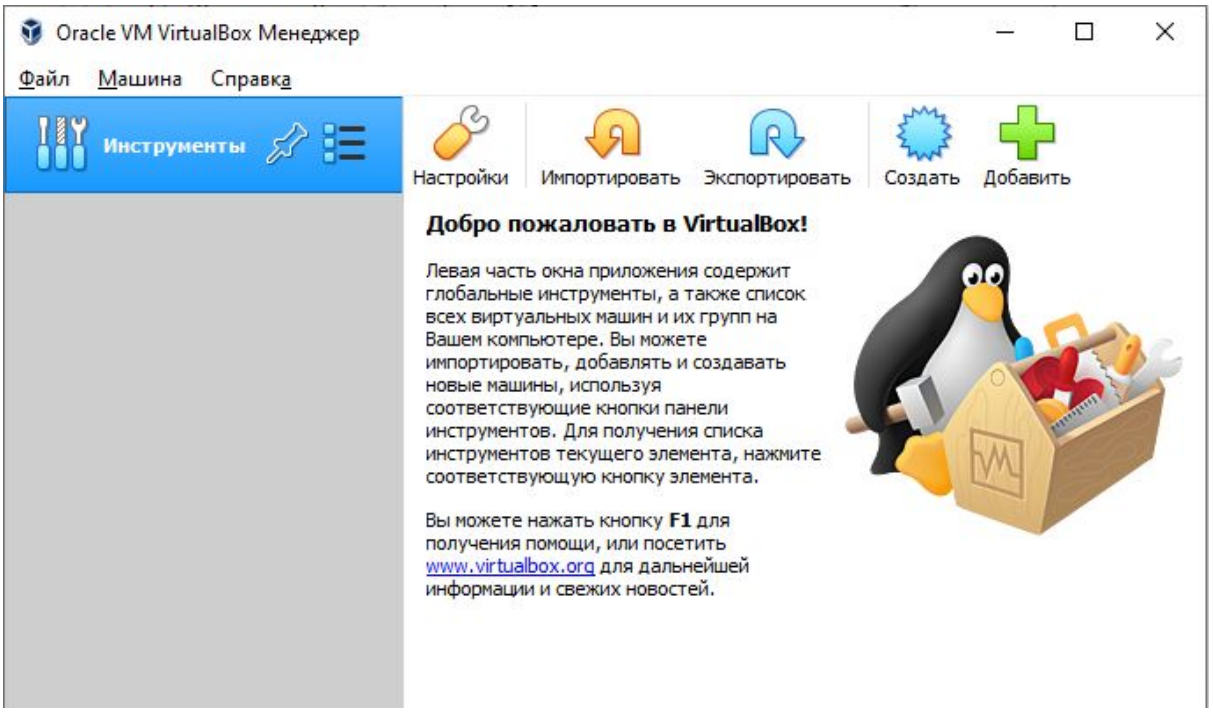
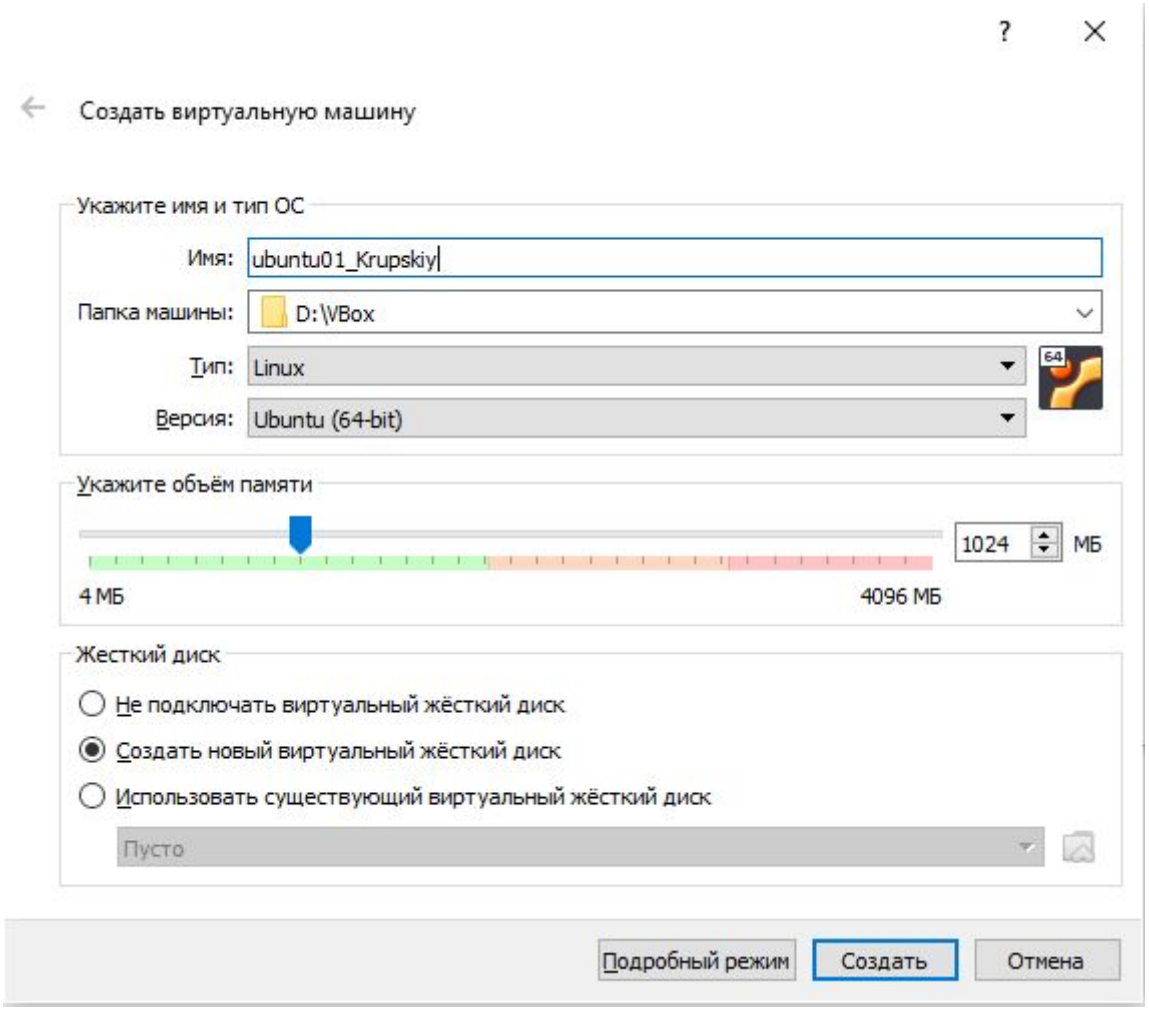
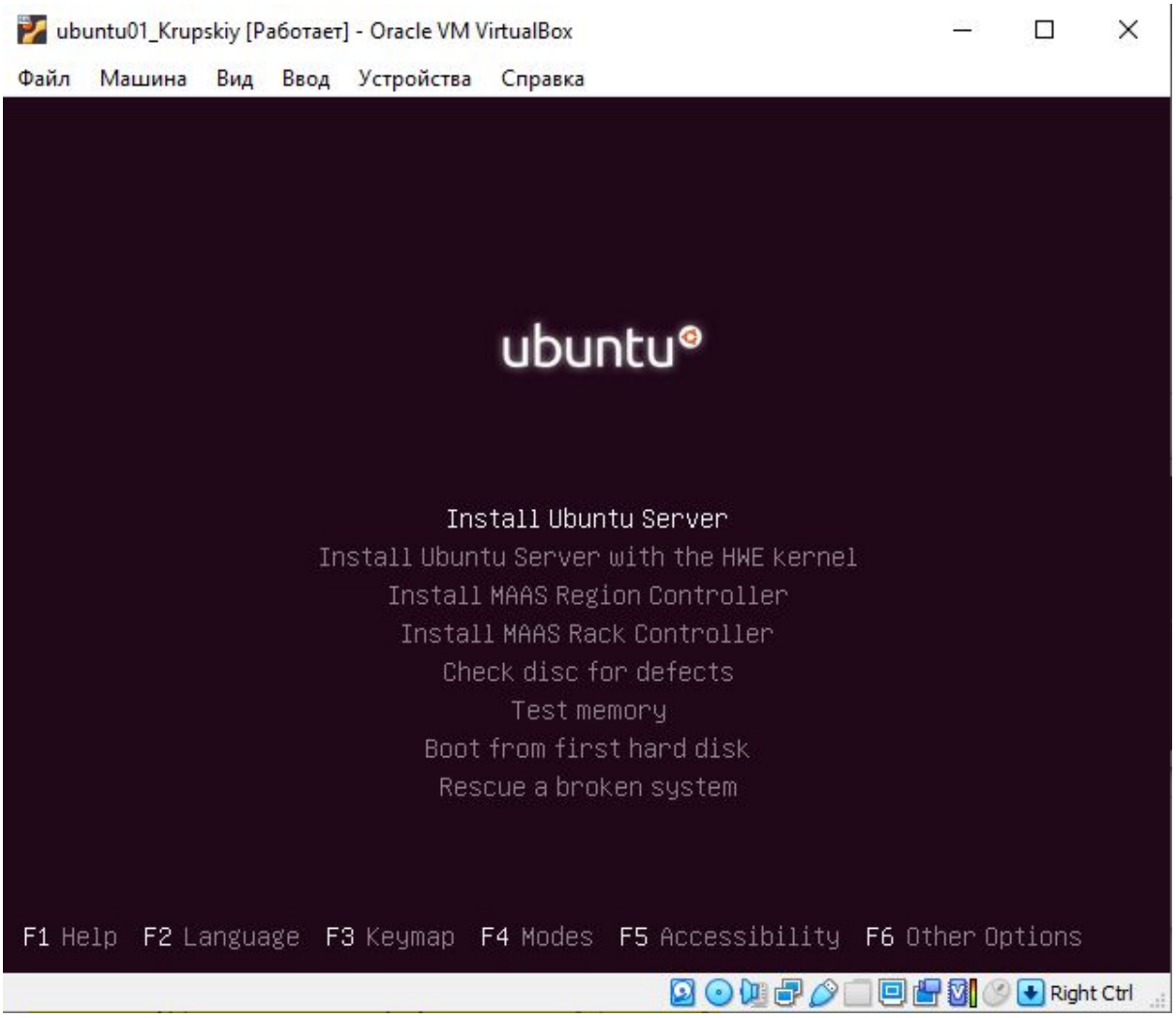
