Assignment 2
DNS
IN715 Networks Three

September 9, 2014

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 Windows Server 2012R2.

This assignment is due on Friday, 19 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 secondary server will run on your Windws server using the Windows DNS server. 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 `nw3.sqrawler.com` 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.nw3.sqrawler.com 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.

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

Configure your BIND DNS server and your ISC DHCP server to perform dynamic DNS updates of your forward and reverse zones so that your Windows client machines have correct forward and reverse records.

Be sure that every system on your network in 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, 19 September. The lecturer shall mark your work by inspecting your 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.