0100 = Version: 4

```
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
     10 4.608858041
                       192.168.1.140
                                             192.168.1.1
                                                                             80
                                                                                    Standard query 0x4aef A
beacons.gcp.gvt2.com
Frame 10: 80 bytes on wire (640 bits), 80 bytes captured (640 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:42.345815125 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614122.345815125 seconds
    [Time delta from previous captured frame: 4.505485618 seconds]
    [Time delta from previous displayed frame: 0.000000000 seconds]
    [Time since reference or first frame: 4.608858041 seconds]
   Frame Number: 10
   Frame Length: 80 bytes (640 bits)
    Capture Length: 80 bytes (640 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 192.168.1.1
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 66
   Identification: 0x3e08 (15880)
   Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x78c5 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192,168,1,140
   Destination: 192.168.1.1
User Datagram Protocol, Src Port: 44994, Dst Port: 53
Domain Name System (query)
    Transaction ID: 0x4aef
    Flags: 0x0100 Standard query
    Questions: 1
   Answer RRs: 0
   Authority RRs: 0
   Additional RRs: 0
   Queries
    [Response In: 11]
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
                                             192.168.1.140
     11 4.612264009
                       192.168.1.1
                                                                    DNS
                                                                             269
                                                                                    Standard query response
0x4aef A beacons.gcp.gvt2.com CNAME beacons-handoff.gcp.gvt2.com A 172.217.20.195 NS ns1.google.com NS
ns3.google.com NS ns2.google.com NS ns4.google.com A 216.239.32.10 A 216.239.34.10 A 216.239.36.10 A
216.239.38.10
Frame 11: 269 bytes on wire (2152 bits), 269 bytes captured (2152 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:42.349221093 EEST
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1589614122.349221093 seconds
    [Time delta from previous captured frame: 0.003405968 seconds]
    [Time delta from previous displayed frame: 0.003405968 seconds]
    [Time since reference or first frame: 4.612264009 seconds]
    Frame Number: 11
   Frame Length: 269 bytes (2152 bits)
   Capture Length: 269 bytes (2152 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff), Dst: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
   Destination: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Source: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.140
```

Domain Name System (query)

```
... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 255
    Identification: 0x0000 (0)
   Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0xb610 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.1
   Destination: 192.168.1.140
User Datagram Protocol, Src Port: 53, Dst Port: 44994
Domain Name System (response)
    Transaction ID: 0x4aef
    Flags: 0x8180 Standard query response, No error
    Questions: 1
   Answer RRs: 2
   Authority RRs: 4
   Additional RRs: 4
    Oueries
   Answers
        beacons.gcp.gvt2.com: type CNAME, class IN, cname beacons-handoff.gcp.gvt2.com
        beacons-handoff.gcp.gvt2.com: type A, class IN, addr 172.217.20.195
   Authoritative nameservers
        gvt2.com: type NS, class IN, ns ns1.google.com
        gvt2.com: type NS, class IN, ns ns3.google.com
        gvt2.com: type NS, class IN, ns ns2.google.com
        gvt2.com: type NS, class IN, ns ns4.google.com
    Additional records
        ns1.google.com: type A, class IN, addr 216.239.32.10
        ns2.google.com: type A, class IN, addr 216.239.34.10
        ns3.google.com: type A, class IN, addr 216.239.36.10
        ns4.google.com: type A, class IN, addr 216.239.38.10
    [Request In: 10]
    [Time: 0.003405968 seconds]
No.
                                                                    Protocol Length Info
        Time
                       Source
                                             Destination
     12 4.613428389
                       192.168.1.140
                                             192.168.1.1
                                                                                    Standard query 0xf234 A
safebrowsing.googleapis.com
Frame 12: 87 bytes on wire (696 bits), 87 bytes captured (696 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
    Arrival Time: May 16, 2020 10:28:42.350385473 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614122.350385473 seconds
    [Time delta from previous captured frame: 0.001164380 seconds]
    [Time delta from previous displayed frame: 0.001164380 seconds]
    [Time since reference or first frame: 4.613428389 seconds]
   Frame Number: 12
   Frame Length: 87 bytes (696 bits)
   Capture Length: 87 bytes (696 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 192.168.1.1
    0100 .... = Version: 4
     ... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 73
    Identification: 0x3e09 (15881)
    Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x78bd [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.140
    Destination: 192.168.1.1
User Datagram Protocol, Src Port: 58097, Dst Port: 53
```

