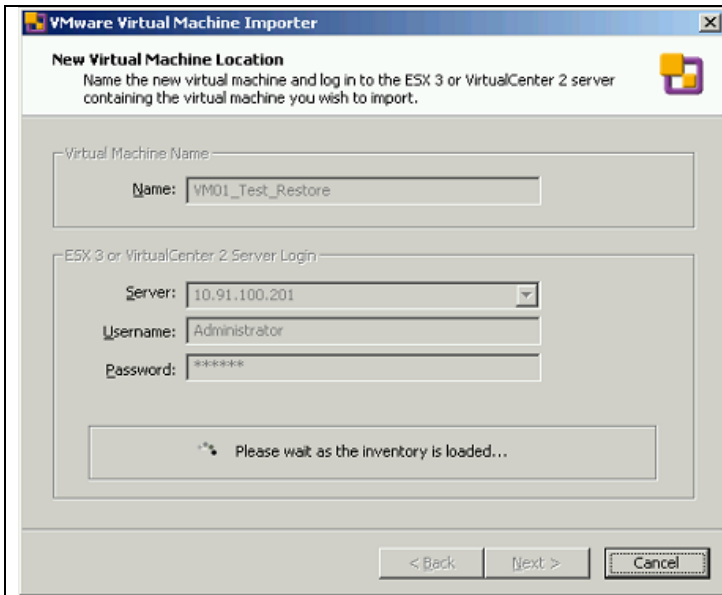
	Step 17 - New Virtual Machine Location (continued) A. The virtual machine inventory is loaded. No action is required on your part.
	Step 18 - Specify the Destination for your virtual machine A. Highlight the ESX host and then click "Next"
	Step 19 - Virtual Machine Inventory Location A. Click "Next"
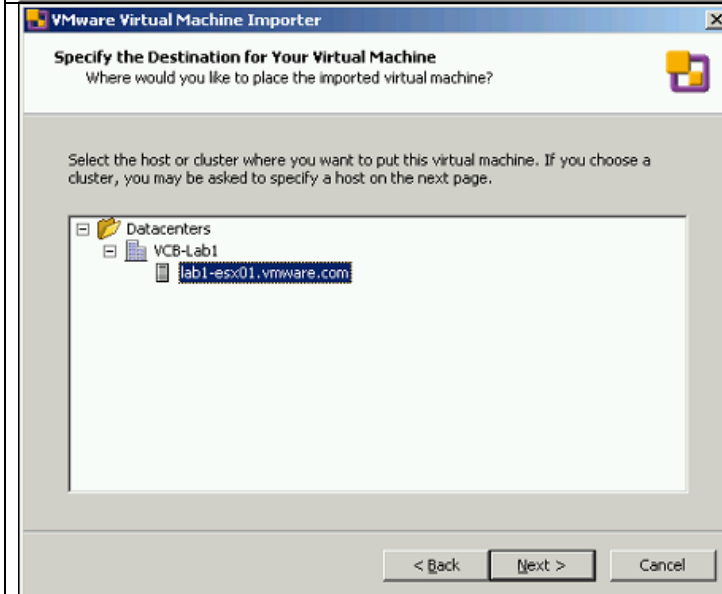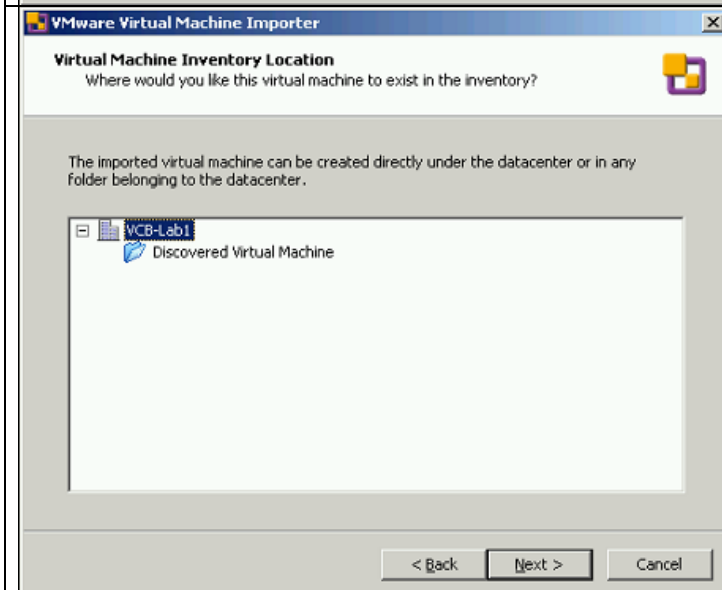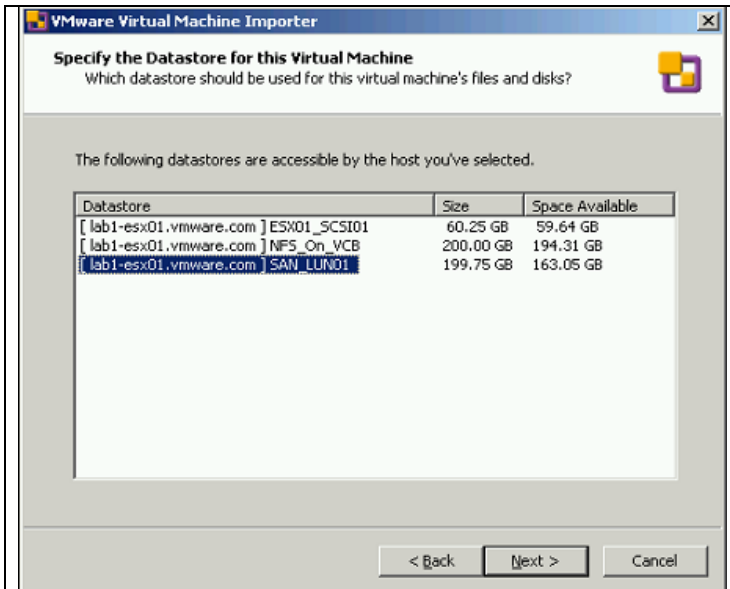
Step 20 - Specify the Datastore for the virtual machine

