

# Введение в Mininet

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Основной целью работы является развёртывание в системе виртуализации (например, в VirtualBox) mininet, знакомство с основными командами для работы с Mininet через командную строку и через графический интерфейс.

# Выполнение задачи

```
Mininet-VM [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
mininet@mininet-vm:~$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.3.15 netmask 255.255.255.0 broadcast 10.0.3.255
    ether 08:00:27:cd:42:83 txqueuelen 1000 (Ethernet)
    RX packets 109 bytes 11581 (11.5 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 109 bytes 10294 (10.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.56.103 netmask 255.255.255.0 broadcast 192.168.56.255
    ether 08:00:27:f2:22:0a txqueuelen 1000 (Ethernet)
    RX packets 2 bytes 1180 (1.1 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 2 bytes 684 (684.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    loop txqueuelen 1000 (Local Loopback)
    RX packets 28 bytes 2800 (2.8 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 28 bytes 2800 (2.8 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
➔ ~ ssh -Y mininet@192.168.56.103
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-42-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

New release '22.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Fri Dec 20 08:55:59 2024 from 192.168.56.1
mininet@mininet-vm:~$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.3.15 netmask 255.255.255.0 broadcast 10.0.3.255
    ether 08:00:27:cd:42:83 txqueuelen 1000 (Ethernet)
    RX packets 141 bytes 14431 (14.4 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 141 bytes 13144 (13.1 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

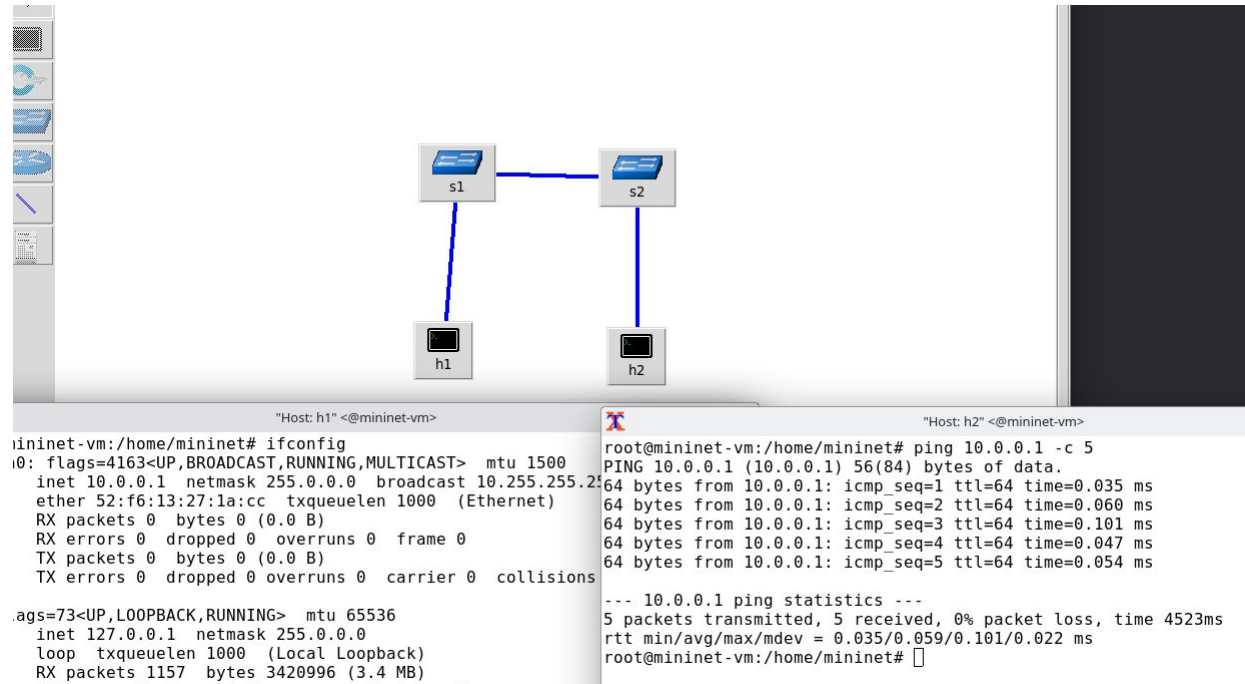
eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.56.103 netmask 255.255.255.0 broadcast 192.168.56.255
    ether 08:00:27:f2:22:0a txqueuelen 1000 (Ethernet)
```

# Выполнение задачи

```
mininet@mininet-vm:~$ cat /etc/netplan/01-netcfg.yaml
# This file describes the network interfaces available on your system
# For more information, see netplan(5).
network:
  version: 2
  renderer: networkd
  ethernets:
    eth0:
      dhcp4: yes
    eth1:
      dhcp4: yes
```

```
mininet@mininet-vm:~$ cat /etc/X11/app-defaults/XTerm | grep 'xterm*'
xterm*faceName: Monospace
xterm*faceSize: 12
mininet@mininet-vm:~$
```

# Выполнение задачи



Я узнал, как настроить виртуальную машину Mininet и подключиться к ней с помощью SSH.

Спасибо За Внимание