CIS 222 Installing Fedora Core 12 (Linux)

Phase 1: Create a virtual machine on the VMWare virtual server

Connect to the Whidbey Island Campus network lab (VPN to netlabWIC)

Open a web browser (does not need to be IE this time). Navigate to http://192.168.9.3:8308/ui. I've noticed sometimes I cannot get to the user interface initially, but if I navigate to 192.169.9.3 first, then I can get to the VMWare page. You may need to install the VMWare add-on and restart IE before you can reach the login page.

Log in with your userID and password (same as MySVC)

| 🖶 VMware Infi | astructure Web Access |        |
|---------------|-----------------------|--------|
| <u> </u>      |                       |        |
| Login Name:   |                       |        |
| Password:     |                       |        |
|               |                       |        |
|               |                       | Log In |



Click on Create Virtual Machine to make your new virtual Linux server

Name the Server xxLinux replacing xx with your student number

Use the Linux datastore to save your virtual machine to. Click Next

| Pages                  |          | Name and Location               |                         |                |
|------------------------|----------|---------------------------------|-------------------------|----------------|
| Name and Location      | <u>^</u> |                                 |                         |                |
| Suest Operating System |          | Enter a descriptive name for y  | our new virtual machine | and specify th |
| Memory and Processors  |          | datastore where its configurati | on files will be saved. |                |
|                        |          | Name: Virtual Machine           | #2                      |                |
| Hard Disk              |          | Name.                           | ~ <b>_</b>              |                |
| Properties             |          | Datastore 🔺                     | Capacity                | Available      |
|                        |          | first                           | 58.49 GB                | 12.17 GB       |
| Network Adapter        |          | Linux                           | 779.49 GB               | 774.97 GB      |
| Properties             | =        | \                               |                         |                |
|                        |          |                                 |                         |                |
| CD/DVD Drive           |          |                                 |                         |                |
| Properties             |          |                                 |                         |                |
|                        |          |                                 |                         |                |
| Floppy Drive           |          |                                 |                         |                |
| Properties             |          |                                 |                         |                |

Select the Linux Operating System; version is Other Linux (32 bit). Select Next

| Guest Ope                                                                                                                  | rating System                                                                                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--|
| Select the o<br>Your select<br>performand                                                                                  | operating system you plan to install in your virtual machine.<br>ion will be used to recommend settings and optimize<br>ce.             |  |
| Once the virtual machine has been created, you will need to install this operating system from your own installation disc. |                                                                                                                                         |  |
| Operating S                                                                                                                | System: O Windows operating system<br>Novell Netware<br>Solaris operating system<br>O Linux operating system<br>Other operating systems |  |
| Version:                                                                                                                   | Other Linux (32-bit)                                                                                                                    |  |
| ► Product                                                                                                                  | Compatibility                                                                                                                           |  |

## Memory size will be 512 MB. Select next

| Create Virtual Machine                      |   | ×                                                                                                                                    |
|---------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------|
| Pages                                       |   | Memory and Processors                                                                                                                |
| Name and Location<br>Guest Operating System |   | Memory                                                                                                                               |
| Memory and Processors                       |   | Increasing a virtual machine's memory allocation can improve its performance but may also impact other running applications.         |
| Properties                                  |   | Size: 512 MB                                                                                                                         |
| Network Adapter                             |   | • Recommended Size (256 MB)                                                                                                          |
| Properties                                  | E | The guest operating system may not start up below this size.                                                                         |
| CD/DVD Drive<br>Properties                  |   | <ul> <li>Recommended Maximum (8192 MB)</li> <li>Memory swapping may occur above this size.</li> </ul>                                |
| Floppy Drive                                |   | Processors                                                                                                                           |
| Properties                                  |   | Select the number of processors carefully. We do not recommend reconfiguring this value after installing the guest operating system. |
| USB Controller                              |   | Count: 1 V                                                                                                                           |
| Help                                        |   | Back Next Cancel                                                                                                                     |