A. Highlight the "SAN_LUN**XX**" datastore and click "Next"
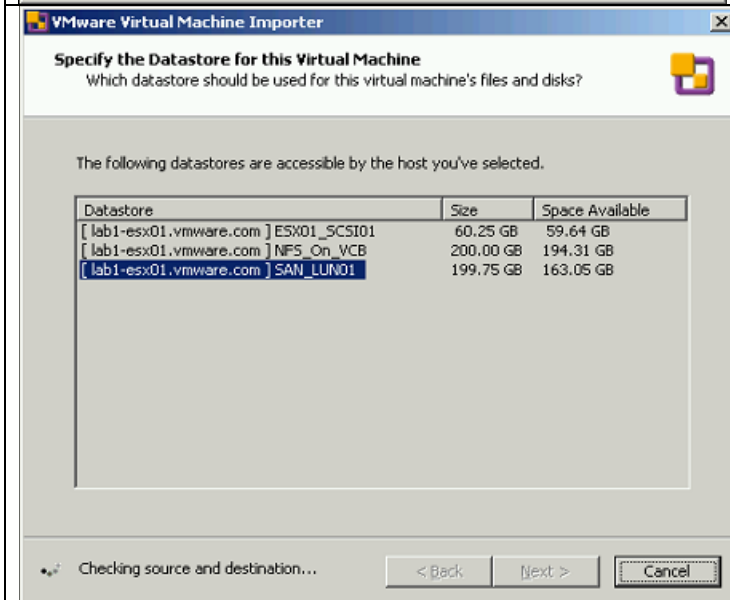
Step 21 - Specify the Datastore for the virtual machine (continued)

A. The source and destination are checked. No action is required on your part.
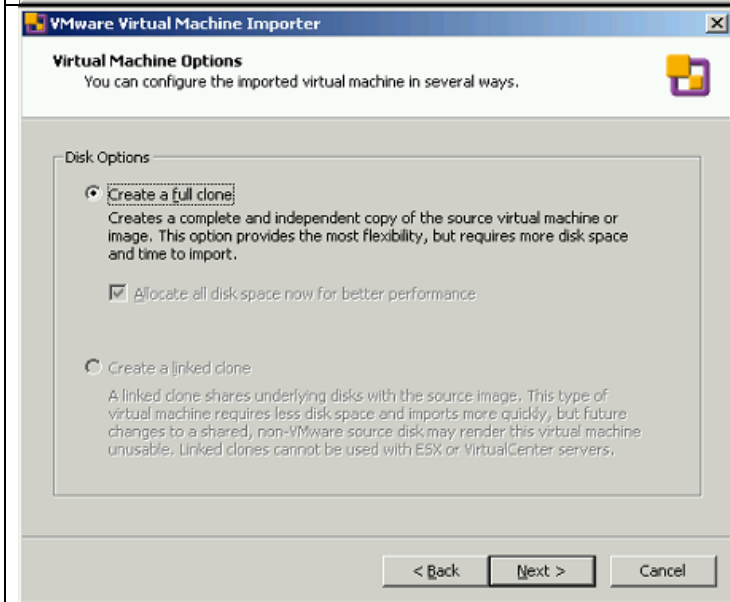
Step 22 - Virtual Machine Options

