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CST 311
Lab 3
May 18, 2015

1.

```
Server:  UnKnown
Address:  10.0.0.1
DNS request timed out.
            Timeout was 2 seconds.
DNS request timed out.
            Timeout was 2 seconds.
Non-authoritative answer:
DNS request timed out.
            Timeout was 2 seconds.
Name:  www.ssru.ac.th
Address:  58.181.147.36
```

2.

```
Primary name server = ub.es
Responsible mail addr = root.ub.es
Serial = 2015051801
Refresh = 86400 (1 day)
Retry = 7200 (2 hours)
Expire = 31449600 (364 days)
Default TTL = 172800 (2 days)
```

3.

```
Server:  ub.es
Address:  161.116.1.1

***ub.es can't find yahoo.com:  Query refused
```

Then I queried without specifying the ub.es name server and got…

```
Server:  UnKnown
Address:  10.0.0.1
Non-authoritative answer:
Yahoo.com       mx preference = 1, mail exchanger = mta7.am0.yahoo.dns.net
Yahoo.com       mx preference = 1, mail exchanger = mta5.am0.yahoo.dns.net
Yahoo.com       mx preference = 1, mail exchanger = mta6.am0.yahoo.dns.net
```

```
No.     Time                 Source                 Destination           Protocol Length Info
    100 11:44:08.736826000 10.0.0.10              10.0.0.1              DNS      74     Standard query
0x0dc6  A www.google.com

Frame 100: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
Ethernet II, Src: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de), Dst: Netgear_c7:80:e8 (00:22:3f:c7:80:e8)
Internet Protocol Version 4, Src: 10.0.0.10 (10.0.0.10), Dst: 10.0.0.1 (10.0.0.1)
User Datagram Protocol, Src Port: 56771 (56771), Dst Port: 53 (53)
Domain Name System (query)
    [Response In: 101]
    Transaction ID: 0x0dc6
    Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
    Queries
        www.google.com: type A, class IN
            Name: www.google.com
            [Name Length: 14]
            [Label Count: 3]
            Type: A (Host Address) (1)
            Class: IN (0x0001)
```

```
No.     Time                   Source                Destination           Protocol Length Info
    101 11:44:08.755180000 10.0.0.1              10.0.0.10             DNS      90     Standard query
response 0x0dc6  A 216.58.216.36

Frame 101: 90 bytes on wire (720 bits), 90 bytes captured (720 bits) on interface 0
Ethernet II, Src: Netgear_c7:80:e8 (00:22:3f:c7:80:e8), Dst: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de)
Internet Protocol Version 4, Src: 10.0.0.1 (10.0.0.1), Dst: 10.0.0.10 (10.0.0.10)
User Datagram Protocol, Src Port: 53 (53), Dst Port: 56771 (56771)
Domain Name System (response)
    [Request In: 100]
    [Time: 0.018354000 seconds]
    Transaction ID: 0x0dc6
    Flags: 0x8180 Standard query response, No error
    Questions: 1
    Answer RRs: 1
    Authority RRs: 0
    Additional RRs: 0
    Queries
        www.google.com: type A, class IN
            Name: www.google.com
            [Name Length: 14]
            [Label Count: 3]
            Type: A (Host Address) (1)
            Class: IN (0x0001)
    Answers
        www.google.com: type A, class IN, addr 216.58.216.36
```

4. UDP
5. 53; 53
6. 10.0.0.1; yes
7. A; No
8. 1; addr 216.58.216.36 (IP address)

```
No.     Time                   Source                Destination           Protocol Length Info
    102 11:44:08.756334000 10.0.0.10             216.58.216.36         TCP      66     61614→443 [SYN]
Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1

Frame 102: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
```

```
Ethernet II, Src: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de), Dst: Netgear_c7:80:e8 (00:22:3f:c7:80:e8)
Internet Protocol Version 4, Src: 10.0.0.10 (10.0.0.10), Dst: 216.58.216.36 (216.58.216.36)
Transmission Control Protocol, Src Port: 61614 (61614), Dst Port: 443 (443), Seq: 0, Len: 0
```