Create a new 40 GB hard disk. Leave the location as it is. Select Next

| rayes                                                                |          | Properties                                                         |
|----------------------------------------------------------------------|----------|--------------------------------------------------------------------|
| Name and Location<br>Guest Operating System<br>Memory and Processors | <b>A</b> | How much software and data should this hard disk be able to store? |
| Hard Disk                                                            |          | Location: [Linux] test/test.vmdk Browse                            |
| Properties                                                           |          | 766.47 GB available                                                |
| Network Adapter                                                      |          | File Options                                                       |
| Properties                                                           | E        | ▶ Disk Mode                                                        |
| CD/DVD Drive                                                         |          | ▶ Virtual Device Node                                              |
| Properties                                                           |          | ▶ Policies                                                         |
| Floppy Drive                                                         |          |                                                                    |
| Properties                                                           |          |                                                                    |
| USB Controller                                                       |          |                                                                    |
|                                                                      | -        |                                                                    |

Add a network adapter. Choose the Bridged adapter.

CD/DVD select Use an ISO Image. Select browse and connect to First, ISO and the file Fedora-12-i386-DVD.iso. Select OK, then Next

| Select File                                                                                                                                                           | 10 IA 16.000                                                                                   |                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Inventory         CIS003         ist         FC7_85         FC7_86         FC7_87         FC8         Instruc_Linux         Iso         Iso         Iso         Linux | Contents<br>en_windows_7_professional<br>Fedora-12-i386-DVD.iso<br>ubuntu-9.10-server-i386.iso | Information<br>Name:<br>Size:<br>Modified:<br>Type:<br>Datastore: | Fedora-12-i386-DV<br>2.984 GB<br>Dec 31, 2009, 4:02<br>ISO Image File (*.i<br>first |
| File Type: ISO Image (*.iso)                                                                                                                                          |                                                                                                | -                                                                 |                                                                                     |
|                                                                                                                                                                       |                                                                                                |                                                                   | OK Cancel                                                                           |

Do not connect a floppy disk drive Do not connect a USB controller

Review your settings and select Finish. Your hardware is now set up. Now it is time to start the machine and begin the installation of Fedora Core 12.

Select your new computer in the left hand pane. Click on the green arrow to start the computer

| 🗿 VMware Infrastructure Web Acc | ess (cis222@192.168.9.3) |
|---------------------------------|--------------------------|
| Application Virtual Machine Adr | ninistration 🔲 💷 🕞 🚱     |
| Inventory                       |                          |
| <ul> <li>CIS003</li> </ul>      |                          |
| 🚯 04Linux                       |                          |
| test                            |                          |
| 🔁 Ubuntu Instruct               |                          |
|                                 |                          |
|                                 |                          |

Click the console tab and click inside the console window



The installation begins within the console. Select to install or upgrade an existing system (will default if not selected within 30 seconds)

| <mark>ז test</mark> VMw | vare Remote Console 👻 Devices 👻                                | - 🗆 |
|-------------------------|----------------------------------------------------------------|-----|
|                         | Welcome to Fedora 12!                                          |     |
|                         | Install or upgrade an existing system                          |     |
|                         | Rescue installed system<br>Boot from <mark>l</mark> ocal drive |     |
|                         |                                                                |     |

Skip the disk test and begin the installation.

Choose English US English Reinitialize the drive when "warned"



Name the computer xxLinux Choose our timezone Enter the root password of cisIsTheBest! Choose to use the entire hard drive and agree to write changes to the disk

| entire drive                             | 0                                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| ncrypt system                            |                                                                                                                                             |
| ct the drive(s) to use for this installa | Writing storage configuration to disk                                                                                                       |
| ☑ sda 40955 MB VMware, VMware Vi         | A The partitioning options you have selected will<br>now be written to disk. Any data on deleted<br>or reformatted partitions will be lost. |
| - Advanced storage configuration         | Go back Write changes to disk                                                                                                               |

Add web server to the software installation. Select next

After the packages have been installed, you have successfully installed Fedora core 12.



