Assignment 2
DNS
IN715 Networks Administration

August 26, 2015

Introduction

For this assignment you will deploy a DNS system for a small network that will include a BIND on OpenBSD and a slave server on a second OpenBSD server.

This assignment is due on Friday, 9 September. It is worth 20% of your overall mark in the paper.

1   Requirements

You will set up two DNS servers;

1. Your primary server will run on your BSD server using BIND.

2. Your second server will run on your BSD relay server on your inner network. It will act as a slave node for your primary.

On your primary server, you will provide the following:

- perform recursive lookups for client on your local networks only;

- provide forward lookups for the `foo.org.nz` zone, including:

    - A proper SOA record;

    - Two NS records;

    - An MX record;

    - Correct A records for your hosts with static IP addresses;

    - A CNAME record that directs www. to your BSD server.

- provide reverse lookups for your two networks. For every A record in your forward zone, there should be a corresponding PTR record in the appropriate reverse zone.

In addition, your systems shall also satisfy the following requirements:

- Your secondary server shall be configured as a slave for each of the three zones on your primary server.

- Your BIND DNS server and your ISC DHCP servers shall perform dynamic DNS updates of your forward and reverse zones.

- Every system on your network shall be configured to use your DNS servers for name resolution.

2 Submission requirements

Have your servers configured and running by the end of the day on Friday, 9 September. Commit your `named.conf`, `dhcpd.conf`, and zone files to your netadmin repository on GitHub. The lecturer shall mark your work by inspecting your files and running systems. Be sure that

1. everything functions properly;

2. your configuration is correct, neatly formatted and commented;

3. all relevant files are appropriately named and that configuration directories do not contain any extraneous files.