Interface id: 0 (wlo1)

Encapsulation type: Ethernet (1)

```
Transaction ID: 0xf234
   Flags: 0x0100 Standard query
   Questions: 1
   Answer RRs: 0
   Authority RRs: 0
   Additional RRs: 0
    Queries
    [Response In: 13]
                                                                    Protocol Length Info
No.
        Time
                       Source
                                             Destination
                                             192.168.1.140
                                                                    DNS
    13 4.615832201
                       192.168.1.1
                                                                             246
                                                                                    Standard query response
0xf234 A safebrowsing.googleapis.com A 172.217.20.202 NS ns2.google.com NS ns4.google.com NS
ns3.google.com NS ns1.google.com A 216.239.32.10 A 216.239.34.10 A 216.239.36.10 A 216.239.38.10
Frame 13: 246 bytes on wire (1968 bits), 246 bytes captured (1968 bits) on interface wlo1, id 0
   Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:42.352789285 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614122.352789285 seconds
    [Time delta from previous captured frame: 0.002403812 seconds]
    [Time delta from previous displayed frame: 0.002403812 seconds]
    [Time since reference or first frame: 4.615832201 seconds]
   Frame Number: 13
   Frame Length: 246 bytes (1968 bits)
   Capture Length: 246 bytes (1968 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff), Dst: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
   Destination: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
   Source: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.140
   0100 .... = Version: 4
      .. 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 232
   Identification: 0x0000 (0)
   Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0xb627 [validation disabled]
    [Header checksum status: Unverified]
   Source: 192.168.1.1
   Destination: 192.168.1.140
User Datagram Protocol, Src Port: 53, Dst Port: 58097
Domain Name System (response)
    Transaction ID: 0xf234
    Flags: 0x8180 Standard query response, No error
   Questions: 1
   Answer RRs: 1
   Authority RRs: 4
   Additional RRs: 4
   Oueries
   Answers
        safebrowsing.googleapis.com: type A, class IN, addr 172.217.20.202
   Authoritative nameservers
        googleapis.com: type NS, class IN, ns ns2.google.com
        googleapis.com: type NS, class IN, ns ns4.google.com
        googleapis.com: type NS, class IN, ns ns3.google.com
        googleapis.com: type NS, class IN, ns ns1.google.com
   Additional records
        ns1.google.com: type A, class IN, addr 216.239.32.10
        ns2.google.com: type A, class IN, addr 216.239.34.10
        ns3.google.com: type A, class IN, addr 216.239.36.10
        ns4.google.com: type A, class IN, addr 216.239.38.10
    [Request In: 12]
    [Time: 0.002403812 seconds]
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
    22 6.738024642
                                             192.168.1.1
                       192.168.1.140
                                                                    DNS
                                                                                    Standard query 0x40f6 A
                                                                             73
bitsy.mit.edu
Frame 22: 73 bytes on wire (584 bits), 73 bytes captured (584 bits) on interface wlo1, id 0
```

