

Networks

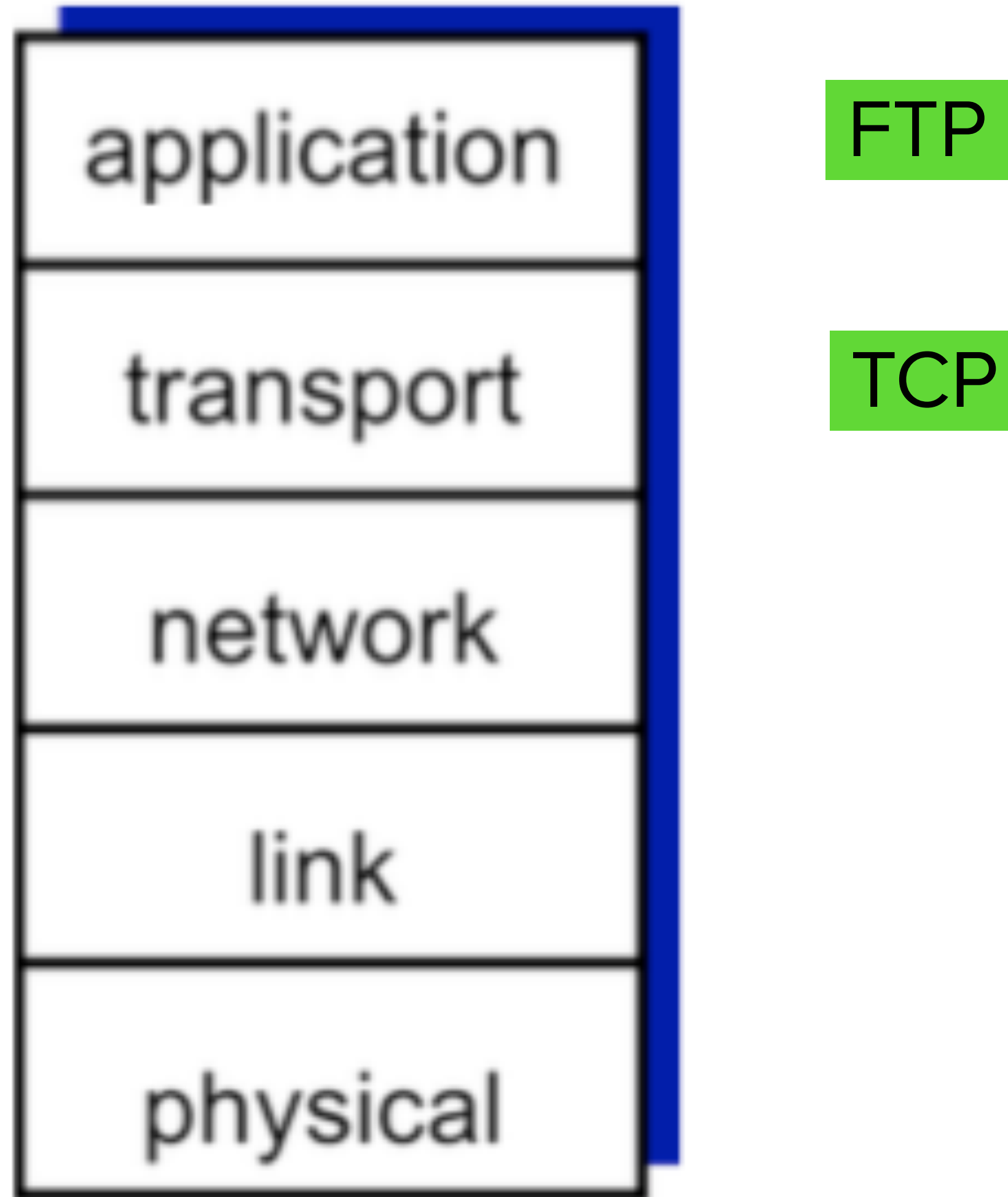
Lab3 - FTP protocol

Lab goal:

1 - Explore FTP protocol

2 - Connect and upload/download files from ftp server

TCP/IP stack



FTP commands

| FTP Command | Description |
|-------------|--|
| USER | user name |
| PASS | password |
| TYPE | TYPE A - text mode, TYPE I - binary mode |
| LIST | list of files in the working directory |
| CWD | change working directory |
| RETR | retrieve file from the server |
| STOR | store the data at the server |
| DELE | delete file at the server |
| MKD | make directory |
| PWD | print working directory |
| RMD | remove directory |
| QUIT | close the connection |

FTP status codes

| Code | Description |
|------|--|
| 125 | Data connection open. Transfer starting |
| 150 | Opening ASCII mode data connection |
| 220 | Service ready for new user. |
| 221 | Service closing control connection. |
| 226 | Transfer complete |
| 229 | Entering Extended Passive Mode (port). |
| 230 | User logged in. |
| 250 | Requested file action okay, completed. |
| 331 | User name okay, need password. |

FTP - File Transfer Protocol

FTP uses 2 connection types:

1) Control connection

2) Data connection:

