

CSIS 3230 Computer Networking Principles

Group Lab Report 7 – DNS

Names:

* = server

1. Initial Testing

- a) Summarize the results of the pings by the server (what works/ doesn't work).

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- b) Summarize the results of the pings by the clients (what works/ doesn't work).

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- c) Summarize the results of running the host commands on the server.

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- d) Summarize the results of running the host commands on the clients.

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2. Initial DNS Configuration

- a) What is the full path name for the main DNS configuration file?

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- b) What is the full path name for the file used to configure local zones?

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- c) Look at the last 3 lines of the zone configuration file.

The "NS" record defines the name server. What is its name?

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d) Describe what the "A" record defines

e) Describe what the "CNAME" record defines

f) What is the full path name of the configuration file for the new zone?

3. Testing your DNS server

a) Summarize the information given by the first dig command's ANSWER SECTION and AUTHORITY SECTION.

b) Summarize the information given by the second dig command's ANSWER SECTION.

c) What happens when the clients run the dig commands?

4. Fixing the clients (by fixing the server)

a) Describe the contents of /etc/resolv.conf of your clients before the modifications to the DHCP server.

- b) Describe the contents of `/etc/resolv.conf` for your clients after the modifications to the DHCP server and restarting the client NIC.

Describe the contents of `/etc/resolv.conf` on the server.

- c) Which host commands fail (if any)?

5. Upstream DNS connections

- ☐ Clients can ping `www.backbone.lab`
- ☐ Server can ping `www.backbone.lab`

6. Downstream DNS connections

- ☐ Other LANS can ping your server by name
- ☐ Other LANS can access your web site by name