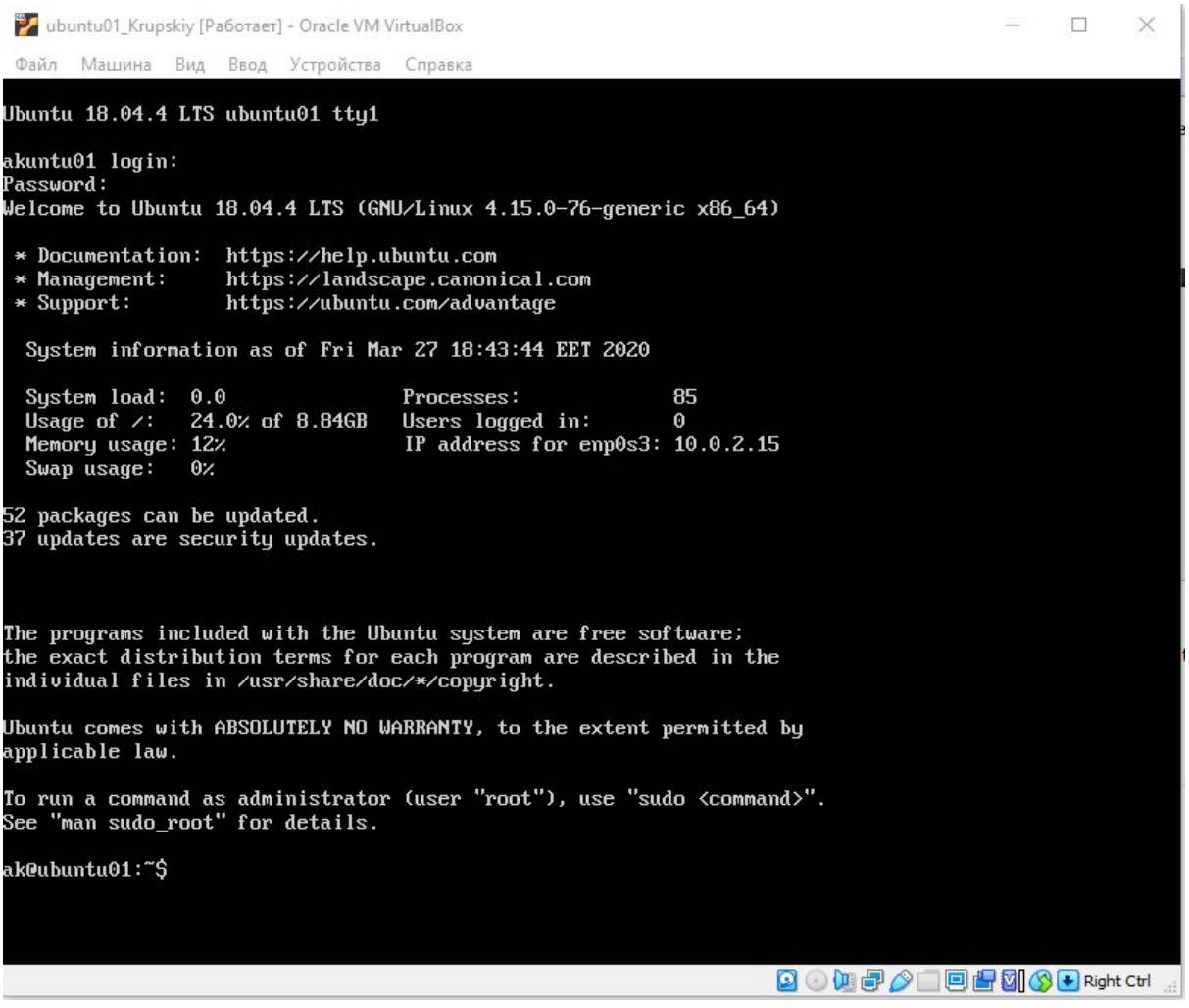
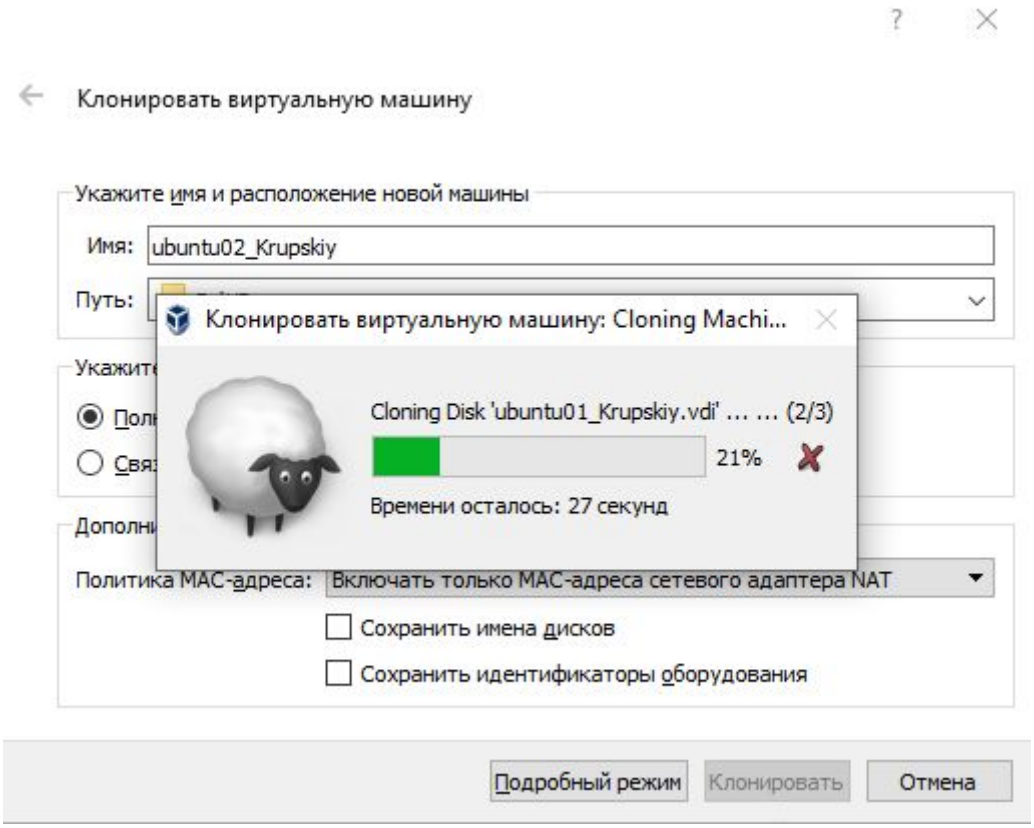
Module 2 Virtualization and Cloud Basic
Home work 2.2

