

0050 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0060 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0070 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0080 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0090 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00b0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00d0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00f0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0100 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0110 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0120 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0130 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0140 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0150 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0160 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0170 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0180 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0190 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
01a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
01b0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
01c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

No. Time Source Destination Protocol Length Info
217292 2023-07-07 15:18:04.681538567 10.164.183.253 10.164.183.252 TFTP 60 Acknowledgement, Block: 108554

Frame 217292: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface eth0, id 0

Section number: 1

Interface id: 0 (eth0)

Interface name: eth0

Encapsulation type: Ethernet (1)

Arrival Time: Jul 7, 2023 15:18:04.681538567 Eastern Daylight Time

[Time shift for this packet: 0.000000000 seconds]

Epoch Time: 1688757484.681538567 seconds

[Time delta from previous captured frame: 0.000115352 seconds]

[Time delta from previous displayed frame: 0.000115352 seconds]

[Time since reference or first frame: 25.381249032 seconds]

Frame Number: 217292

Frame Length: 60 bytes (480 bits)

Capture Length: 60 bytes (480 bits)

[Frame is marked: False]

[Frame is ignored: False]

[Protocols in frame: eth:ethertype:ip:udp:tftp]

[Coloring Rule Name: UDP]

[Coloring Rule String: udp]

Ethernet II, Src: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3), Dst: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)

Destination: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)

Address: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)

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

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

Source: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)

Address: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)

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

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

Type: IPv4 (0x0800)

Padding: 0000000000000000000000000000

Internet Protocol Version 4, Src: 10.164.183.253, Dst: 10.164.183.252

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)

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

Total Length: 32

Identification: 0xa80a (43018)

010. = Flags: 0x2, Don't fragment

0... = Reserved bit: Not set

.1.. = Don't fragment: Set

..0. = More fragments: Not set

...0 0000 0000 0000 = Fragment Offset: 0

Time to Live: 255

Protocol: UDP (17)

Header Checksum: 0x4e80 [validation disabled]

[Header checksum status: Unverified]

Source Address: 10.164.183.253

Destination Address: 10.164.183.252

User Datagram Protocol, Src Port: 69, Dst Port: 34514

Source Port: 69
Destination Port: 34514
Length: 12
Checksum: 0x0000 [zero-value ignored]
[Checksum Status: Not present]
[Stream index: 3]
[Timestamps]
[Time since first frame: 22.960639482 seconds]
[Time since previous frame: 0.000115352 seconds]
UDP payload (4 bytes)

Trivial File Transfer Protocol
Opcode: Acknowledgement (4)
[Destination File: firmware]
[Write Request in frame 158]
Block: 43018
[Full Block Number: 108554]

0000 dc a6 32 e2 80 8d 6c cd d6 d3 9e a3 08 00 45 00 ..2...1.....E.
0010 00 20 a8 0a 40 00 ff 11 4e 80 0a a4 b7 fd 0a a4 ...@...N.....
0020 b7 fc 00 45 86 d2 00 0c 00 00 00 04 a8 0a 00 00 ...E.....
0030 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

No. Time Source Destination Protocol Length Info
217293 2023-07-07 15:18:04.681694455 Raspberr_e2:80:8d Netgear_d3:9e:a3 NMRP 20 Keep-alive Request
Frame 217293: 20 bytes on wire (160 bits), 20 bytes captured (160 bits) on interface eth0, id 0

Section number: 1
Interface id: 0 (eth0)
Interface name: eth0
Encapsulation type: Ethernet (1)
Arrival Time: Jul 7, 2023 15:18:04.681694455 Eastern Daylight Time
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1688757484.681694455 seconds
[Time delta from previous captured frame: 0.000155888 seconds]
[Time delta from previous displayed frame: 0.000155888 seconds]
[Time since reference or first frame: 25.381404920 seconds]

Frame Number: 217293
Frame Length: 20 bytes (160 bits)
Capture Length: 20 bytes (160 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:nmrp]

Ethernet II, Src: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d), Dst: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Destination: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Address: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
....0. = LG bit: Globally unique address (factory default)
....0. = IG bit: Individual address (unicast)
Source: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
Address: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
....0. = LG bit: Globally unique address (factory default)
....0. = IG bit: Individual address (unicast)

