Linnaeus University

Laboration 3

1DV720 – Server Administraion

February 13, 2017

1 Introduction

In this lab we will cover 2 very important services: DNS and a Web server - and see how they work together. As previously you will be using the lab environment from where you left off after lab 2. You will use the file server, in the DMZ that you created in lab 2, to store your web site files.

Your will configure a web server that will serve a simple web site, the files will be stored on the file server. To be able to connect to the web site you should also configure DNS by setting up two name servers.

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 session, prepare a small document with an overview of your configuration/setup if needed for overview.

3 Assignment

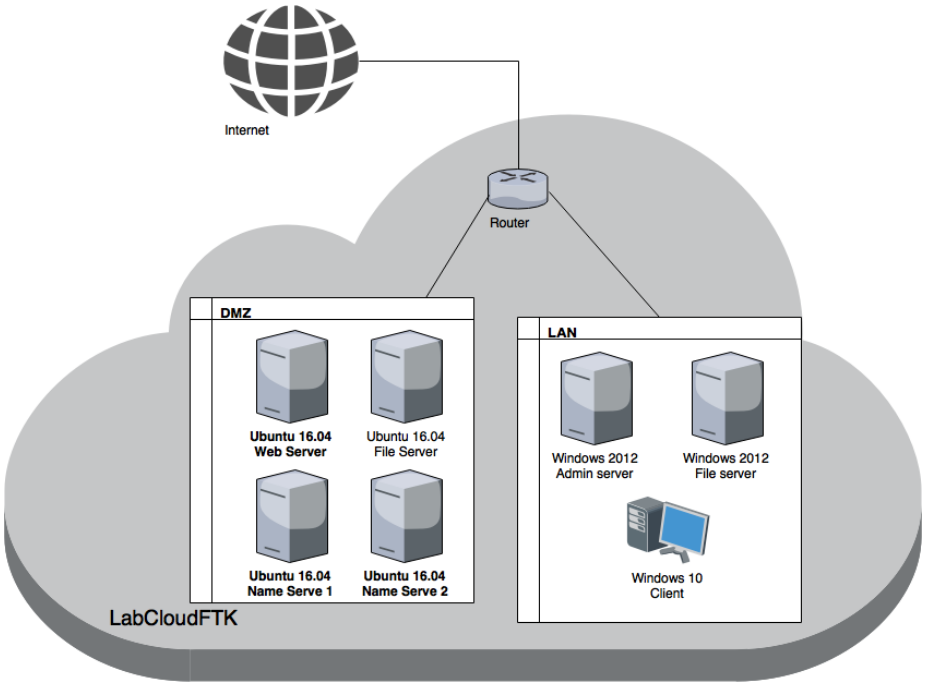

Figure 1: The network as it should be setup in Lab 3.

In this lab you will only work in the DMZ network. The first thing you should focus on is setting up the name servers. You'll need two name servers, one as master and the other as slave. You will configure them to answer for the domain `xx222yy.devopslab.xyz` where `xx222yy` is your LNU username.

When the zone is configured correctly you should register the domain name at `https://www.devopslab.xyz`. When that is done you should be able to get answers for the domain from any where in the world.

Then you will setup a web server and configure a web site for

`www.xx222yy.devopslab.xyz` where `xx222yy` is your LNU username. The web sites files should not be stored on the web server, instead they will be hosted on the DMZ file server.

4 Requirements

As in the previous labs, security is important and all machines should have there firewalls enabled. Firewall rules will be checked to be 'decent'. Remember that if (as it should be) your firewall is properly setup you will need to make exception for the protocols you are implementing. As previously your configuration should survive a reboot.

- All machines should:
  - should have internet access
  - within the same network be able to ping each other
  - have a proper naming convention.
- Specific machine requirements:
  - **Name server 1**
    - OS: Ubuntu 16.04
    - Name server: Bind 9
    - Only answer for configured zones
    - Should not be configured to redirect queries it can't answer for
    - **Master** server for the zone `xx222yy.devopslab.xyz` where `xx222yy` is your LNU username
    - A correctly configured SOA record
    - Default TTL and Negative Cache TTL should **300** seconds
  - **Name server 2**
    - OS: Ubuntu 16.04
    - Name server Bind 9
    - Only answer for configured zones
    - Should not be configured to redirect queries it can't answer for
    - **Slave** server for the zone `xx222yy.devopslab.xyz` where `xx222yy` is your LNU username
  - **Web server**
    - OS: Ubuntu 16.04
    - Web server: Apache 2
    - The DMZ file server share should be mounted
    - Should serve the site `www.xx222yy.devopslab.xyz` where `xx222yy` is your LNU username
    - the HTML files for the site should be stored on the file server share

5 Work Environment

You will be using FTK Lab Cloud to be able to accomplish this lab. You will find your credentials and tutorial on how to get started on this page: https://coursepress.lnu.se/kurs/serveradministration/lab-cloud/

For this lab I have also created a video tutorial with some basics for this lab. You'll find it on the `course homepage`.

Good luck!