

21-52 802.3 RAW -> IPX

0000 ff ff ff ff ff ff 00 04 76 a4 e4 8c 01 b0 ff ff

DST MAC

SRC MAC

Len

IPX

0010 01 b0 00 01 30 09 80 00 ff ff ff ff ff ff 04 53

0020 30 09 80 00 00 04 76 a4 e4 8c 04 53 00 02 00 00

0030 00 80 00 03 00 04 00 00 00 01 00 02 ...

0xff = 0b11111111 = 0d255

21-58 802.3 LLC -> IPX

0000 ff ff ff ff ff ff 52 54 ab 14 55 f4 00 64 e0 e0

DST MAC

SRC MAC

Len

SAP

0010 03 ff ff 00 60 00 04 30 09 80 00 ff ff ff ff ff

0020 ff 04 52 30 09 80 00 52 54 ab 14 55 f4 40 18 00

0030 02 06 40 44 32 30 35 00 00 00 00 00 ...

27-112 802.3 LLC -> SNAP -> DTP

0000 01 00 0c cc cc cc 9c 57 ad 32 97 18 00 22 aa aa

DMAC

SMAC

Len

SNAP

0010 03 00 00 0c 20 04 01 00 01 00 05 00 00 02 00 05

EthType

0020 81 00 03 00 05 a5 00 04 00 0a 9c 57 ad 32 97 18

0030 00 00 00 00 00 00 00 00 00 00 00 00

20-5 EthII -> IPv4 -> ICMP Echo Reply

```

0000  00 14 38 06 e0 93 00 02 cf ab a2 4c 08 00 4e 00
           DMAC                SMAC                IPv4 IHL=14x4
0010  00 60 c2 2f 00 00 37 01 b8 9c 9e c3 04 8a c0 a8
                        ICMP                SRC IP    DST IP
0020  01 21 44 24 25 81 c3 1c 4b 81 05 02 95 2d c0 6c

0030  94 4b 05 02 95 2c c1 57 03 89 05 02 95 2d 9e c3

0040  01 5d 05 02 95 2d 00 00 3d 5c 03 00 15 00 61 62
                        Type Code
0050  63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70 71 72
0060  73 74 75 76 77 61 62 63 64 65 66 67 68 69

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27-116 EthII -> IPv4 -> TCP -> HTTPS

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0000  30 65 ec 83 32 36 84 b8 02 66 72 34 08 00 45 00
           DMAC                SMAC                IPv4
0010  00 34 48 a8 40 00 36 06 3e dd 97 65 00 85 93 af
                        TPC                S IP        D IP
0020  91 a5 01 bb e4 ae a4 a5 4a c4 a6 d8 d3 d6 80 10
           S port  D port
0030  00 3b 76 62 00 00 01 01 05 0a a6 d8 d3 d5 a6 d8
0040  d3 d6

```

0x01bb = 01*256 + 11*16 + 11

256 + 176 + 11 = 443

7-42 EthII -> IPv4 -> UDP -> RIP

0000 ff ff ff ff ff ff 00 02 cf ab a2 4c 08 00 45 00

DMAC

SMAC

IPv4

0010 00 48 00 f0 00 00 01 11 34 65 c0 a8 01 01 c0 a8

0x11 = 0d17 UDP

S IP

D IP

0020 01 ff 02 08 02 08 00 34 c0 c3 02 01 00 00 00 02

S port D port

0030 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

0040 00 02 00 02 00 00 d4 37 e0 21 00 00 00 00 00 00

0050 00 00 00 00 00 01

$0x0208 = 2*256 + 16*0 + 8*1 = 520$