9. Yes, 216.58.216.36

```
No.     Time                   Source                Destination           Protocol Length Info
    177 11:44:09.697338000 10.0.0.10             10.0.0.1              DNS      74     Standard query
0xf1eb  A rfc-editor.org

Frame 177: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
Ethernet II, Src: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de), Dst: Netgear_c7:80:e8 (00:22:3f:c7:80:e8)
Internet Protocol Version 4, Src: 10.0.0.10 (10.0.0.10), Dst: 10.0.0.1 (10.0.0.1)
User Datagram Protocol, Src Port: 52501 (52501), Dst Port: 53 (53)
Domain Name System (query)
    [Response In: 258]
    Transaction ID: 0xf1eb
    Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
    Queries
        rfc-editor.org: type A, class IN
            Name: rfc-editor.org
            [Name Length: 14]
            [Label Count: 2]
            Type: A (Host Address) (1)
            Class: IN (0x0001)
```

10. Yes (one example above)

```
No.     Time                   Source                Destination           Protocol Length Info
     35 12:23:00.130079000 10.0.0.10             10.0.0.1              DNS      71     Standard query
0x0002  A www.mit.edu

Frame 35: 71 bytes on wire (568 bits), 71 bytes captured (568 bits) on interface 0
Ethernet II, Src: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de), Dst: Netgear_c7:80:e8 (00:22:3f:c7:80:e8)
```

```
Internet Protocol Version 4, Src: 10.0.0.10 (10.0.0.10), Dst: 10.0.0.1 (10.0.0.1)
User Datagram Protocol, Src Port: 49323 (49323), Dst Port: 53 (53)
Domain Name System (query)
    [Response In: 36]
    Transaction ID: 0x0002
    Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
    Queries
        www.mit.edu: type A, class IN
            Name: www.mit.edu
            [Name Length: 11]
            [Label Count: 3]
            Type: A (Host Address) (1)
            Class: IN (0x0001)


No.     Time               Source                Destination           Protocol Length Info
     36 12:23:00.187249000 10.0.0.1              10.0.0.10             DNS      160    Standard query
response 0x0002  CNAME www.mit.edu.edgekey.net CNAME e9566.dscb.akamaiedge.net A 23.15.94.165

Frame 36: 160 bytes on wire (1280 bits), 160 bytes captured (1280 bits) on interface 0
Ethernet II, Src: Netgear_c7:80:e8 (00:22:3f:c7:80:e8), Dst: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de)
Internet Protocol Version 4, Src: 10.0.0.1 (10.0.0.1), Dst: 10.0.0.10 (10.0.0.10)
User Datagram Protocol, Src Port: 53 (53), Dst Port: 49323 (49323)
Domain Name System (response)
    [Request In: 35]
    [Time: 0.057170000 seconds]
    Transaction ID: 0x0002
    Flags: 0x8180 Standard query response, No error
    Questions: 1
    Answer RRs: 3
    Authority RRs: 0
    Additional RRs: 0
    Queries
        www.mit.edu: type A, class IN
            Name: www.mit.edu
            [Name Length: 11]
            [Label Count: 3]
            Type: A (Host Address) (1)
            Class: IN (0x0001)
    Answers
        www.mit.edu: type CNAME, class IN, cname www.mit.edu.edgekey.net
            Name: www.mit.edu
            Type: CNAME (Canonical NAME for an alias) (5)
            Class: IN (0x0001)
            Time to live: 1800
            Data length: 25
            CNAME: www.mit.edu.edgekey.net
        www.mit.edu.edgekey.net: type CNAME, class IN, cname e9566.dscb.akamaiedge.net
            Name: www.mit.edu.edgekey.net
            Type: CNAME (Canonical NAME for an alias) (5)
            Class: IN (0x0001)
            Time to live: 32
            Data length: 24
            CNAME: e9566.dscb.akamaiedge.net
        e9566.dscb.akamaiedge.net: type A, class IN, addr 23.15.94.165
            Name: e9566.dscb.akamaiedge.net
            Type: A (Host Address) (1)
            Class: IN (0x0001)
            Time to live: 10
            Data length: 4
            Address: 23.15.94.165 (23.15.94.165)
```

