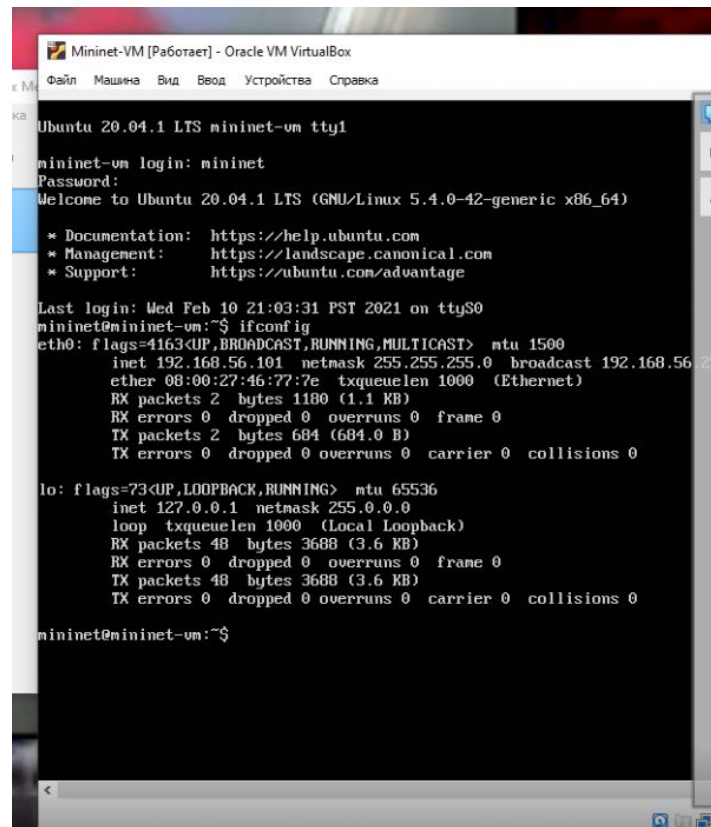




# Лабораторная работа N°1

по дисциплине Моделирование систем передачи данных

# Ход работы



The screenshot shows a terminal window titled "Mininet-VM [Работаer] - Oracle VM VirtualBox". The terminal displays the login process for a user named "mininet" on an Ubuntu 20.04.1 LTS system. After logging in, the user runs the "ifconfig" command to check network settings. The output shows two interfaces: "eth0" (Ethernet) and "lo" (Loopback). Both interfaces are in the "UP" state and "RUNNING". The "eth0" interface has an IP address of 192.168.56.101 and a netmask of 255.255.255.0. The "lo" interface has an IP address of 127.0.0.1 and a netmask of 255.0.0.0. The terminal also shows the last login time and the user's prompt.

```
Mininet-VM [Работаer] - Oracle VM VirtualBox
Файл  Машина  Вид  Ввод  Устройства  Справка
x M
Ka
Ubuntu 20.04.1 LTS mininet-vm tty1
mininet-vm login: mininet
Password:
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

Last login: Wed Feb 10 21:03:31 PST 2021 on ttyS0
mininet@mininet-vm:~$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.56.101  netmask 255.255.255.0  broadcast 192.168.56.255
    ether 08:00:27:46:77:7e  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 48  bytes 3688 (3.6 KB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 48  bytes 3688 (3.6 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

mininet@mininet-vm:~$
```



# Ход работы

## Install Chocolatey for Individual Use:

1. First, ensure that you are using an **administrative shell** - you can also install as a non-admin, check out Non-Administrative Installation.
2. Install with powershell.exe

### NOTE

Please inspect <https://community.chocolatey.org/install.ps1> prior to running any of these scripts to ensure safety. We already know it's safe, but you should verify the internet you are not familiar with. All of these scripts download a remote PowerShell script and execute it on your machine. We take security very seriously.

