

## Часть 2. Oracle Virtual Box

```
host1 login: 1234
Password:

Login incorrect
host1 login: user1
Password:
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.4.0-77-generic x86_64)

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

System information as of Mon Jul  5 08:02:52 UTC 2021

System load:  1.44           Processes:            112
Usage of /:   43.8% of 8.79GB Users logged in:          0
Memory usage: 10%           IPv4 address for enp0s3: 10.0.2.15
Swap usage:   0%

68 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

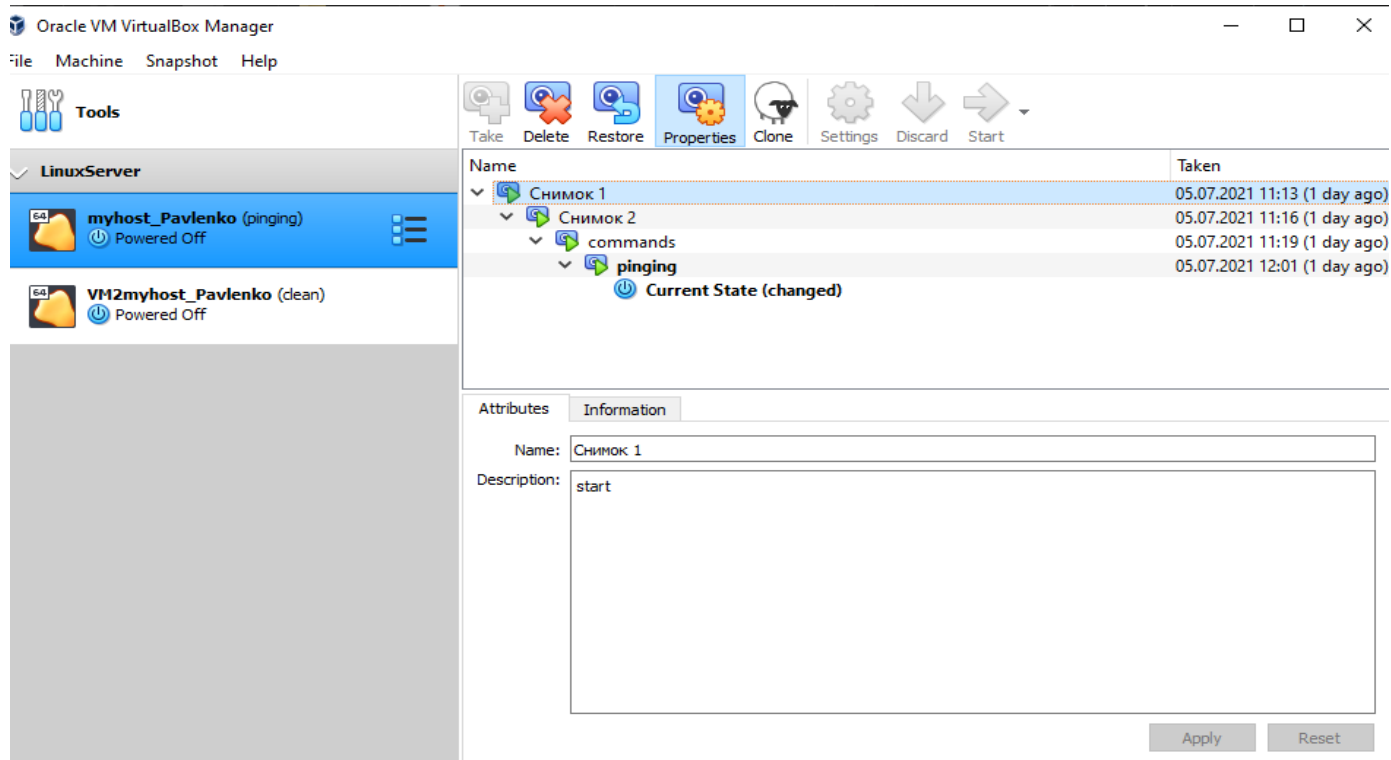
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