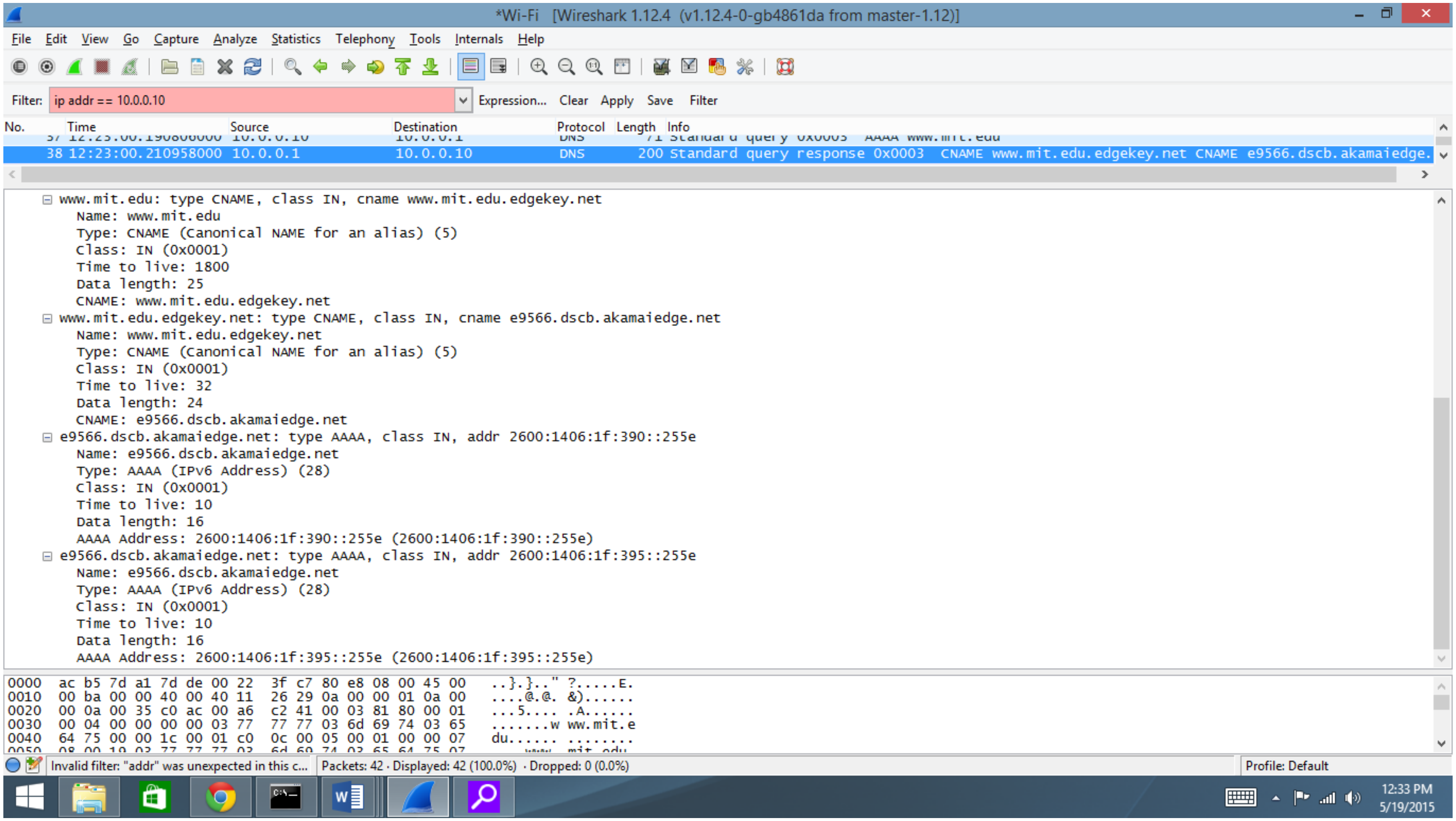
11. 53; 53

12. 10.0.0.1; yes

13. type A; no

14. 4; the first two return a canonical names for the requested page and the second two return addresses (I can't see a difference between the third and fourth answer)

15.