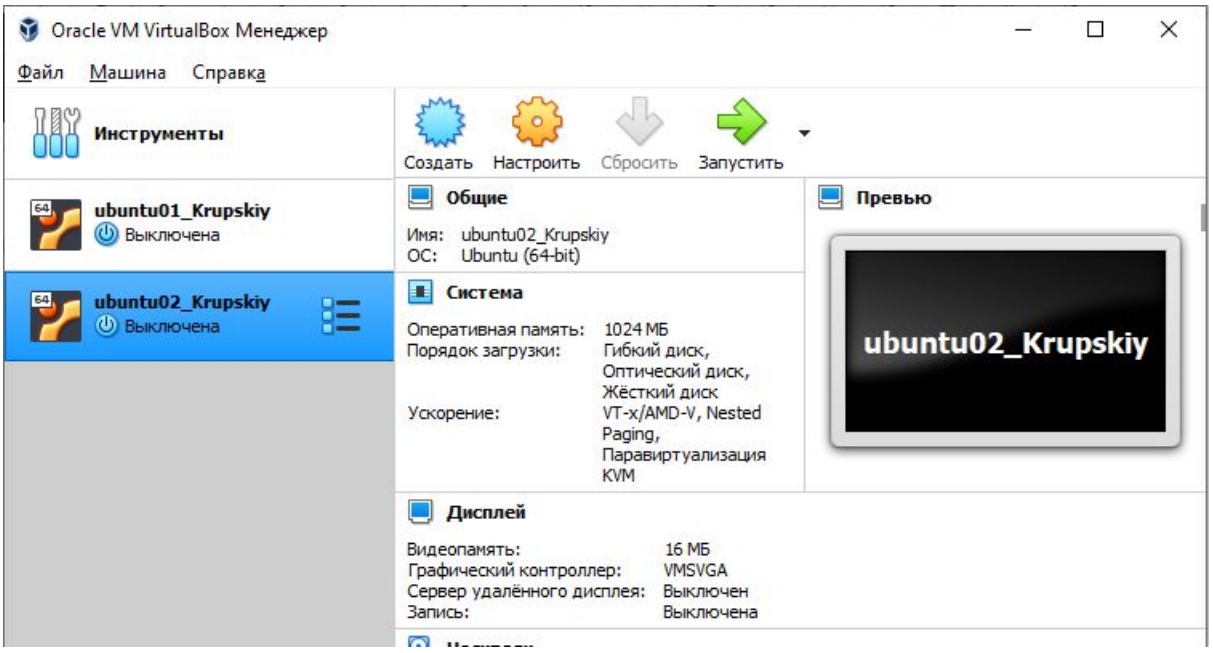


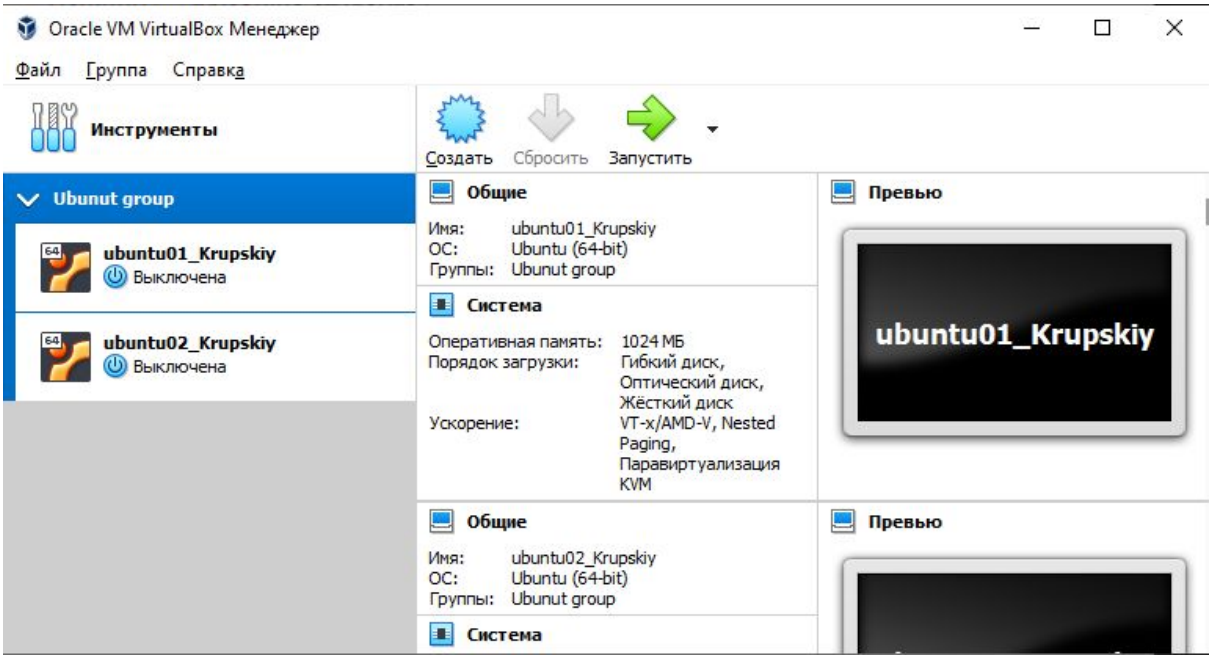


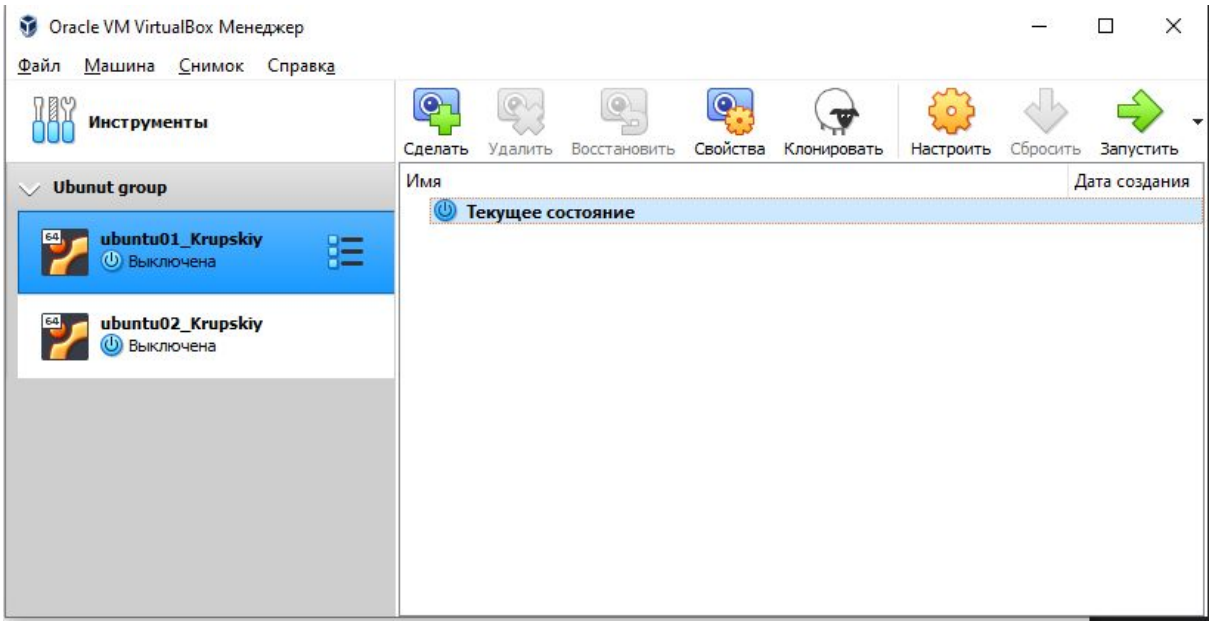

ubuntu01_Krupskiy [Работает] - Oracle VM VirtualBox
Файл Машина Вид Ввод Устройства Справка
ubuntu
Install Ubuntu Server
Install Ubuntu Server with the HWE kernel
Install MAAS Region Controller
Install MAAS Rack Controller
Check disc for defects
Test memory
Boot from first hard disk
Rescue a broken system
F1 Help F2 Language F3 Keymap F4 Modes F5 Accessibility F6 Other Options
Right Ctrl

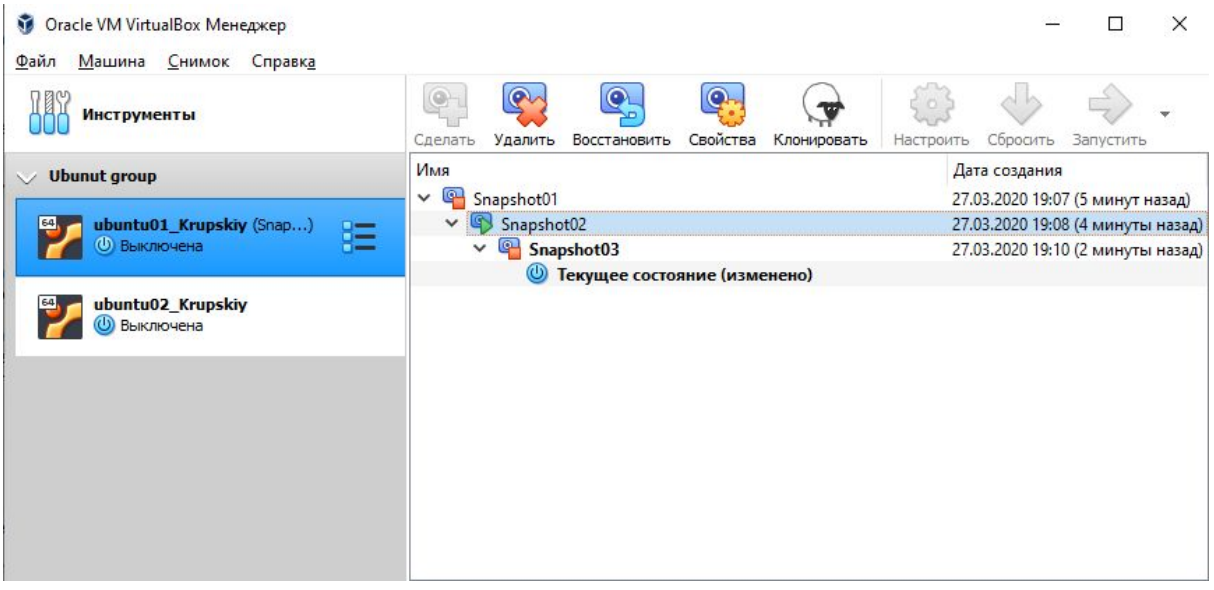

ubuntu01_Krupskiy [Работает] - Oracle VM VirtualBox
Файл Машина Вид Ввод Устройства Справка
Ubuntu 18.04.4 LTS ubuntu01 tty1
akuntu01 login:
Password:
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-76-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
System information as of Fri Mar 27 18:43:44 EET 2020
System load: 0.0 Processes: 85
Usage of /: 24.0% of 8.84GB Users logged in: 0
Memory usage: 12% IP address for enp0s3: 10.0.2.15
Swap usage: 0%
52 packages can be updated.
37 updates are security updates.
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.
ak@ubuntu01:~$
Right Ctrl