2a) active mode

2b) passive mode

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

| | | | |
|---------|---|-----------------|---------------------|
| | FTP request/response | Connection type | tnFTP commands |
| client: | ftp 188.130.155.130 | control | ftp 188.130.155.130 |
| server: | 220 Welcome to the ftp server | control | |
| client: | USER username | control | username |
| server: | 331 User username OK. Password required | control | |
| client: | PASS password | control | password |
| server: | 230 OK. Current directory is / | control | |
| client: | TYPE I | control | binary |
| server: | 200 Type is now binary | control | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | FTP request/response | Connection type | tnFTP commands |
|---------|---|-----------------|---------------------|
| client: | ftp 188.130.155.130 | control | ftp 188.130.155.130 |
| server: | 220 Welcome to the ftp server | control | |
| client: | USER username | control | username |
| server: | 331 User username OK. Password required | control | |
| client: | PASS password | control | password |
| server: | 230 OK. Current directory is / | control | |
| client: | TYPE I | control | binary |
| server: | 200 Type is now binary | control | |
| client: | EPSV | control | ls |
| | | | |
| | | | |
| | | | |
| | | | |

| | FTP request/response | Connection type | tnFTP commands |
|---------|--|-----------------|---------------------|
| client: | ftp 188.130.155.130 | control | ftp 188.130.155.130 |
| server: | 220 Welcome to the ftp server | control | |
| client: | USER username | control | username |
| server: | 331 User username OK. Password required | control | |
| client: | PASS password | control | password |
| server: | 230 OK. Current directory is / | control | |
| client: | TYPE I | control | binary |
| server: | 200 Type is now binary | control | |
| client: | EPSV | control | ls |
| server: | 229 Extended passive mode OK (30007) | control | |
| | | | |
| | | | |
| | | | |

| | FTP request/response | Connection type | tnFTP commands |
|---------|--|-----------------|---------------------|
| client: | ftp 188.130.155.130 | control | ftp 188.130.155.130 |
| server: | 220 Welcome to the ftp server | control | |
| client: | USER username | control | username |
| server: | 331 User username OK. Password required | control | |
| client: | PASS password | control | password |
| server: | 230 OK. Current directory is / | control | |
| client: | TYPE I | control | binary |
| server: | 200 Type is now binary | control | |
| client: | EPSV | control | ls |
| server: | 229 Extended passive mode OK (30007) | control | |
| client: | LIST | control | |
| | | | |
| | | | |

| | FTP request/response | Connection type | tnFTP commands |
|---------|--|-----------------|---------------------|
| client: | ftp 188.130.155.130 | control | ftp 188.130.155.130 |
| server: | 220 Welcome to the ftp server | control | |
| client: | USER username | control | username |
| server: | 331 User username OK. Password required | control | |
| client: | PASS password | control | password |
| server: | 230 OK. Current directory is / | control | |
| client: | TYPE I | control | binary |
| server: | 200 Type is now binary | control | |
| client: | EPSV | control | ls |
| server: | 229 Extended passive mode OK (30007) | control | |
| client: | LIST | control | |
| server: | 150 Accepted data connection | control | |
| | | | |

| | | | |
|---------|--|-----------------|---------------------|
| | FTP request/response | Connection type | tnFTP commands |
| client: | ftp 188.130.155.130 | control | ftp 188.130.155.130 |
| server: | 220 Welcome to the ftp server | control | |
| client: | USER username | control | username |
| server: | 331 User username OK. Password required | control | |
| client: | PASS password | control | password |
| server: | 230 OK. Current directory is / | control | |
| client: | TYPE I | control | binary |
| server: | 200 Type is now binary | control | |
| client: | EPSV | control | ls |
| server: | 229 Extended passive mode OK (30007) | control | |
| client: | LIST | control | |
| server: | 150 Accepted data connection | control | |
| | ftp.png | data | |

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

| | | | |
|---------|--|-----------------|----------------|
| | FTP request/response | Connection type | tnFTP commands |
| client: | SIZE ftp.png | control | size ftp.png |
| server | 213 359554 | control | |
| client: | EPSV | control | get ftp.png |
| server: | 229 Extended passive mode OK (30000) | control | |
| client: | RETR ftp.png | control | |
| server: | 150 Accepted data connection | control | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

