## ПРОСТЫЕ СЕТИ В GNS3. АНАЛИЗ ТРАФИКА

Работу выполнил:

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## ЦЕЛЬ РАБОТЫ

построение простейших моделей сети на базе коммутатора и маршрутизаторов FRR и VyOS в GNS3, анализ трафика посредством Wireshark

PC1-aram> ip 192.168.1.11/24 192.168.1.1
Checking for duplicate address...
PC1-aram : 192.168.1.11 255.255.255.0 gateway 192.168.1.1

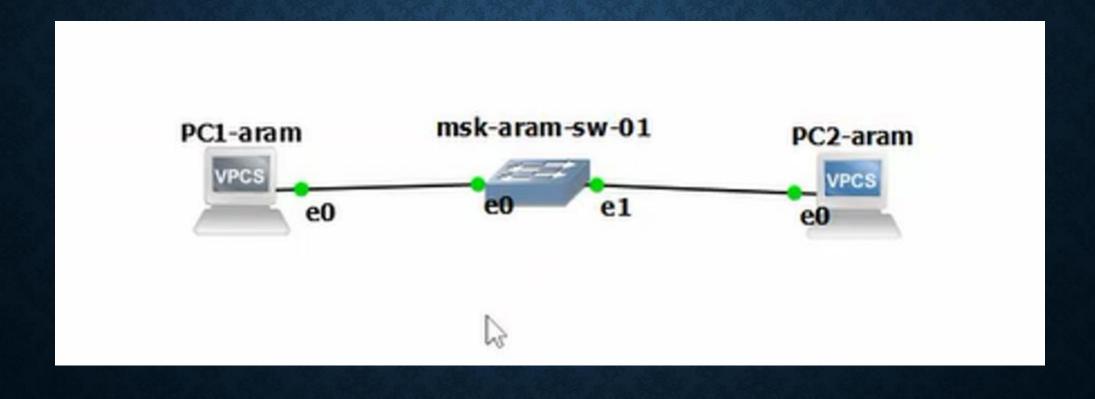
PC1-aram> save
Saving startup configuration to startup.vpc
. done

PC1-aram>

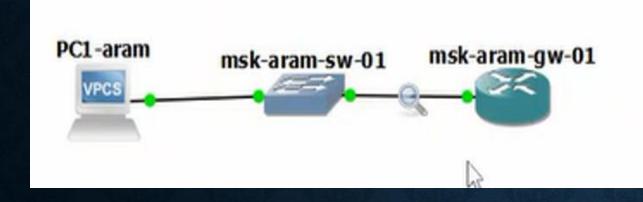
PC2-aram>
PC2-aram> ip 192.168.1.12/24 192.168.1.1
Checking for duplicate address...
PC2-aram : 192.168.1.12 255.255.255.0 gateway 192.168.1.1

PC2-aram> save
Saving startup configuration to startup.vpc
. done

PC2-aram>



```
C2-aram> ping 192.168.1.11 -3
         70192.168.1.11 seg=1 ttl=64 time=1.362 ms
endData 7@192.168.1.11 seg=1 ttl=64 time=1.954 ms
         7@192.168.1.11 seq=1 ttl=64 time=3.012 ms
        7@192.168.1.11 seq=2 ttl=64 time=1.870 ms
endData 7@192.168.1.11 seg=2 ttl=64 time=1.939 ms
         7@192.168.1.11 seq=2 ttl=64 time=3.080 ms
        70192.168.1.11 seq=3 ttl=64 time=2.688 ms
endData 7@192.168.1.11 seq=3 ttl=64 time=1.822 ms
         7@192.168.1.11 seq=3 ttl=64 time=2.932 ms
        7@192.168.1.11 seg=4 ttl=64 time=1.965 ms
endData 7@192.168.1.11 seq=4 ttl=64 time=2.729 ms
         7@192.168.1.11 seq=4 ttl=64 time=3.616 ms
        7@192.168.1.11 seg=5 ttl=64 time=1.908 ms
endData 70192.168.1.11 seq=5 ttl=64 time=1.890 ms
         7@192.168.1.11 seq=5 ttl=64 time=3.808 ms
C2-aram>
```



```
→ Frame 21: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface -, id 0

  > Interface id: 0 (-)
     Encapsulation type: Ethernet (1)
     Arrival Time: Oct 3, 2022 16:33:41.573922000 RTZ 2 (3има)
     [Time shift for this packet: 0.000000000 seconds]
     Epoch Time: 1664804021.573922000 seconds
     [Time delta from previous captured frame: 73.563325000 seconds]
     [Time delta from previous displayed frame: 73.563325000 seconds]
     [Time since reference or first frame: 272.571803000 seconds]
     Frame Number: 21
     Frame Length: 98 bytes (784 bits)
    Capture Length: 98 bytes (784 bits)
     [Frame is marked: False]
     [Frame is ignored: False]
     [Protocols in frame: eth:ethertype:ip:udp:echo]
     [Coloring Rule Name: UDP]
     [Coloring Rule String: udp]
Ethernet II, Src: Private_66:68:01 (00:50:79:66:68:01), Dst: Private_66:68:00 (00:50:79:66:68:00)
  Destination: Private 66:68:00 (00:50:79:66:68:00)
        Address: Private 66:68:00 (00:50:79:66:68:00)
       .....0. .... = LG bit: Globally unique address (factory default)
       .... ..0 .... = IG bit: Individual address (unicast)
  ∨ Source: Private 66:68:01 (00:50:79:66:68:01)
       Address: Private 66:68:01 (00:50:79:66:68:01)
       .....0. .... = LG bit: Globally unique address (factory default)
       .... ..0 .... = IG bit: Individual address (unicast)
     Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.1.12, Dst: 192.168.1.11
     0100 .... = Version: 4
     .... 0101 = Header Length: 20 bytes (5)
    Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
     Total Length: 84
```

Wireshark - Haket 21 - wireshark.pcapn

## ВЫВОД

- 1) Мы научились строить простейшие сети в GNS3
- 2) Научились работать с маршрутизаторами FRR и VyOS
- 3) Захватили и проанализировали захваченные пакеты с помощью Wireshark