Time to live: 64 Protocol: UDP (17)

```
Arrival Time: May 16, 2020 10:28:44.474981726 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614124.474981726 seconds
    [Time delta from previous captured frame: 0.366219608 seconds]
    [Time delta from previous displayed frame: 2.122192441 seconds]
    [Time since reference or first frame: 6.738024642 seconds]
    Frame Number: 22
   Frame Length: 73 bytes (584 bits)
   Capture Length: 73 bytes (584 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 192.168.1.1
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 59
   Identification: 0x3e50 (15952)
   Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x7884 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.140
   Destination: 192.168.1.1
User Datagram Protocol, Src Port: 44301, Dst Port: 53
Domain Name System (query)
    Transaction ID: 0x40f6
    Flags: 0x0100 Standard query
    Questions: 1
   Answer RRs: 0
   Authority RRs: 0
   Additional RRs: 0
    Oueries
    [Response In: 24]
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
     23 6.738175901
                       192.168.1.140
                                             192.168.1.1
                                                                    DNS
                                                                             73
                                                                                    Standard query 0x761a
AAAA bitsy.mit.edu
Frame 23: 73 bytes on wire (584 bits), 73 bytes captured (584 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:44.475132985 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614124.475132985 seconds
    [Time delta from previous captured frame: 0.000151259 seconds]
    [Time delta from previous displayed frame: 0.000151259 seconds]
    [Time since reference or first frame: 6.738175901 seconds]
    Frame Number: 23
   Frame Length: 73 bytes (584 bits)
    Capture Length: 73 bytes (584 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 192.168.1.1
   0100 .... = Version: 4
     \dots 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 59
    Identification: 0x3e51 (15953)
    Flags: 0x4000, Don't fragment
    Fragment offset: 0
```

```
Header checksum: 0x7883 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.140
   Destination: 192.168.1.1
User Datagram Protocol, Src Port: 43871, Dst Port: 53
Domain Name System (query)
    Transaction ID: 0x761a
   Flags: 0x0100 Standard query
   Questions: 1
   Answer RRs: 0
   Authority RRs: 0
   Additional RRs: 0
   Oueries
    [Response In: 25]
                                                                    Protocol Length Info
                       Source
                                             Destination
    24 6.741862339
                       192.168.1.1
                                             192.168.1.140
                                                                    DNS
                                                                             384
                                                                                    Standard query response
0x40f6 A bitsy.mit.edu A 18.0.72.3 NS usw2.akam.net NS use5.akam.net NS eur5.akam.net NS asia1.akam.net NS
ns1-37.akam.net NS ns1-173.akam.net NS use2.akam.net NS asia2.akam.net A 23.74.25.64 A 96.7.49.64 A
2.16.40.64 A 184.26.161.64 A 95.100.175.64 A 95.101.36.64 A 193.108.91.37 A 193.108.91.173
Frame 24: 384 bytes on wire (3072 bits), 384 bytes captured (3072 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:44.478819423 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614124.478819423 seconds
    [Time delta from previous captured frame: 0.003686438 seconds]
    [Time delta from previous displayed frame: 0.003686438 seconds]
    [Time since reference or first frame: 6.741862339 seconds]
   Frame Number: 24
   Frame Length: 384 bytes (3072 bits)
   Capture Length: 384 bytes (3072 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff), Dst: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
   Destination: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
   Source: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.140
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 370
   Identification: 0x0000 (0)
   Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0xb59d [validation disabled]
    [Header checksum status: Unverified]
   Source: 192.168.1.1
   Destination: 192.168.1.140
User Datagram Protocol, Src Port: 53, Dst Port: 44301
Domain Name System (response)
    Transaction ID: 0x40f6
    Flags: 0x8180 Standard query response, No error
    Questions: 1
   Answer RRs: 1
   Authority RRs: 8
   Additional RRs: 8
   Queries
   Answers
        bitsy.mit.edu: type A, class IN, addr 18.0.72.3
   Authoritative nameservers
        mit.edu: type NS, class IN, ns usw2.akam.net
        mit.edu: type NS, class IN, ns use5.akam.net
        mit.edu: type NS, class IN, ns eur5.akam.net
        mit.edu: type NS, class IN, ns asia1.akam.net
        mit.edu: type NS, class IN, ns ns1-37.akam.net
        mit.edu: type NS, class IN, ns ns1-173.akam.net
        mit.edu: type NS, class IN, ns use2.akam.net
        mit.edu: type NS, class IN, ns asia2.akam.net
   Additional records
```

eur5.akam.net: type A, class IN, addr 23.74.25.64

Capture Length: 74 bytes (592 bits)