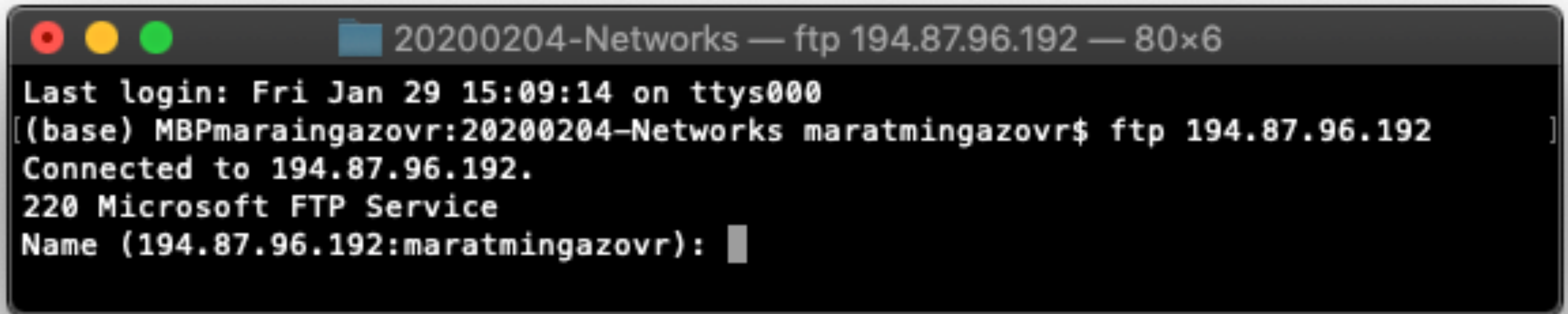
| | FTP request/response | Connection type | tnFTP commands |
|---------|--|-----------------|----------------|
| client: | SIZE ftp.png | control | size ftp.png |
| server | 213 359554 | control | |
| client: | EPSV | control | get ftp.png |
| server: | 229 Extended passive mode OK (30000) | control | |
| client: | RETR ftp.png | control | |
| server: | 150 Accepted data connection | control | |
| | FTP-DATA .. | data | |
| | FTP-DATA ... | data | |
| | | | |
| | | | |
| | | | |

| | FTP request/response | Connection type | tnFTP commands |
|---------|--|-----------------|----------------|
| client: | SIZE ftp.png | control | size ftp.png |
| server | 213 359554 | control | |
| client: | EPSV | control | get ftp.png |
| server: | 229 Extended passive mode OK (30000) | control | |
| client: | RETR ftp.png | control | |
| server: | 150 Accepted data connection | control | |
| | FTP-DATA .. | data | |
| | FTP-DATA ... | data | |
| | 226 File successfully transferred | control | |
| | | | |
| | | | |

| | FTP request/response | Connection type | tnFTP commands |
|---------|--|-----------------|----------------|
| client: | SIZE ftp.png | control | size ftp.png |
| server | 213 359554 | control | |
| client: | EPSV | control | get ftp.png |
| server: | 229 Extended passive mode OK (30000) | control | |
| client: | RETR ftp.png | control | |
| server: | 150 Accepted data connection | control | |
| | FTP-DATA .. | data | |
| | FTP-DATA ... | data | |
| | 226 File successfully transferred | control | |
| client: | QUIT | control | quit |
| | | | |

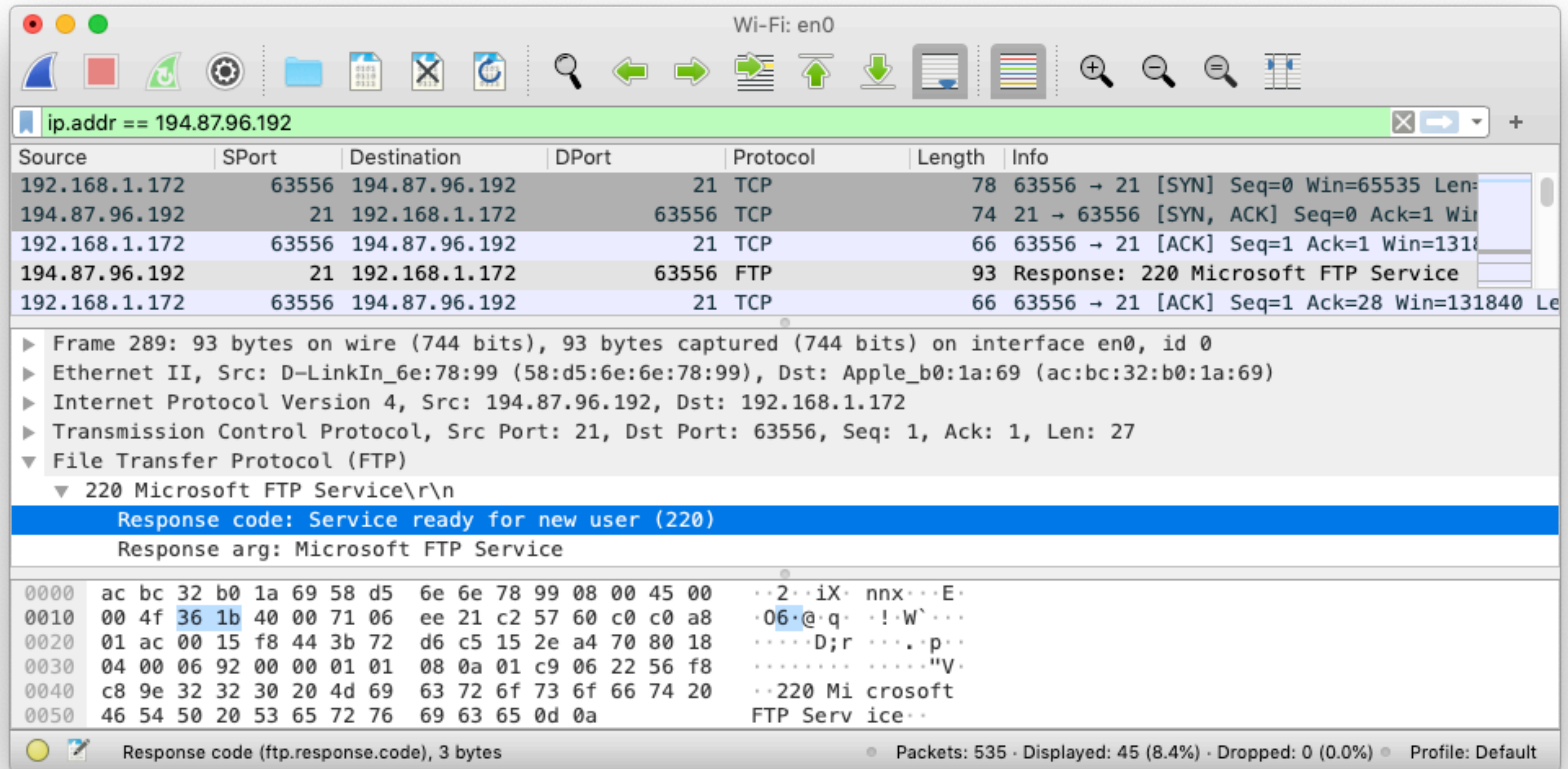
| | | | |
|---------|--|-----------------|----------------|
| | FTP request/response | Connection type | tnFTP commands |
| client: | SIZE ftp.png | control | size ftp.png |
| server | 213 359554 | control | |
| client: | EPSV | control | get ftp.png |
| server: | 229 Extended passive mode OK (30000) | control | |
| client: | RETR ftp.png | control | |
| server: | 150 Accepted data connection | control | |
| | FTP-DATA .. | data | |
| | FTP-DATA ... | data | |
| | 226 File successfully transferred | control | |
| client: | QUIT | control | quit |
| server: | 221 Goodbye. You downloaded 352 kbytes | control | |