A. Choose "Create a full clone" and click "Next"
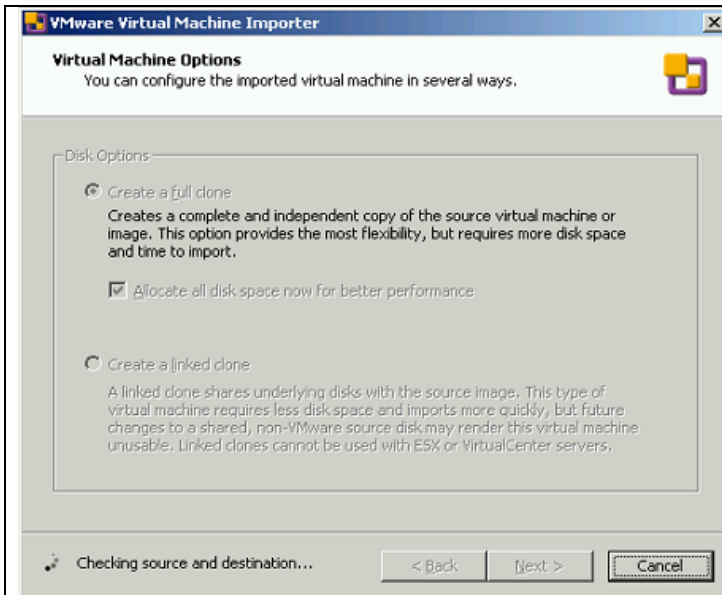
Step 23 - Virtual Machine Options (continued)

A. The source and destination are checked. No action is required on your part.
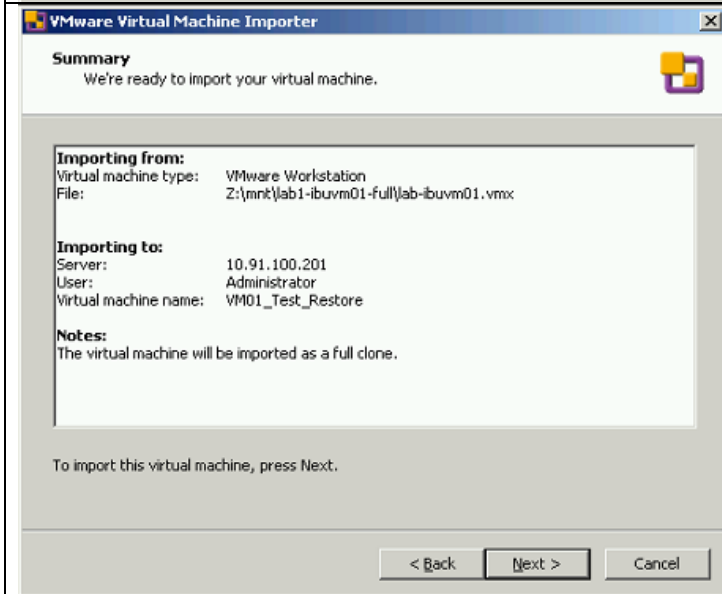
Step 24 - Summary

A. Verify all the choices are correct, and click "Next"
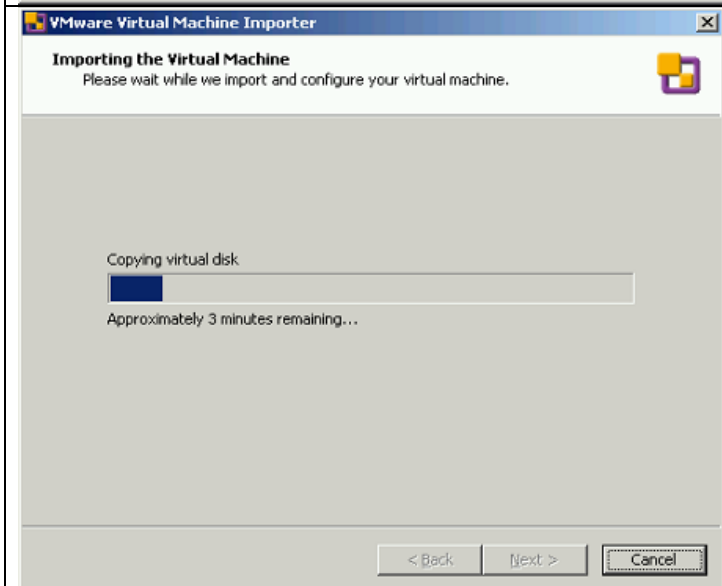
Step 25 - Importing the Virtual Machine

