

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>  
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> █
```



```
PC2-aram> ping 192.168.1.11 -3
```

```
Connect 7@192.168.1.11 seq=1 ttl=64 time=1.362 ms
SendData 7@192.168.1.11 seq=1 ttl=64 time=1.954 ms
Close 7@192.168.1.11 seq=1 ttl=64 time=3.012 ms
Connect 7@192.168.1.11 seq=2 ttl=64 time=1.870 ms
SendData 7@192.168.1.11 seq=2 ttl=64 time=1.939 ms
Close 7@192.168.1.11 seq=2 ttl=64 time=3.080 ms
Connect 7@192.168.1.11 seq=3 ttl=64 time=2.688 ms
SendData 7@192.168.1.11 seq=3 ttl=64 time=1.822 ms
Close 7@192.168.1.11 seq=3 ttl=64 time=2.932 ms
Connect 7@192.168.1.11 seq=4 ttl=64 time=1.965 ms
SendData 7@192.168.1.11 seq=4 ttl=64 time=2.729 ms
Close 7@192.168.1.11 seq=4 ttl=64 time=3.616 ms
Connect 7@192.168.1.11 seq=5 ttl=64 time=1.908 ms
SendData 7@192.168.1.11 seq=5 ttl=64 time=1.890 ms
Close 7@192.168.1.11 seq=5 ttl=64 time=3.808 ms
```

```
PC2-aram>
```

PC1-aram



msk-aram-sw-01



msk-aram-gw-01



Wireshark - IIXaxet 21 - wireshark.pcapng

```
▼ 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 (зима)
    [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
```


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