*Wi-Fi [Wireshark 1.12.4 (v1.12.4-0-gb4861da from master-1.12)]
File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help
Filter: ip addr == 10.0.0.10
Expression... Clear Apply Save Filter

```
No.  Time                Source      Destination  Protocol Length Info
 37 12:23:00.190806000 10.0.0.10   10.0.0.1     DNS       71 Standard query 0x0003  AAAA www.mit.edu
 38 12:23:00.210958000 10.0.0.1    10.0.0.10    DNS      200 Standard query response 0x0003  CNAME www.mit.edu.edgekey.net CNAME e9566.dscb.akamaiedge.
```

```
⊟ www.mit.edu: type CNAME, class IN, cname www.mit.edu.edgekey.net
    Name: www.mit.edu
    Type: CNAME (Canonical NAME for an alias) (5)
    Class: IN (0x0001)
    Time to live: 1800
    Data length: 25
    CNAME: www.mit.edu.edgekey.net
⊟ www.mit.edu.edgekey.net: type CNAME, class IN, cname e9566.dscb.akamaiedge.net
    Name: www.mit.edu.edgekey.net
    Type: CNAME (Canonical NAME for an alias) (5)
    Class: IN (0x0001)
    Time to live: 32
    Data length: 24
    CNAME: e9566.dscb.akamaiedge.net
⊟ e9566.dscb.akamaiedge.net: type AAAA, class IN, addr 2600:1406:1f:390::255e
    Name: e9566.dscb.akamaiedge.net
    Type: AAAA (IPv6 Address) (28)
    Class: IN (0x0001)
    Time to live: 10
    Data length: 16
    AAAA Address: 2600:1406:1f:390::255e (2600:1406:1f:390::255e)
⊟ e9566.dscb.akamaiedge.net: type AAAA, class IN, addr 2600:1406:1f:395::255e
    Name: e9566.dscb.akamaiedge.net
    Type: AAAA (IPv6 Address) (28)
    Class: IN (0x0001)
    Time to live: 10
    Data length: 16
    AAAA Address: 2600:1406:1f:395::255e (2600:1406:1f:395::255e)
```

```
0000  ac b5 7d a1 7d de 00 22  3f c7 80 e8 08 00 45 00   ..}.}.." ?.....E.
0010  00 ba 00 00 40 00 40 11  26 29 0a 00 00 01 0a 00   ....@.@. &)......
0020  00 0a 00 35 c0 ac 00 a6  c2 41 00 03 81 80 00 01   ...5.... .A......
0030  00 04 00 00 00 00 03 77  77 77 03 6d 69 74 03 65   .......w ww.mit.e
0040  64 75 00 00 1c 00 01 c0  0c 00 05 00 01 00 00 07   du...... ........
0050  08 00 19 03 77 77 77 03  6d 69 74 03 65 64 75 07   ....www. mit.edu.
```

Invalid filter: "addr" was unexpected in this c...
Packets: 42 · Displayed: 42 (100.0%) · Dropped: 0 (0.0%)
Profile: Default
12:33 PM
5/19/2015

```
No.     Time               Source                Destination           Protocol Length Info
     25 12:40:51.288679000 10.0.0.10             10.0.0.1              DNS      67     Standard query
0x0002  NS mit.edu

Frame 25: 67 bytes on wire (536 bits), 67 bytes captured (536 bits) on interface 0
Ethernet II, Src: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de), Dst: Netgear_c7:80:e8 (00:22:3f:c7:80:e8)
```