A. The virtual disk begins to copy. This process will take approximately 3-4 minutes.
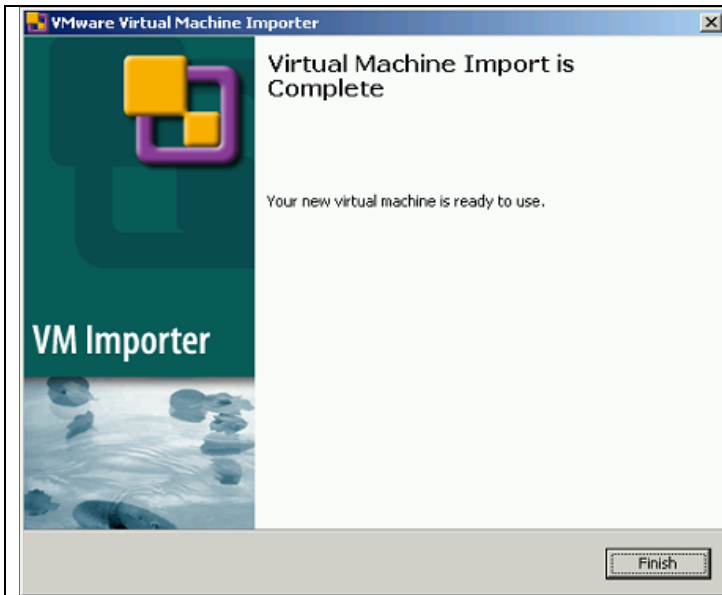
Step 26 - Import Complete

A. Once the import is complete, you will click "Finish"
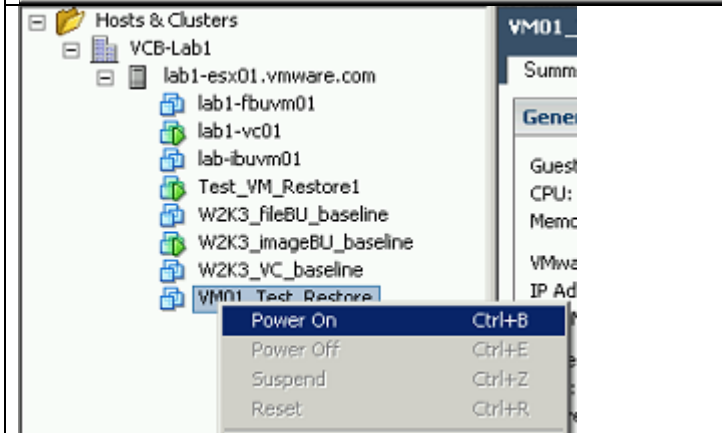
Step 27 - Power on new virtual machine.

A. Connect to VirtualCenter using the VI Client.
B. Right click the new virtual machine you just imported, and choose "Power On"
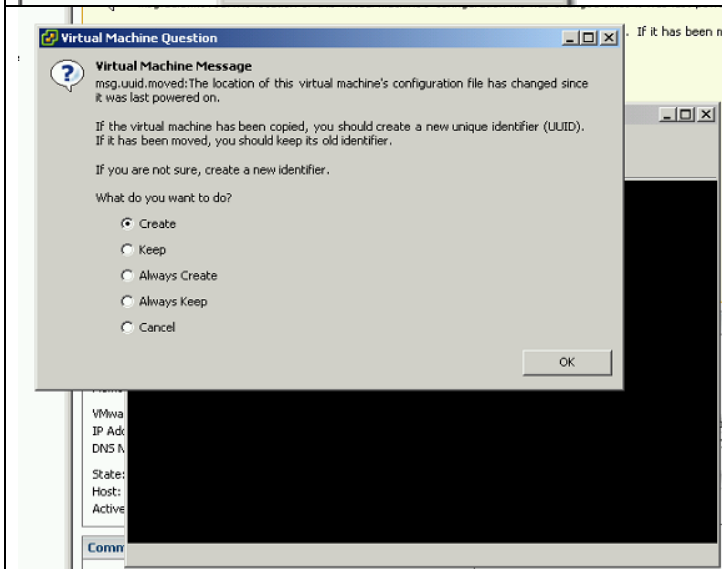
Step 28 - Virtual Machine Question

