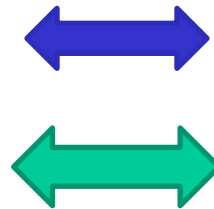# Homework 03

DNS

Architecture

b.nctucs.net
140.113.b.b
192.168.2.0/24

a.nctucs.net
140.113.a.a
192.168.1.0/24

slave

delegation

Requirement

❑ Setup a DNS server with BIND

- Serve your own domain A
- Serve your teammate B's domain as a slave
  - ➢ Updates should be synchronized

❑ Delegation

- Delegate a sub-domain to your teammate B

❑ Reverse zone for your NAT

- Each IP in 192.168.x.0/24

❑ SSHFP record for your server

- Make a reasonable setting

Requirement (Cont.)

❑ View

- Create TA.{your.domain} A record
- For queries from 192.168.0.0/16, answer 192.168.0.254
- Otherwise, answer your public IP

❑ Logging

- Record all records to /var/log/named.log
- Do log rotate
- You might be asked to explain the meaning of each log entry

❑ Security

- Only allow AXFR request from 140.113.235.0/24

Bonus – DNS Hosting Service

❑ Use database as backend

❑ Write a simple web page for user to input their zone data

❑ Zone files in BIND is still valid

❑ Hint: Dynamically Loadable Zones

Hand-in

❑ Due
- 5/22

❑ Demo
- TBA