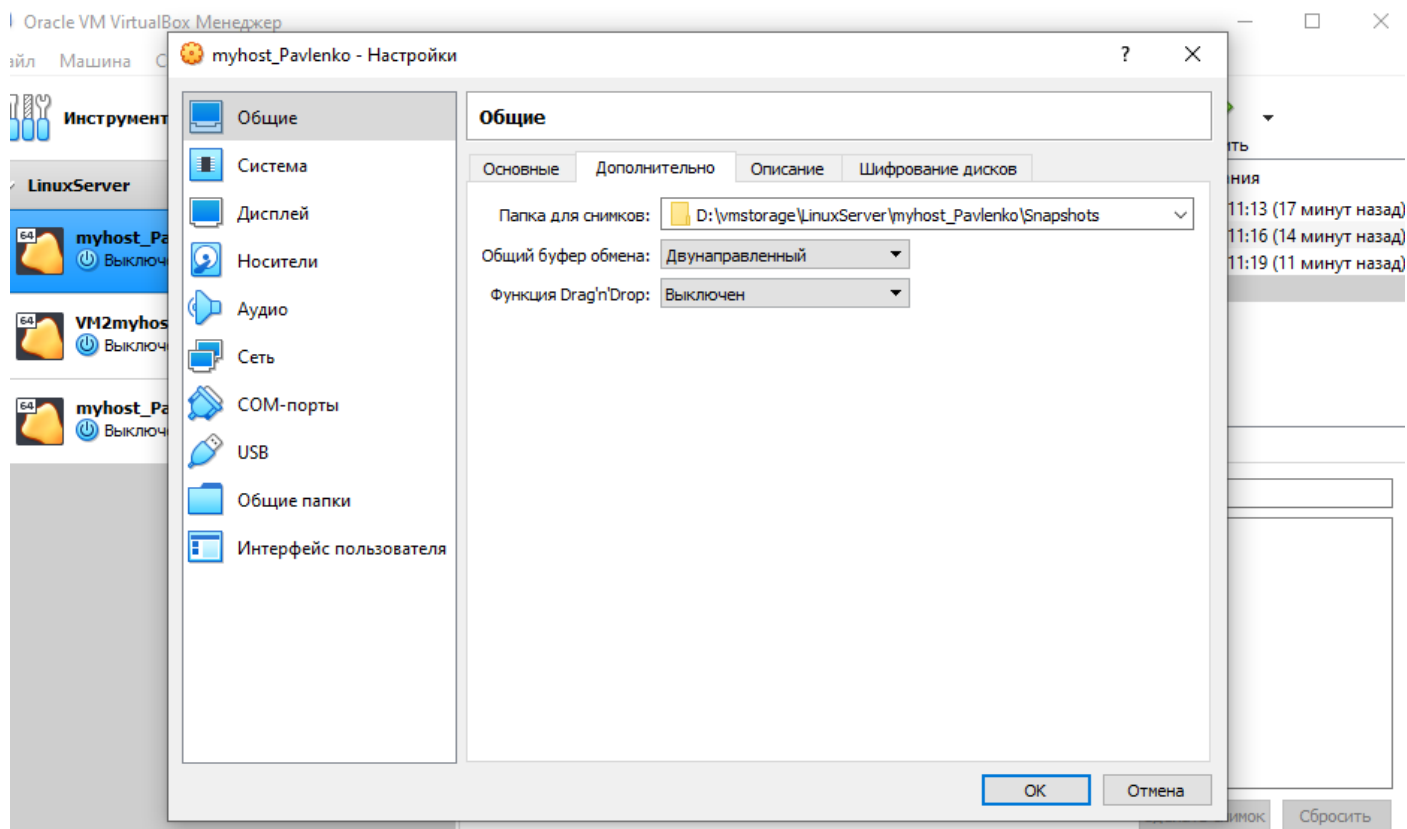
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

user1@host1:~$
```

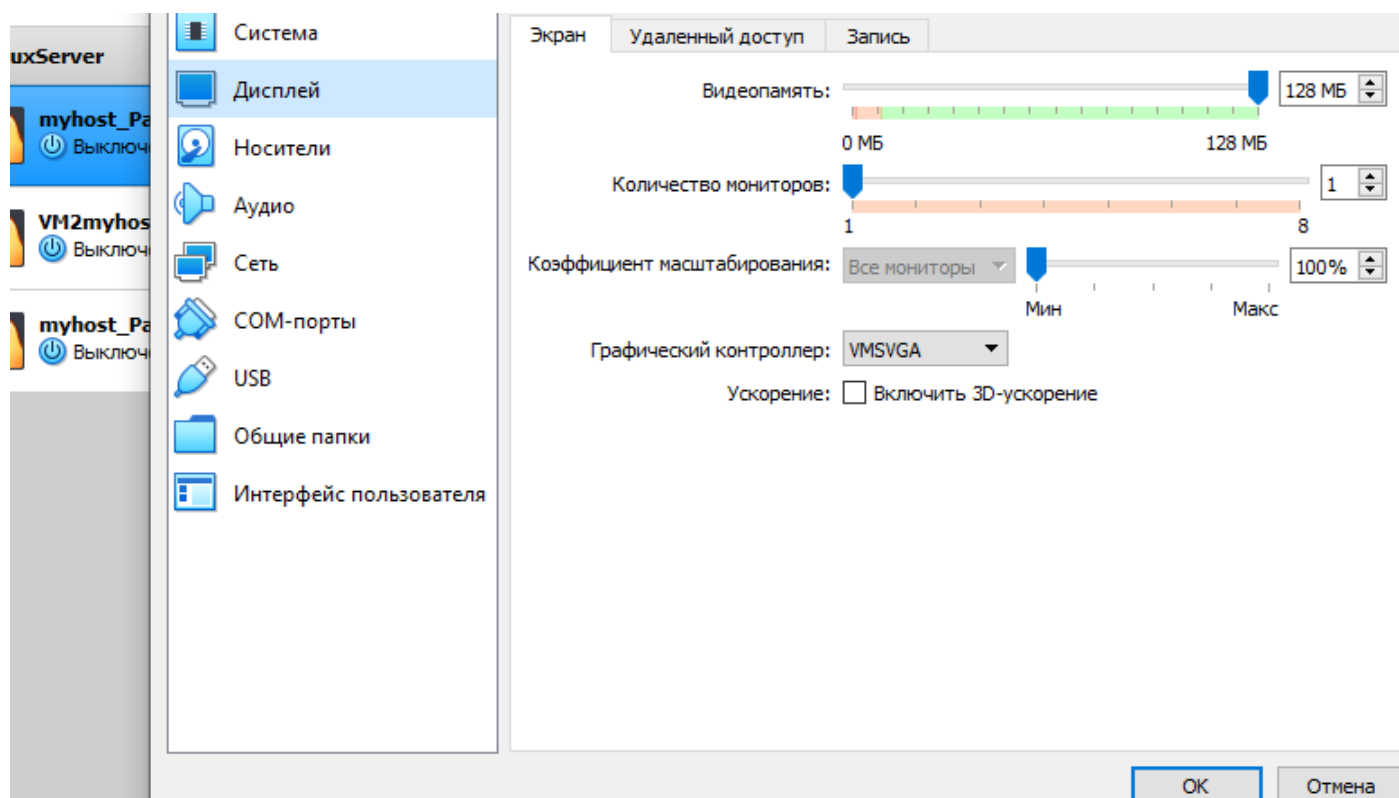
*Screenshot 1 – Запуск ВМ с операционной системой Ubuntu Linux Server*



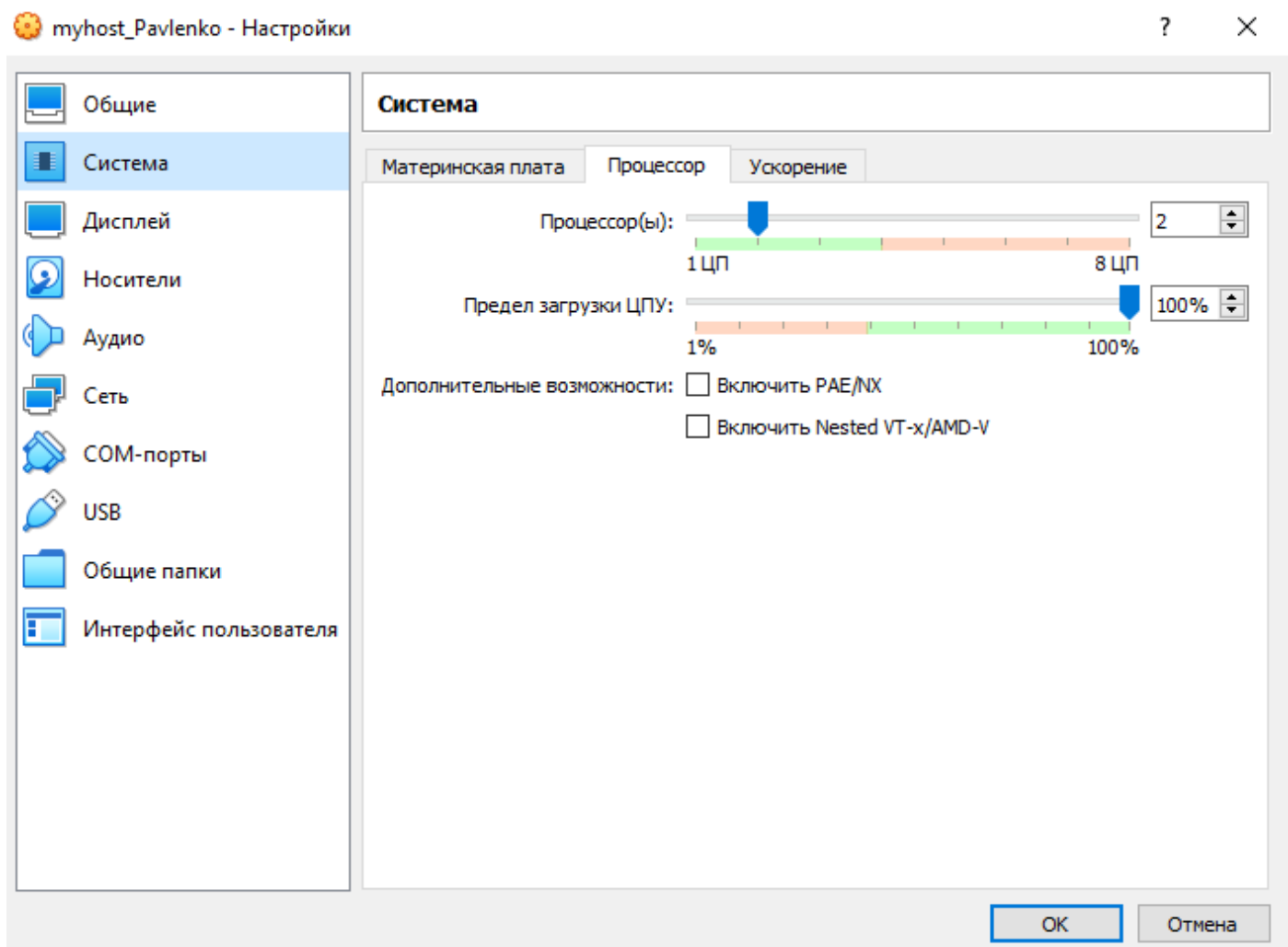
*Screenshot 2 – Создание группы с клонированной ВМ*