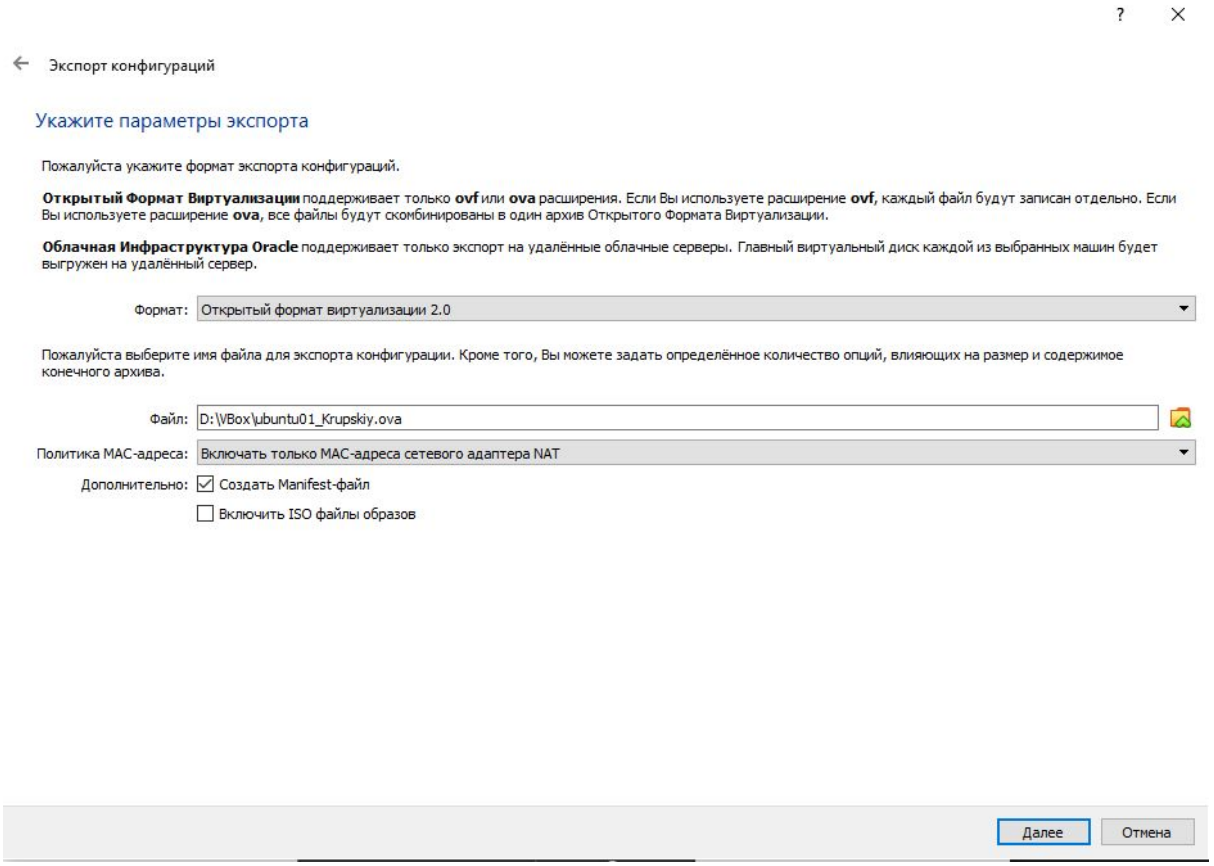

Клонировать виртуальную машину
Укажите имя и расположение новой машины
Имя: ubuntu02_Krupskiy
Путь:
Клонировать виртуальную машину: Cloning Machi...
Cloning Disk 'ubuntu01_Krupskiy.vdi' ... ... (2/3)
21%
Времени осталось: 27 секунд
Политика MAC-адреса: Включать только MAC-адреса сетевого адаптера NAT
Сохранить имена дисков
Сохранить идентификаторы оборудования
Подробный режим
Клонировать
Отмена

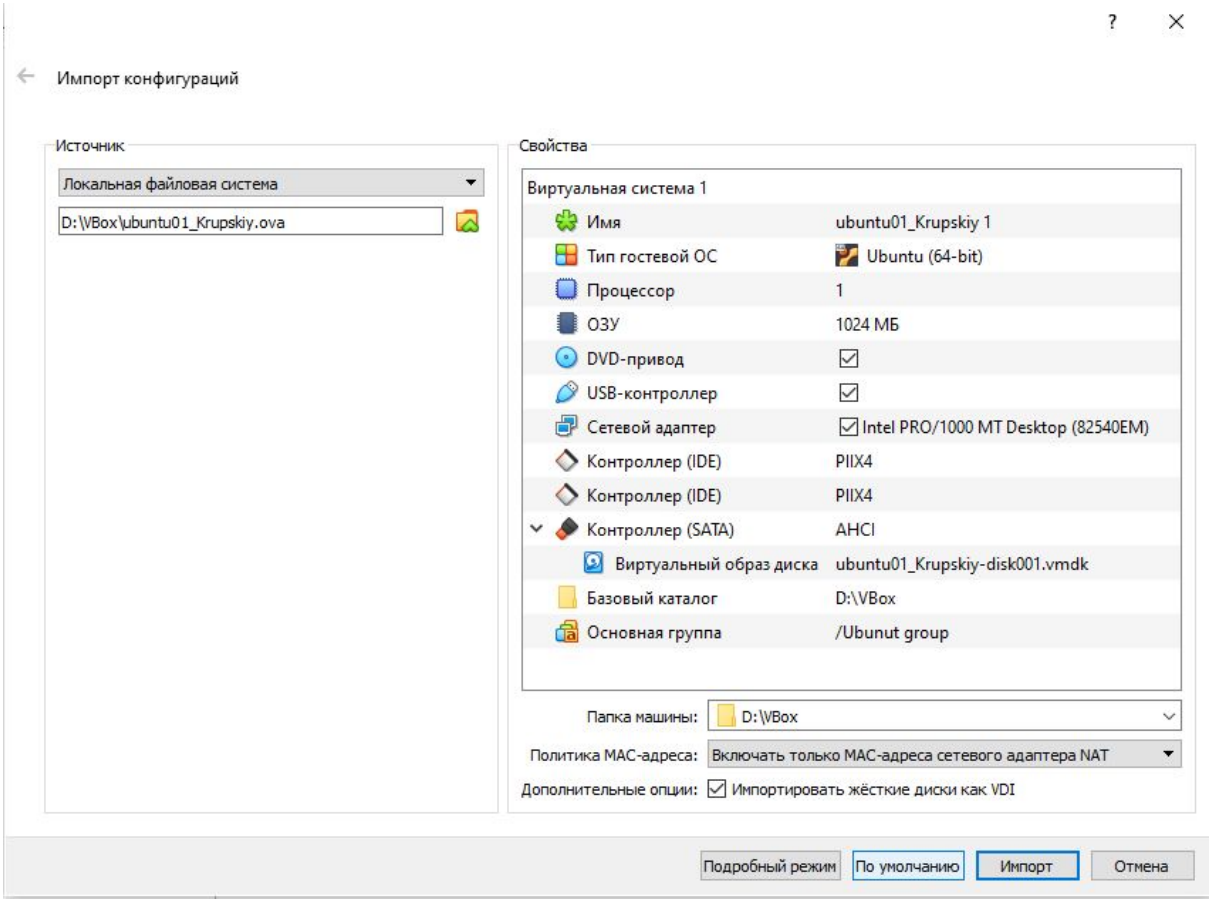

Oracle VM VirtualBox Менеджер
Файл Машина Справка
Инструменты
Создать Настроить Сбросить Запустить
ubuntu01_Krupskiy
Выключена
ubuntu02_Krupskiy
Выключена
Общие
Имя: ubuntu02_Krupskiy
ОС: Ubuntu (64-bit)
Система
Оперативная память: 1024 МБ
Порядок загрузки: Гибкий диск, Оптический диск, Жёсткий диск
Ускорение: VT-x/AMD-V, Nested Paging, Паравиртуализация KVM
Превью
ubuntu02_Krupskiy
Дисплей
Видеопамять: 16 МБ
Графический контроллер: VMSVGA
Сервер удалённого дисплея: Выключен
Запись: Выключена

