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Analisa Paket ICMP dan DNS

1. Analisa ICMP

```
Frame 12722: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on
    Section number: 1
  Interface id: 0 (\Device\NPF_{7EBB4D90-6742-41EF-8D14-567171A1C008})
    Encapsulation type: Ethernet (1)
    Arrival Time: Apr  1, 2023 10:05:21.091212000 SE Asia Standard Time
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1680318321.091212000 seconds
    [Time delta from previous captured frame: 0.005898000 seconds]
    [Time delta from previous displayed frame: 0.000000000 seconds]
    [Time since reference or first frame: 442.297358000 seconds]
    Frame Number: 12722
    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:icmp:data]
    [Coloring Rule Name: ICMP]
    [Coloring Rule String: icmp || icmpv6]
Ethernet II, Src: LiteonTe_9e:69:59 (9c:2f:9d:9e:69:59), Dst: Tp-LinkT_3d:
  Destination: Tp-LinkT_3d:06:36 (68:ff:7b:3d:06:36)
  Source: LiteonTe_9e:69:59 (9c:2f:9d:9e:69:59)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.107, Dst: 103.17.76.41
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
  Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
    Total Length: 60
    Identification: 0x3b82 (15234)
  000. .... = Flags: 0x0
    ...0 0000 0000 0000 = Fragment Offset: 0
    Time to Live: 128
    Protocol: ICMP (1)
    Header Checksum: 0x89f1 [validation disabled]
    [Header checksum status: Unverified]
    Source Address: 192.168.1.107
    Destination Address: 103.17.76.41
Internet Control Message Protocol
    Type: 8 (Echo (ping) request)
    Code: 0
    Checksum: 0x4d50 [correct]
    [Checksum Status: Good]
    Identifier (BE): 1 (0x0001)
    Identifier (LE): 256 (0x0100)
    Sequence Number (BE): 11 (0x000b)
    Sequence Number (LE): 2816 (0x0b00)
    [Response frame: 12723]
  Data (32 bytes)
      Data: 6162636465666768696a6b6c6d6e6f707172737475767761626364656667768
      [Length: 32]
```

- Paket permintaan *ping* dikirim dari IP sumber 192.168.1.107 menuju IP tujuan 103.17.76.41
- Paket bertipe delapan berarti sebuah permintaan *echo* atau *ping* dan memiliki kode nol
- *Checksum* berisi benar dan paket berisi sebuah *identifier* satu, dan *sequence number* satu juga, serta bersamaan dengan data sebanyak 32 *byte*.

2. Analisa DNS

```
Frame 2395: 80 bytes on wire (640 bits), 80 bytes captured (640 bits) on interface \Device\NPF_{7EBB4D
    Section number: 1
  Interface id: 0 (\Device\NPF_{7EBB4D90-6742-41EF-8D14-567171A1C008})
    Encapsulation type: Ethernet (1)
    Arrival Time: Apr  1, 2023 10:22:48.934301000 SE Asia Standard Time
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1680319368.934301000 seconds
    [Time delta from previous captured frame: 0.000184000 seconds]
    [Time delta from previous displayed frame: 0.000184000 seconds]
    [Time since reference or first frame: 110.465155000 seconds]
    Frame Number: 2395
    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: LiteonTe_9e:69:59 (9c:2f:9d:9e:69:59), Dst: Tp-LinkT_3d:06:36 (68:ff:7b:3d:06:36)
  Destination: Tp-LinkT_3d:06:36 (68:ff:7b:3d:06:36)
  Source: LiteonTe_9e:69:59 (9c:2f:9d:9e:69:59)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.107, 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: 0xa838 (43064)
  000. .... = Flags: 0x0
    ...0 0000 0000 0000 = Fragment Offset: 0
    Time to Live: 128
    Protocol: UDP (17)
    Header Checksum: 0x0eb6 [validation disabled]
    [Header checksum status: Unverified]
    Source Address: 192.168.1.107
    Destination Address: 192.168.1.1
User Datagram Protocol, Src Port: 64448, Dst Port: 53
    Source Port: 64448
    Destination Port: 53
    Length: 46
    Checksum: 0xbf90 [unverified]
    [Checksum Status: Unverified]
    [Stream index: 58]
  [Timestamps]
    UDP payload (38 bytes)
Domain Name System (query)
    Transaction ID: 0xebc3
  Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
  Queries
    diktis.kemenag.go.id: type HTTPS, class IN
```

- Paket dikirim dari IP sumber 192.168.1.107 menuju IP tujuan 192.168.1.1
- Panjang total adalah 66.
- Sumber *port* yang digunakan adalah 64448.
- *Checksum* berstatus belum diverifikasi.
- UDP *Payload* berukuran 32 *byte*.
- Transaksi IDE adalah 0xebc3.
- *Queries* berisi nama dari domain tujuan yaitu diktis.kemenag.go.id