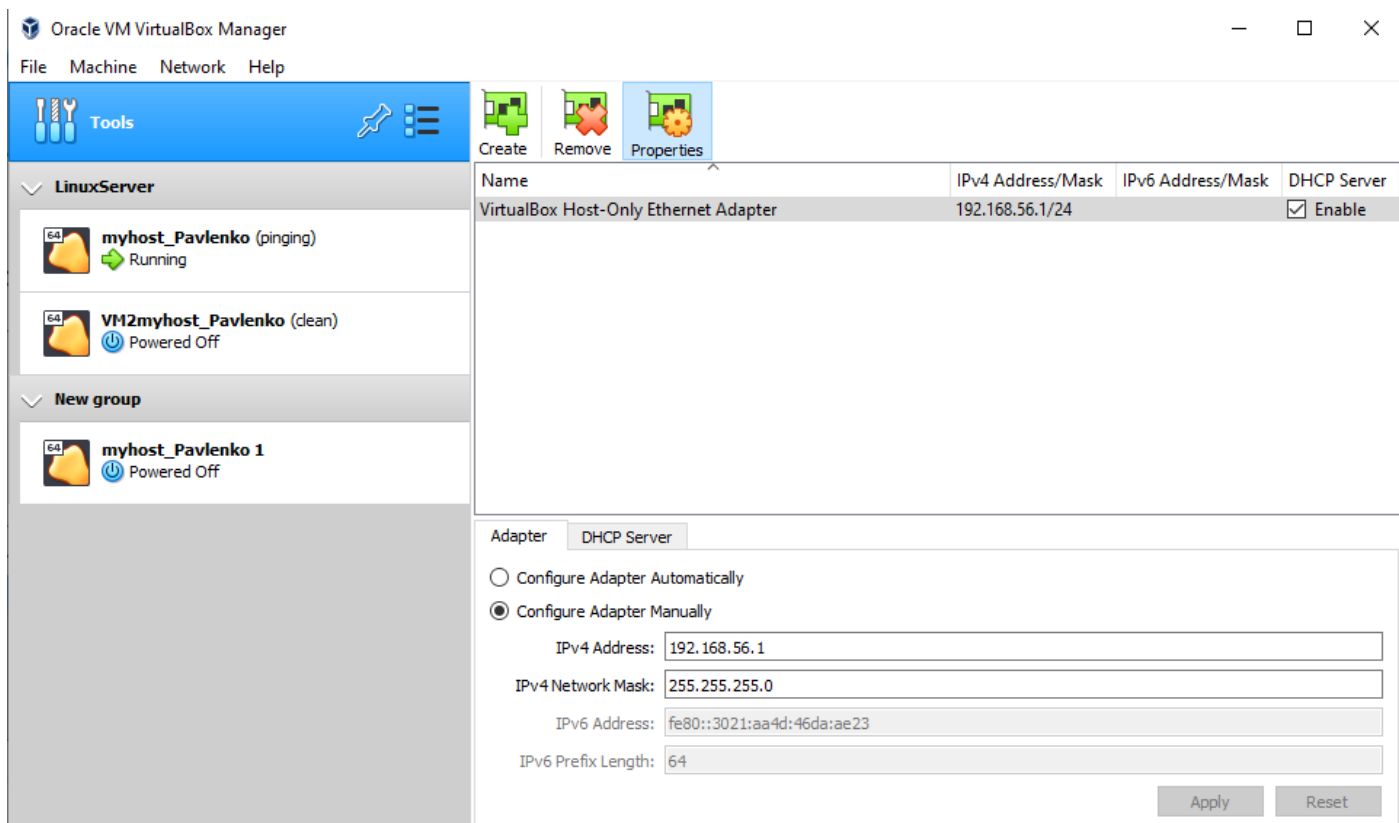
*Screenshot 3 – Настройка буфера обмена и обмена снапшотами*



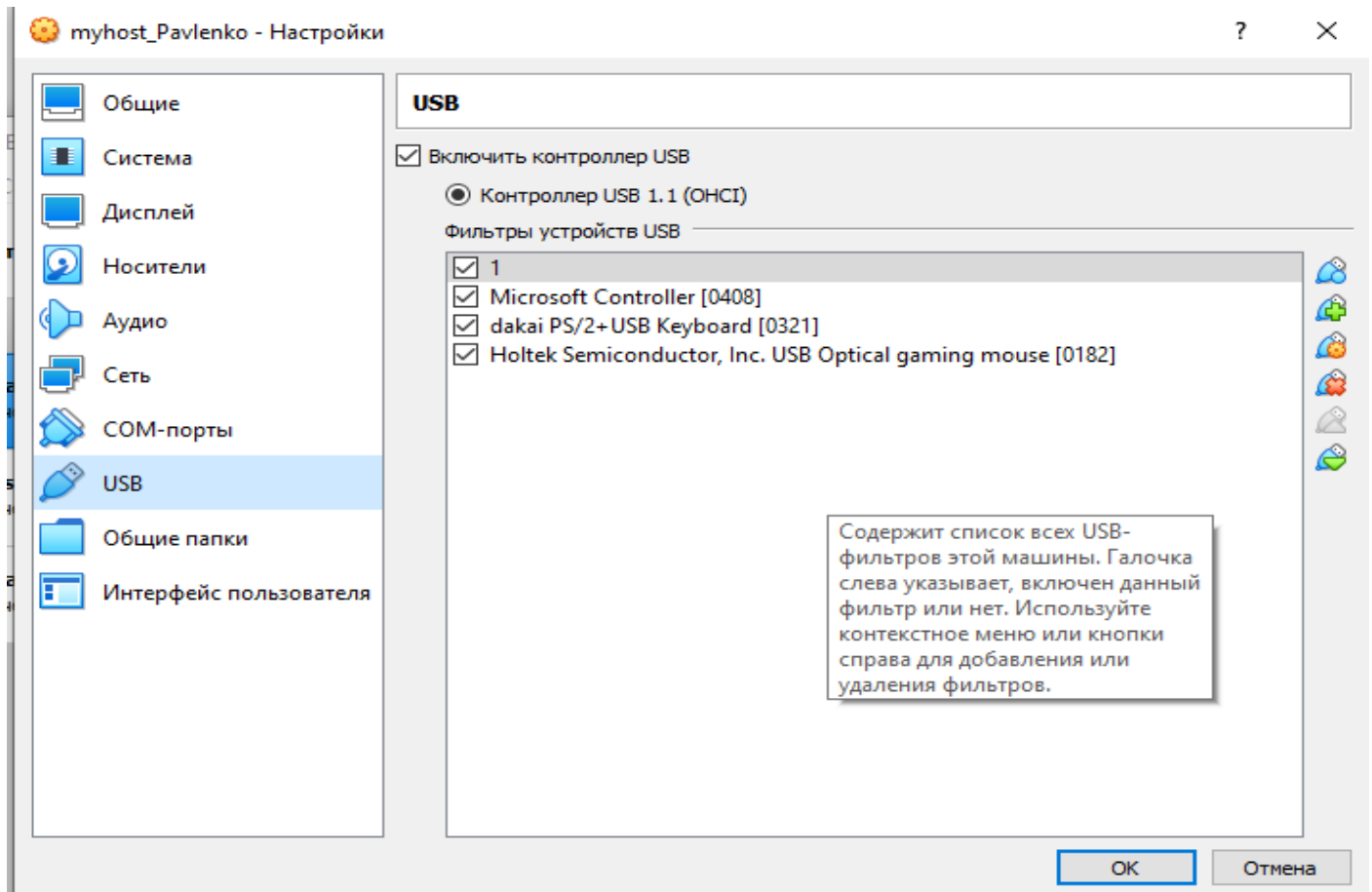
*Screenshot 4 – Настройка видеопамати и графического контроллера VM*



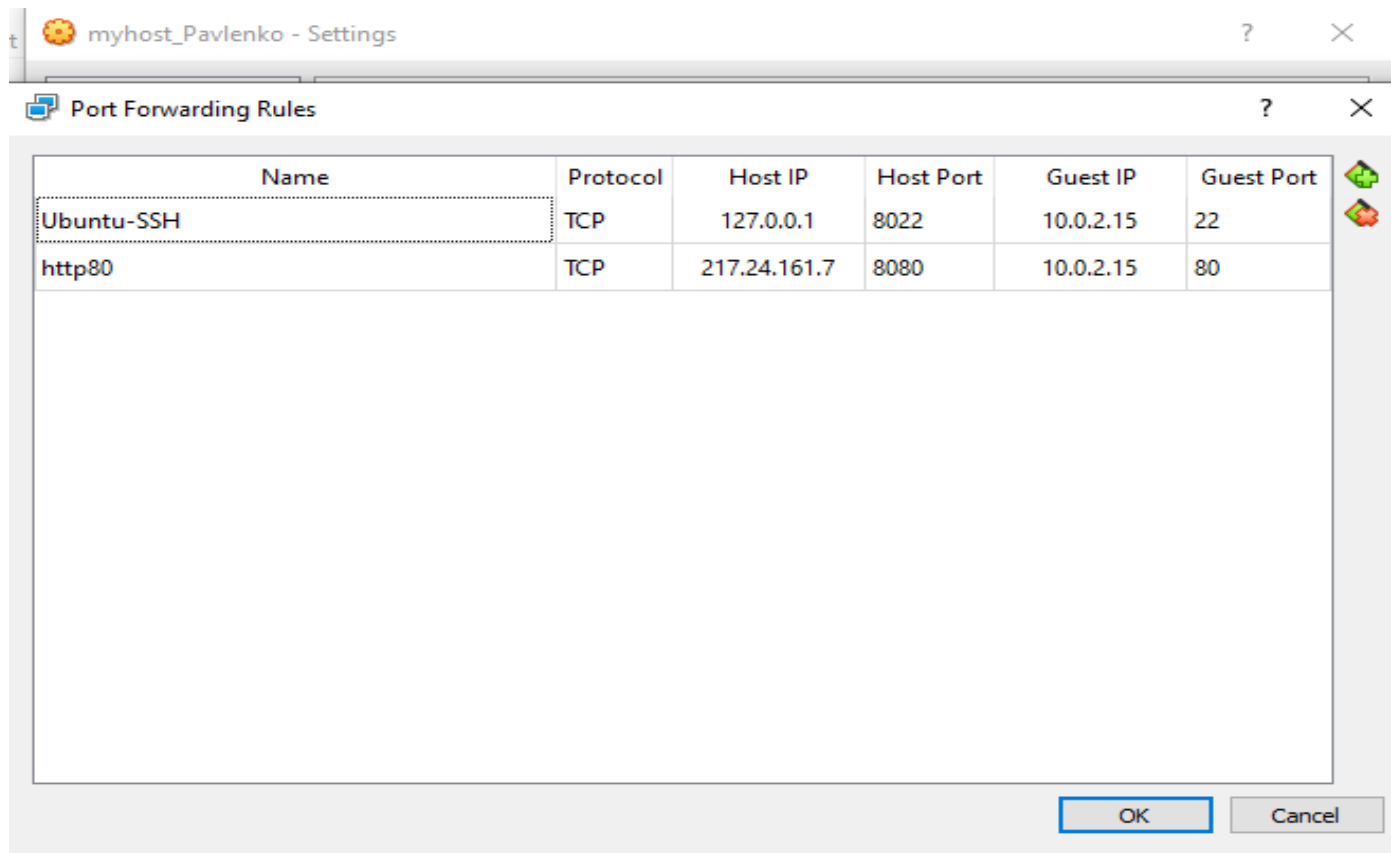
*Screenshot 5 – Настройка процессора и аппаратного ускорения VM*