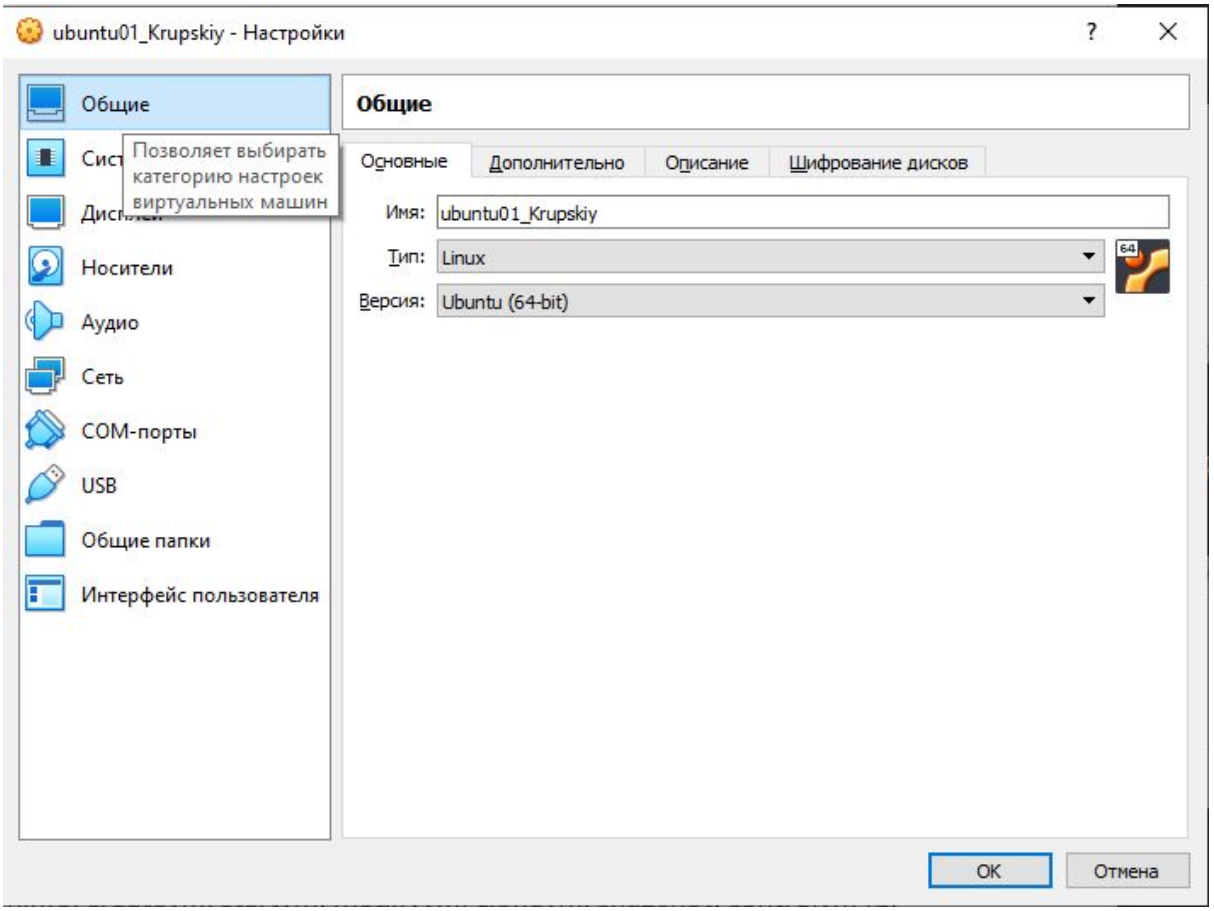

Oracle VM VirtualBox Менеджер
Файл Группа Справка
Инструменты
Создать Сбросить Запустить
Ubunut group
ubuntu01_Krupskiy
Выключена
ubuntu02_Krupskiy
Выключена
Общие
Имя: ubuntu01_Krupskiy
ОС: Ubuntu (64-bit)
Группы: Ubunut group
Система
Оперативная память: 1024 МБ
Порядок загрузки: Гибкий диск, Оптический диск, Жёсткий диск
Ускорение: VT-x/AMD-V, Nested Paging, Паравиртуализация KVM
Превью
ubuntu01_Krupskiy
Общие
Имя: ubuntu02_Krupskiy
ОС: Ubuntu (64-bit)
Группы: Ubunut group
Система
Превью

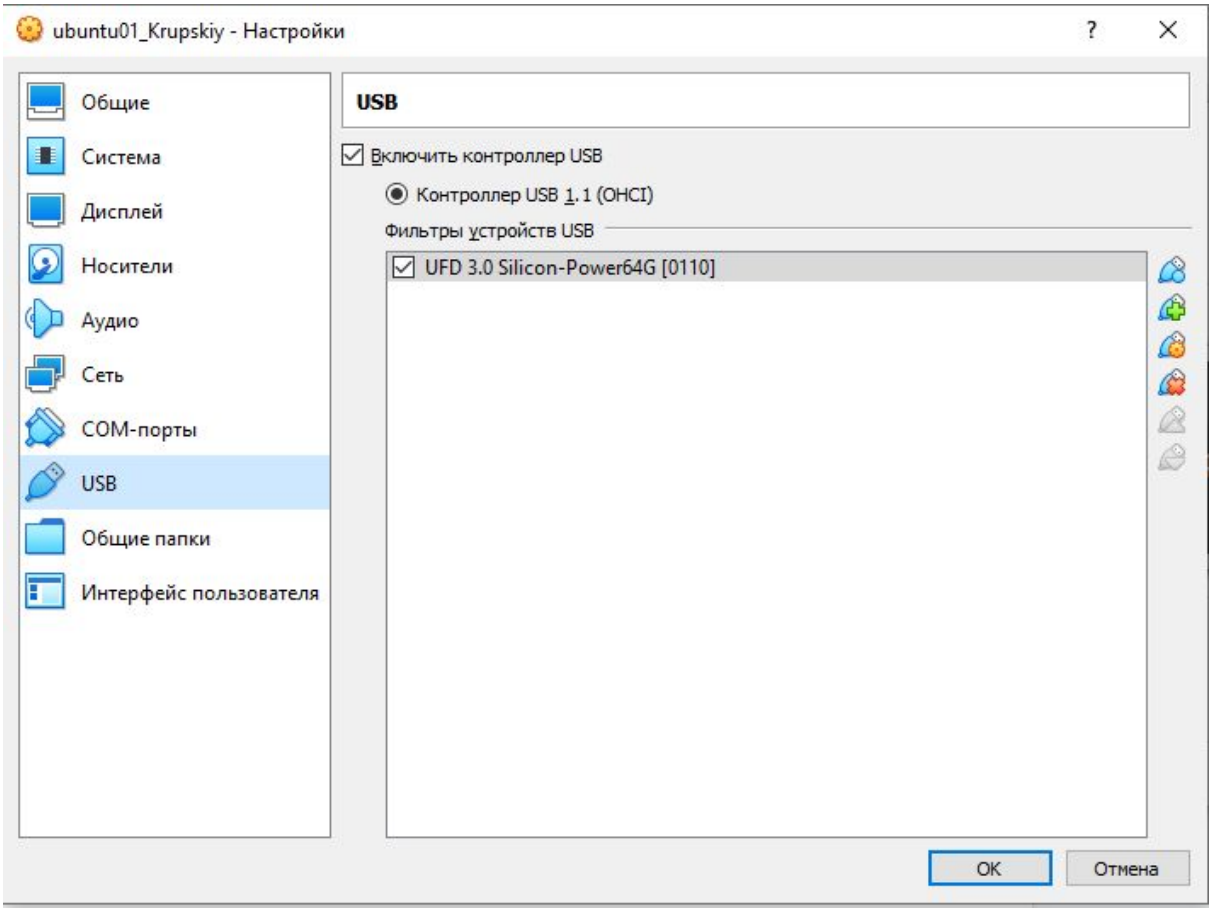

Oracle VM VirtualBox Менеджер
Файл Машина Снимок Справка
Инструменты
Сделать Удалить Восстановить Свойства Клонировать Настроить Сбросить Запустить
Ubunut group
ubuntu01_Krupskiy
Выключена
ubuntu02_Krupskiy
Выключена
Имя
Дата создания
Текущее состояние