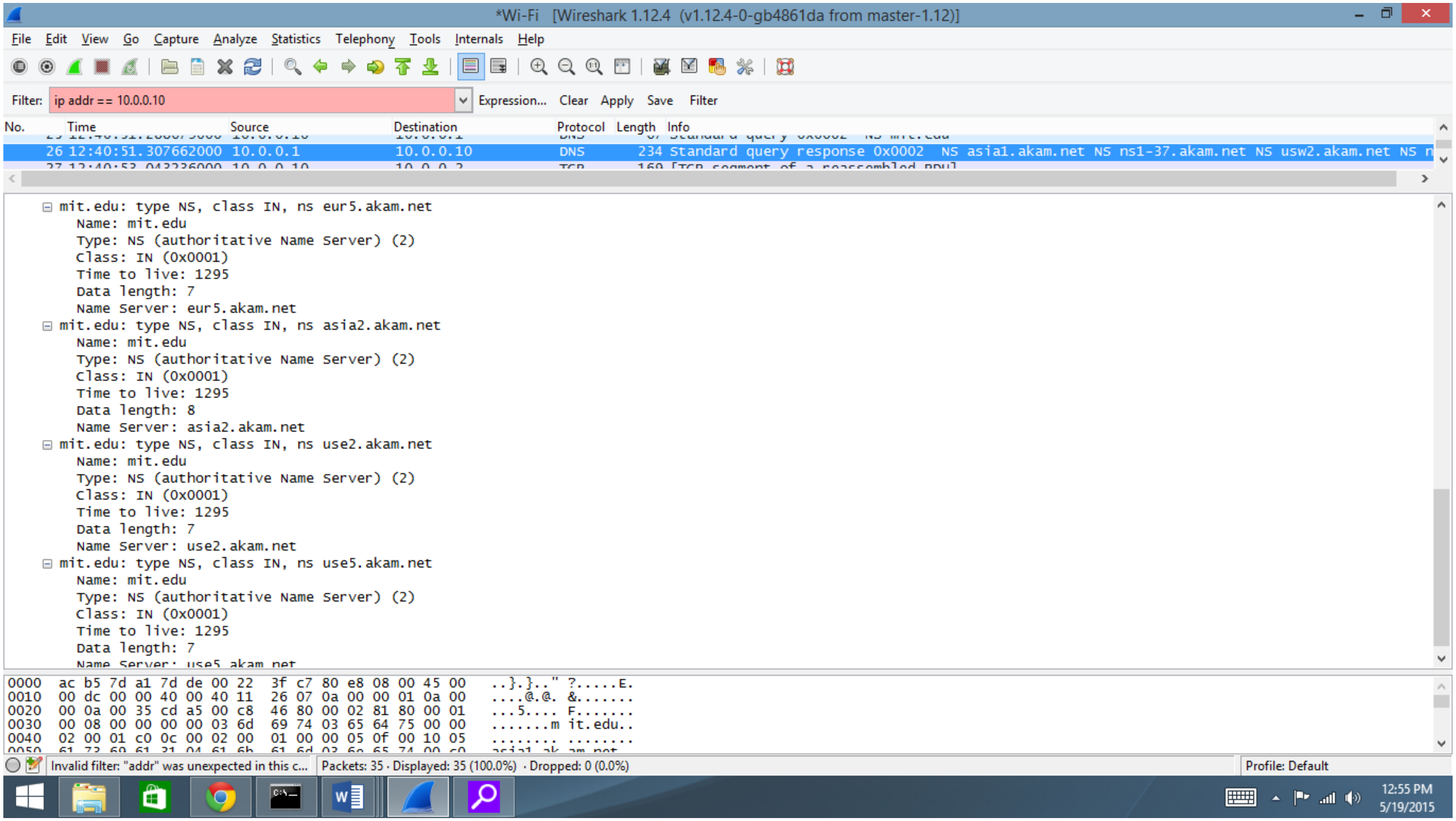
```
Internet Protocol Version 4, Src: 10.0.0.10 (10.0.0.10), Dst: 10.0.0.1 (10.0.0.1)
User Datagram Protocol, Src Port: 52645 (52645), Dst Port: 53 (53)
Domain Name System (query)
    [Response In: 26]
    Transaction ID: 0x0002
    Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
    Queries
        mit.edu: type NS, class IN
            Name: mit.edu
            [Name Length: 7]
            [Label Count: 2]
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)

No.     Time               Source                Destination           Protocol Length Info
     26 12:40:51.307662000 10.0.0.1              10.0.0.10             DNS      234    Standard query
response 0x0002  NS asia1.akam.net NS ns1-37.akam.net NS usw2.akam.net NS ns1-173.akam.net NS
eur5.akam.net NS asia2.akam.net NS use2.akam.net NS use5.akam.net

Frame 26: 234 bytes on wire (1872 bits), 234 bytes captured (1872 bits) on interface 0
Ethernet II, Src: Netgear_c7:80:e8 (00:22:3f:c7:80:e8), Dst: LiteonTe_a1:7d:de (ac:b5:7d:a1:7d:de)
Internet Protocol Version 4, Src: 10.0.0.1 (10.0.0.1), Dst: 10.0.0.10 (10.0.0.10)
User Datagram Protocol, Src Port: 53 (53), Dst Port: 52645 (52645)
Domain Name System (response)
    [Request In: 25]
    [Time: 0.018983000 seconds]
    Transaction ID: 0x0002
    Flags: 0x8180 Standard query response, No error
    Questions: 1
    Answer RRs: 8
    Authority RRs: 0
    Additional RRs: 0
    Queries
        mit.edu: type NS, class IN
            Name: mit.edu
            [Name Length: 7]
            [Label Count: 2]
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
    Answers
        mit.edu: type NS, class IN, ns asia1.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 16
            Name Server: asia1.akam.net
        mit.edu: type NS, class IN, ns ns1-37.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 9
            Name Server: ns1-37.akam.net
        mit.edu: type NS, class IN, ns usw2.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 7
            Name Server: usw2.akam.net
        mit.edu: type NS, class IN, ns ns1-173.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 10
            Name Server: ns1-173.akam.net
        mit.edu: type NS, class IN, ns eur5.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 7
            Name Server: eur5.akam.net
        mit.edu: type NS, class IN, ns asia2.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 8
            Name Server: asia2.akam.net
        mit.edu: type NS, class IN, ns use2.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 7
            Name Server: use2.akam.net
        mit.edu: type NS, class IN, ns use5.akam.net
            Name: mit.edu
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 1295
            Data length: 7
            Name Server: use5.akam.net
```

16. 10.0.0.1; yes
17. NS; no
18. asia1.akam.net, ns1-37.akam.net, usw2.akam.net, ns1-173.akam.net, eur5.akam.net, asia2.akam.net, use2.akam.net, use5.akam.net; no

19.