With PowerShell, you must ensure Get-ExecutionPolicy is not Restricted. We suggest using `Bypass` to bypass the policy to get things installed or `AllSigned` for q

- Run `Get-ExecutionPolicy`. If it returns `Restricted`, then run `Set-ExecutionPolicy AllSigned` or `Set-ExecutionPolicy Bypass -Scope Process`.

Now run the following command:

```
> Set-ExecutionPolicy Bypass -Scope Process -Force; [System.Net.ServicePointManager]::SecurityProtocol = [System.Net.ServicePointManager]::SecurityProtocol -bo
```

3. Paste the copied text into your shell and press Enter.

4. Wait a few seconds for the command to complete.

5. If you don't see any errors, you are ready to use Chocolatey! Type `choco` or `choco -?` now, or see [Getting Started](#) for usage instructions.

## Chocolatey Licer

Are you also installing a `PS F:\Windows\system32> choco install putty`

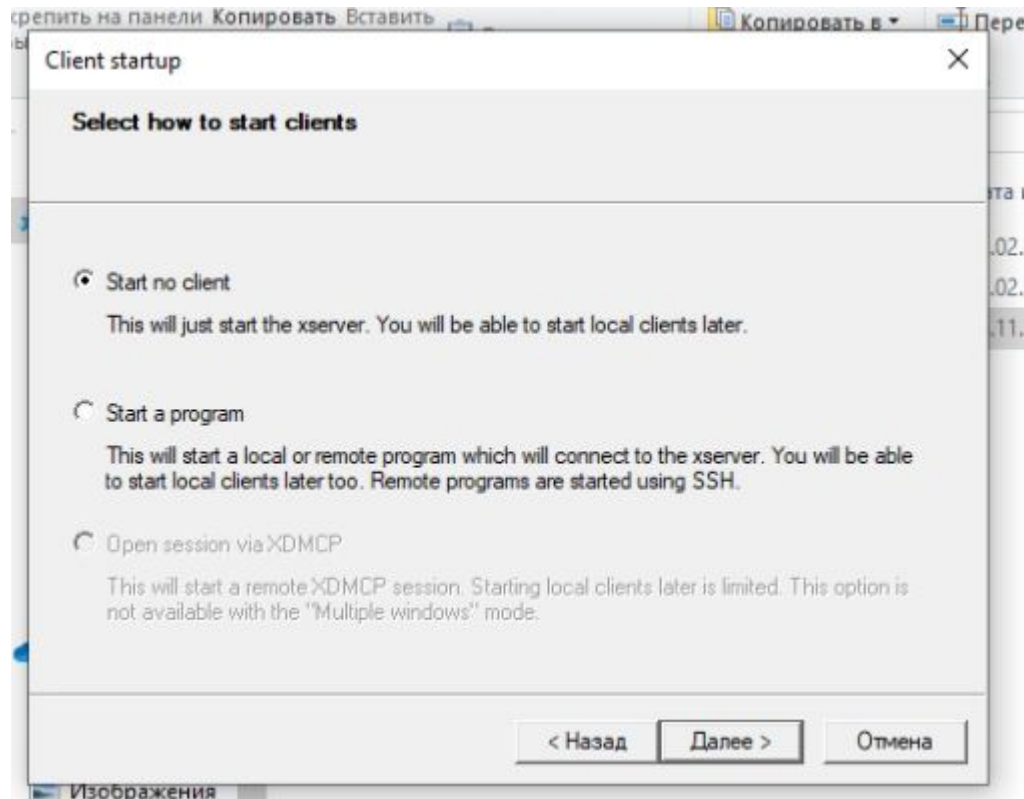
Администратор: Windows PowerShell

Windows PowerShell

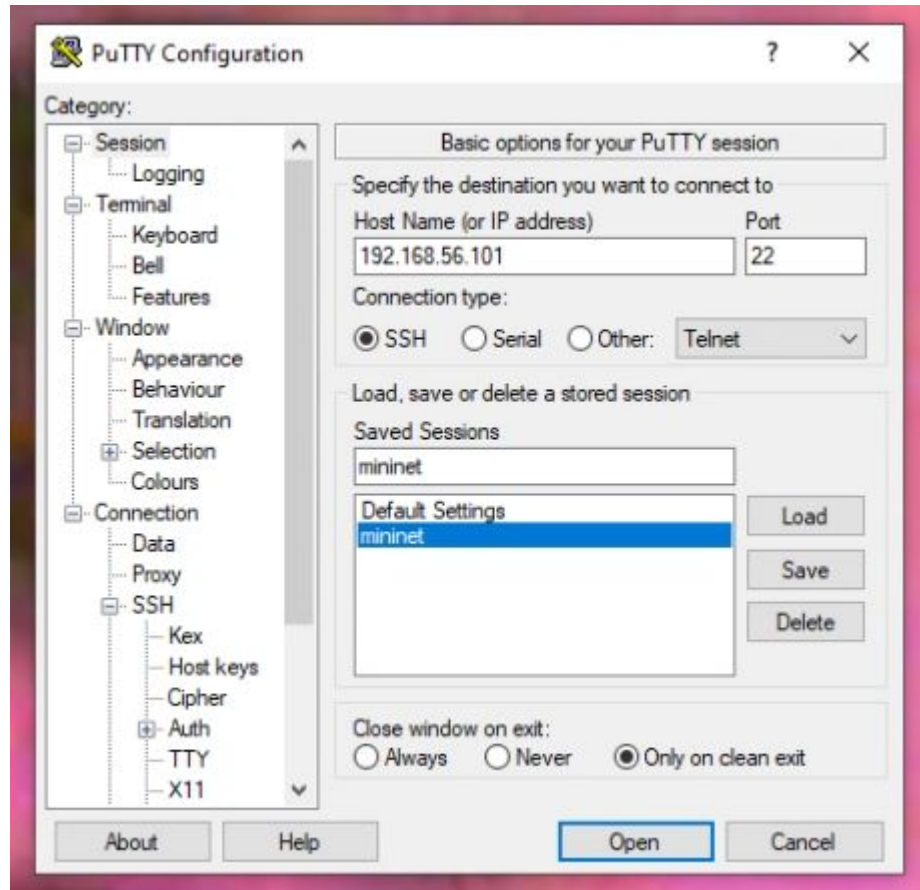
(C) Корпорация Майкрософт (Microsoft Corporation). Все права защищены.

Попробуйте новую кроссплатформенную оболочку PowerShell (<https://aka.ms/pscore6>)

