

No. Time Source Destination Protocol Length Info  
119 11.522410 192.168.1.49 192.168.1.1 DNS 84 Standard query 0x0001 PTR 1.1.168.192.in-addr.arpa

Frame 119: 84 bytes on wire (672 bits), 84 bytes captured (672 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}, id 0

Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}  
Interface description: Wi-Fi  
Encapsulation type: Ethernet (1)  
Arrival Time: May 2, 2021 14:02:37.303073000 Финляндия (лето)  
[Time shift for this packet: 0.000000000 seconds]  
Epoch Time: 1619953357.303073000 seconds  
[Time delta from previous captured frame: 0.126847000 seconds]  
[Time delta from previous displayed frame: 0.000000000 seconds]  
[Time since reference or first frame: 11.522410000 seconds]  
Frame Number: 119  
Frame Length: 84 bytes (672 bits)  
Capture Length: 84 bytes (672 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\_88:6b:3e (c8:b2:9b:88:6b:3e), Dst: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
Destination: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
.... .0. .... .... .... = LG bit: Globally unique address (factory default)  
.... ..0. .... .... .... = IG bit: Individual address (unicast)  
Source: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
.... .0. .... .... .... = LG bit: Globally unique address (factory default)  
.... ..0. .... .... .... = IG bit: Individual address (unicast)

Type: IPv4 (0x0800)  
Internet Protocol Version 4, Src: 192.168.1.49, Dst: 192.168.1.1  
0100 .... = Version: 4  
.... 0101 = Header Length: 20 bytes (5)  
Differentiated Services Field: 0x00 (DSGP: CS0, ECN: Not-ECT)  
0000 00.. = Differentiated Services Codepoint: Default (0)  
.... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)  
Total Length: 70  
Identification: 0xc76a (51050)  
Flags: 0x00  
0.... .... = Reserved bit: Not set  
.0... .... = Don't fragment: Not set  
.0. .... = More fragments: Not set  
Fragment Offset: 0  
Time to Live: 128  
Protocol: UDP (17)  
Header Checksum: 0x0000 [validation disabled]  
[Header checksum status: Unverified]  
Source Address: 192.168.1.49  
Destination Address: 192.168.1.1  
User Datagram Protocol, Src Port: 57495, Dst Port: 53  
Source Port: 57495  
Destination Port: 53  
Length: 50  
Checksum: 0x83c6 [unverified]  
[Checksum Status: Unverified]  
[Stream index: 0]  
[Timestamps]  
[Time since first frame: 0.000000000 seconds]  
[Time since previous frame: 0.000000000 seconds]  
UDP payload (42 bytes)  
Domain Name System (query)  
Transaction ID: 0x0001  
Flags: 0x0100 Standard query  
0.... .... .... = Response: Message is a query  
.000 0.... .... .... = Opcode: Standard query (0)  
.... .0. .... .... = Truncated: Message is not truncated  
.... ..1 .... .... = Recursion desired: Do query recursively  
.... .... .0. .... = Z: reserved (0)  
.... .... ..0 .... = Non-authenticated data: Unacceptable  
Questions: 1  
Answer RRs: 0  
Authority RRs: 0  
Additional RRs: 0  
Queries  
1.1.168.192.in-addr.arpa: type PTR, class IN  
Name: 1.1.168.192.in-addr.arpa  
[Name Length: 24]  
[Label Count: 6]  
Type: PTR (domain name PoinTeR) (12)  
Class: IN (0x0001)  
[Response In: 120]

No. Time Source Destination Protocol Length Info  
120 11.524341 192.168.1.49 192.168.1.1 DNS 113 Standard query response 0x0001 PTR 1.1.168.192.in-addr.arpa PTR router.asus.com

Frame 120: 113 bytes on wire (904 bits), 113 bytes captured (904 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}, id 0

Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}  
Interface description: Wi-Fi  
Encapsulation type: Ethernet (1)  
Arrival Time: May 2, 2021 14:02:37.305004000 Финляндия (лето)  
[Time shift for this packet: 0.000000000 seconds]  
Epoch Time: 1619953357.305004000 seconds  
[Time delta from previous captured frame: 0.001931000 seconds]  
[Time delta from previous displayed frame: 0.001931000 seconds]  
[Time since reference or first frame: 11.524341000 seconds]  
Frame Number: 120  
Frame Length: 113 bytes (904 bits)  
Capture Length: 113 bytes (904 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: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80), Dst: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Destination: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
.... .0. .... .... .... = LG bit: Globally unique address (factory default)  
.... .0. .... .... .... = IG bit: Individual address (unicast)  
Source: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
.... .0. .... .... .... = LG bit: Globally unique address (factory default)  
.... .0. .... .... .... = IG bit: Individual address (unicast)  
Type: IPv4 (0x0800)  
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.49  
0100 .... = Version: 4  
.... 0101 = Header Length: 20 bytes (5)  
Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)  
0000 00.. = Differentiated Services Codepoint: Default (0)  
.... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)  
Total Length: 99  
Identification: 0x0000 (0)  
Flags: 0x40, Don't fragment  
0.... .... = Reserved bit: Not set  
.1.. .... = Don't fragment: Set  
.0. .... = More fragments: Not set  
Fragment Offset: 0  
Time to Live: 64  
Protocol: UDP (17)  
Header Checksum: 0xb707 [validation disabled]  
[Header checksum status: Unverified]  
Source Address: 192.168.1.1  
Destination Address: 192.168.1.49  
User Datagram Protocol, Src Port: 53, Dst Port: 57495  
Source Port: 53  
Destination Port: 57495  
Length: 79  
Checksum: 0x23cf [unverified]  
[Checksum Status: Unverified]  
[Stream index: 0]  
[Timestamps]  
[Time since first frame: 0.001931000 seconds]  
[Time since previous frame: 0.001931000 seconds]  
UDP payload (71 bytes)  
Domain Name System (response)  
Transaction ID: 0x0001  
Flags: 0x8580 Standard query response, No error  
1.... .... .... = Response: Message is a response  
.000 0... .... .... = Opcode: Standard query (0)  
.... .1. .... .... = Authoritative: Server is an authority for domain  
.... .0. .... .... = Truncated: Message is not truncated  
.... ..1 .... .... = Recursion desired: Do query recursively  
.... .... 1.... .... = Recursion available: Server can do recursive queries  
.... .... .0.... .... = Z: reserved (0)  
.... .... ..0.... .... = Answer authenticated: Answer/authority portion was not authenticated by the server  
.... .... ..0.... .... = Non-authenticated data: Unacceptable  
.... .... .... 0000 = Reply code: No error (0)  
Questions: 1  
Answer RRs: 1  
Authority RRs: 0  
Additional RRs: 0  
Queries  
1.1.168.192.in-addr.arpa: type PTR, class IN  
Name: 1.1.168.192.in-addr.arpa  
[Name Length: 24]  
[Label Count: 6]  
Type: PTR (domain name PoinTeR) (12)  
Class: IN (0x0001)  
Answers  
1.1.168.192.in-addr.arpa: type PTR, class IN, router.asus.com  
Name: 1.1.168.192.in-addr.arpa

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Type: PTR (domain name PoinTeR) (12)  
Class: IN (0x0001)  
Time to live: 0 (0 seconds)  
Data length: 17  
Domain Name: router.asus.com  
[Request In: 119]  
[Time: 0.001931000 seconds]

No.	Time	Source	Destination	Protocol	Length	Info
121	11.526742	192.168.1.49	192.168.1.1	DNS	71	Standard query 0x0002 A www.mit.edu