[Frame is marked: False]

```
use2.akam.net: type A, class IN, addr 96.7.49.64
        use5.akam.net: type A, class IN, addr 2.16.40.64
        usw2.akam.net: type A, class IN, addr 184.26.161.64
        asia1.akam.net: type A, class IN, addr 95.100.175.64
        asia2.akam.net: type A, class IN, addr 95.101.36.64
        ns1-37.akam.net: type A, class IN, addr 193.108.91.37
        ns1-173.akam.net: type A, class IN, addr 193.108.91.173
    [Request In: 22]
    [Time: 0.003837697 seconds]
                                                                    Protocol Length Info
No.
        Time
                       Source
                                              Destination
     25 6.772801707
                       192.168.1.1
                                              192.168.1.140
                                                                             138
                                                                                    Standard query response
0x761a AAAA bitsy.mit.edu SOA use2.akam.net
Frame 25: 138 bytes on wire (1104 bits), 138 bytes captured (1104 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
    Encapsulation type: Ethernet (1)
    Arrival Time: May 16, 2020 10:28:44.509758791 EEST
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1589614124.509758791 seconds
    [Time delta from previous captured frame: 0.030939368 seconds]
    [Time delta from previous displayed frame: 0.030939368 seconds]
    [Time since reference or first frame: 6.772801707 seconds]
    Frame Number: 25
    Frame Length: 138 bytes (1104 bits)
    Capture Length: 138 bytes (1104 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff), Dst: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Destination: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Source: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.140
    0100 .... = Version: 4
      .. 0101 = Header Length: 20 bytes (5)
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
    Total Length: 124
    Identification: 0x0000 (0)
    Flags: 0x4000, Don't fragment
    Fragment offset: 0
    Time to live: 64
    Protocol: UDP (17)
    Header checksum: 0xb693 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.1
    Destination: 192.168.1.140
User Datagram Protocol, Src Port: 53, Dst Port: 43871
Domain Name System (response)
    Transaction ID: 0x761a
    Flags: 0x8180 Standard query response, No error
    Questions: 1
    Answer RRs: 0
    Authority RRs: 1
    Additional RRs: 0
    Oueries
    Authoritative nameservers
        mit.edu: type SOA, class IN, mname use2.akam.net
    [Request In: 23]
    [Time: 0.034625806 seconds]
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
     26 6.774910321
                       192.168.1.140
                                             18.0.72.3
                                                                                    Standard query 0x9b07 A
www.aiit.or.kr
Frame 26: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
    Encapsulation type: Ethernet (1)
    Arrival Time: May 16, 2020 10:28:44.511867405 EEST
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1589614124.511867405 seconds
    [Time delta from previous captured frame: 0.002108614 seconds]
    [Time delta from previous displayed frame: 0.002108614 seconds]
    [Time since reference or first frame: 6.774910321 seconds]
    Frame Number: 26
    Frame Length: 74 bytes (592 bits)
```

Authority RRs: 0

```
[Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 18.0.72.3
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 60
   Identification: 0xd2c1 (53953)
   Flags: 0x0000
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x8bb8 [validation disabled]
    [Header checksum status: Unverified]
   Source: 192.168.1.140
   Destination: 18.0.72.3
User Datagram Protocol, Src Port: 42325, Dst Port: 53
Domain Name System (query)
   Transaction ID: 0x9b07
   Flags: 0x0100 Standard query
    Questions: 1
   Answer RRs: 0
   Authority RRs: 0
   Additional RRs: 0
    Queries
Nο
                                                                    Protocol Length Info
       Time
                       Source
                                             Destination
    27 7.866497457
                       192.168.1.140
                                             192.168.1.1
                                                                                    Standard query 0xb255 A
                                                                    DNS
                                                                             89
clientservices.googleapis.com
Frame 27: 89 bytes on wire (712 bits), 89 bytes captured (712 bits) on interface wlo1, id 0
   Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:45.603454541 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614125.603454541 seconds
    [Time delta from previous captured frame: 1.091587136 seconds]
    [Time delta from previous displayed frame: 1.091587136 seconds]
    [Time since reference or first frame: 7.866497457 seconds]
   Frame Number: 27
   Frame Length: 89 bytes (712 bits)
   Capture Length: 89 bytes (712 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 192.168.1.1
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 75
   Identification: 0x3e6e (15982)
   Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x7856 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.140
   Destination: 192.168.1.1
User Datagram Protocol, Src Port: 54378, Dst Port: 53
Domain Name System (query)
    Transaction ID: 0xb255
    Flags: 0x0100 Standard query
    Questions: 1
   Answer RRs: 0
```

```
Additional RRs: 0
    Queries
    [Response In: 28]
No.
                                             Destination
                                                                    Protocol Length Info
        Time
                       Source
     28 7.868962228
                       192.168.1.1
                                             192.168.1.140
                                                                    DNS
                                                                             248
                                                                                    Standard query response
0xb255 A clientservices.googleapis.com A 172.217.16.35 NS ns1.google.com NS ns4.google.com NS
ns2.google.com NS ns3.google.com A 216.239.32.10 A 216.239.34.10 A 216.239.36.10 A 216.239.38.10
Frame 28: 248 bytes on wire (1984 bits), 248 bytes captured (1984 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
    Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:45.605919312 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614125.605919312 seconds
    [Time delta from previous captured frame: 0.002464771 seconds]
    [Time delta from previous displayed frame: 0.002464771 seconds]
    [Time since reference or first frame: 7.868962228 seconds]
   Frame Number: 28
   Frame Length: 248 bytes (1984 bits)
    Capture Length: 248 bytes (1984 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff), Dst: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
   Destination: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Source: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.140
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 234
    Identification: 0x0000 (0)
    Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0xb625 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.1
    Destination: 192.168.1.140
User Datagram Protocol, Src Port: 53, Dst Port: 54378
Domain Name System (response)
    Transaction ID: 0xb255
    Flags: 0x8180 Standard query response, No error
    Questions: 1
   Answer RRs: 1
   Authority RRs: 4
   Additional RRs: 4
   Queries
   Answers
        clientservices.googleapis.com: type A, class IN, addr 172.217.16.35
   Authoritative nameservers
        googleapis.com: type NS, class IN, ns ns1.google.com
        googleapis.com: type NS, class IN, ns ns4.google.com
        googleapis.com: type NS, class IN, ns ns2.google.com
        googleapis.com: type NS, class IN, ns ns3.google.com
    Additional records
        ns1.google.com: type A, class IN, addr 216.239.32.10
        ns2.google.com: type A, class IN, addr 216.239.34.10
        ns3.google.com: type A, class IN, addr 216.239.36.10
        ns4.google.com: type A, class IN, addr 216.239.38.10
    [Request In: 27]
    [Time: 0.002464771 seconds]
No.
        Time
                                             Destination
                                                                    Protocol Length Info
                       Source
                       192.168.1.140
     49 11.772024418
                                             18.0.72.3
                                                                                    Standard query 0x9b07 A
                                                                    DNS
                                                                             74
www.aiit.or.kr
Frame 49: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
    Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:49.508981502 EEST
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1589614129.508981502 seconds
    [Time delta from previous captured frame: 0.366298699 seconds]
```