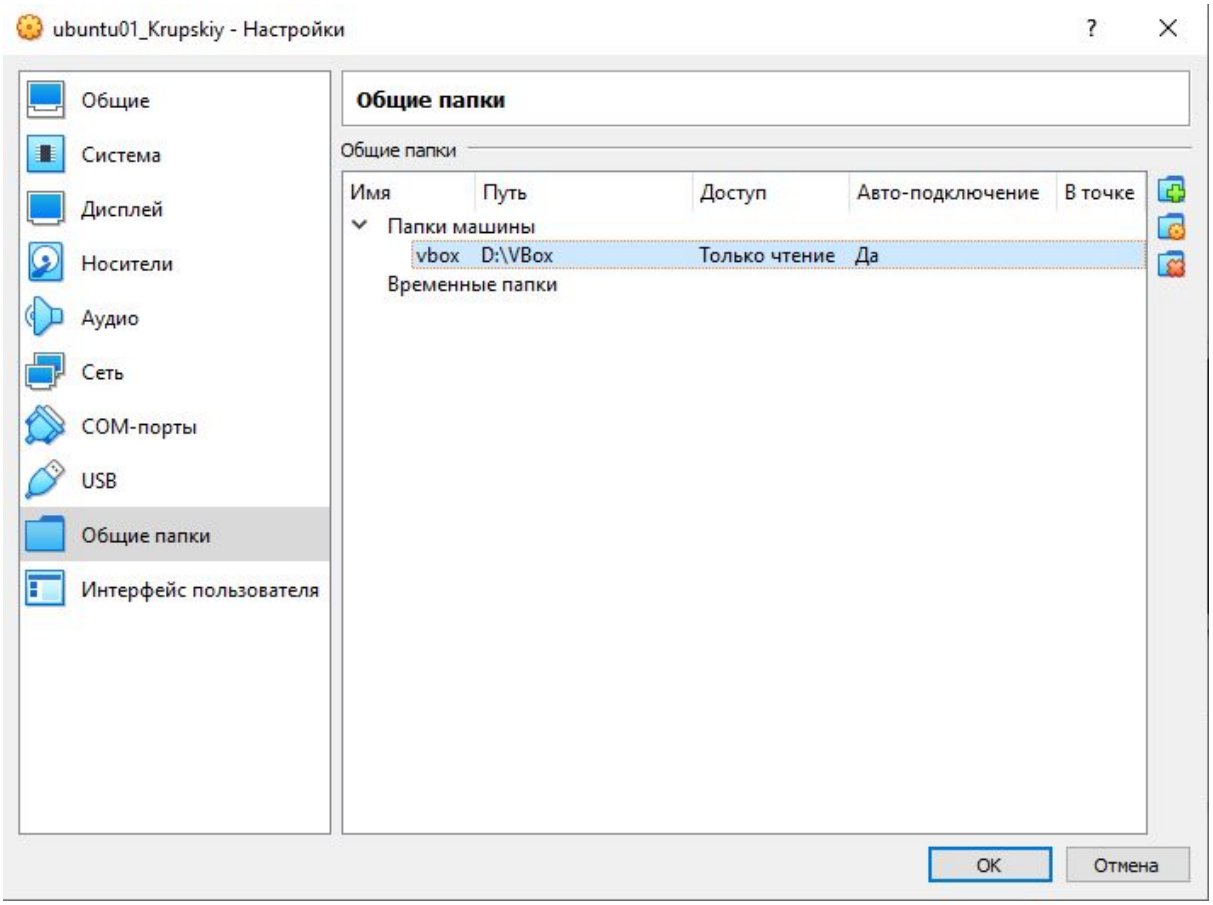

Oracle VM VirtualBox Менеджер
Файл Машина Снимок Справка
Инструменты
Сделать Удалить Восстановить Свойства Клонировать Настроить Сбросить Запустить
Ubunut group
ubuntu01_Krupskiy (Snap...)
Выключена
ubuntu02_Krupskiy
Выключена
Имя
Дата создания
Snapshot01
27.03.2020 19:07 (5 минут назад)
Snapshot02
27.03.2020 19:08 (4 минуты назад)
Snapshot03
27.03.2020 19:10 (2 минуты назад)
Текущее состояние (изменено)

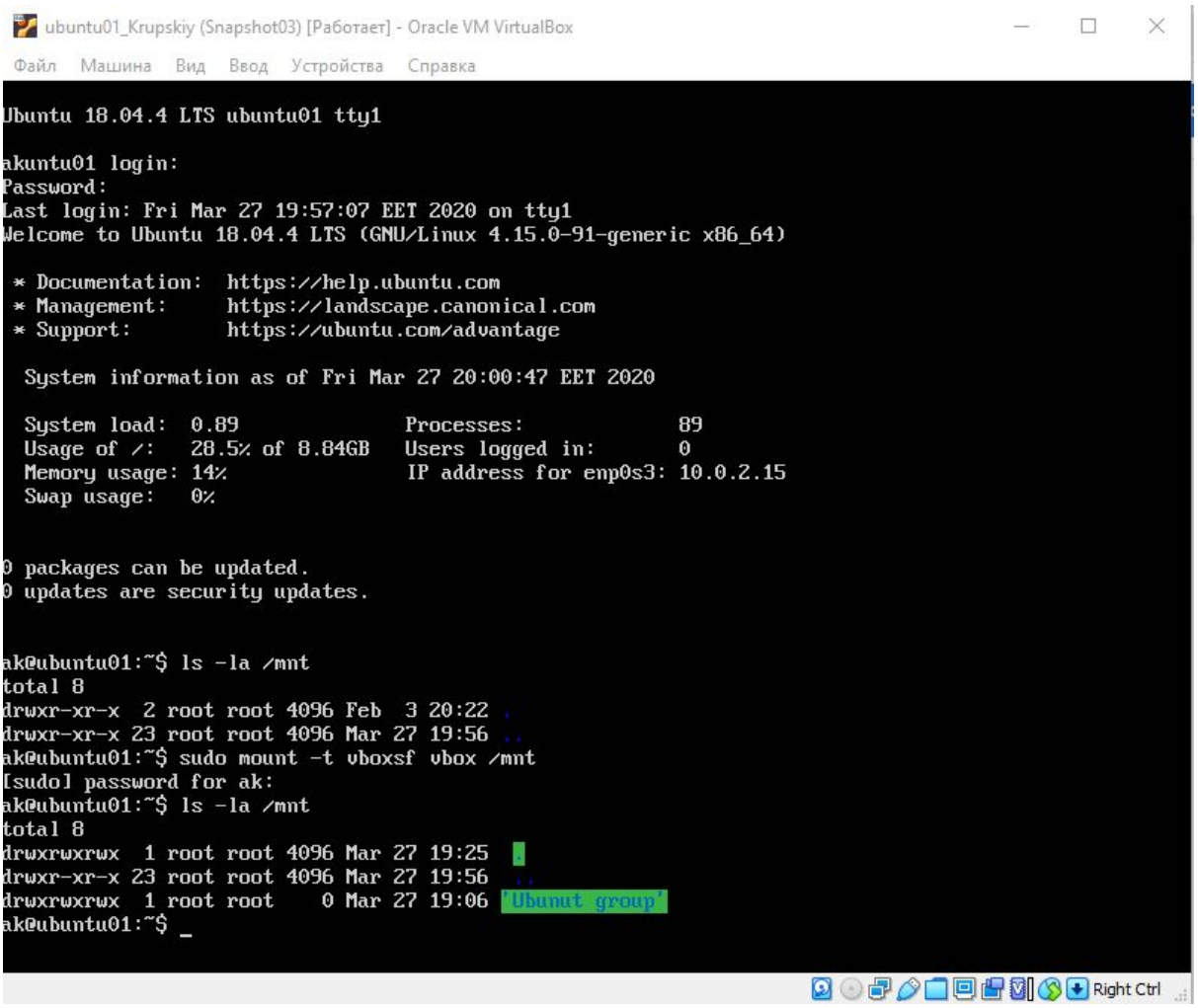

Экспорт конфигураций
Укажите параметры экспорта
Пожалуйста укажите формат экспорта конфигураций.
Открытый Формат Виртуализации поддерживает только ovf или ova расширения. Если Вы используете расширение ovf, каждый файл будут записан отдельно. Если Вы используете расширение ova, все файлы будут скомбинированы в один архив Открытого Формата Виртуализации.
Облачная Инфраструктура Oracle поддерживает только экспорт на удалённые облачные серверы. Главный виртуальный диск каждой из выбранных машин будет выгружен на удалённый сервер.
Формат:
Открытый формат виртуализации 2.0
Пожалуйста выберите имя файла для экспорта конфигурации. Кроме того, Вы можете задать определённое количество опций, влияющих на размер и содержимое конечного архива.
Файл:
D:\VBox\ubuntu01_Krupskiy.ova
Политика MAC-адреса:
Включать только MAC-адреса сетевого адаптера NAT
Дополнительно:
Создать Manifest-файл
Включить ISO файлы образов
Далее
Отмена


Импорт конфигураций
Источник
Локальная файловая система
D:\VBox\ubuntu01_Krupskiy.ova
Свойства
Виртуальная система 1
Имя
ubuntu01_Krupskiy 1
Тип гостевой ОС
Ubuntu (64-bit)
Процессор
1
ОЗУ
1024 МБ
DVD-привод
USB-контроллер
Сетевой адаптер
Intel PRO/1000 MT Desktop (82540EM)
Контроллер (IDE)
PIIX4
Контроллер (IDE)
PIIX4
Контроллер (SATA)
AHCI
Виртуальный образ диска
ubuntu01_Krupskiy-disk001.vmdk
Базовый каталог
D:\VBox
Основная группа
/Ubunut group
Папка машины:
D:\VBox
Политика MAC-адреса:
Включать только MAC-адреса сетевого адаптера NAT
Дополнительные опции:
Импортировать жёсткие диски как VDI
Подробный режим
По умолчанию
Импорт
Отмена