Frame 121: 71 bytes on wire (568 bits), 71 bytes captured (568 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}, id 0  
Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}  
Interface description: Wi-Fi  
Encapsulation type: Ethernet (1)  
Arrival Time: May 2, 2021 14:02:37.307405000 Финляндия (лето)  
[Time shift for this packet: 0.000000000 seconds]  
Epoch Time: 1619953357.307405000 seconds  
[Time delta from previous captured frame: 0.002401000 seconds]  
[Time delta from previous displayed frame: 0.002401000 seconds]  
[Time since reference or first frame: 11.526742000 seconds]  
Frame Number: 121  
Frame Length: 71 bytes (568 bits)  
Capture Length: 71 bytes (568 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\_88:6b:3e (c8:b2:9b:88:6b:3e), Dst: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
Destination: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
. .... .0. .... .... .... = LG bit: Globally unique address (factory default)  
. .... .0. .... .... .... = IG bit: Individual address (unicast)

Source: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
. .... .0. .... .... .... = LG bit: Globally unique address (factory default)  
. .... .0. .... .... .... = IG bit: Individual address (unicast)

Type: IPv4 (0x0800)  
Internet Protocol Version 4, Src: 192.168.1.49, Dst: 192.168.1.1  
0100 .... = Version: 4  
. .... 0101 = Header Length: 20 bytes (5)  
Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)  
0000 00.. = Differentiated Services Codepoint: Default (0)  
. .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)  
Total Length: 57  
Identification: 0xc76b (51051)  
Flags: 0x00  
0.... .... = Reserved bit: Not set  
.0... .... = Don't fragment: Not set  
.0. .... .... = More fragments: Not set  
Fragment Offset: 0  
Time to Live: 128  
Protocol: UDP (17)  
Header Checksum: 0x0000 [validation disabled]  
[Header checksum status: Unverified]  
Source Address: 192.168.1.49  
Destination Address: 192.168.1.1  
User Datagram Protocol, Src Port: 57496, Dst Port: 53  
Source Port: 57496  
Destination Port: 53  
Length: 37  
Checksum: 0x83b9 [unverified]  
[Checksum Status: Unverified]  
[Stream index: 1]  
[Timestamps]  
[Time since first frame: 0.000000000 seconds]  
[Time since previous frame: 0.000000000 seconds]  
UDP payload (29 bytes)  
Domain Name System (query)  
Transaction ID: 0x0002  
Flags: 0x0100 Standard query  
0.... .... .... .... = Response: Message is a query  
.000 0... .... .... = Opcode: Standard query (0)  
. .... .0. .... .... = Truncated: Message is not truncated  
. .... ..1 .... .... = Recursion desired: Do query recursively  
. .... .... .0.. .... = Z: reserved (0)  
. .... .... ..0 .... = Non-authenticated data: Unacceptable  
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)

[Response In: 122]

No.	Time	Source	Destination	Protocol	Length	Info
122	11.558990	192.168.1.1	192.168.1.49	DNS	160	Standard query response 0x0002 A www.mit.edu CNAME www.mit.edu.edgekey.net CNAME e9566.dscb.akamaiedge.net A 23.37.44.254

Frame 122: 160 bytes on wire (1280 bits), 160 bytes captured (1280 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}, id 0

Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
 Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}  
 Interface description: Wi-Fi  
 Encapsulation type: Ethernet (1)  
 Arrival Time: May 2, 2021 14:02:37.339653000 Финляндия (лето)  
 [Time shift for this packet: 0.000000000 seconds]  
 Epoch Time: 1619953357.339653000 seconds  
 [Time delta from previous captured frame: 0.032248000 seconds]  
 [Time delta from previous displayed frame: 0.032248000 seconds]  
 [Time since reference or first frame: 11.558990000 seconds]  
 Frame Number: 122  
 Frame Length: 160 bytes (1280 bits)  
 Capture Length: 160 bytes (1280 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: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80), Dst: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
 Destination: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
 Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
 .... ..0. .... .... .... = LG bit: Globally unique address (factory default)  
 .... ..0. .... .... .... = IG bit: Individual address (unicast)  
 Source: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
 Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
 .... ..0. .... .... .... = LG bit: Globally unique address (factory default)  
 .... ..0. .... .... .... = IG bit: Individual address (unicast)  
 Type: IPv4 (0x0800)

Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.49  
 0100 .... = Version: 4  
 .... 0101 = Header Length: 20 bytes (5)  
 Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)  
 0000 00.. = Differentiated Services Codepoint: Default (0)  
 .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)  
 Total Length: 146  
 Identification: 0x0000 (0)  
 Flags: 0x40, Don't fragment  
 0.... .... = Reserved bit: Not set  
 .1... .... = Don't fragment: Set  
 ..0. .... = More fragments: Not set  
 Fragment Offset: 0  
 Time to Live: 64  
 Protocol: UDP (17)  
 Header Checksum: 0xb6d8 [validation disabled]  
 [Header checksum status: Unverified]  
 Source Address: 192.168.1.1  
 Destination Address: 192.168.1.49

User Datagram Protocol, Src Port: 53, Dst Port: 57496  
 Source Port: 53  
 Destination Port: 57496  
 Length: 126  
 Checksum: 0x7a43 [unverified]  
 [Checksum Status: Unverified]  
 [Stream index: 1]  
 [Timestamps]  
 [Time since first frame: 0.032248000 seconds]  
 [Time since previous frame: 0.032248000 seconds]  
 UDP payload (118 bytes)

Domain Name System (response)  
 Transaction ID: 0x0002  
 Flags: 0x8100 Standard query response, No error  
 1.... .... .... = Response: Message is a response  
 .000 0.... .... = Opcode: Standard query (0)  
 .... .0.... .... = Authoritative: Server is not an authority for domain  
 .... ..0.... .... = Truncated: Message is not truncated  
 .... ...1.... .... = Recursion desired: Do query recursively  
 .... .... 1.... .... = Recursion available: Server can do recursive queries  
 .... .... .0.... .... = Z: reserved (0)  
 .... .... ..0.... .... = Answer authenticated: Answer/authority portion was not authenticated by the server  
 .... .... ...0.... .... = Non-authenticated data: Unacceptable  
 .... .... .... 0000 = Reply code: No error (0)

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: 3600 (1 hour)  
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: 1890 (31 minutes, 30 seconds)  
Data length: 24  
CNAME: e9566.dscb.akamaiedge.net  
e9566.dscb.akamaiedge.net: type A, class IN, addr 23.37.44.254  
Name: e9566.dscb.akamaiedge.net  
Type: A (Host Address) (1)  
Class: IN (0x0001)  
Time to live: 1890 (31 minutes, 30 seconds)  
Data length: 4  
Address: 23.37.44.254

[Request In: 121]

[Time: 0.032248000 seconds]

No.	Time	Source	Destination	Protocol	Length	Info
123	11.564168	192.168.1.49	192.168.1.1	DNS	71	Standard query 0x0003 AAAA www.mit.edu

Frame 123: 71 bytes on wire (568 bits), 71 bytes captured (568 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2},  
id 0

Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}

Interface description: Wi-Fi

Encapsulation type: Ethernet (1)

Arrival Time: May 2, 2021 14:02:37.344831000 Финляндия (лето)

[Time shift for this packet: 0.000000000 seconds]

Epoch Time: 1619953357.344831000 seconds

[Time delta from previous captured frame: 0.005178000 seconds]

[Time delta from previous displayed frame: 0.005178000 seconds]

[Time since reference or first frame: 11.564168000 seconds]

Frame Number: 123

Frame Length: 71 bytes (568 bits)

Capture Length: 71 bytes (568 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\_88:6b:3e (c8:b2:9b:88:6b:3e), Dst: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)

Destination: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)

Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)

.... .0. .... .... .... = LG bit: Globally unique address (factory default)

.... .0. .... .... .... = IG bit: Individual address (unicast)

Source: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)

Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)

.... .0. .... .... .... = LG bit: Globally unique address (factory default)

.... .0. .... .... .... = IG bit: Individual address (unicast)

Type: IPv4 (0x0800)

Internet Protocol Version 4, Src: 192.168.1.49, Dst: 192.168.1.1

0100 .... = Version: 4

.... 0101 = Header Length: 20 bytes (5)

Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

0000 00.. = Differentiated Services Codepoint: Default (0)

.... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)

Total Length: 57

Identification: 0xc76c (51052)

Flags: 0x00

0.... .... = Reserved bit: Not set

.0... .... = Don't fragment: Not set

..0. .... = More fragments: Not set

Fragment Offset: 0

Time to Live: 128

Protocol: UDP (17)

Header Checksum: 0x0000 [validation disabled]

[Header checksum status: Unverified]

Source Address: 192.168.1.49

Destination Address: 192.168.1.1

User Datagram Protocol, Src Port: 57497, Dst Port: 53

Source Port: 57497

Destination Port: 53

Length: 37

Checksum: 0x83b9 [unverified]

[Checksum Status: Unverified]

[Stream index: 2]

[Timestamps]

[Time since first frame: 0.000000000 seconds]

[Time since previous frame: 0.000000000 seconds]  
[Time since first frame: 0.033304000 seconds]  
[Time since previous frame: 0.033304000 seconds]

UDP payload (29 bytes)

Domain Name System (query)  
Transaction ID: 0x0003  
Flags: 0x0100 Standard query  
0.... .... .... .... = Response: Message is a query  
.000 0... .... .... = Opcode: Standard query (0)  
.... .0. .... .... = Truncated: Message is not truncated  
.... ...1 .... .... = Recursion desired: Do query recursively  
.... .... .0.. .... = Z: reserved (0)  
.... .... ..0 .... = Non-authenticated data: Unacceptable

Questions: 1  
Answer RRs: 0  
Authority RRs: 0  
Additional RRs: 0  
Queries  
www.mit.edu: type AAAA, class IN  
Name: www.mit.edu  
[Name Length: 11]  
[Label Count: 3]  
Type: AAAA (IPv6 Address) (28)  
Class: IN (0x0001)  
[Response In: 124]

No.	Time	Source	Destination	Protocol	Length	Info
124	11.597472	192.168.1.1	192.168.1.49	DNS	200	Standard query response 0x0003 AAAA www.mit.edu

CNAME www.mit.edu.edgekey.net CNAME e9566.dsrb.akamaiedge.net AAAA 2a02:26f0:d200:3a3::255e AAAA 2a02:26f0:d200:3ab::255e  
Frame 124: 200 bytes on wire (1600 bits), 200 bytes captured (1600 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}, id 0  
Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}  
Interface description: Wi-Fi  
Encapsulation type: Ethernet (1)  
Arrival Time: May 2, 2021 14:02:37.378135000 Финляндия (лето)  
[Time shift for this packet: 0.000000000 seconds]  
Epoch Time: 1619953357.378135000 seconds  
[Time delta from previous captured frame: 0.033304000 seconds]  
[Time delta from previous displayed frame: 0.033304000 seconds]  
[Time since reference or first frame: 11.597472000 seconds]  
Frame Number: 124  
Frame Length: 200 bytes (1600 bits)  
Capture Length: 200 bytes (1600 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: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80), Dst: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Destination: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
.... .0. .... .... .... = LG bit: Globally unique address (factory default)  
.... .0. .... .... .... = IG bit: Individual address (unicast)  
Source: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
.... .0. .... .... .... = LG bit: Globally unique address (factory default)  
.... .0. .... .... .... = IG bit: Individual address (unicast)  
Type: IPv4 (0x0800)  
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.49  
0100 .... = Version: 4  
.... 0101 = Header Length: 20 bytes (5)  
Differentiated Services Field: 0x00 (DSGP: CS0, ECN: Not-ECT)  
0000 00.. = Differentiated Services Codepoint: Default (0)  
.... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)  
Total Length: 186  
Identification: 0x0000 (0)  
Flags: 0x40, Don't fragment  
0.... .... = Reserved bit: Not set  
.1.. .... = Don't fragment: Set  
.0. .... = More fragments: Not set  
Fragment Offset: 0  
Time to Live: 64  
Protocol: UDP (17)  
Header Checksum: 0xb6b0 [validation disabled]  
[Header checksum status: Unverified]  
Source Address: 192.168.1.1  
Destination Address: 192.168.1.49  
User Datagram Protocol, Src Port: 53, Dst Port: 57497  
Source Port: 53  
Destination Port: 57497  
Length: 166  
Checksum: 0x35c2 [unverified]  
[Checksum Status: Unverified]  
[Stream index: 2]  
[Timestamps]  
[Time since first frame: 0.033304000 seconds]  
[Time since previous frame: 0.033304000 seconds]  
UDP payload (158 bytes)  
Domain Name System (response)