A. Choose "Create" and click "OK"
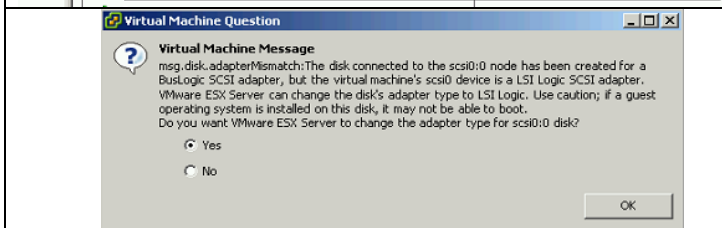
Step 29 - Virtual Machine Question #2

A. Click "Yes" and click "OK"
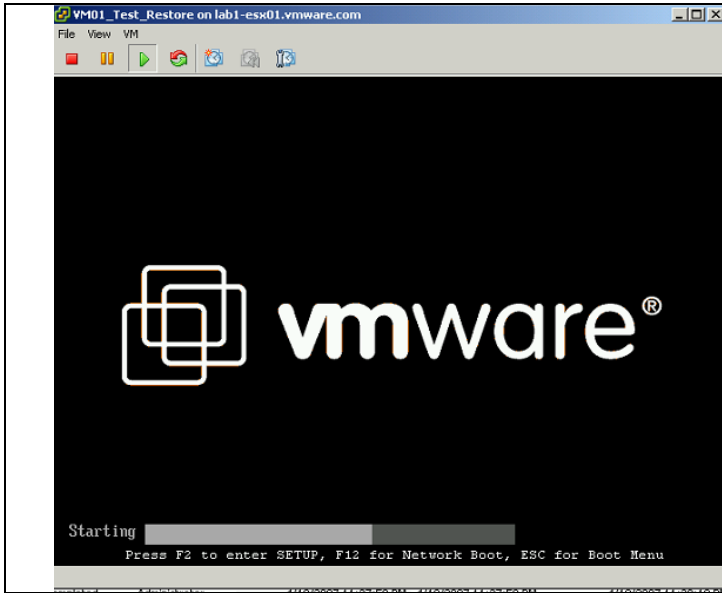
Step 30 - Virtual Machine Import Complete

A. The newly imported virtual machine now powers on and boots into the OS.

Optional Exercise– Configuring the Consolidated Backup Framework

```
/*
 * Generic configuration file for VMware Consolidated Backup (VCB).
 */
/*
 * Directory where all the VM backup jobs are supposed to reside in.
 * For each backup job, a directory with a unique name derived from the
 * backup type and the VM name will be created here.
 * If omitted, BACKUPROOT defaults to c:\\mnt.
 *
 * Make sure this directory exists before attempting any VM backups.
 */
// BACKUPROOT="C:\\mnt";

/*
 * URL that is used by "mountvm" to obtain the block list for a
 * disk image that is to be mounted on the backup proxy.
 *
 * Specifying this option is mandatory. There is no default
 * value.
 */
HOST="bu02.eng.vmware.com";

/*
 * Port for communicating with all the VC SDK services.|
 * Defaults to 902
 */
// PORT="902";

/*
 * Username/password used for authentication against the mountvm server.
 * Specifying these options is mandatory.
 */
USERNAME="root";
PASSWORD="XXX";

/*
 * SNAPSHOT_POLICY determines how disk snapshots for backup are being created:
 * +) "automatic"
 *      A snapshot is being generated automatically by the Legato Networker
 *      Interoperability Module right before backup and it is being removed
 *      automatically right after backup.
 * +) "manual" -
 *      Exactly one snapshot named "_VCB-BACKUP_" must already exist for
 *      each protected VM. The snapshot is mounted/unmounted on the proxy,
 *      but the snapshot is neither created nor deleted by the Legato Networker
 *      Interoperability Module. - This can be used to have external tools
 *      manage backup snapshot.
 * +) "createonly"
 *      The Legato Networker Interoperability Module will create the snapshot
 *      for each VM right before it gets backed up, but will not remove the
 *      snapshot after unmounting.
 * +) "deleteonly"
 *      The Legato Networker Interoperability Module assumes that the snapshot
 *      named "BACKUP" has been created beforehand. The snapshot will be deleted
 *      automatically after backup.
 *
 *      This is useful when Legato Networker should still be used in the protected
 *      VM to get application-consistent snapshots that are obtained from within
 *      the VM. See README-legato.html for more details.
 *
 * The default option is "automatic"
 *
 */
//SNAPSHOT_POLICY="automatic";
```