Step 1. Connect to ftp server: `ftp 194.87.96.192`

A terminal window with a dark background and light gray text. The title bar at the top shows three colored window control buttons (red, yellow, green) on the left, followed by a folder icon and the text "20200204-Networks — ftp 194.87.96.192 — 80x6". The terminal content shows a successful connection to an FTP server. The first line is "Last login: Fri Jan 29 15:09:14 on ttys000". The second line shows the command prompt "(base) MBPmaraingazovr:20200204-Networks maratmingazovr\$ ftp 194.87.96.192" followed by a closing bracket. The third line is "Connected to 194.87.96.192.". The fourth line is "220 Microsoft FTP Service". The fifth line is "Name (194.87.96.192:maratmingazovr):" followed by a gray rectangular cursor.

```
Last login: Fri Jan 29 15:09:14 on ttys000
(base) MBPmaraingazovr:20200204-Networks maratmingazovr$ ftp 194.87.96.192
Connected to 194.87.96.192.
220 Microsoft FTP Service
Name (194.87.96.192:maratmingazovr):
```


Step 1. Connect to ftp server: ftp 194.87.96.192



Wi-Fi: en0

ip.addr == 194.87.96.192

| Source | SPort | Destination | DPort | Protocol | Length | Info |
|---------------|-------|---------------|-------|----------|--------|---|
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 78 | 63556 → 21 [SYN] Seq=0 Win=65535 Len= |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | TCP | 74 | 21 → 63556 [SYN, ACK] Seq=0 Ack=1 Win= |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=1 Ack=1 Win=1318 |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 93 | Response: 220 Microsoft FTP Service |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=1 Ack=28 Win=131840 Le |

▶ Frame 289: 93 bytes on wire (744 bits), 93 bytes captured (744 bits) on interface en0, id 0

▶ Ethernet II, Src: D-LinkIn_6e:78:99 (58:d5:6e:6e:78:99), Dst: Apple_b0:1a:69 (ac:bc:32:b0:1a:69)

▶ Internet Protocol Version 4, Src: 194.87.96.192, Dst: 192.168.1.172

▶ Transmission Control Protocol, Src Port: 21, Dst Port: 63556, Seq: 1, Ack: 1, Len: 27

▼ File Transfer Protocol (FTP)

▼ 220 Microsoft FTP Service\r\n

Response code: Service ready for new user (220)

