



LINNÉUNIVERSITETET

Laboration 1

1DV020 – Serveradministraion

January 22, 2015



1 Introduction

You are an IT-technician on a small newly founded company and the board have given you the task to install the company's first servers and clients. There are some requirements on the system that you should find in Requirements 4

It is important that you have read the lab thoroughly before you start with the laboration. You must follow the instructions under work environment 5.

All machines that are created are saved under your own folder in:

C:\VirtualLabs\Courses\1DV020\users\2015\[your username]

2 Deadline

There are two laboratory sessions connected to this module, at these sessions you are given the opportunity to get help if so needed. To be able to finish the modules you are likely needed to spend more time on your own.

Accounting You will show your work and demonstrate your progress at any of these lab sessions, prepare a small document with an overview of your configuration/setup if needed for overview.

3 Assignment

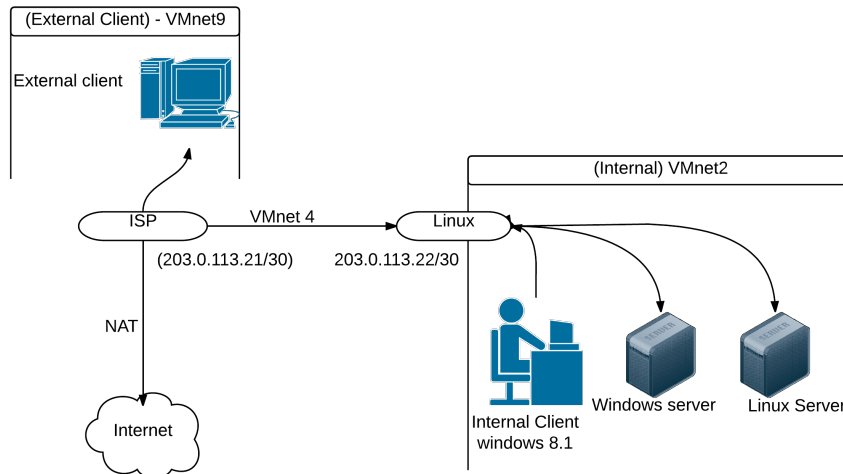


Figure 1: The network as it should be setup in Lab 1.

You have been given the task to configure a newly founded company's network. In Figure1 you should see how the network should look when you are done with lab 1.

The topology contains one Linux server, one Windows Server 2012 R2, one Linux machine as a router and one Windows 8.1 client on the internal. All of these should be connected to VMnet2. The Linux router is also connected to the ISP Gateway with the VMNet 4. We will also have an external client on VMNet 9.

4 Requirements

Aside from the network sketch there are some requirements the company have:

- All machines should:
 - have static ip-addressing, the addresses is up to you to decide but you should be able to motivate your choice.
 - should have internet access using the linux router.
 - should be able to ping each other on their respective VMNet.

- have proper firewall rules. This includes both the linux and windows machines.
- Have a proper naming convention.
- Specific machine requirements:
 - **ISP Gateway**
 - * This is the only machine that you will not install yourself, it is a predefined machine that you will make a linked clone of.
 - * The template is located at **c:\VirtualLabs\Files\Templates\ISP Gateway Template (2015)**
 - **Linuxrouter**
 - * should have two network interfaces, one for VMnet 4 pointing to the ISP Gateway and one for the local Server LAN VMnet2.
 - * The ISP pointing interface should be configured according to the network sketch in Figure1, *Observe! To be able to lookups it needs to use the ISP Gateways DNS server.*
 - **Other OS**
 - * Only be connected to their respective VMNet.

5 Workenviroment

You will be using VMware Workstation to be able to accomplish this lab. You will only use templates for the ISP Gateway in this lab. The rest is up to you to construct from isofiles.

To be able to start this laboration you need to have signed up for MSDNAA and a labgroup. When you have done this it takes up to a workday before you are put into the system.

For the Linux router and Linux Server you will have to download .iso files for your favourite linux server distribution such as Ubuntu Server 14.04

ISO At your disposal there are Microsoft Windows Server 2012 R2 och Windows 8.1 ISOs on C:\VirtualLabs\Files\MSDNAA\Operating Systems