Lecture 19

Exercise 1: Compare the file (path) name `/usr/local/src/bind/hosts.txt` and the domain name `red.sf.isc.com`. In each case what is the most specific portion of the name? What is the least-specific? What characters are used to separate different parts of the names? What would be the (null) name of the top level of the hierarchy?

file name

most specific — rightmost (hosts.txt)

least specific — leftmost (usr)

separator — /

top level — /

domain name

leftmost (red)

rightmost (com)

. (period)

.

Exercise 2: Based on these records, what is the IP address of ns.example.com? What is the IP address of example.com? What IP addresses would you connect to in order to send e-mail addressed to ~~mail~~example.com?

ns[.example.com.] A 192.0.2.2

example.com. A 192.0.2.1

① look up MX record(s) for example.com

mail, mail2, mail3 .example.com

② look up IP address for that server

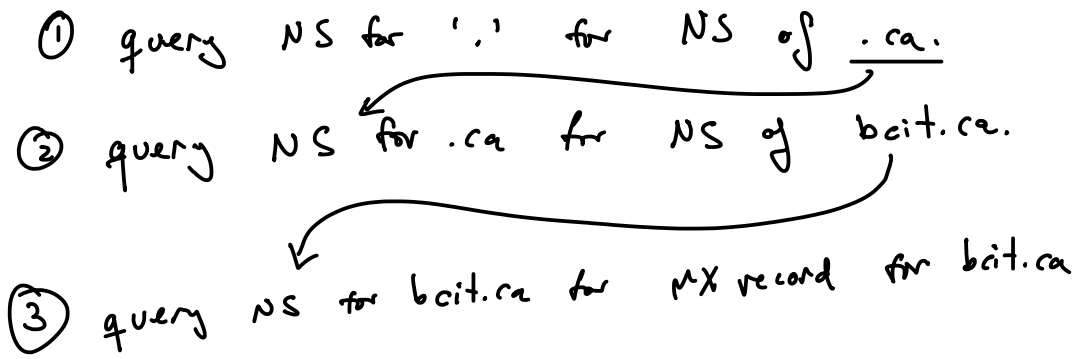
mail → 192.0.2.3

mail2 → 192.0.2.4

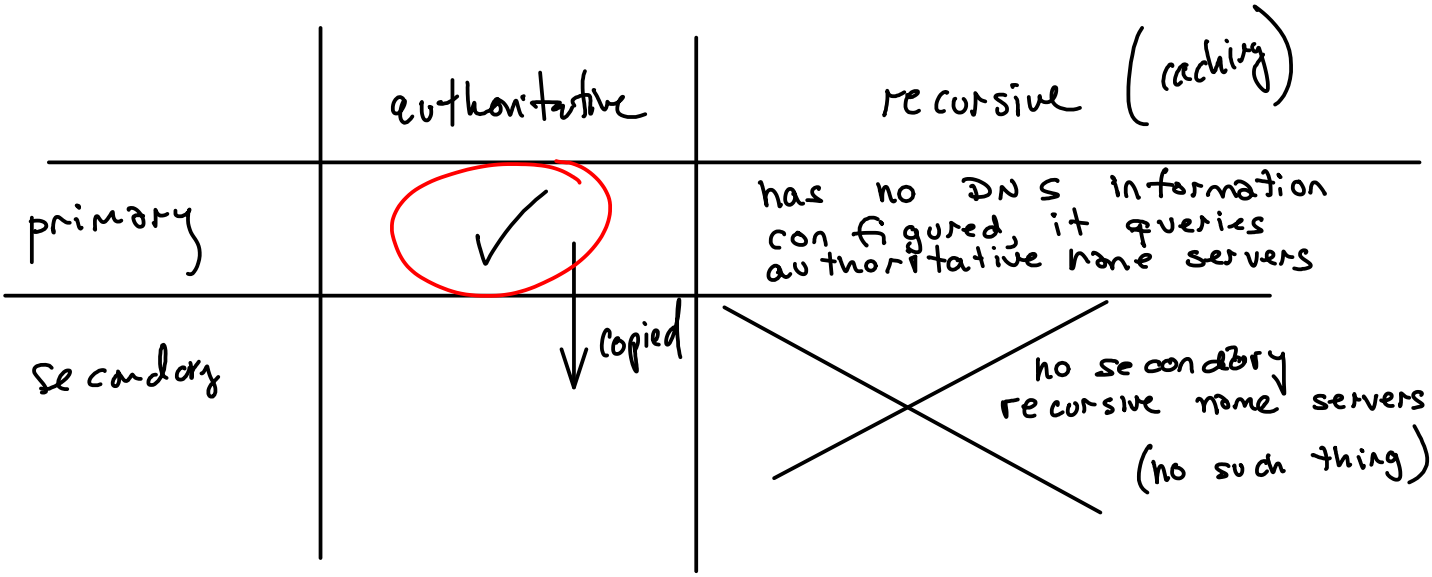
mail3 → ??

Exercise 3: Explain the sequence of servers queried and the records retrieved to find the MX record for bcit.ca.

bill@bcit.ca



Exercise 4: If you were updating the RR for a domain, what type(s) of DNS server(s) would you have to update?



Exercise 5: Look up the IP address for google.com. What is returned by the reverse DNS lookup?