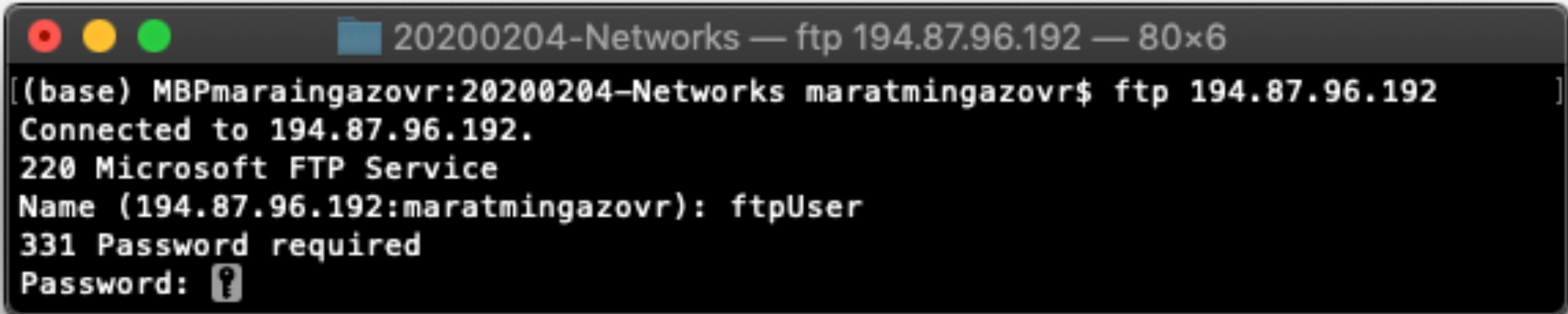
Response arg: Microsoft FTP Service


| Offset | Hex | ASCII |
|--------|---|--------------------|
| 0000 | ac bc 32 b0 1a 69 58 d5 6e 6e 78 99 08 00 45 00 | ..2..iX· nnx...E· |
| 0010 | 00 4f 36 1b 40 00 71 06 ee 21 c2 57 60 c0 c0 a8 | ·06·@·q· ·!·W`...· |
| 0020 | 01 ac 00 15 f8 44 3b 72 d6 c5 15 2e a4 70 80 18 |D;rp· |
| 0030 | 04 00 06 92 00 00 01 01 08 0a 01 c9 06 22 56 f8 |"v· |
| 0040 | c8 9e 32 32 30 20 4d 69 63 72 6f 73 6f 66 74 20 | ·220 Mi crosoft |
| 0050 | 46 54 50 20 53 65 72 76 69 63 65 0d 0a | FTP Serv ice· |

Response code (ftp.response.code), 3 bytes

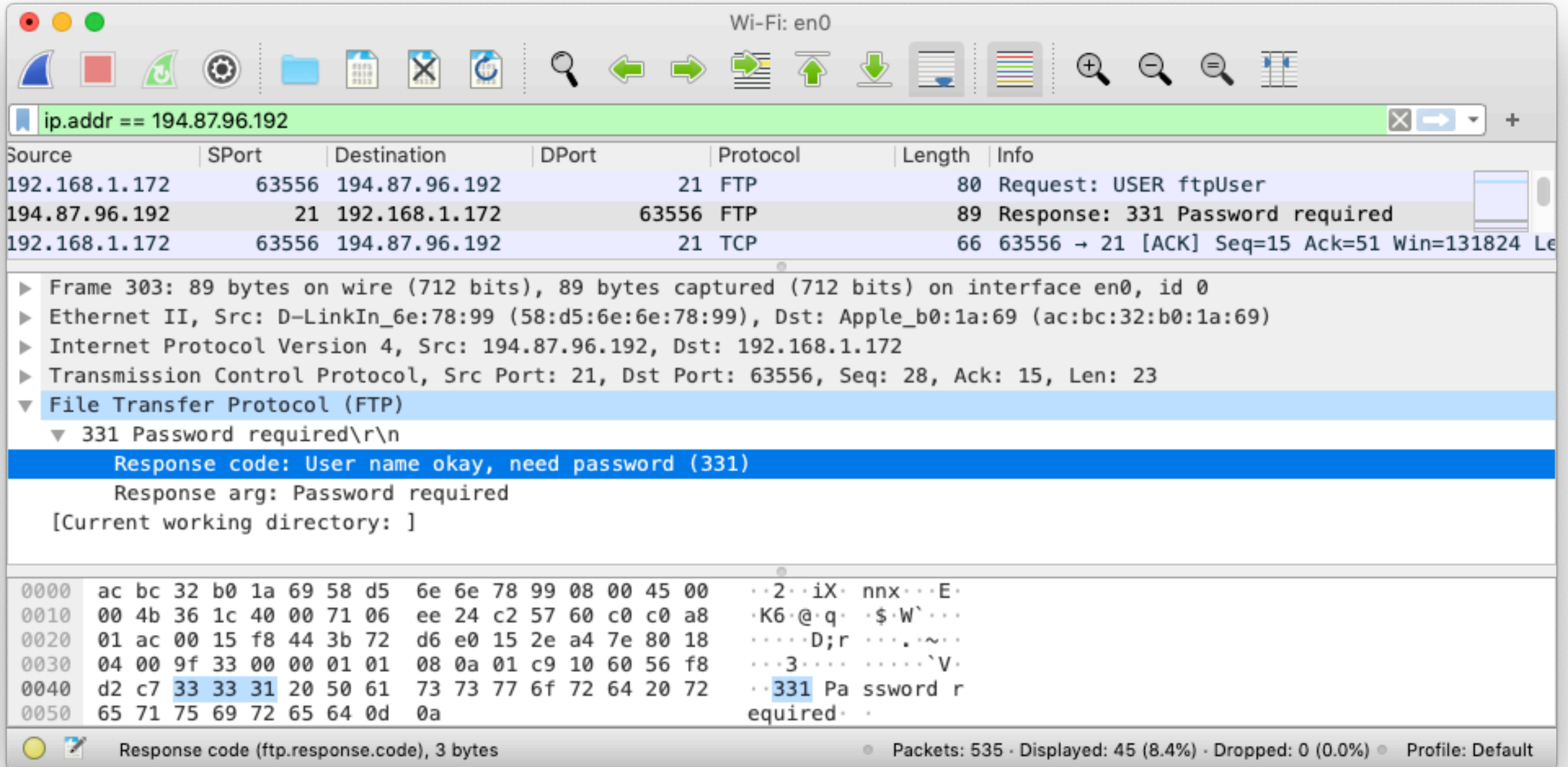
Packets: 535 · Displayed: 45 (8.4%) · Dropped: 0 (0.0%) · Profile: Default

