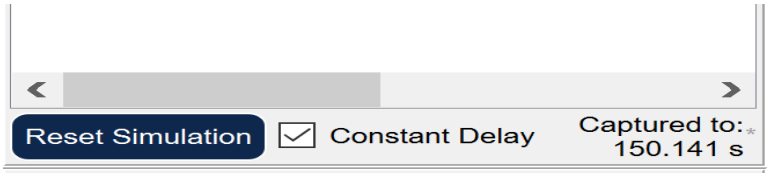
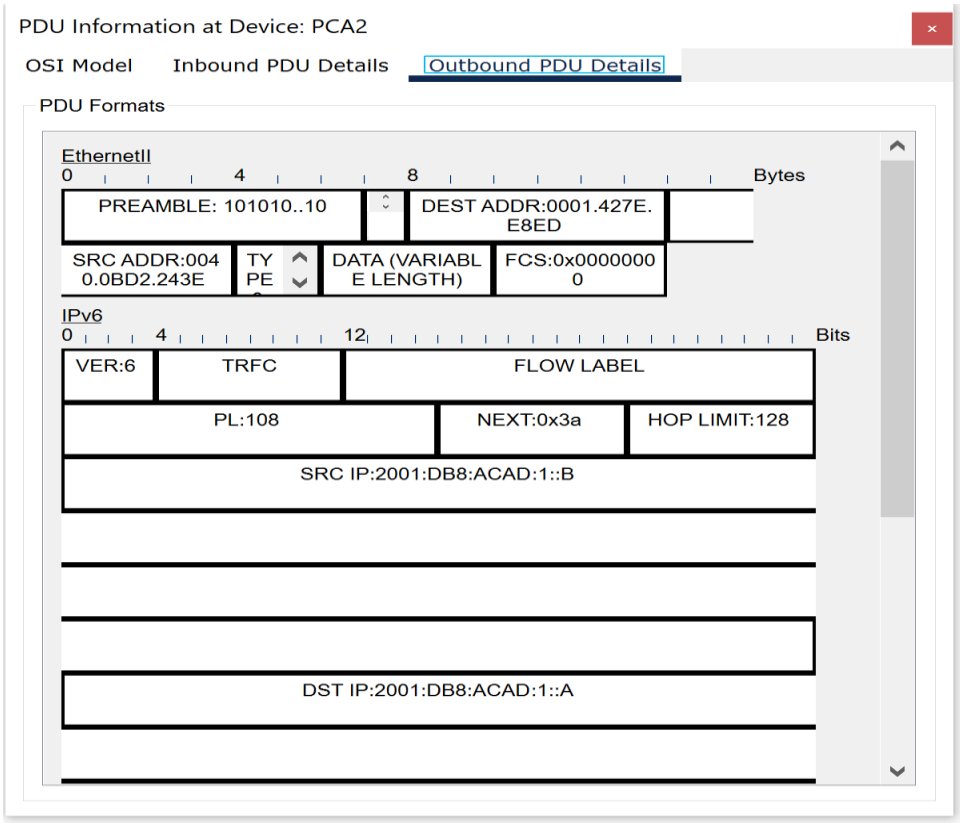
By :Mennat Allah Kamal Kamel