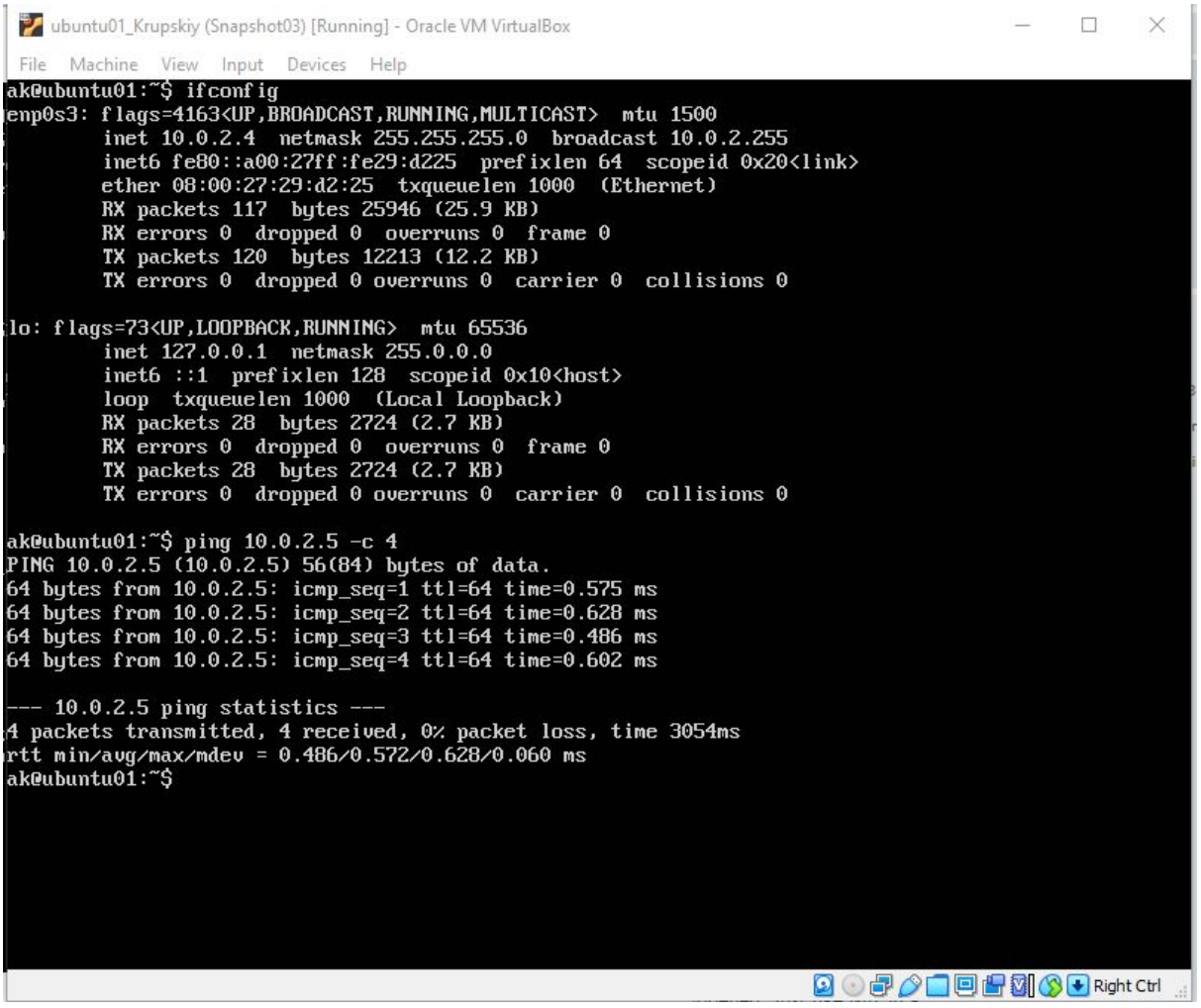

ubuntu01_Krupskiy - Настройки
Общие
Позволяет выбирать категорию настроек виртуальных машин
Носители
Аудио
Сеть
COM-порты
USB
Общие папки
Интерфейс пользователя
Общие
Основные
Дополнительно
Описание
Шифрование дисков
Имя: ubuntu01_Krupskiy
Тип: Linux
Версия: Ubuntu (64-bit)
OK
Отмена

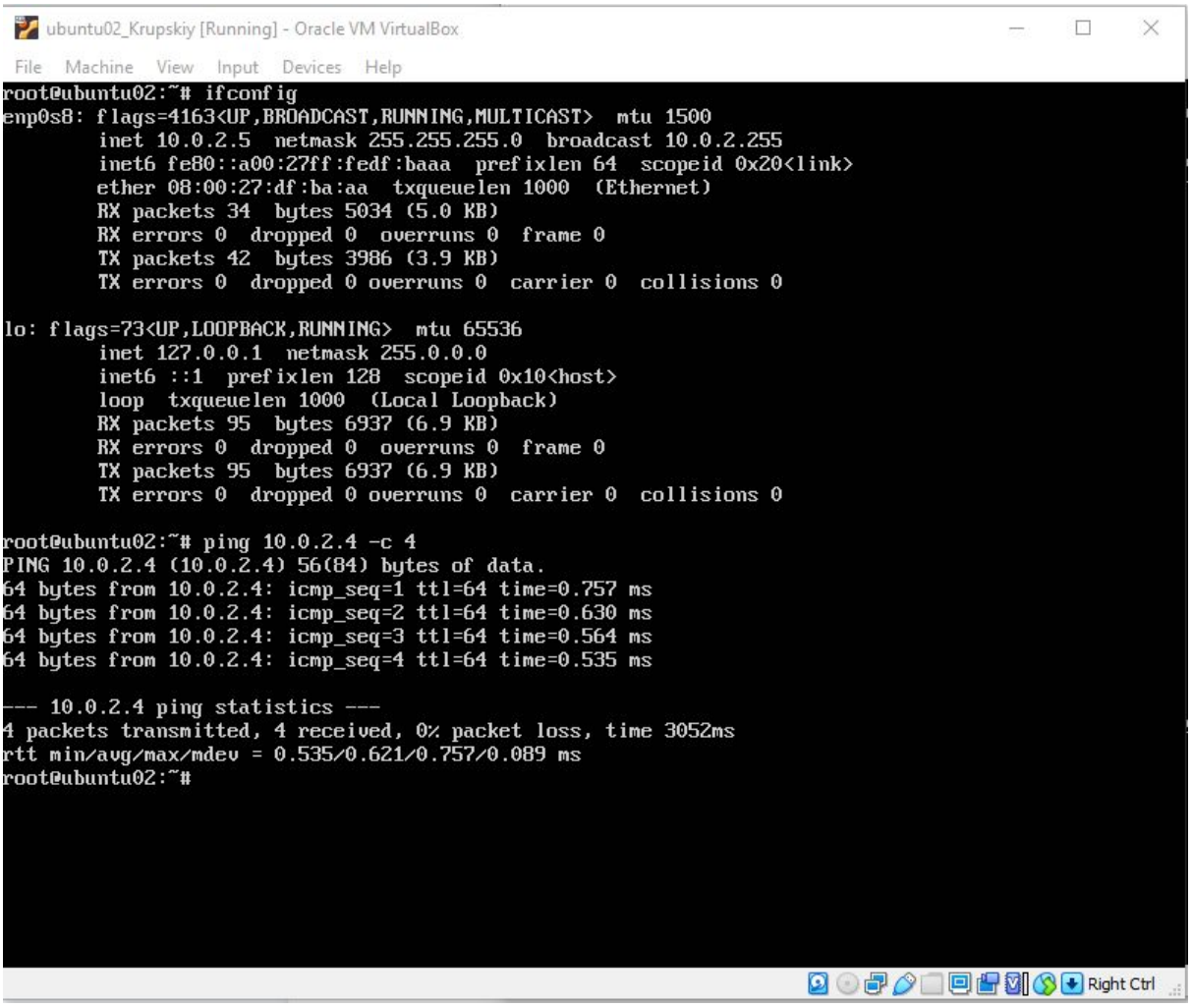

ubuntu01_Krupskiy - Настройки
Общие
Система
Дисплей
Носители
Аудио
Сеть
COM-порты
USB
Общие папки
Интерфейс пользователя
USB
Включить контроллер USB
Контроллер USB 1.1 (OHCI)
Фильтры устройств USB
UFD 3.0 Silicon-Power64G [0110]
OK
Отмена