Step 2. Set username: ftpUser

A terminal window with a dark background and light text. The title bar at the top shows three colored window control buttons (red, yellow, green) on the left, followed by a folder icon and the text "20200204-Networks — ftp 194.87.96.192 — 80x6". The terminal content shows a series of commands and responses: a prompt "(base) MBPmaraingazovr:20200204-Networks maratmingazovr\$" followed by the command "ftp 194.87.96.192", then "Connected to 194.87.96.192.", then "220 Microsoft FTP Service", then "Name (194.87.96.192:maratmingazovr): ftpUser", then "331 Password required", and finally "Password:" followed by a small icon of a key.

```
(base) MBPmaraingazovr:20200204-Networks maratmingazovr$ ftp 194.87.96.192
Connected to 194.87.96.192.
220 Microsoft FTP Service
Name (194.87.96.192:maratmingazovr): ftpUser
331 Password required
Password: 
```


Step 2. Set username: ftpUser



Wi-Fi: en0

ip.addr == 194.87.96.192

| Source | SPort | Destination | DPort | Protocol | Length | Info |
|---------------|-------|---------------|-------|----------|--------|--|
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | FTP | 80 | Request: USER ftpUser |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 89 | Response: 331 Password required |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=15 Ack=51 Win=131824 Le |

Frame 303: 89 bytes on wire (712 bits), 89 bytes captured (712 bits) on interface en0, id 0

Ethernet II, Src: D-LinkIn_6e:78:99 (58:d5:6e:6e:78:99), Dst: Apple_b0:1a:69 (ac:bc:32:b0:1a:69)

Internet Protocol Version 4, Src: 194.87.96.192, Dst: 192.168.1.172

Transmission Control Protocol, Src Port: 21, Dst Port: 63556, Seq: 28, Ack: 15, Len: 23

File Transfer Protocol (FTP)

331 Password required\r\n

Response code: User name okay, need password (331)

Response arg: Password required

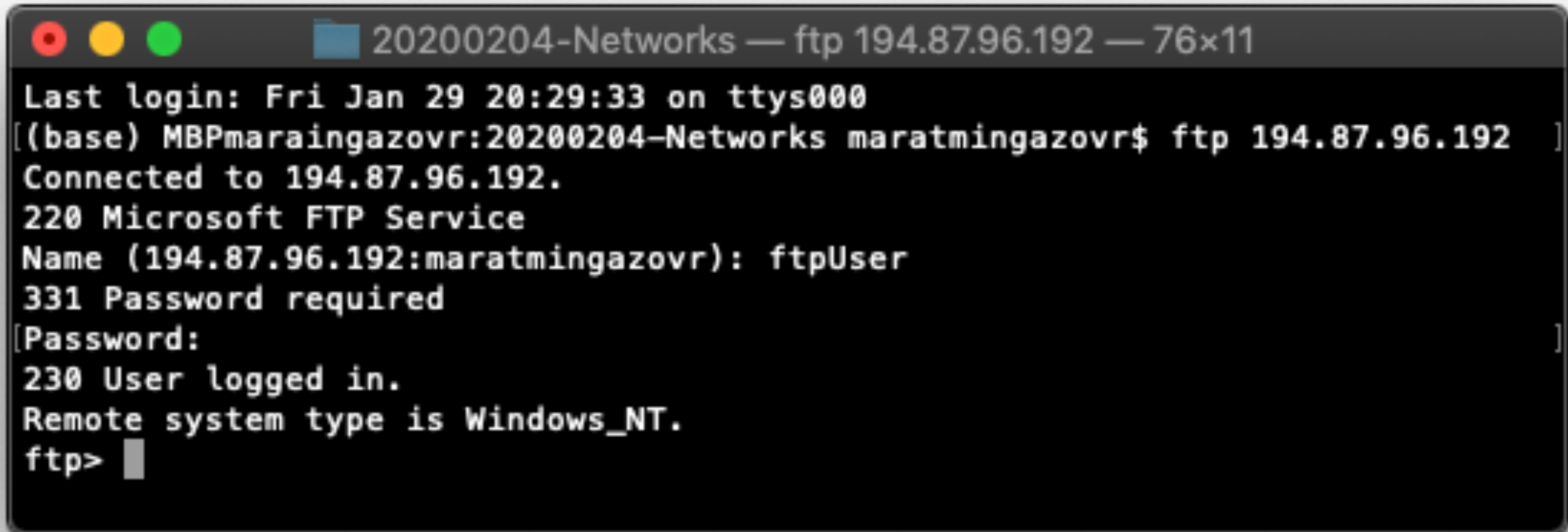
[Current working directory:]