Step 1 – Configure the Consolidated Backup Framework

Essential configuration for Consolidated Backup is stored in a configuration file called `config.js`. It is located in a subdirectory named `config` within the installation directory for Consolidated Backup
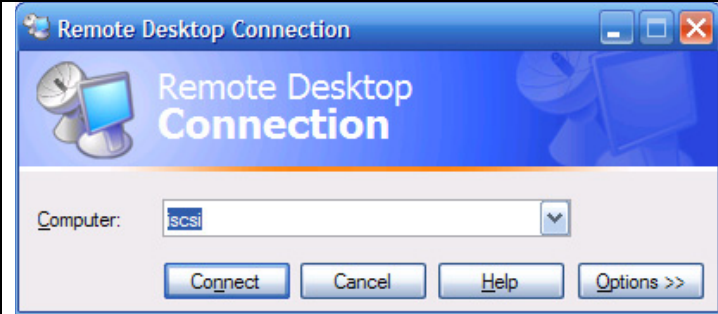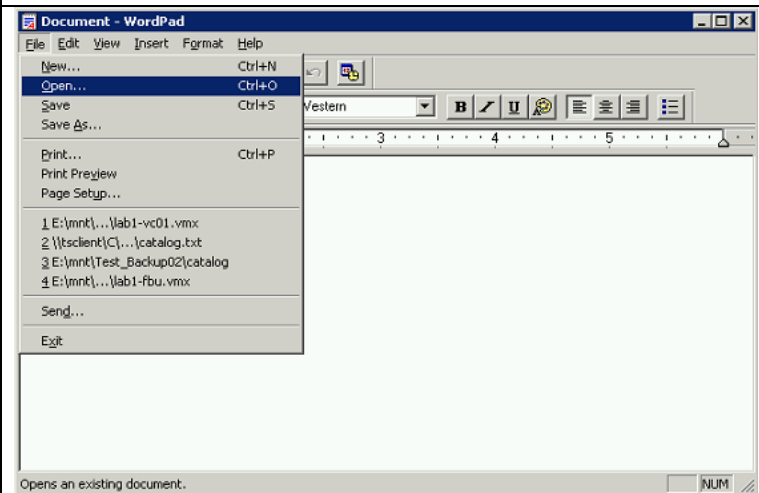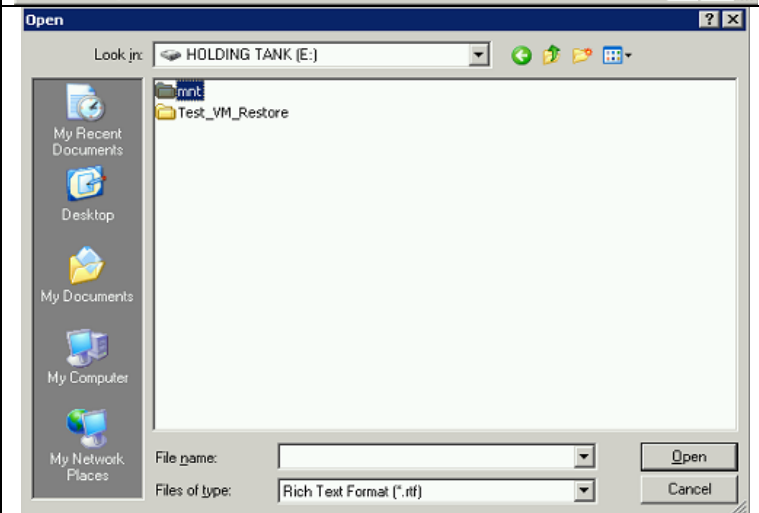
A. Using Notepad, open the file `config.js` with Notepad. It is located in `c:\Program Files\VMware\VMware Consolidated Backup Framework\config`. The default configuration is shown here.

B. Modify the entry `BACKUPROOT=`… to read `BACKUPROOT=e:\\mnt` (Remember to remove the comments/slashes at the beginning of the line)

C. Modify the entry `HOST=`… to read `HOST="lab1-vcxx.vmware.com"` where *xx* is the lab station number you are assigned to

D. Modify the entry `USERNAME=`… to read `USERNAME="Administrator"`

E. Modify the entry `PASSWORD=`… to read `PASSWORD="vmware"`

Once you have modified this file in your own environment, you would now install your 3rd party backup software and compatible module to integrate with VCB. We will not be previewing any 3rd party software in the lab, but felt it was necessary to mention this step.

## Optional Exercise – Restore a Virtual Machine that Already Exists Using vcbRestore

This lab consists of performing a restore of a virtual machine to a different location than where it was originally backed up. This does not change any attributes of the virtual machine itself, but rather stores the VM in a different location.

	Step 1 - Connect to the VCB Proxy Machine A. Double click on the VCB Proxy Remote Desktop Shortcut on your desktop.
	Step 2 - Open Note Pad
	Step 3 - Open Catalog A. Click "File", then "Open"
	Step 4 - Open Catalog (continued) A. Navigate to `Holding Tank` partition (Drive letter E) B. Doubleclick the `mnt` directory. C. Open the **labXX-ibuvmxx-full** directory

Step 5 - Open Catalog (continued)