Transaction ID: 0x0003

Flags: 0x8180 Standard query response, No error

..... = Response: Message is a response  
 .000 0... = Opcode: Standard query (0)  
 .... 0.. = Authoritative: Server is not an authority for domain  
 .... 0. = Truncated: Message is not truncated  
 .... 1.. = Recursion desired: Do query recursively  
 .... 1.. = Recursion available: Server can do recursive queries  
 .... 0.. = Z: reserved (0)  
 .... 0.. = Answer authenticated: Answer/authority portion was not authenticated by the server  
 .... 0.. = Non-authenticated data: Unacceptable  
 .... 0000 = Reply code: No error (0)

Questions: 1

Answer RRs: 4

Authority RRs: 0

Additional RRs: 0

Queries

www.mit.edu: type AAAA, class IN  
 Name: www.mit.edu  
 [Name Length: 11]  
 [Label Count: 3]  
 Type: AAAA (IPv6 Address) (28)  
 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: 3600 (1 hour)  
 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: 1890 (31 minutes, 30 seconds)  
 Data length: 24  
 CNAME: e9566.dscb.akamaiedge.net  
 e9566.dscb.akamaiedge.net: type AAAA, class IN, addr 2a02:26f0:d200:3a3::255e  
 Name: e9566.dscb.akamaiedge.net  
 Type: AAAA (IPv6 Address) (28)  
 Class: IN (0x0001)  
 Time to live: 3600 (1 hour)  
 Data length: 16  
 AAAA Address: 2a02:26f0:d200:3a3::255e  
 e9566.dscb.akamaiedge.net: type AAAA, class IN, addr 2a02:26f0:d200:3ab::255e  
 Name: e9566.dscb.akamaiedge.net  
 Type: AAAA (IPv6 Address) (28)  
 Class: IN (0x0001)  
 Time to live: 3600 (1 hour)  
 Data length: 16  
 AAAA Address: 2a02:26f0:d200:3ab::255e

[Request In: 123]

[Time: 0.033304000 seconds]

No.	Time	Source	Destination	Protocol	Length	Info
135	13.432552	192.168.1.49	192.168.1.1	DNS	77	Standard query 0xd837 A a-ring.msedge.net

Frame 135: 77 bytes on wire (616 bits), 77 bytes captured (616 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}, id 0

Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
 Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}  
 Interface description: Wi-Fi

Encapsulation type: Ethernet (1)

Arrival Time: May 2, 2021 14:02:39.213215000 Финляндия (лето)

[Time shift for this packet: 0.000000000 seconds]

Epoch Time: 1619953359.213215000 seconds

[Time delta from previous captured frame: 0.141708000 seconds]

[Time delta from previous displayed frame: 1.835080000 seconds]

[Time since reference or first frame: 13.432552000 seconds]

Frame Number: 135

Frame Length: 77 bytes (616 bits)