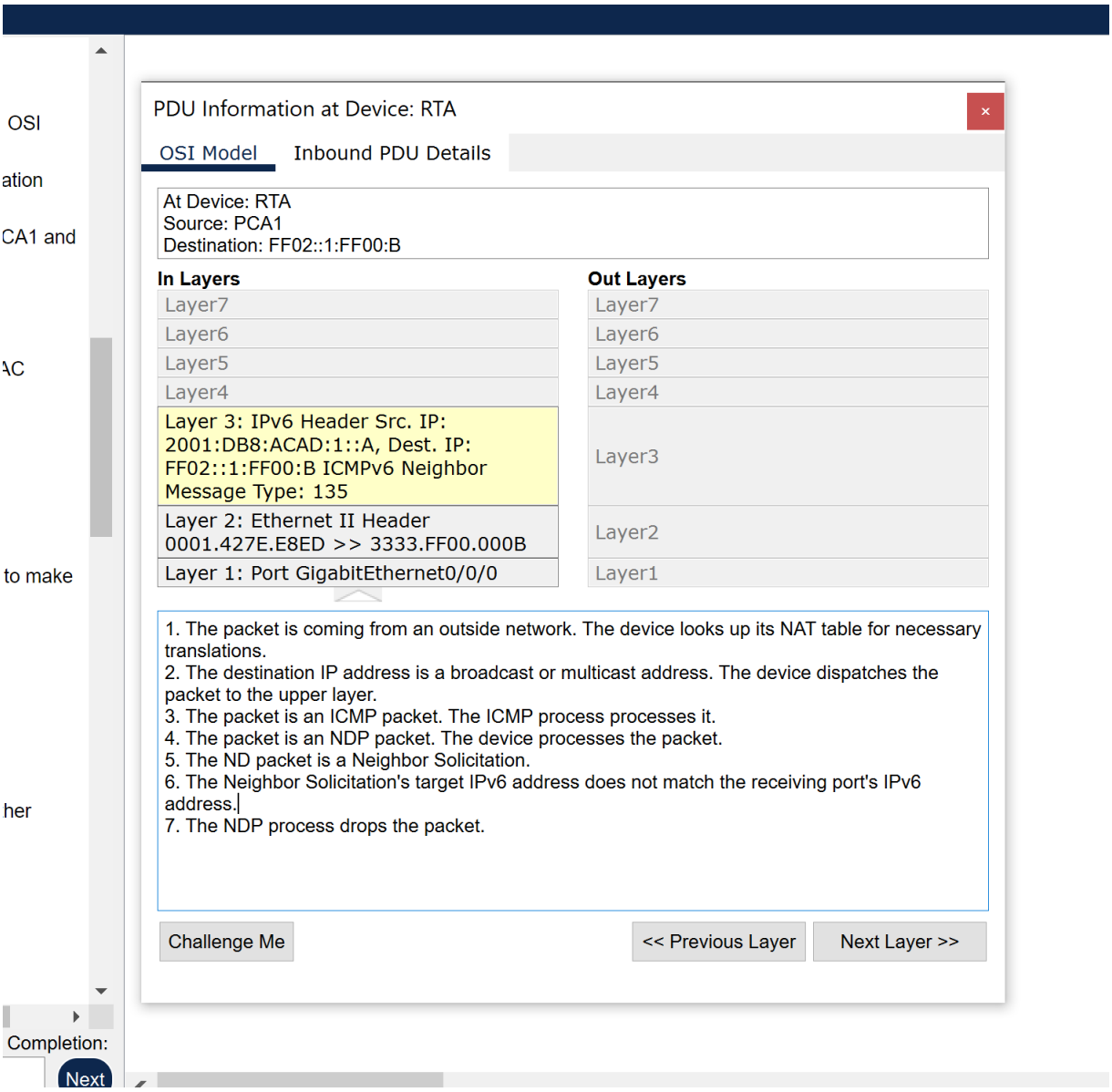
Lab:9.3.4

Part1: IPv6 Neighbor Discovery Local Network





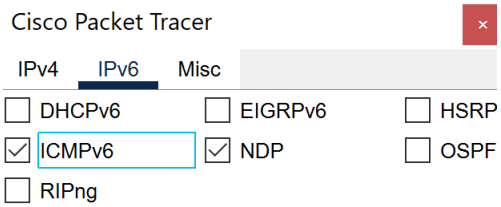

```
C:\>ping -n 1 2001:db8:acad:1::b

Pinging 2001:db8:acad:1::b with 32 bytes of data:

Reply from 2001:DB8:ACAD:1::B: bytes=32 time=8ms TTL=128

Ping statistics for 2001:DB8:ACAD:1::B:
    Packets: Sent = 1, Received = 1, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 8ms, Maximum = 8ms, Average = 8ms
```