Type: Unknown (0x0912)

NMRP
Code: 0x06 - Keep-alive Request
ID: 0x00
Length: 6
Reserved: 0x0000

0000 6c cd d6 d3 9e a3 dc a6 32 e2 80 8d 09 12 00 00 1.....2.....
0010 06 00 00 06

No. Time Source Destination Protocol Length Info
217294 2023-07-07 15:18:04.681754011 Raspberr_e2:80:8d Netgear_d3:9e:a3 NMRP 20 Keep-alive Request
Frame 217294: 20 bytes on wire (160 bits), 20 bytes captured (160 bits) on interface eth0, id 0

Section number: 1
Interface id: 0 (eth0)
Interface name: eth0
Encapsulation type: Ethernet (1)
Arrival Time: Jul 7, 2023 15:18:04.681754011 Eastern Daylight Time
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1688757484.681754011 seconds
[Time delta from previous captured frame: 0.00059556 seconds]
[Time delta from previous displayed frame: 0.00059556 seconds]
[Time since reference or first frame: 25.381464476 seconds]

Frame Number: 217294
Frame Length: 20 bytes (160 bits)
Capture Length: 20 bytes (160 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:nmrp]

Ethernet II, Src: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d), Dst: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)

Destination: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Address: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)
Source: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
Address: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)
Type: Unknown (0x0912)

NMRP

Code: 0x06 - Keep-alive Request
ID: 0x00
Length: 6
Reserved: 0x0000

0000 6c cd d6 d3 9e a3 dc a6 32 e2 80 8d 09 12 00 00 1.....2.....
0010 06 00 00 06

Table with 7 columns: No., Time, Source, Destination, Protocol, Length, Info. Row 1: 217295, 2023-07-07 15:18:04.681793474, Raspberr_e2:80:8d, Netgear_d3:9e:a3, NMRP, 20, Keep-alive Request

Frame 217295: 20 bytes on wire (160 bits), 20 bytes captured (160 bits) on interface eth0, id 0

Section number: 1
Interface id: 0 (eth0)
Interface name: eth0
Encapsulation type: Ethernet (1)
Arrival Time: Jul 7, 2023 15:18:04.681793474 Eastern Daylight Time
[Time shift for this packet: 0.00000000 seconds]
Epoch Time: 1688757484.681793474 seconds
[Time delta from previous captured frame: 0.00039463 seconds]
[Time delta from previous displayed frame: 0.00039463 seconds]
[Time since reference or first frame: 25.381503939 seconds]
Frame Number: 217295
Frame Length: 20 bytes (160 bits)
Capture Length: 20 bytes (160 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:nmrp]

Ethernet II, Src: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d), Dst: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)

Destination: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Address: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)
Source: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
Address: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)
Type: Unknown (0x0912)

NMRP

Code: 0x06 - Keep-alive Request
ID: 0x00
Length: 6
Reserved: 0x0000

0000 6c cd d6 d3 9e a3 dc a6 32 e2 80 8d 09 12 00 00 1.....2.....
0010 06 00 00 06

Table with 7 columns: No., Time, Source, Destination, Protocol, Length, Info. Row 1: 217296, 2023-07-07 15:18:04.681831993, Raspberr_e2:80:8d, Netgear_d3:9e:a3, NMRP, 20, Keep-alive Request

Frame 217296: 20 bytes on wire (160 bits), 20 bytes captured (160 bits) on interface eth0, id 0

Section number: 1
Interface id: 0 (eth0)
Interface name: eth0
Encapsulation type: Ethernet (1)
Arrival Time: Jul 7, 2023 15:18:04.681831993 Eastern Daylight Time
[Time shift for this packet: 0.00000000 seconds]
Epoch Time: 1688757484.681831993 seconds
[Time delta from previous captured frame: 0.00038519 seconds]
[Time delta from previous displayed frame: 0.00038519 seconds]
[Time since reference or first frame: 25.381542458 seconds]
Frame Number: 217296
Frame Length: 20 bytes (160 bits)
Capture Length: 20 bytes (160 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:nmrp]