*Wi-Fi [Wireshark 1.12.4 (v1.12.4-0-gb4861da from master-1.12)]
File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help
Expression... Clear Apply Save Filter
Profile: Default
12:55 PM
5/19/2015

Filter: ip addr == 10.0.0.10

```
No.  Time                    Source        Destination   Protocol  Length  Info
  25 12:40:51.280075000 10.0.0.10     10.0.0.1      DNS         67 Standard query 0x0002  NS mit.edu
  26 12:40:51.307662000 10.0.0.1      10.0.0.10     DNS        234 Standard query response 0x0002  NS asia1.akam.net NS ns1-37.akam.net NS usw2.akam.net NS n
  27 12:40:53.043236000 10.0.0.10     10.0.0.2      TCP        169 [TCP segment of a reassembled PDU]
```

```
  ⊟ mit.edu: type NS, class IN, ns eur5.akam.net
      Name: mit.edu
      Type: NS (authoritative Name Server) (2)
      Class: IN (0x0001)
      Time to live: 1295
      Data length: 7
      Name Server: eur5.akam.net
  ⊟ mit.edu: type NS, class IN, ns asia2.akam.net
      Name: mit.edu
      Type: NS (authoritative Name Server) (2)
      Class: IN (0x0001)
      Time to live: 1295
      Data length: 8
      Name Server: asia2.akam.net
  ⊟ mit.edu: type NS, class IN, ns use2.akam.net
      Name: mit.edu
      Type: NS (authoritative Name Server) (2)
      Class: IN (0x0001)
      Time to live: 1295
      Data length: 7
      Name Server: use2.akam.net
  ⊟ mit.edu: type NS, class IN, ns use5.akam.net
      Name: mit.edu
      Type: NS (authoritative Name Server) (2)
      Class: IN (0x0001)
      Time to live: 1295
      Data length: 7
      Name Server: use5.akam.net
```

```
0000  ac b5 7d a1 7d de 00 22  3f c7 80 e8 08 00 45 00   ..}.}.." ?.....E.
0010  00 dc 00 00 40 00 40 11  26 07 0a 00 00 01 0a 00   ....@.@. &.......
0020  00 0a 00 35 cd a5 00 c8  46 80 00 02 81 80 00 01   ...5.... F.......
0030  00 08 00 00 00 00 03 6d  69 74 03 65 64 75 00 00   .......m it.edu..
0040  02 00 01 c0 0c 00 02 00  01 00 00 05 0f 00 10 05   ........ ........
0050  61 73 69 61 31 04 61 6b  61 6d 03 6e 65 74 00 c0   asia1.ak am.net..
```

Invalid filter: "addr" was unexpected in this c... | Packets: 35 · Displayed: 35 (100.0%) · Dropped: 0 (0.0%)

The following are from the trace file

```
No.     Time            Source                Destination           Protocol Length Info
    104 14:36:49.859652 128.238.38.160        18.72.0.3             DNS      74     Standard query
0x0003  A www.aiit.or.kr
```