Capture Length: 77 bytes (616 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\_88:6b:3e (c8:b2:9b:88:6b:3e), Dst: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)

Destination: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)

Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)

.... 0. .... .... .... = LG bit: Globally unique address (factory default)

.... 0. .... .... .... = IG bit: Individual address (unicast)

Source: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)

Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)

.... 0. .... .... .... = LG bit: Globally unique address (factory default)

.... 0. .... .... .... = IG bit: Individual address (unicast)

Type: IPv4 (0x0800)

Internet Protocol Version 4, Src: 192.168.1.49, Dst: 192.168.1.1

0100 .... = Version: 4  
.... 0101 = Header Length: 20 bytes (5)  
Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)  
0000 00.. = Differentiated Services Codepoint: Default (0)  
.0000 ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)  
Total Length: 63  
Identification: 0xc76d (51053)  
Flags: 0x00  
0.... .... = Reserved bit: Not set  
.0... .... = Don't fragment: Not set  
.0. .... = More fragments: Not set  
Fragment Offset: 0  
Time to Live: 128  
Protocol: UDP (17)  
Header Checksum: 0x0000 [validation disabled]  
[Header checksum status: Unverified]  
Source Address: 192.168.1.49  
Destination Address: 192.168.1.1  
User Datagram Protocol, Src Port: 61632, Dst Port: 53  
Source Port: 61632  
Destination Port: 53  
Length: 43  
Checksum: 0x83bf [unverified]  
[Checksum Status: Unverified]  
[Stream index: 3]  
[Timestamps]  
[Time since first frame: 0.000000000 seconds]  
[Time since previous frame: 0.000000000 seconds]  
UDP payload (35 bytes)  
Domain Name System (query)  
Transaction ID: 0xd837  
Flags: 0x0100 Standard query  
0.... .... .... = Response: Message is a query  
.000 0.... .... .... = Opcode: Standard query (0)  
. .... ..0. .... .... = Truncated: Message is not truncated  
. .... .1 .... .... = Recursion desired: Do query recursively  
. .... .0.. .... = Z: reserved (0)  
. .... ..0 .... = Non-authenticated data: Unacceptable  
Questions: 1  
Answer RRs: 0  
Authority RRs: 0  
Additional RRs: 0  
Queries  
a-ring.msedge.net: type A, class IN  
Name: a-ring.msedge.net  
[Name Length: 17]  
[Label Count: 3]  
Type: A (Host Address) (1)  
Class: IN (0x0001)  
[Response In: 136]  
No. Time Source Destination Protocol Length Info  
136 13.435201 192.168.1.1 192.168.1.49 DNS 144 Standard query response 0xd837 A a-ring.msedge.net  
CNAME a-ring.a-9999.a-msedge.net CNAME a-9999.a-msedge.net A 204.79.197.254  
Frame 136: 144 bytes on wire (1152 bits), 144 bytes captured (1152 bits) on interface \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}, id 0  
Interface id: 0 (\Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2})  
Interface name: \Device\NPF\_{E8F1393B-10D6-4491-A631-26A44CA59FE2}  
Interface description: Wi-Fi  
Encapsulation type: Ethernet (1)  
Arrival Time: May 2, 2021 14:02:39.215864000 Финляндия (лето)  
[Time shift for this packet: 0.000000000 seconds]  
Epoch Time: 1619953359.215864000 seconds  
[Time delta from previous captured frame: 0.002649000 seconds]  
[Time delta from previous displayed frame: 0.002649000 seconds]  
[Time since reference or first frame: 13.435201000 seconds]  
Frame Number: 136  
Frame Length: 144 bytes (1152 bits)  
Capture Length: 144 bytes (1152 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: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80), Dst: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Destination: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
Address: IntelCor\_88:6b:3e (c8:b2:9b:88:6b:3e)  
. .... ..0. .... .... .... = LG bit: Globally unique address (factory default)  
. .... ..0. .... .... .... = IG bit: Individual address (unicast)  
Source: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
Address: ASUSTekC\_e5:39:80 (18:31:bf:e5:39:80)  
. .... ..0. .... .... .... = LG bit: Globally unique address (factory default)  
. .... ..0. .... .... .... = IG bit: Individual address (unicast)  
Type: IPv4 (0x0800)  
Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.49  
0100 .... = Version: 4  
.... 0101 = Header Length: 20 bytes (5)  
Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