*Screenshot 6 – Настройка сетевого адаптера и DHCP сервера VM*



*Screenshot 7 – Настройка usb контроллеров ВМ*

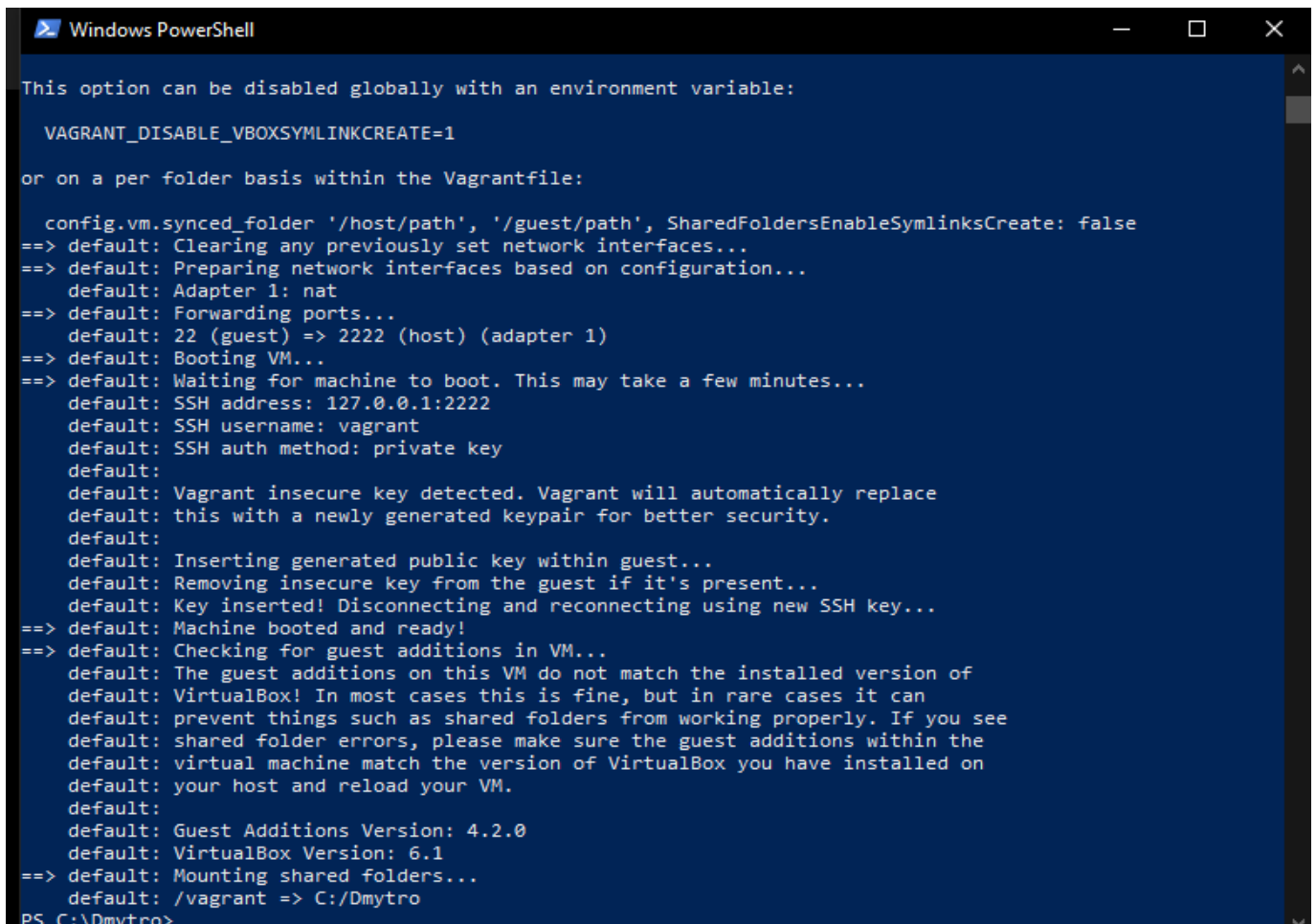


*Screenshot 8 – Настройка Port forwarding rules ВМ*

```
user1@host1: ~  
login as: user1  
user1@127.0.0.1's password:  
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.4.0-77-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/advantage  
  
System information as of Tue Jul  6 13:40:12 UTC 2021  
  
System load:  0.14           Processes:            140  
Usage of /:   57.3% of 8.79GB Users logged in:             1  
Memory usage: 11%           IPv4 address for enp0s3: 10.0.2.15  
Swap usage:   0%  
  
68 updates can be installed immediately.  
0 of these updates are security updates.  
To see these additional updates run: apt list --upgradable  
  
Last login: Tue Jul  6 13:38:41 2021 from 127.0.0.1  
user1@host1:~$ ping -c 10 127.0.0.1  
PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data.