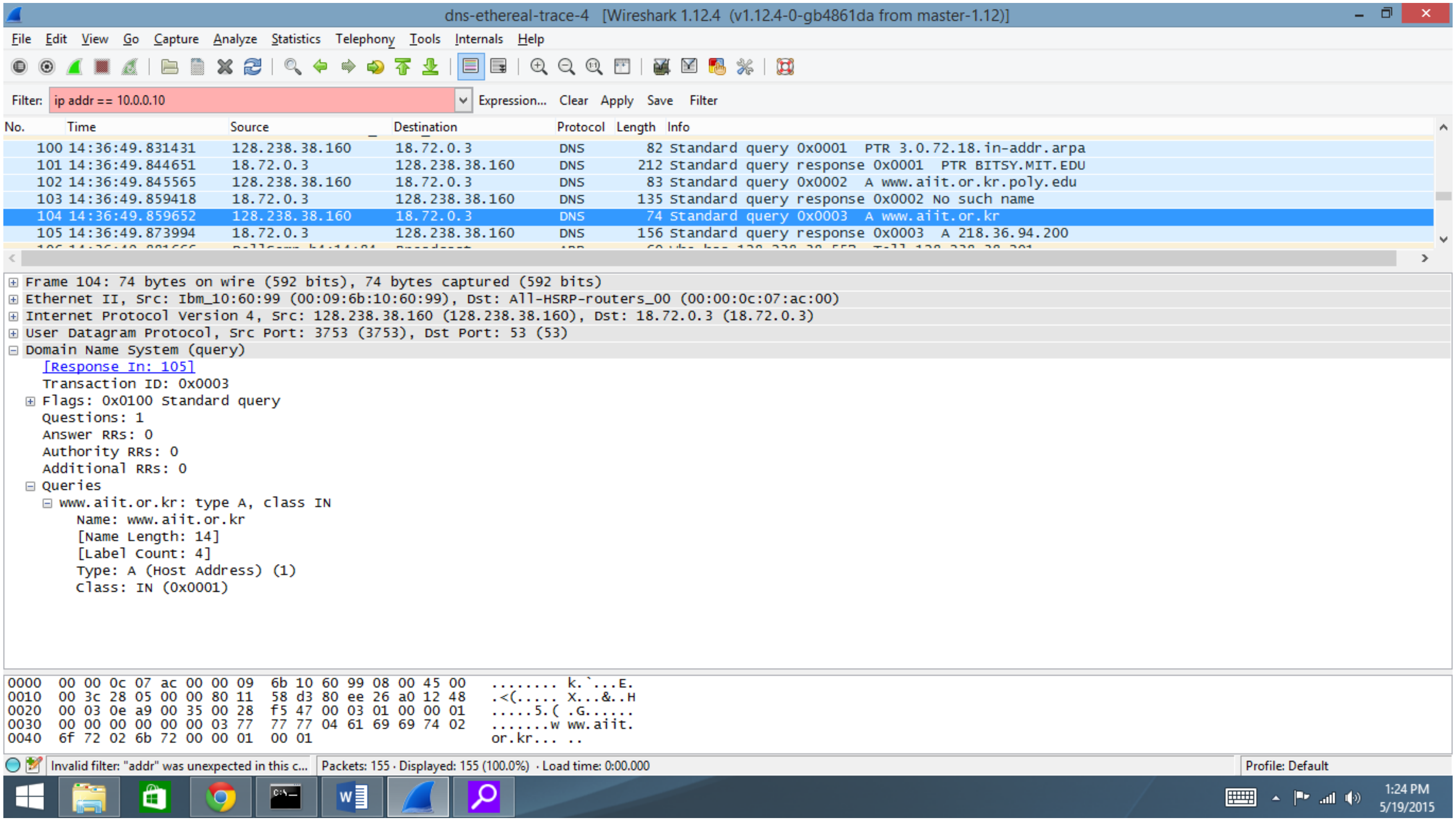
```
Frame 104: 74 bytes on wire (592 bits), 74 bytes captured (592 bits)
Ethernet II, Src: Ibm_10:60:99 (00:09:6b:10:60:99), Dst: All-HSRP-routers_00 (00:00:0c:07:ac:00)
Internet Protocol Version 4, Src: 128.238.38.160 (128.238.38.160), Dst: 18.72.0.3 (18.72.0.3)
User Datagram Protocol, Src Port: 3753 (3753), Dst Port: 53 (53)
Domain Name System (query)
    [Response In: 105]
    Transaction ID: 0x0003
    Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
    Queries
        www.aiit.or.kr: type A, class IN
            Name: www.aiit.or.kr
            [Name Length: 14]
            [Label Count: 4]
            Type: A (Host Address) (1)
            Class: IN (0x0001)

No.     Time            Source                Destination           Protocol Length Info
    105 14:36:49.873994 18.72.0.3             128.238.38.160        DNS      156    Standard query
response 0x0003  A 218.36.94.200

Frame 105: 156 bytes on wire (1248 bits), 156 bytes captured (1248 bits)
Ethernet II, Src: Cisco_83:e4:54 (00:b0:8e:83:e4:54), Dst: Ibm_10:60:99 (00:09:6b:10:60:99)
Internet Protocol Version 4, Src: 18.72.0.3 (18.72.0.3), Dst: 128.238.38.160 (128.238.38.160)
User Datagram Protocol, Src Port: 53 (53), Dst Port: 3753 (3753)
Domain Name System (response)
    [Request In: 104]
    [Time: 0.014342000 seconds]
    Transaction ID: 0x0003
    Flags: 0x8180 Standard query response, No error
    Questions: 1
    Answer RRs: 1
    Authority RRs: 2
    Additional RRs: 2
    Queries
        www.aiit.or.kr: type A, class IN
            Name: www.aiit.or.kr
            [Name Length: 14]
            [Label Count: 4]
            Type: A (Host Address) (1)
            Class: IN (0x0001)
    Answers
        www.aiit.or.kr: type A, class IN, addr 218.36.94.200
            Name: www.aiit.or.kr
            Type: A (Host Address) (1)
            Class: IN (0x0001)
            Time to live: 3338
            Data length: 4
            Address: 218.36.94.200 (218.36.94.200)
    Authoritative nameservers
        aiit.or.kr: type NS, class IN, ns ns.aiit.or.kr
            Name: aiit.or.kr
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 3338
            Data length: 5
            Name Server: ns.aiit.or.kr
        aiit.or.kr: type NS, class IN, ns w3.aiit.or.kr
            Name: aiit.or.kr
            Type: NS (authoritative Name Server) (2)
            Class: IN (0x0001)
            Time to live: 3338
            Data length: 5
            Name Server: w3.aiit.or.kr
    Additional records
        ns.aiit.or.kr: type A, class IN, addr 222.106.36.66
            Name: ns.aiit.or.kr
            Type: A (Host Address) (1)
            Class: IN (0x0001)
            Time to live: 86138
            Data length: 4
            Address: 222.106.36.66 (222.106.36.66)
        w3.aiit.or.kr: type A, class IN, addr 222.106.36.67
            Name: w3.aiit.or.kr
```

```
            Type: A (Host Address) (1)
            Class: IN (0x0001)
            Time to live: 86138
            Data length: 4
            Address: 222.106.36.67 (222.106.36.67)
```