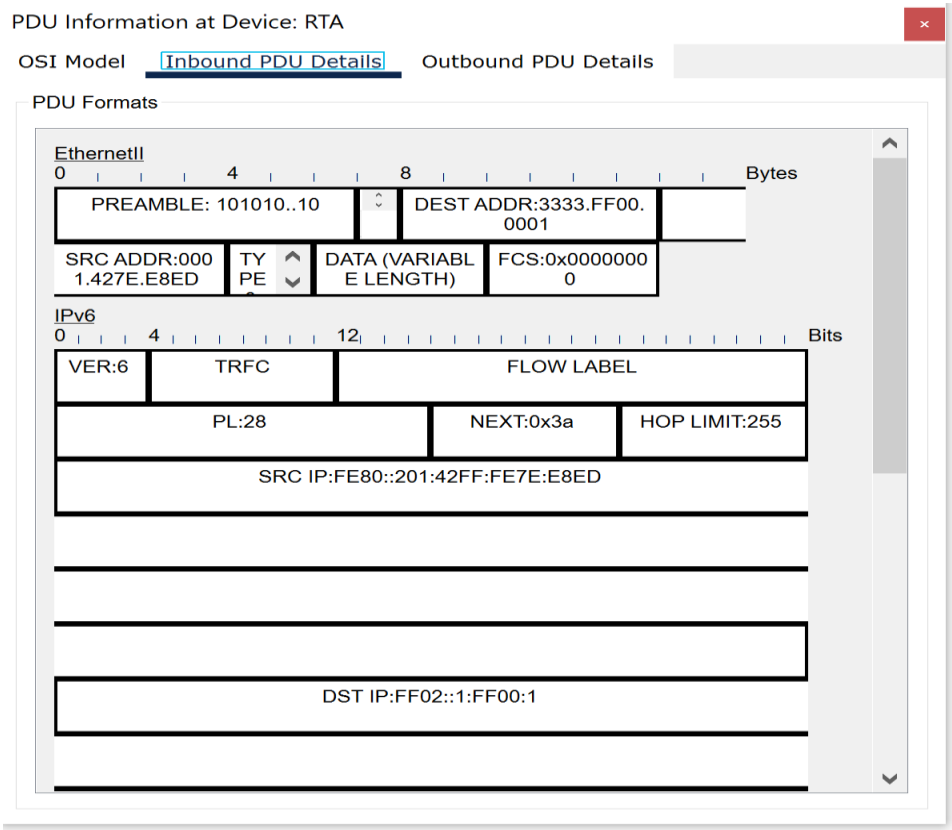



```
RTA>show ipv6 neighbors
RTA>en
RTA#show ipv6 neighbors
RTA#show ipv6 neighbors
IPv6 Address                              Age Link-layer Addr State Interface
2001:DB8:ACAD:1::B                          2 0040.0BD2.243E  REACH Gig0/0/0
RTA#
```

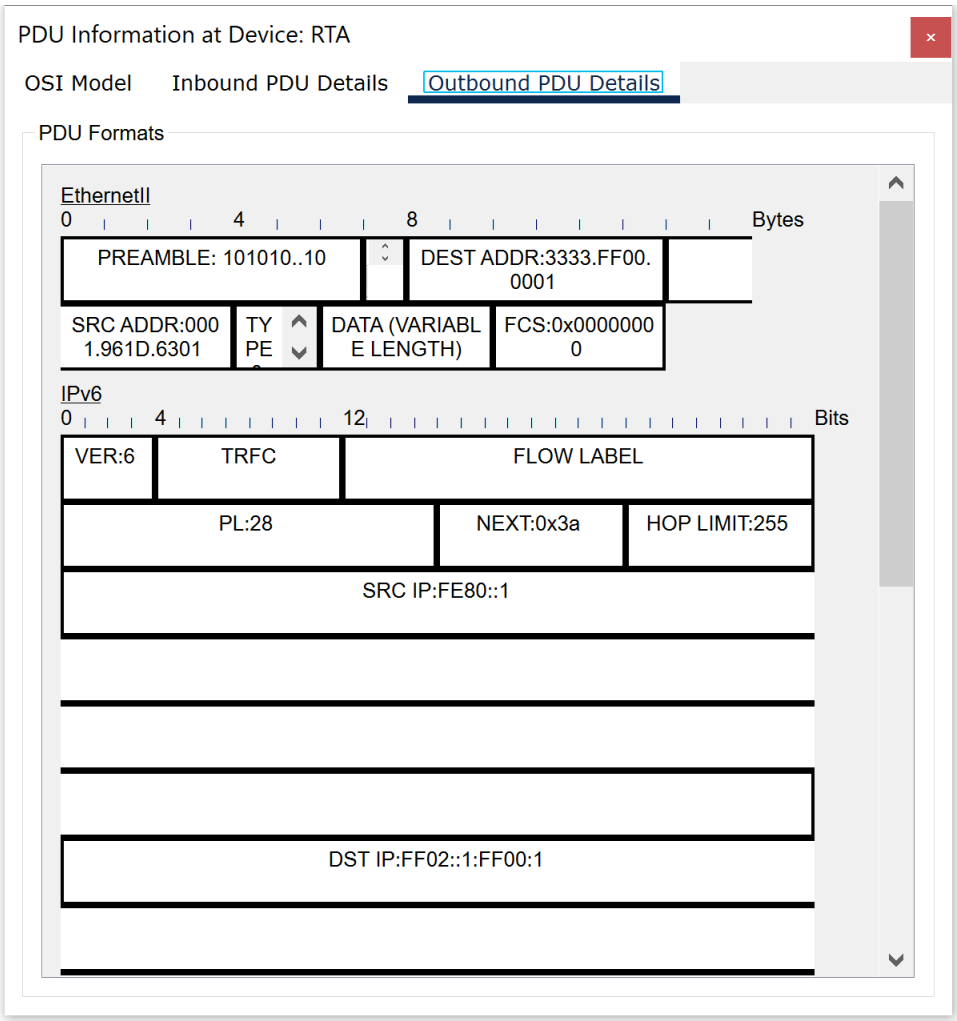
Part2:

1:

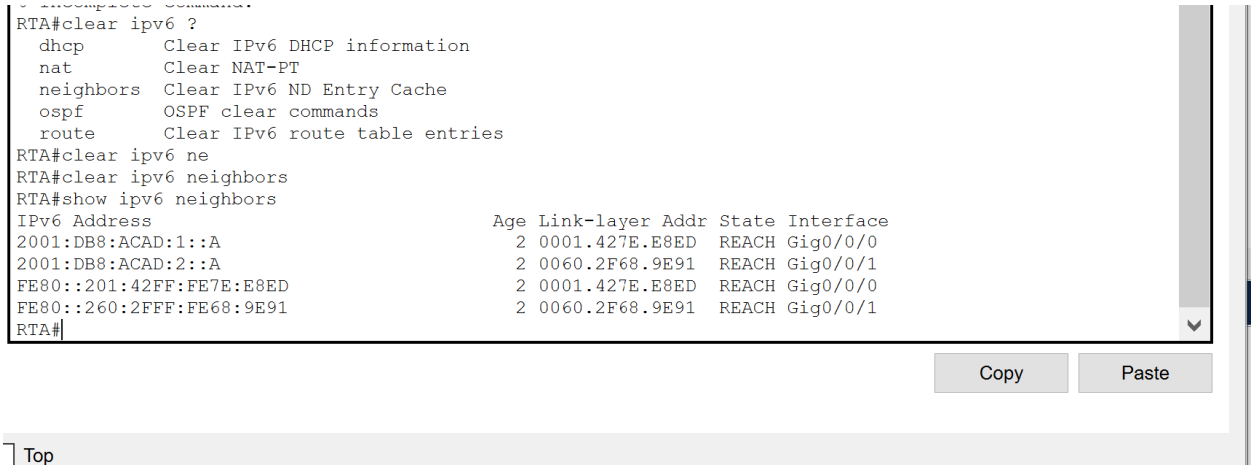





```
C:\>ping n 1 2001:db8:acad:2::a -
Invalid Command.

C:\>ping -n 1 2001:db8:acad:2::a

Pinging 2001:db8:acad:2::a with 32 bytes of data:

Reply from 2001:DB8:ACAD:2::A: bytes=32 time=24ms TTL=127

Ping statistics for 2001:DB8:ACAD:2::A:
    Packets: Sent = 1, Received = 1, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 24ms, Maximum = 24ms, Average = 24ms
```


PDU Information at Device: RTA
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
EthernetII
0
4
8
Bytes
PREAMBLE: 101010..10
DEST ADDR:3333.FF00.0001
SRC ADDR:0001.961D.6301
TYPE
DATA (VARIABLE LENGTH)
FCS:0x00000000
IPv6
0
4
12
Bits
VER:6
TRFC
FLOW LABEL
PL:28
NEXT:0x3a
HOP LIMIT:255
SRC IP:FE80::1
DST IP:FF02::1:FF00:1

Step2:


RTA#clear ipv6 ?
dhcp Clear IPv6 DHCP information
nat Clear NAT-PT
neighbors Clear IPv6 ND Entry Cache
ospf OSPF clear commands
route Clear IPv6 route table entries
RTA#clear ipv6 ne
RTA#clear ipv6 neighbors
RTA#show ipv6 neighbors
IPv6 Address Age Link-layer Addr State Interface
2001:DB8:ACAD:1::A 2 0001.427E.E8ED REACH Gig0/0/0
2001:DB8:ACAD:2::A 2 0060.2F68.9E91 REACH Gig0/0/1
FE80::201:42FF:FE7E:E8ED 2 0001.427E.E8ED REACH Gig0/0/0
FE80::260:2FFF:FE68:9E91 2 0060.2F68.9E91 REACH Gig0/0/1
RTA#
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Top