```

*Screenshot 9 – Соединение через порт 8022(ssh) к ВМ*

## Часть 3. Vagrant



```
Windows PowerShell

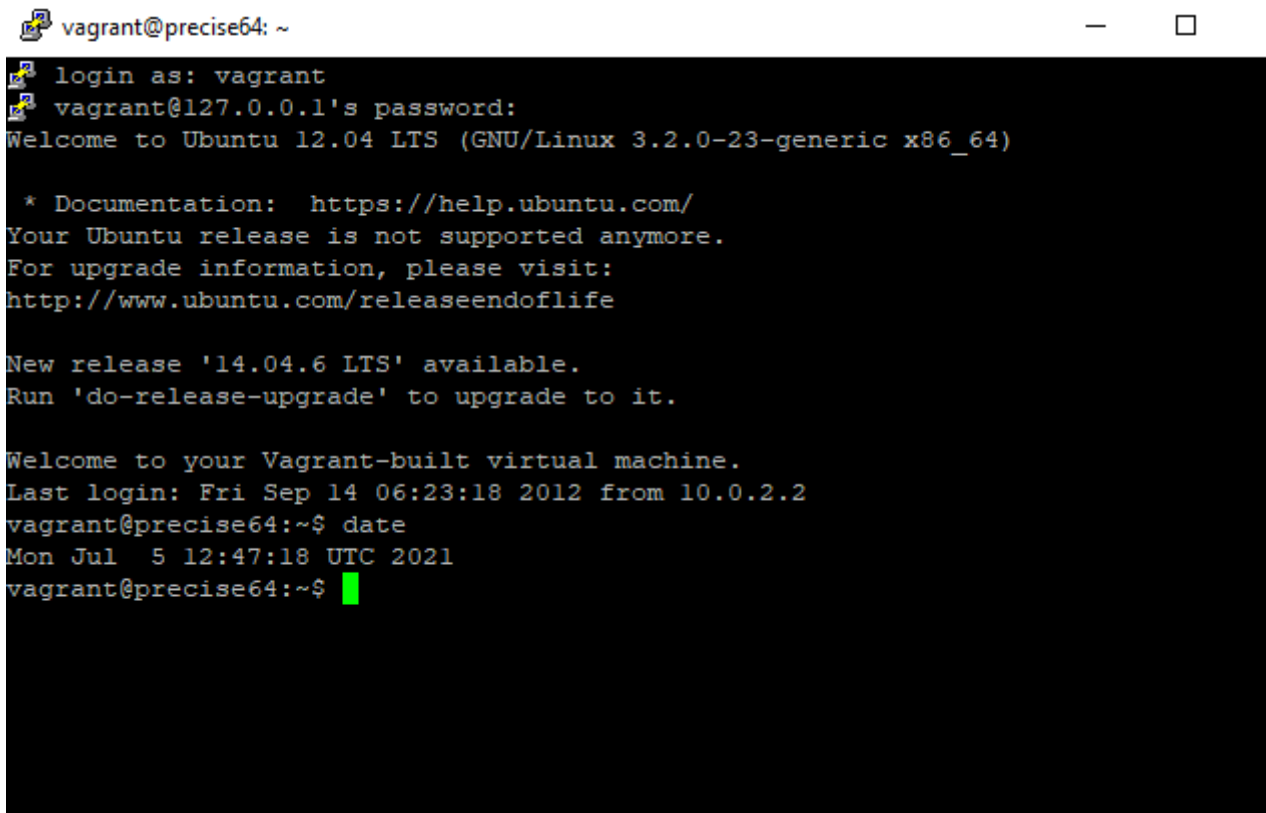
This option can be disabled globally with an environment variable:

  VAGRANT_DISABLE_VBOXSYMLINKCREATE=1

or on a per folder basis within the Vagrantfile:

  config.vm.synced_folder '/host/path', '/guest/path', SharedFoldersEnableSymlinksCreate: false
==> default: Clearing any previously set network interfaces...
==> default: Preparing network interfaces based on configuration...
  default: Adapter 1: nat
==> default: Forwarding ports...
  default: 22 (guest) => 2222 (host) (adapter 1)
==> default: Booting VM...
==> default: Waiting for machine to boot. This may take a few minutes...
  default: SSH address: 127.0.0.1:2222
  default: SSH username: vagrant
  default: SSH auth method: private key
  default:
  default: Vagrant insecure key detected. Vagrant will automatically replace
  default: this with a newly generated keypair for better security.
  default:
  default: Inserting generated public key within guest...
  default: Removing insecure key from the guest if it's present...
  default: Key inserted! Disconnecting and reconnecting using new SSH key...
==> default: Machine booted and ready!
==> default: Checking for guest additions in VM...
  default: The guest additions on this VM do not match the installed version of
  default: VirtualBox! In most cases this is fine, but in rare cases it can
  default: prevent things such as shared folders from working properly. If you see
  default: shared folder errors, please make sure the guest additions within the
  default: virtual machine match the version of VirtualBox you have installed on
  default: your host and reload your VM.
  default:
  default: Guest Additions Version: 4.2.0
  default: VirtualBox Version: 6.1
==> default: Mounting shared folders...
  default: /vagrant => C:/Dmytro
PS C:\Dmytro>
```

*Screenshot 10 – Создание ВМ через Vagrant*



```
vagrant@precise64: ~

login as: vagrant
vagrant@127.0.0.1's password:
Welcome to Ubuntu 12.04 LTS (GNU/Linux 3.2.0-23-generic x86_64)

 * Documentation:  https://help.ubuntu.com/
Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releaseendoflife

New release '14.04.6 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Welcome to your Vagrant-built virtual machine.
Last login: Fri Sep 14 06:23:18 2012 from 10.0.2.2
vagrant@precise64:~$ date
Mon Jul  5 12:47:18 UTC 2021
vagrant@precise64:~$
```

*Screenshot 11 – Проверка соединения с ВМ через PuTTY*