Setting up a domain

In this exercise, you will register a new domain, *something*.presanog.org.bt. You will create master nameservice on your own machine, and someone else will be your slave.

Firstly, note that each machine in the classroom has been given a working DNS name: pcX.presanog.org.bt. Configure your server with its real name: e.g. for pc23

```
# hostname pc23.presanog.org.bt
# vi /etc/rc.conf
...
hostname="pc23.presanog.org.bt"
# vi /etc/hosts
...
192.188.58.87 pc23.presanog.org.bt
```

(You should see the new name at the login screen on the console)

Exercise

- 1. Choose a new domain: ______.presanog.org.bt
- 2. Check that the directories you need exist. If they don't, create them:

```
# mkdir /etc/namedb/master
# mkdir /etc/namedb/slave
# chown bind /etc/namedb/slave
```

- 3. Find someone who will agree to be slave for your domain. You must choose someone on a DIFFERENT table to you. (Remember RFC2182: secondaries must be on remote networks). You can have more than one slave if you wish.
- 4. Create your zone file in /etc/namedb/master/xxxxxx.presanog.org.bt (where xxxxxx is your own domain)

```
$TTL 10m
               SOA
                       pcXX.presanog.org.bt. your.email.address. (
       IN
                               2004030500 ; Serial
                               10m ; Refresh
                               10m
                                         ; Retry
                               ; Expire 10m ) : N
                                         ; Negative
                       pcXX.presanog.org.bt. ; master
       TN
               NS
                       pcYY.presanog.org.bt. ; slave
       IN
                       192.188.58.xx
www
                                              ; your own IP
```

(Note that we have chosen purposely low values for TTL, refresh, retry. For a production domain you would use higher values, e.g. \$TTL 1d)

- 5. Edit /etc/namedb/named.conf to configure your machine as master (see slides for information how to do this)
- 6. Check that your zone file is valid and load it:

```
# named-checkzone xxxxxx.presanog.org.bt /etc/namedb/master/xxxxxx.presanog.org
If there are any errors, correct them
# rndc reload
# tail /var/log/messages
If there are any errors, correct them
```

- 7. Get your slaves to configure themselves. If you are slave for someone else, check that there are no errors when you do rndc reload.
- 8. Check that you and your slaves are giving authoritative answers:

```
# dig +norec @192.188.58.xx xxxxxx.presanog.org.bt. soa
# dig +norec @192.188.58.yy xxxxxx.presanog.org.bt. soa
Check that you get an AA (authoritative answer) from both, and that
the serial numbers match
```

9. Now you are ready to request delegation. Bring the following form to the classroom instructor:

Domain name:	presanog.org.bt
Master nameserver:	pcpresanog.org.bt
Slave nameserver:	pcpresanog.org.bt
Slave nameserver:	pcpresanog.org.bt (optional)
Slave nameserver:	pc .presanog.org.bt (optional)

- 10. You will not get delegation until the instructor has checked:
 - Your nameservers are all authoritative for your domain
 - They all have the same SOA serial number
 - The NS records within the zone match the list of servers you are requesting delegation for
 - The slave(s) are not on the same desk as you
- 11. Once you have delegation, try to resolve www.xxxxxx.presanog.org.bt:
 - On your own machine
 - On someone else's machine (who is not slave for you)
 - o On a machine elsewhere on the Internet, if you have access to one
- 12. Add a new entry to your zone file. Remember to update the serial number. Check that your slaves have updated. Try resolving this new name from elsewhere.