| Offset | Bytes | ASCII | UTF-8 |
|--------|---|--------------------|-------|
| 0000 | ac bc 32 b0 1a 69 58 d5 6e 6e 78 99 08 00 45 00 | ..2..iX. nnx...E. | |
| 0010 | 00 4b 36 1c 40 00 71 06 ee 24 c2 57 60 c0 c0 a8 | ·K6·@·q· ·\$·W`... | |
| 0020 | 01 ac 00 15 f8 44 3b 72 d6 e0 15 2e a4 7e 80 18 |D;r~... | |
| 0030 | 04 00 9f 33 00 00 01 01 08 0a 01 c9 10 60 56 f8 | ...3.....`V. | |
| 0040 | d2 c7 33 33 31 20 50 61 73 73 77 6f 72 64 20 72 | ..331 Pa ssword r | |
| 0050 | 65 71 75 69 72 65 64 0d 0a | equired. | |

Response code (ftp.response.code), 3 bytes

Packets: 535 · Displayed: 45 (8.4%) · Dropped: 0 (0.0%) · Profile: Default

Step 3. Set user pass: ftpPass

A terminal window with a dark background and light gray text. The window title bar shows three colored circles (red, yellow, green) on the left, followed by a folder icon and the text "20200204-Networks — ftp 194.87.96.192 — 76x11". The terminal content shows the output of an FTP command, including login status, connection details, and a password prompt.

```
Last login: Fri Jan 29 20:29:33 on ttys000
[(base) MBPmaraingazovr:20200204-Networks maratmingazovr$ ftp 194.87.96.192 ]
Connected to 194.87.96.192.
220 Microsoft FTP Service
Name (194.87.96.192:maratmingazovr): ftpUser
331 Password required
[Password: ]
230 User logged in.
Remote system type is Windows_NT.
ftp> █
```


Step 3. Set user pass: ftpPass

Wi-Fi: en0

ip.addr == 194.87.96.192

| Source | SPort | Destination | DPort | Protocol | Length | Info |
|---------------|-------|---------------|-------|----------|--------|---|
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | FTP | 80 | Request: PASS ftpPass |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 87 | Response: 230 User logged in. |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=29 Ack=72 Win=13 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | FTP | 72 | Request: SYST |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 82 | Response: 215 Windows_NT |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=35 Ack=88 Win=13 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | FTP | 72 | Request: FEAT |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 100 | Response: 211-Extended features supported |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 84 | Response: LANG EN* |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 119 | Response: AUTH TLS;TLS-C;SSL;TLS-P;S |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 73 | Response: HOST |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 103 | Response: SIZE |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=41 Ack=122 Win=13 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=41 Ack=140 Win=13 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=41 Ack=193 Win=13 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=41 Ack=200 Win=13 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=41 Ack=237 Win=13 |

▶ Frame 355: 87 bytes on wire (696 bits), 87 bytes captured (696 bits) on interface en0, id 0

▶ Ethernet II, Src: D-LinkIn_6e:78:99 (58:d5:6e:6e:78:99), Dst: Apple_b0:1a:69 (ac:bc:32:b0:1a:69)

▶ Internet Protocol Version 4, Src: 194.87.96.192, Dst: 192.168.1.172

▶ Transmission Control Protocol, Src Port: 21, Dst Port: 63556, Seq: 51, Ack: 29, Len: 21

▼ File Transfer Protocol (FTP)

▼ 230 User logged in.\r\n

Response code: User logged in, proceed (230)

0030 04 00 5b 7e 00 00 01 01 08 0a 01 c9 1c 1d 56 f8 ..[~....V.

0040 de 4a 32 33 30 20 55 73 65 72 20 6c 6f 67 67 65 .J230 Us er logge

0050 64 20 69 6e 2e 0d 0a d in...