A. Highlight "Catalog" and click "Open"
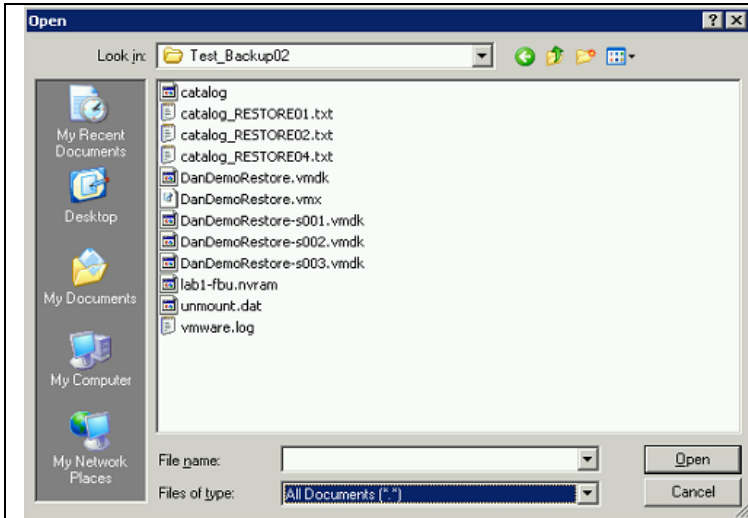
Step 6 - Modify Catalog

A. Each line that mentions the datastore `SAN_LUN01` must be modified.
B. Change `lab1-fbu/lab1-fbu.vmdk` to `Restored_VMXX/Restored_VMXX.vmdk`

   Where XX is your Lab station number
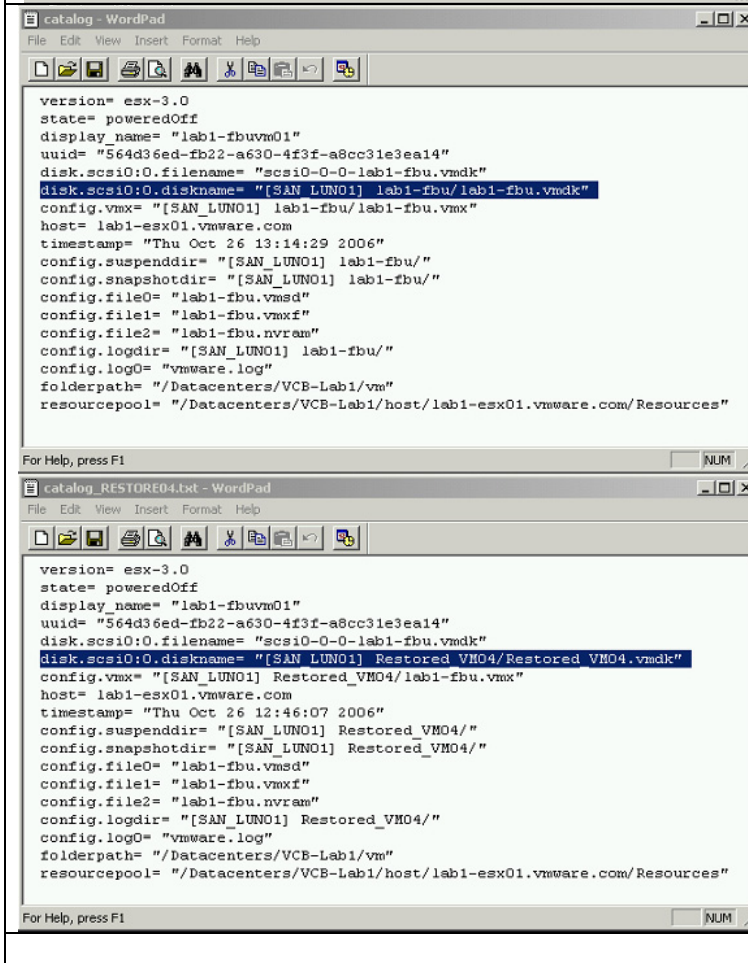
Step 7 - Modify Catalog (continued)

A. Change `lab1-fbu/` to `Restored_VMXX/` on both lines that begin with `config`

Where XX is your Lab station number

Step 8 - Modify Catalog (continued)

A. Change `lab1-fbu/` to `Restored_VMXX/`
   Where XX is your Lab station number
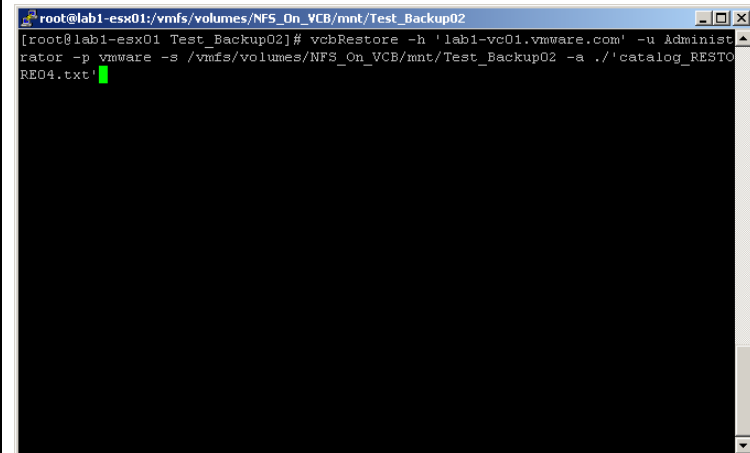B. Save the file as **catalog_RESTORE**
C. Exit WordPad.

