Linux lab 0 – The virtual machine environment

During this laboration we will learn the basics of the tool that further laborations are based on – VMWare player. This tool is used to virtualize a computer and will make the laborations easier since the whole computer system can be backed up for additional work.

The VMWare player software is free for anyone to download from the VMWare web page at http://www.vmware.com/ .

For this laboration there will be no assistance so you have to read and follow the instructions very carefully.

Goals
- To be able to start a virtual machine in VMWare player.
- To be able to install a guest OS using VMWare player.
- To be able to perform basic navigation in the file structure.
- To be able to make basic network configurations of the guest OS.
- To be able to backup your current virtual machine to a DVD for later retrieval.
- To install Ubuntu

The main Linux distribution used during this course is the Ubuntu 9.10. This is a free distribution with a user friendly community.

1. Download and install the VMWare player. (This is allready done in the laboratories)
2. Download the file Lab_0.zip from the course page.
3. This is a compressed folder called Lab_0. Uncompress it on your system.
4. Download the Ubuntu 9.10 32-bit release from ubuntu.com to the subfolder iso in the folder Lab_0. Make sure the file is saved under the name ubuntu-9.10-desktop-i386.iso
5. Let the download finish.
6. Open the folder Lab_0 and double-click the .vmx-file. This file conatains a description of how your virtual computer is configured.
7. Now your virtual computer will boot. What you see in your VMWare window is what would have appeared at the screen of a corresponding physical computer.
8. As you can see the BIOS performs the normal startup procedures and then continues to look for bootable devices.
9. Your virtual computer is configured with an empty harddrive and a single CD-player and will therefore boot

from the CD until you have installed something on the harddrive.

10. Your virtual computer will now boot on your virtual Ubuntu-CD.

11. To switch focus for the mouse and keyboard between the virtual computer and your physical computer, press **[Ctrl]+[Alt]** to go to your physical computer and click with the mouse in the VMWare window or press **[Ctrl]+G** to enter the virtual computer.

12. Choose the installer language from the list using the cursor keys and enter.

13. From the menu pick "Install" using the cursor keys and enter.

14. Now you will be presented with a number of different settings.

15. Choose english as language. (forward)

16. Choose Sweden as timezone. (forward)

17. Select the swedish keyboard. (forward)

18. Choose the default mode for partitioning of the harddrive. (forward)

19. Enter an easy to remember user name and password.

20. Enter a suitable computer name of your choise. (forward)

21. The system will now install for about 15 minutes.

22. Let the system reboot as part of the installation process. You will be asked to remove the installation CD.

23. You can now delete the iso file if you want to save space.

24. Press return to reboot the system.0.30

The virtual computer will now reboot and present you with the Ubuntu login form.

To configure the network

1. Start the network tool from System->Preferences->Network.
2. Left-click the Atuo-eth0
3. Click Edit…
4. Click the IPv4 tab.
5. Change connection method to Automatic (DHCP).
6. You will be asked for your password.
7. Click apply.
8. Make sure that the network device in the VMWare top bar is set to mode **"NAT"**.
9. Reboot the system from the menu with the on-off button and your user name.
10. Log on to the system.
11. Start the Firefox web browser and check that you can access local web pages such as **"www.hh.se"**.
12. If everything works, power off the machine from the "on-off" menu.

Wrapping up

1. In the physical computer you now need to tidy up and make a backup of your current machine.
2. Store your Lab_0 folder on a portable media, dvd, thumbdrive…
3. If this is in the laboratory, delete the folder **"Lab_0"** from the computer's harddrive.
4. Log out from Windows.