Response code (ftp.response.code), 3 bytes

Packets: 535 · Displayed: 45 (8.4%) · Dropped: 0 (0.0%) · Profile: Default

Step 4. Get list of files: ls

```
maratmingazovr — ftp 194.87.96.192 — 62x17
Last login: Fri Jan 29 20:39:14 on ttys000
(base) MBPmaraingazovr:~ maratmingazovr$ ftp 194.87.96.192
Connected to 194.87.96.192.
220 Microsoft FTP Service
Name (194.87.96.192:maratmingazovr): ftpUser
331 Password required
Password:
230 User logged in.
Remote system type is Windows_NT.
ftp> ls
229 Entering Extended Passive Mode (|||49848|).
125 Data connection already open; Transfer starting.
01-29-21  01:06PM      <DIR>          hello
01-29-21  01:35PM      <DIR>          MaratMingazov-BS01
226 Transfer complete.
ftp> █
```


Step 4. Get list of files: ls

Wi-Fi: en0

ip.addr == 194.87.96.192

| Source | SPort | Destination | DPort | Protocol | Length | Info |
|---------------|-------|---------------|-------|----------|--------|--|
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | FTP | 71 | Request: PWD |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 97 | Response: 257 "/" is current directory. |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=46 Ack=268 Win=131600 Len=0 TSval=145 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | FTP | 72 | Request: EPSV |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 115 | Response: 229 Entering Extended Passive Mode (49848). |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=52 Ack=317 Win=131552 Len=0 TSval=145 |
| 192.168.1.172 | 63590 | 194.87.96.192 | 49848 | TCP | 78 | 63590 → 49848 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=8 TS |
| 194.87.96.192 | 49848 | 192.168.1.172 | 63590 | TCP | 74 | 49848 → 63590 [SYN, ACK] Seq=0 Ack=1 Win=8192 Len=0 MSS=14 |
| 192.168.1.172 | 63590 | 194.87.96.192 | 49848 | TCP | 66 | 63590 → 49848 [ACK] Seq=1 Ack=1 Win=131872 Len=0 TSval=145 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | FTP | 72 | Request: LIST |
| 194.87.96.192 | 49848 | 192.168.1.172 | 63590 | FTP-DATA | 171 | FTP Data: 105 bytes (EPASV) (LIST) |
| 194.87.96.192 | 49848 | 192.168.1.172 | 63590 | TCP | 66 | 49848 → 63590 [FIN, ACK] Seq=106 Ack=1 Win=262144 Len=0 TS |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 120 | Response: 125 Data connection already open; Transfer start |
| 194.87.96.192 | 21 | 192.168.1.172 | 63556 | FTP | 90 | Response: 226 Transfer complete. |
| 192.168.1.172 | 63590 | 194.87.96.192 | 49848 | TCP | 66 | 63590 → 49848 [ACK] Seq=1 Ack=106 Win=131768 Len=0 TSval=1 |
| 192.168.1.172 | 63590 | 194.87.96.192 | 49848 | TCP | 66 | 63590 → 49848 [ACK] Seq=1 Ack=107 Win=131768 Len=0 TSval=1 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=58 Ack=371 Win=131504 Len=0 TSval=145 |
| 192.168.1.172 | 63556 | 194.87.96.192 | 21 | TCP | 66 | 63556 → 21 [ACK] Seq=58 Ack=395 Win=131480 Len=0 TSval=145 |
| 192.168.1.172 | 63590 | 194.87.96.192 | 49848 | TCP | 66 | 63590 → 49848 [FIN, ACK] Seq=1 Ack=107 Win=131768 Len=0 TS |
| 194.87.96.192 | 49848 | 192.168.1.172 | 63590 | TCP | 66 | 49848 → 63590 [ACK] Seq=107 Ack=2 Win=262144 Len=0 TSval=2 |

▶ Frame 423: 115 bytes on wire (920 bits), 115 bytes captured (920 bits) on interface en0, id 0

▶ Ethernet II, Src: D-LinkIn_6e:78:99 (58:d5:6e:6e:78:99), Dst: Apple_b0:1a:69 (ac:bc:32:b0:1a:69)

▶ Internet Protocol Version 4, Src: 194.87.96.192, Dst: 192.168.1.172

▶ Transmission Control Protocol, Src Port: 21, Dst Port: 63556, Seq: 268, Ack: 52, Len: 49

0040 e7 42 32 32 39 20 45 6e 74 65 72 69 6e 67 20 45 B229 En tering E

0050 78 74 65 6e 64 65 64 20 50 61 73 73 69 76 65 20 xtended Passive

0060 4d 6f 64 65 20 28 7c 7c 7c 34 39 38 34 38 7c 29 Mode (|| |49848|)

Response code (ftp.response.code), 3 bytes

Packets: 535 · Displayed: 45 (8.4%) · Dropped: 0 (0.0%) · Profile: Default

Task. Connect to ftp server.

1 - Connect to ftp server.

ip = 194.87.96.192

login = ftpUser

password = ftpPass

2 - Get the list of files in root folder.

3 - Download all available files from 'hello' folder.

4 - Create your own folder with name 'NameSurname'.

5 - Inside this folder upload any text file + any jpeg file.

6 - Show result to TA.

7 - Delete your folder from ftp server.

Useful links:

1 - <http://www.simotime.com/ftp4cmd1.htm>

2 - https://en.wikipedia.org/wiki/List_of_FTP_server_return_codes

3 - https://en.wikipedia.org/wiki/List_of_FTP_commands