Ethernet II, Src: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d), Dst: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)

Destination: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Address: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)

Source: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
Address: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)
Type: Unknown (0x0912)

NMRP

Code: 0x06 - Keep-alive Request
ID: 0x00
Length: 6
Reserved: 0x0000

0000 6c cd d6 d3 9e a3 dc a6 32 e2 80 8d 09 12 00 00 1.....2.....
0010 06 00 00 06

Table with 7 columns: No., Time, Source, Destination, Protocol, Length, Info. Row 1: 217297 2023-07-07 15:18:04.681889733 Raspberr_e2:80:8d Netgear_d3:9e:a3 NMRP 36 Configuration

Frame 217297: 36 bytes on wire (288 bits), 36 bytes captured (288 bits) on interface eth0, id 0
Section number: 1
Interface id: 0 (eth0)
Interface name: eth0
Encapsulation type: Ethernet (1)
Arrival Time: Jul 7, 2023 15:18:04.681889733 Eastern Daylight Time
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1688757484.681889733 seconds
[Time delta from previous captured frame: 0.000057740 seconds]
[Time delta from previous displayed frame: 0.000057740 seconds]
[Time since reference or first frame: 25.381600198 seconds]
Frame Number: 217297
Frame Length: 36 bytes (288 bits)
Capture Length: 36 bytes (288 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:nmrp]

Ethernet II, Src: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d), Dst: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Destination: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Address: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)
Source: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
Address: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0 = IG bit: Individual address (unicast)
Type: Unknown (0x0912)

NMRP

Code: 0x03 - Configuration
ID: 0x00
Length: 22
Reserved: 0x0000
Option: 0x0002 - IP Configuration
Length: 12
Address: 10.164.183.253
Netmask: 255.255.255.0
Option: 0x0101 - Update Firmware

0000 6c cd d6 d3 9e a3 dc a6 32 e2 80 8d 09 12 00 00 1.....2.....
0010 03 00 00 16 00 02 00 0c 0a a4 b7 fd ff ff ff 00
0020 01 01 00 04

Table with 7 columns: No., Time, Source, Destination, Protocol, Length, Info. Row 1: 217298 2023-07-07 15:18:04.681968548 Raspberr_e2:80:8d Netgear_d3:9e:a3 NMRP 36 Configuration

Frame 217298: 36 bytes on wire (288 bits), 36 bytes captured (288 bits) on interface eth0, id 0
Section number: 1
Interface id: 0 (eth0)
Interface name: eth0
Encapsulation type: Ethernet (1)
Arrival Time: Jul 7, 2023 15:18:04.681968548 Eastern Daylight Time
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1688757484.681968548 seconds
[Time delta from previous captured frame: 0.000078815 seconds]
[Time delta from previous displayed frame: 0.000078815 seconds]
[Time since reference or first frame: 25.381679013 seconds]
Frame Number: 217298
Frame Length: 36 bytes (288 bits)
Capture Length: 36 bytes (288 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:nmrp]

Ethernet II, Src: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d), Dst: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Destination: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)
Address: Netgear_d3:9e:a3 (6c:cd:d6:d3:9e:a3)

.... ..0. = LG bit: Globally unique address (factory default)
.... ...0 = IG bit: Individual address (unicast)
Source: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
Address: Raspberr_e2:80:8d (dc:a6:32:e2:80:8d)
.... ..0. = LG bit: Globally unique address (factory default)
.... ...0 = IG bit: Individual address (unicast)
Type: Unknown (0x0912)

NMRP

Code: 0x03 - Configuration
ID: 0x00
Length: 22
Reserved: 0x0000
Option: 0x0002 - IP Configuration
Length: 12
Address: 10.164.183.253
Netmask: 255.255.255.0
Option: 0x0101 - Update Firmware

0000	6c cd d6 d3 9e a3 dc a6 32 e2 80 8d 09 12 00 00	1.....2.....
0010	03 00 00 16 00 02 00 0c 0a a4 b7 fd ff ff ff 00
0020	01 01 00 04