The system will reboot, when restarted, click Forward and continue on this installation of Fedora



## Agree to the License Information

Create a user named is XXLinux (replace XX with your student Number) password will be cisIsTheBest!

| 🗾 04Linux 🛛 VMware Remote                                              | Console - Devices 🗆 🗙                                                                                                                                               |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Welcome<br>License<br>Information<br>> Create User<br>Date and<br>Time | Create User You must create a 'username' for regular (non-administrative) use of system. To create a system 'username', please provide the informa requested below. |
| Hardware<br>Profile                                                    | Username:     04Linux       Full Name:     Renee Fangman                                                                                                            |
|                                                                        | Password: ••••••<br>Confir <u>m</u> Password: ••••••                                                                                                                |
|                                                                        | If you need to use network authentication, such as Kerberos or NIS, please click the Use Network Login button.                                                      |
|                                                                        | Use Network <u>L</u> ogin                                                                                                                                           |
| <                                                                      |                                                                                                                                                                     |
| To direct input to this virtual machi                                  | ne, press Ctrl+G. 🚽 🕞 😨 👘 vmware' 🚊                                                                                                                                 |

You decide if you want to send in your profile or not.

| 🔏 O4Linux VMware Remote                                                            | Console - Devices -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Welcome<br>License<br>Information<br>Create User<br>Date and<br>Time<br>→ Hardware | Construction of the provided and the |
| Profile                                                                            | CPU Stepping: 8<br>CPU Family: 6<br>CPU Model Num: 6<br>Number of CPUS: 1<br>CPU Speed: 2999<br>System Memory: 497<br>System Swap: 1023<br>Vendor: VMware, Inc.<br>System: VMware Virtual Platform None<br>Form factor: unknown<br>Kernel: 2.6.31.5-127.fc12.i686.PAE<br>SELinux Enabled: 1<br>SELinux Enabled: 1<br>SELinux Enabled: 1<br>SELinux Enforce: Enforcing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| < [                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| To direct input to this virtual machin                                             | ne, press Citl+G. 📃 🔒 🚱 🗐 vmware' 🚊                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

Log into Linux and make the following adjustments:

Click on System, Administration Network. Authenticate with root's password (cisIsTheBest!). Open eth0 by double-clicking on it.

Check Activate device when computer starts.

Change the IP settings to a static IP number of 192.168.9.xxx (your assigned Linux number), subnet 255.255.255.0

gateway 192.168.9.1

DNS of 192.168.9.10

Very Important! Then hit the tab key 5 times to reach the OK portion of the page that you cannot see. Double check that the changes have been saved by opening this configuration of eth0 again and ensure the IP information you entered is still there.

Click on File, Save on the network configuration page

Click activate (if already activated, deactivate, then activate)

Close the network configuration window.

Click on System, Administration, SELinux Management. Authenticate. Change all Enforcing settings to Permissive. Close the window. Click on System, Administration, Firewall. Authenticate. Allow http (www) and smb services through the firewall. Ensure ssh is already allowed. Apply the changes and reload.

Ensure PuTTy can connect by opening a PuTTy session on your main computer (not the linux), connect to your IP number. At the PuTTy terminal, install Samba using the command yum install samba

04Linux VMware Remote Console • Devices • - E X 😭 Applications Places System 👹 SR 🚯 🛃 🖲 34 °F Tue Jan 5, 02:20 Renee Fangman 🖄 12 Service Configuration Minimize Window Program Service Help Ø 989 X 2 Enable Customize Stop Restart Help Name Remarks The network service is started once, usually when the system is booted, runs in the background and wakes up when 🐵 🛕 lvm2-monitor Monitoring of LVM2 mirrors needed. 🔵 🍘 mdmonitor Start and stop the MD soft This service is disabled. 🔵 🗐 messagebus The D-Bus systemwide me A This service is running. 🔵 剩 microcode\_ctl Description 🔴 🗊 multipathd Control multipathd Bring up/down networking e 🕼 netconsole 🛯 🗐 netfs Mount and unmount netwo 🔴 🕼 netplugd 🔵 剩 network 🛛 🔴 🌒 nfs Start up the NFS server se 🛯 🗐 nfslock Start up the NFS file lockir Starts the Name Switch Ca 🗎 🏦 nscd > 🚐 🚷 🖳 👘 🖬 wmware

Click on System, Services. Find http server, enable and start the service

Follow the labs from last quarter to install samba and http. Post your journals on the Linux machine as a web page.