D:\KFT\2 семестр\комп.сети и protocols\Wireshark\Lab5\lab5\_dns\_1of\_7-10.pcapng 280 total packets, 8 shown

0000 00.. = Differentiated Services Codepoint: Default (0)  
. .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)

Total Length: 130  
Identification: 0x0000 (0)  
Flags: 0x40, Don't fragment  
0.... .... = Reserved bit: Not set  
.1... .... = Don't fragment: Set  
.0. .... = More fragments: Not set

Fragment Offset: 0  
Time to Live: 64  
Protocol: UDP (17)  
Header Checksum: 0xb6e8 [validation disabled]  
[Header checksum status: Unverified]  
Source Address: 192.168.1.1  
Destination Address: 192.168.1.49

User Datagram Protocol, Src Port: 53, Dst Port: 61632  
Source Port: 53  
Destination Port: 61632  
Length: 110  
Checksum: 0x8748 [unverified]  
[Checksum Status: Unverified]  
[Stream index: 3]  
[Timestamps]  
    [Time since first frame: 0.002649000 seconds]  
    [Time since previous frame: 0.002649000 seconds]

UDP payload (102 bytes)  
Domain Name System (response)  
Transaction ID: 0xd837  
Flags: 0x8180 Standard query response, No error  
1.... .... .... = Response: Message is a response  
.000 0.... .... .... = Opcode: Standard query (0)  
. .... .0.... .... .... = Authoritative: Server is not an authority for domain  
. .... .0. .... .... = Truncated: Message is not truncated  
. .... .1.... .... = Recursion desired: Do query recursively  
. .... .1... .... = Recursion available: Server can do recursive queries  
. .... .0... .... = Z: reserved (0)  
. .... .0. .... = Answer authenticated: Answer/authority portion was not authenticated by the server  
. .... .0.... .... = Non-authenticated data: Unacceptable  
. .... .... 0000 = Reply code: No error (0)

Questions: 1  
Answer RRs: 3  
Authority RRs: 0  
Additional RRs: 0

Queries  
    a-ring.msedge.net: type A, class IN  
        Name: a-ring.msedge.net  
        [Name Length: 17]  
        [Label Count: 3]  
        Type: A (Host Address) (1)  
        Class: IN (0x0001)

Answers  
    a-ring.msedge.net: type CNAME, class IN, cname a-ring.a-9999.a-msedge.net  
        Name: a-ring.msedge.net  
        Type: CNAME (Canonical NAME for an alias) (5)  
        Class: IN (0x0001)  
        Time to live: 432 (7 minutes, 12 seconds)  
        Data length: 25  
        CNAME: a-ring.a-9999.a-msedge.net  
    a-ring.a-9999.a-msedge.net: type CNAME, class IN, cname a-9999.a-msedge.net  
        Name: a-ring.a-9999.a-msedge.net  
        Type: CNAME (Canonical NAME for an alias) (5)  
        Class: IN (0x0001)  
        Time to live: 3164 (52 minutes, 44 seconds)  
        Data length: 2  
        CNAME: a-9999.a-msedge.net  
    a-9999.a-msedge.net: type A, class IN, addr 204.79.197.254  
        Name: a-9999.a-msedge.net  
        Type: A (Host Address) (1)  
        Class: IN (0x0001)  
        Time to live: 432 (7 minutes, 12 seconds)  
        Data length: 4  
        Address: 204.79.197.254

[Request In: 135]  
[Time: 0.002649000 seconds]