20. 18.72.0.3; No, It’s the bitsy.mit.edu IP
21. type A; No
22. 1; addr 218.36.94.200 (the IP address of www.aiit.or.kr)
23.


dns-ethereal-trace-4 [Wireshark 1.12.4 (v1.12.4-0-gb4861da from master-1.12)]
File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help
Expression... Clear Apply Save Filter

Filter: ip addr == 10.0.0.10

```
No.  Time             Source          Destination     Protocol Length Info
 100 14:36:49.831431  128.238.38.160  18.72.0.3       DNS        82 Standard query 0x0001  PTR 3.0.72.18.in-addr.arpa
 101 14:36:49.844651  18.72.0.3       128.238.38.160  DNS       212 Standard query response 0x0001  PTR BITSY.MIT.EDU
 102 14:36:49.845565  128.238.38.160  18.72.0.3       DNS        83 Standard query 0x0002  A www.aiit.or.kr.poly.edu
 103 14:36:49.859418  18.72.0.3       128.238.38.160  DNS       135 Standard query response 0x0002 No such name
 104 14:36:49.859652  128.238.38.160  18.72.0.3       DNS        74 Standard query 0x0003  A www.aiit.or.kr
 105 14:36:49.873994  18.72.0.3       128.238.38.160  DNS       156 Standard query response 0x0003  A 218.36.94.200
```

```
⊞ Frame 104: 74 bytes on wire (592 bits), 74 bytes captured (592 bits)
⊞ Ethernet II, Src: Ibm_10:60:99 (00:09:6b:10:60:99), Dst: All-HSRP-routers_00 (00:00:0c:07:ac:00)
⊞ Internet Protocol Version 4, Src: 128.238.38.160 (128.238.38.160), Dst: 18.72.0.3 (18.72.0.3)
⊞ User Datagram Protocol, Src Port: 3753 (3753), Dst Port: 53 (53)
⊟ Domain Name System (query)
    [Response In: 105]
    Transaction ID: 0x0003
  ⊞ Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
  ⊟ Queries
    ⊟ www.aiit.or.kr: type A, class IN
        Name: www.aiit.or.kr
        [Name Length: 14]
        [Label Count: 4]
        Type: A (Host Address) (1)
        Class: IN (0x0001)
```

```
0000  00 00 0c 07 ac 00 00 09  6b 10 60 99 08 00 45 00   ........ k.`...E.
0010  00 3c 28 05 00 00 80 11  58 d3 80 ee 26 a0 12 48   .<(..... X...&..H
0020  00 03 0e a9 00 35 00 28  f5 47 00 03 01 00 00 01   .....5.( .G......
0030  00 00 00 00 00 00 03 77  77 77 04 61 69 69 74 02   .......w ww.aiit.
0040  6f 72 02 6b 72 00 00 01  00 01                     or.kr... ..
```

Invalid filter: "addr" was unexpected in this c... Packets: 155 · Displayed: 155 (100.0%) · Load time: 0:00.000 Profile: Default