Step 9 – Establish a SSH session to the ESX Host

A. Double click Putty on your Desktop
B. Enter your ESX Server's IP address
C. Click on "Open"
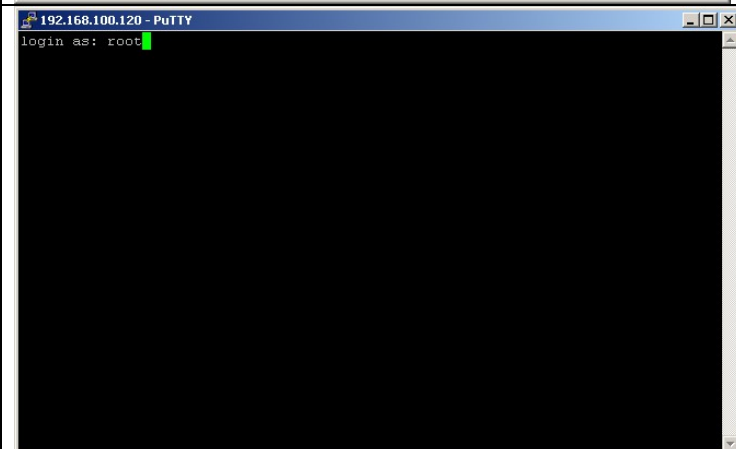
Step 10 – Authenticating to ESX

A. Login as your root user
B. Enter your password and press "Enter"

Step 11 – Restoring the Virtual Machine

A. From the console OS, type (all one line)

```
vcbRestore –h 'lab1-
vcXX.vmware.com' –u Administrator –
p vmware –s
/mnt/SMB_on_VCB/mnt/lab1-ibuvmXX-
full –a ./catalog_RESTORE.txt
```

Where XX is your Lab station number

B. Press "Enter"

```
[root@lab1-esx01 Test_Backup02]# vcbRestore -h 'lab1-vc01.vmware.com' -u Administ
rator -p vmware -s /vmfs/volumes/NFS_On_VCB/mnt/Test_Backup02 -a ./'catalog_RESTO
RE04.txt'
[2006-10-26 16:00:46.686 'App' 3076440192 info] Current working directory: /vmfs/
volumes/b3d04c0a-b9df834e/mnt/Test_Backup02
[2006-10-26 16:00:46.737 'BaseLibs' 8801200 warning] [Vmdb_Unset] Unsetting unkno
wn path: /vmomi/

Converting "/vmfs/volumes/SAN_LUN01/Restored_VM04/Restored_VM04.vmdk" (VMFS (flat
)):
        0%=====================50%=====================100%
        **************************************************

[root@lab1-esx01 Test_Backup02]#
```
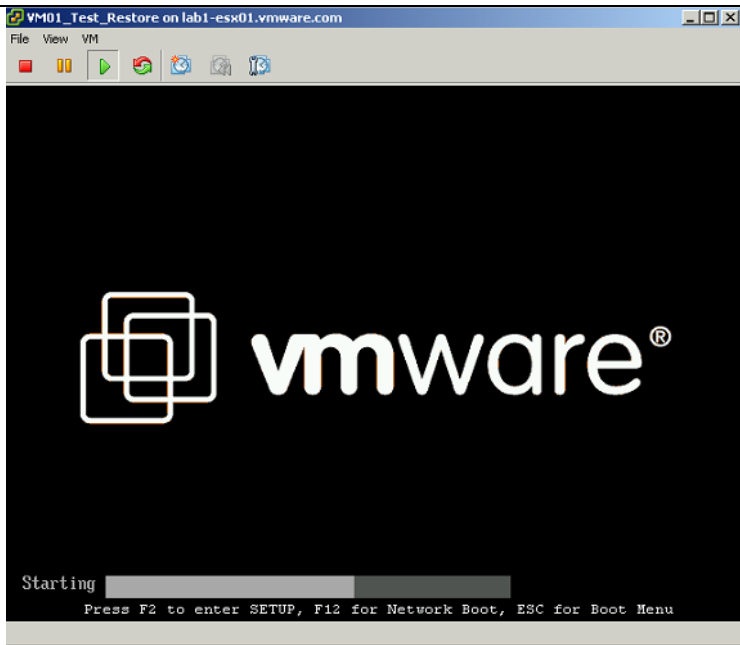
Step 12 – Restoring the Virtual Machine (continued)

A. Once the `vcbrestore` command has finished, type "exit"

Note: If the virtual machine you just restored did not exist in VirtualCenter, modifying the catalog file would not have been necessary.

Step 13 – Power on the VM

A. Log into VirtualCenter and power on the new virtual machine
B. Choose "create" for the new UUID transfer option.