[Time delta from previous displayed frame: 3.903062190 seconds]

Destination: 18.0.72.3

```
[Time since reference or first frame: 11.772024418 seconds]
    Frame Number: 49
   Frame Length: 74 bytes (592 bits)
    Capture Length: 74 bytes (592 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 18.0.72.3
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 60
    Identification: 0xd4d5 (54485)
    Flags: 0x0000
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x89a4 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.140
    Destination: 18.0.72.3
User Datagram Protocol, Src Port: 42325, Dst Port: 53
Domain Name System (query)
    Transaction ID: 0x9b07
   Flags: 0x0100 Standard query
    Questions: 1
   Answer RRs: 0
   Authority RRs: 0
    Additional RRs: 0
    Oueries
    [Retransmitted request. Original request in: 26]
    [Retransmission: True]
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
     66 16.772075975
                       192.168.1.140
                                             18.0.72.3
                                                                    DNS
                                                                                    Standard query 0x9b07 A
                                                                             74
www.aiit.or.kr
Frame 66: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface wlo1, id 0
    Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:54.509033059 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614134.509033059 seconds
    [Time delta from previous captured frame: 0.234510978 seconds]
    [Time delta from previous displayed frame: 5.000051557 seconds]
    [Time since reference or first frame: 16.772075975 seconds]
    Frame Number: 66
   Frame Length: 74 bytes (592 bits)
   Capture Length: 74 bytes (592 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 18.0.72.3
   0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 60
    Identification: 0xd9a5 (55717)
   Flags: 0x0000
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x84d4 [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.140
```

