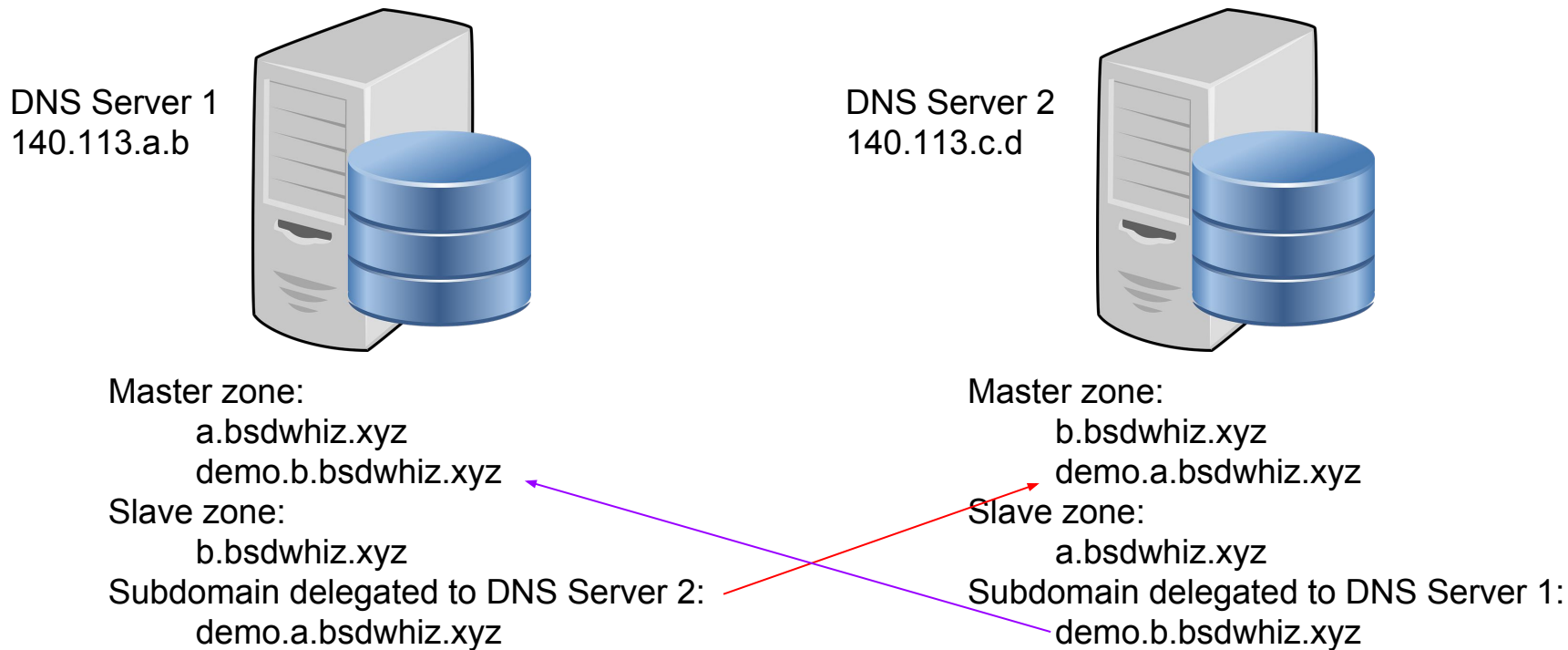


Homework 3

DNS BIND

Due: 5/9

Architecture



Requirement (1/2)

- Build a dns server with whatever server you like; BIND is suggested.
 - Serve as master for your own domain (E.g. a.bsdwhiz.xyz) and one subdomain from your teammate's domain. (E.g. demo.b.bsdwhiz.xyz)
 - Serve as slave of your teammate's domain (E.g. b.bsdwhiz.xyz)
- Subdomain delegation
 - Delegate subdomain "demo" to your teammate
- Forward and reverse resolution
 - ta.{your domain} <=> 192.168.100.1 (Both forward and reverse resolution should be configured)
- Views
 - view.{your domain} -> 127.0.0.1 (When query from 140.113.168.0/24)
-> 1.0.0.127 (When query from 140.113.235.0/24)

Requirement (2/2)

- Enable DNSSEC on your domain
- Logging
 - DNSSEC related log goes to `/var/log/named/dnssec.log`
 - Others go to `/var/log/named/named.log`
 - You can also configure logs from different types go to different files
- Security
 - Only your slaves may perform AXFR, IXFR queries
 - Only allow recursive query from `140.113.235.0/24`
 - Enable TSIG key when performing zone transfer

Hints

- Get a public IP for your DNS server
 - Google Cloud Platform/DigitalOcean is your good friend
- Get a domain name that support DNSSEC
 - Get a cheap .xyz domain from any registra
 - If you don't want to buy one, visit: <https://bsdwhiz.xyz>

Bonus

- Add remote dynamic update support for your domain name
- If DNSSEC is supported on dynamic update, you'll get extra credits.