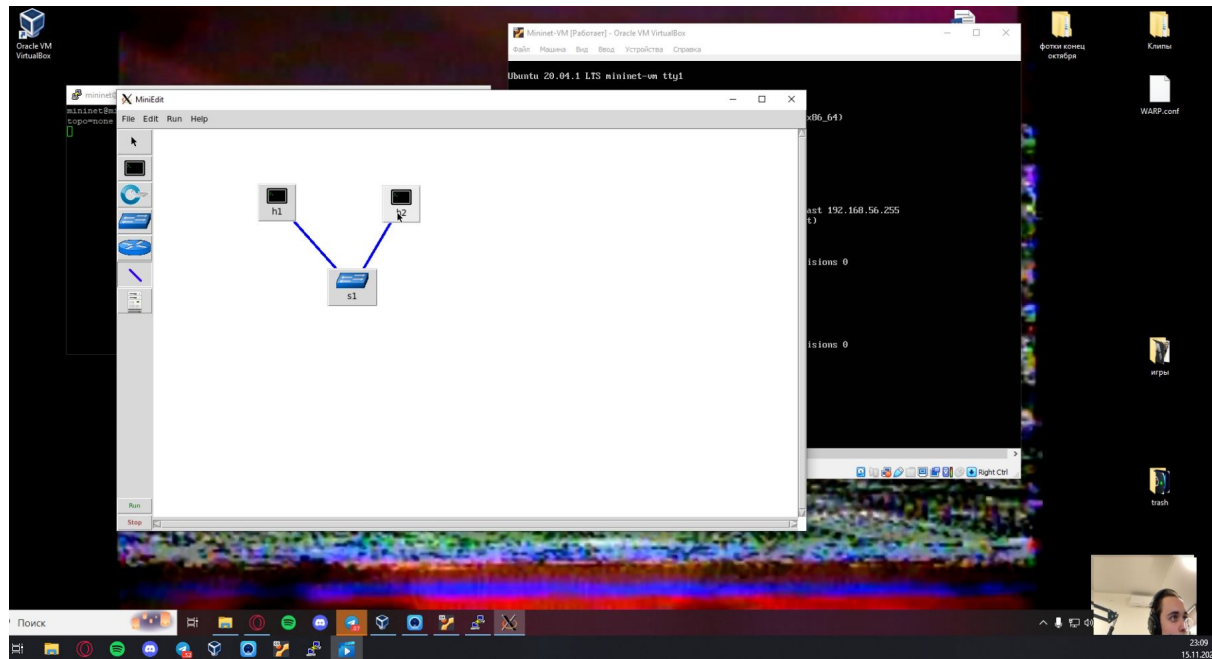
# Ход работы



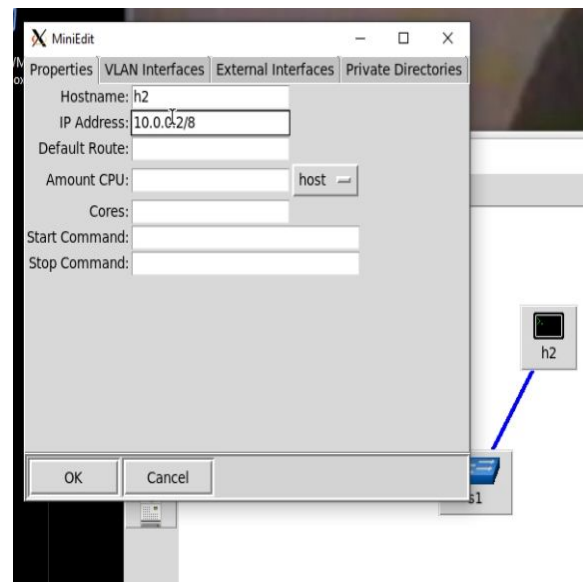
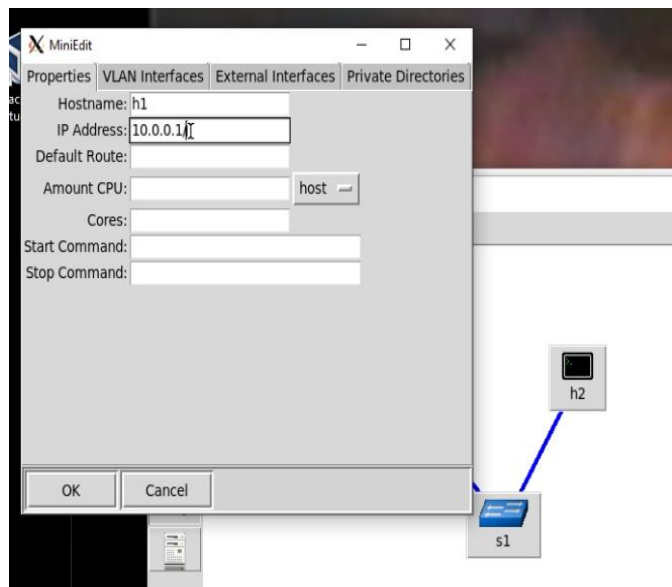
## Ход работы



