

Device Drivers

Lab Exercise 8

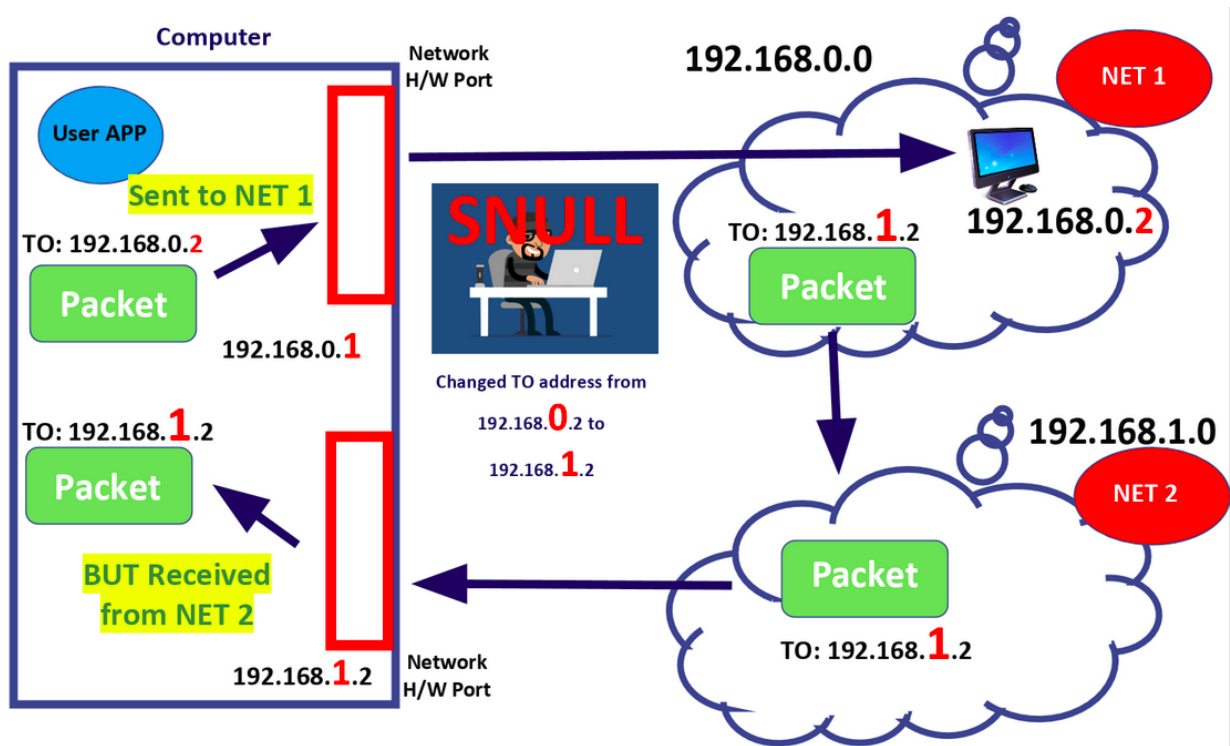
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Write on how a SNULL works.

SNULL:

- Simple Network Utility for Loading Localities
- Driver of the network device
- Driver that does not talk to the "actual" devices
- Works like a loopback device but not a loopback interface.
- It simulates conversations with real remote hosts in order to better demonstrate the task of writing a network driver.
- Only supports IP protocol

Working of SNULL:



- The user application creates a packet with a destination IP address in the same network as where it is present.
- A network port is opened and the packet is sent to the destination through it.
- The SNULL changes the least important of the third octet of the IP address(Class C) thereby changing the destination IP address to a different network.
- The packet accordingly gets rejected by the former IP address since the packet's destination is not the same as it is.

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- Now the packet goes to the changed destination network/IP address with the same contents as the previous one.
 - The reply from this IP address is collected using the other Network Port from the Host/Source IP address.
 - We observe that the packet was sent to one network and the reply originated from another network although internally the packet is the same.