[Frame is marked: False]
[Frame is ignored: False]

```
User Datagram Protocol, Src Port: 42325, Dst Port: 53
Domain Name System (query)
   Transaction ID: 0x9b07
    Flags: 0x0100 Standard query
   Questions: 1
   Answer RRs: 0
   Authority RRs: 0
    Additional RRs: 0
   Oueries
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
    72 19.616917023
                       192.168.1.140
                                             192.168.1.1
                                                                             79
                                                                                    Standard query 0x794e A
clients6.google.com
Frame 72: 79 bytes on wire (632 bits), 79 bytes captured (632 bits) on interface wlo1, id 0
   Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:57.353874107 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614137.353874107 seconds
    [Time delta from previous captured frame: 1.064801243 seconds]
    [Time delta from previous displayed frame: 2.844841048 seconds]
    [Time since reference or first frame: 19.616917023 seconds]
   Frame Number: 72
   Frame Length: 79 bytes (632 bits)
   Capture Length: 79 bytes (632 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50), Dst: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Destination: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
   Source: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
   Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.140, Dst: 192.168.1.1
   0100 .... = Version: 4
      .. 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
   Total Length: 65
   Identification: 0x480d (18445)
   Flags: 0x4000, Don't fragment
   Fragment offset: 0
   Time to live: 64
   Protocol: UDP (17)
   Header checksum: 0x6ec1 [validation disabled]
    [Header checksum status: Unverified]
   Source: 192.168.1.140
   Destination: 192.168.1.1
User Datagram Protocol, Src Port: 36850, Dst Port: 53
Domain Name System (query)
    Transaction ID: 0x794e
    Flags: 0x0100 Standard query
   Questions: 1
   Answer RRs: 0
   Authority RRs: 0
   Additional RRs: 0
   Queries
    [Response In: 73]
                       Source
                                             Destination
                                                                    Protocol Length Info
     73 19.619341901
                       192.168.1.1
                                             192.168.1.140
                                                                    DNS
                                                                             255
                                                                                    Standard query response
0x794e A clients6.google.com CNAME clients.l.google.com A 216.58.208.206 NS ns4.google.com NS
ns1.google.com NS ns2.google.com NS ns3.google.com A 216.239.32.10 A 216.239.34.10 A 216.239.36.10 A
Frame 73: 255 bytes on wire (2040 bits), 255 bytes captured (2040 bits) on interface wlo1, id 0
   Interface id: 0 (wlo1)
   Encapsulation type: Ethernet (1)
   Arrival Time: May 16, 2020 10:28:57.356298985 EEST
    [Time shift for this packet: 0.000000000 seconds]
   Epoch Time: 1589614137.356298985 seconds
    [Time delta from previous captured frame: 0.002424878 seconds]
    [Time delta from previous displayed frame: 0.002424878 seconds]
    [Time since reference or first frame: 19.619341901 seconds]
   Frame Number: 73
    Frame Length: 255 bytes (2040 bits)
    Capture Length: 255 bytes (2040 bits)
```

```
[Protocols in frame: eth:ethertype:ip:udp:dns]
    [Coloring Rule Name: UDP]
    [Coloring Rule String: udp]
Ethernet II, Src: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff), Dst: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Destination: IntelCor_a9:ef:50 (8c:70:5a:a9:ef:50)
    Source: Tp-LinkT_5c:d1:ff (f8:d1:11:5c:d1:ff)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.140
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
    Total Length: 241
    Identification: 0x0000 (0)
    Flags: 0x4000, Don't fragment
    Fragment offset: 0
    Time to live: 64
    Protocol: UDP (17)
    Header checksum: 0xb61e [validation disabled]
    [Header checksum status: Unverified]
    Source: 192.168.1.1
    Destination: 192.168.1.140
User Datagram Protocol, Src Port: 53, Dst Port: 36850
Domain Name System (response)
    Transaction ID: 0x794e
    Flags: 0x8180 Standard query response, No error
    Questions: 1
    Answer RRs: 2
    Authority RRs: 4
    Additional RRs: 4
    Queries
    Answers
        clients6.google.com: type CNAME, class IN, cname clients.l.google.com
        clients.l.google.com: type A, class IN, addr 216.58.208.206
    Authoritative nameservers
        google.com: type NS, class IN, ns ns4.google.com
        google.com: type NS, class IN, ns ns1.google.com
        google.com: type NS, class IN, ns ns2.google.com
        google.com: type NS, class IN, ns ns3.google.com
    Additional records
        ns1.google.com: type A, class IN, addr 216.239.32.10
        ns2.google.com: type A, class IN, addr 216.239.34.10 ns3.google.com: type A, class IN, addr 216.239.36.10 ns4.google.com: type A, class IN, addr 216.239.38.10
    [Request In: 72]
    [Time: 0.002424878 seconds]
```