# Ход работы



# Ход работы



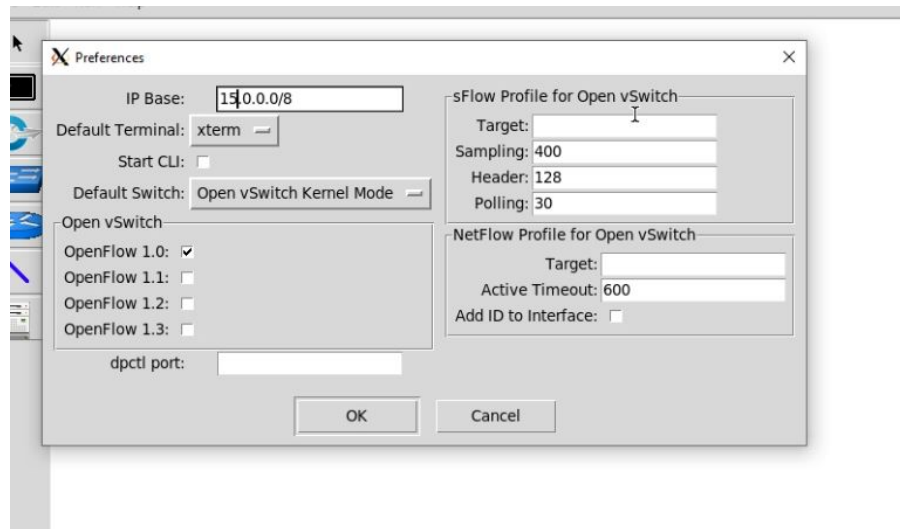
# Ход работы

```
root@mininet-vm:/home/mininet# ping 10.0.0.2
PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data.
64 bytes from 10.0.0.2: icmp_seq=1 ttl=64 time=0.182 ms
64 bytes from 10.0.0.2: icmp_seq=2 ttl=64 time=0.034 ms
64 bytes from 10.0.0.2: icmp_seq=3 ttl=64 time=0.027 ms
64 bytes from 10.0.0.2: icmp_seq=4 ttl=64 time=0.031 ms
64 bytes from 10.0.0.2: icmp_seq=5 ttl=64 time=0.037 ms
^C
--- 10.0.0.2 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4098ms
rtt min/avg/max/mdev = 0.027/0.062/0.182/0.059 ms
root@mininet-vm:/home/mininet#
```

```
root@mininet-vm:/home/mininet# ping 10.0.0.1
PING 10.0.0.1 (10.0.0.1) 56(84) bytes of data.
64 bytes from 10.0.0.1: icmp_seq=1 ttl=64 time=0.026 ms
64 bytes from 10.0.0.1: icmp_seq=2 ttl=64 time=0.031 ms
64 bytes from 10.0.0.1: icmp_seq=3 ttl=64 time=0.030 ms
64 bytes from 10.0.0.1: icmp_seq=4 ttl=64 time=0.031 ms
64 bytes from 10.0.0.1: icmp_seq=5 ttl=64 time=0.033 ms
^C
--- 10.0.0.1 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4092ms
rtt min/avg/max/mdev = 0.026/0.030/0.033/0.002 ms
root@mininet-vm:/home/mininet#
```



# Ход работы



# Ход работы

```
root@mininet-vm:/home/mininet# ifconfig
h1-eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 15.0.0.1 netmask 255.0.0.0 broadcast 15.255.255.255
    ether 32:42:da:8b:22:07 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 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 896 bytes 264232 (264.2 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 896 bytes 264232 (264.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@mininet-vm:/home/mininet#
```

```
root@mininet-vm:/home/mininet# ifconfig
h2-eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 15.0.0.2 netmask 255.0.0.0 broadcast 15.255.255.255
    ether 86:60:5d:14:80:a4 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 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 914 bytes 265348 (265.3 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 914 bytes 265348 (265.3 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@mininet-vm:/home/mininet#
```

# Ход работы