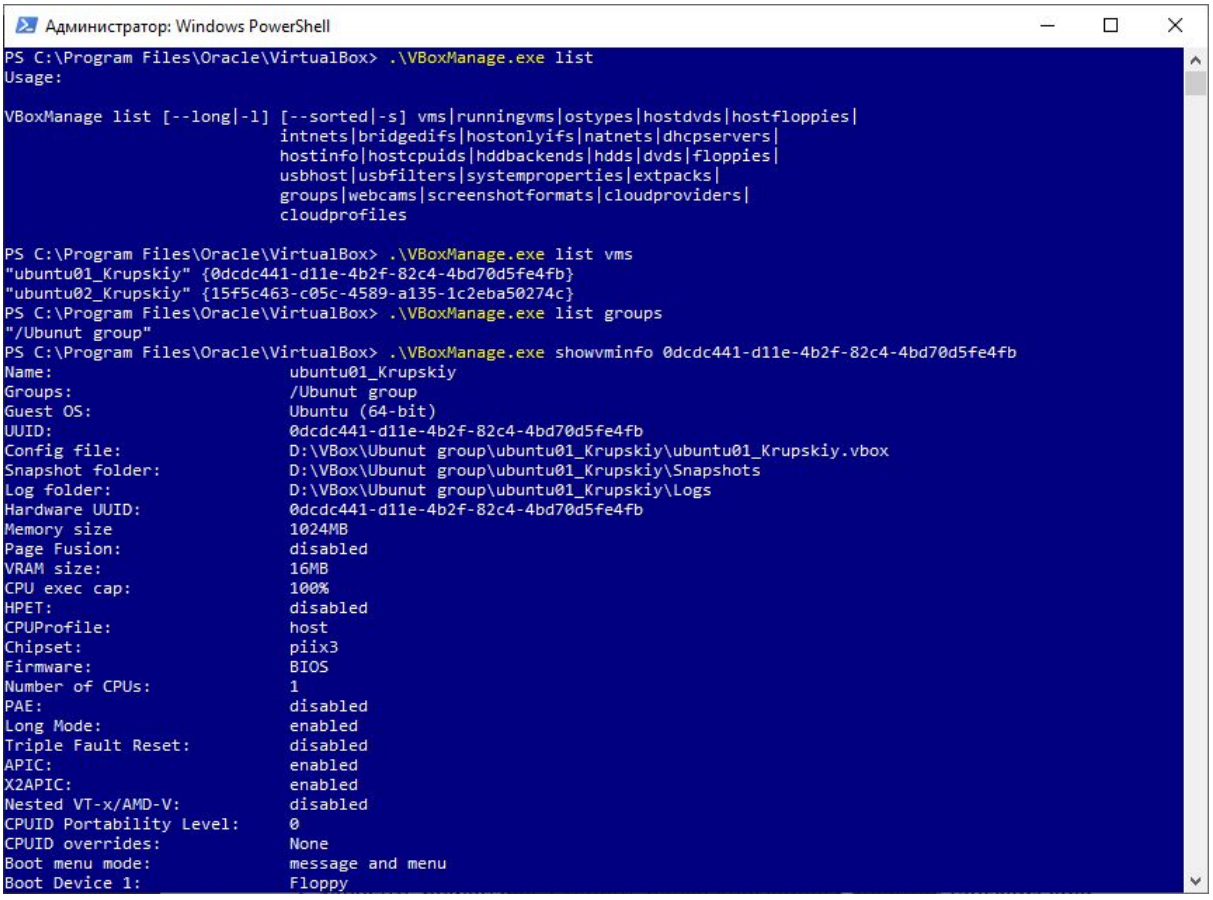

ubuntu01_Krupskiy - Настройки
Общие
Система
Дисплей
Носители
Аудио
Сеть
COM-порты
USB
Общие папки
Интерфейс пользователя
Общие папки
Общие папки
Имя
Путь
Доступ
Авто-подключение
В точке
Папки машины
vbox
D:\VBox
Только чтение
Да
Временные папки
OK
Отмена

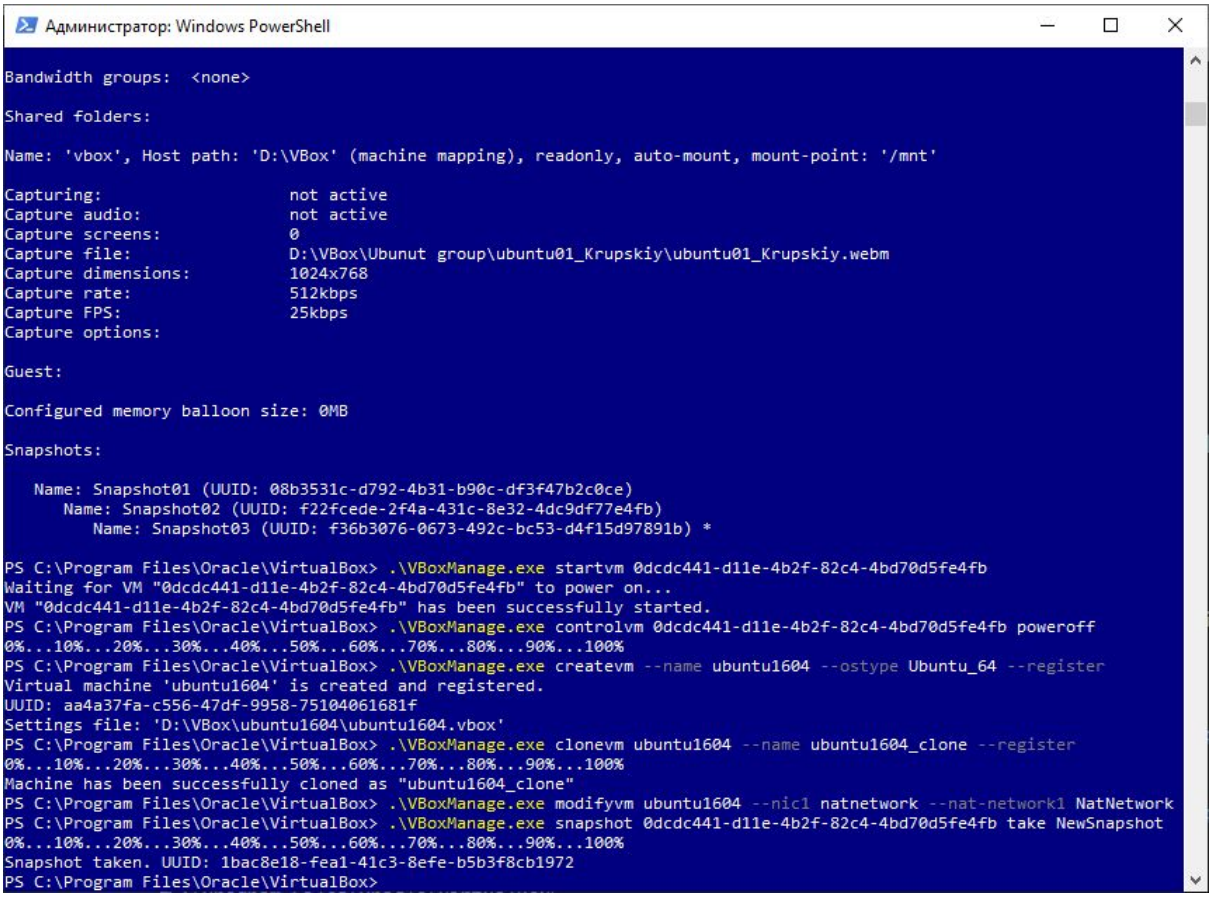

ubuntu01_Krupskiy (Snapshot03) [Работает] - Oracle VM VirtualBox
Файл Машина Вид Ввод Устройства Справка
Ubuntu 18.04.4 LTS ubuntu01 tty1
akuntu01 login:
Password:
Last login: Fri Mar 27 19:57:07 EET 2020 on tty1
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-91-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
System information as of Fri Mar 27 20:00:47 EET 2020
System load: 0.89 Processes: 89
Usage of /: 28.5% of 8.84GB Users logged in: 0
Memory usage: 14% IP address for enp0s3: 10.0.2.15
Swap usage: 0%
0 packages can be updated.
0 updates are security updates.
ak@ubuntu01:~$ ls -la /mnt
total 8
drwxr-xr-x 2 root root 4096 Feb 3 20:22 .
drwxr-xr-x 23 root root 4096 Mar 27 19:56 ..
ak@ubuntu01:~$ sudo mount -t vboxsf vbox /mnt
[sudo] password for ak:
ak@ubuntu01:~$ ls -la /mnt
total 8
drwxrwxrwx 1 root root 4096 Mar 27 19:25 .
drwxr-xr-x 23 root root 4096 Mar 27 19:56 ..
drwxrwxrwx 1 root root 0 Mar 27 19:06 'Ubunut group'
ak@ubuntu01:~$ _
Right Ctrl

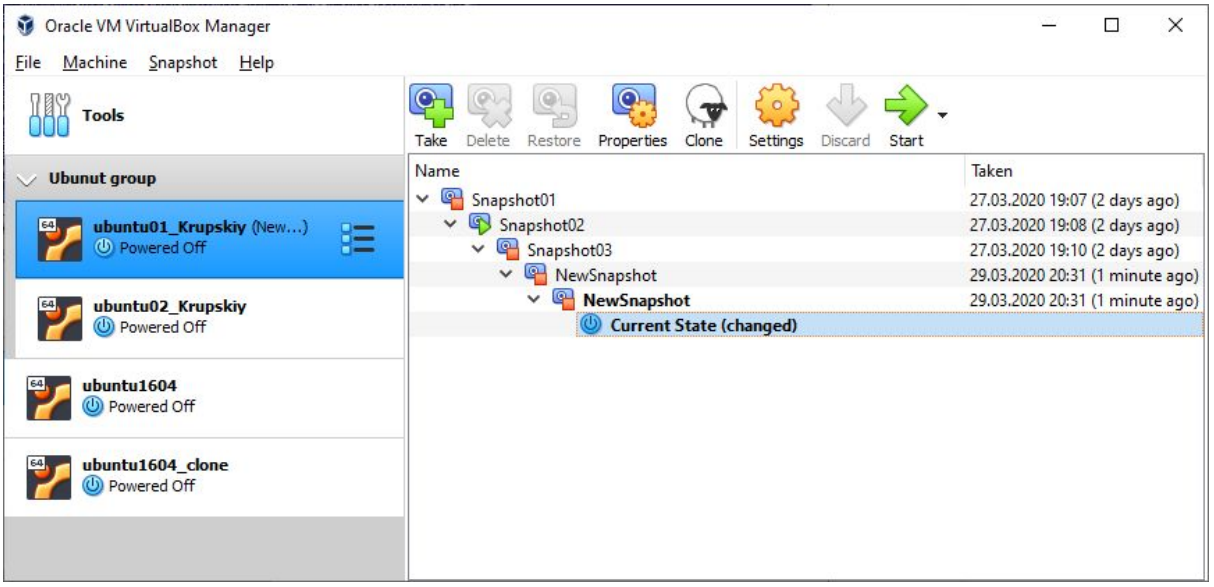
	VM ↔ Host	VM1 ↔ VM2	VM → Internet	VM ← Internet
NAT	NO	NO	YES	Port forward
Bridged	YES	YES	YES	YES
Internal	NO	YES	NO	NO
Host-only	YES	YES	NO	NO
NAT network	NO	YES	YES	Port forward

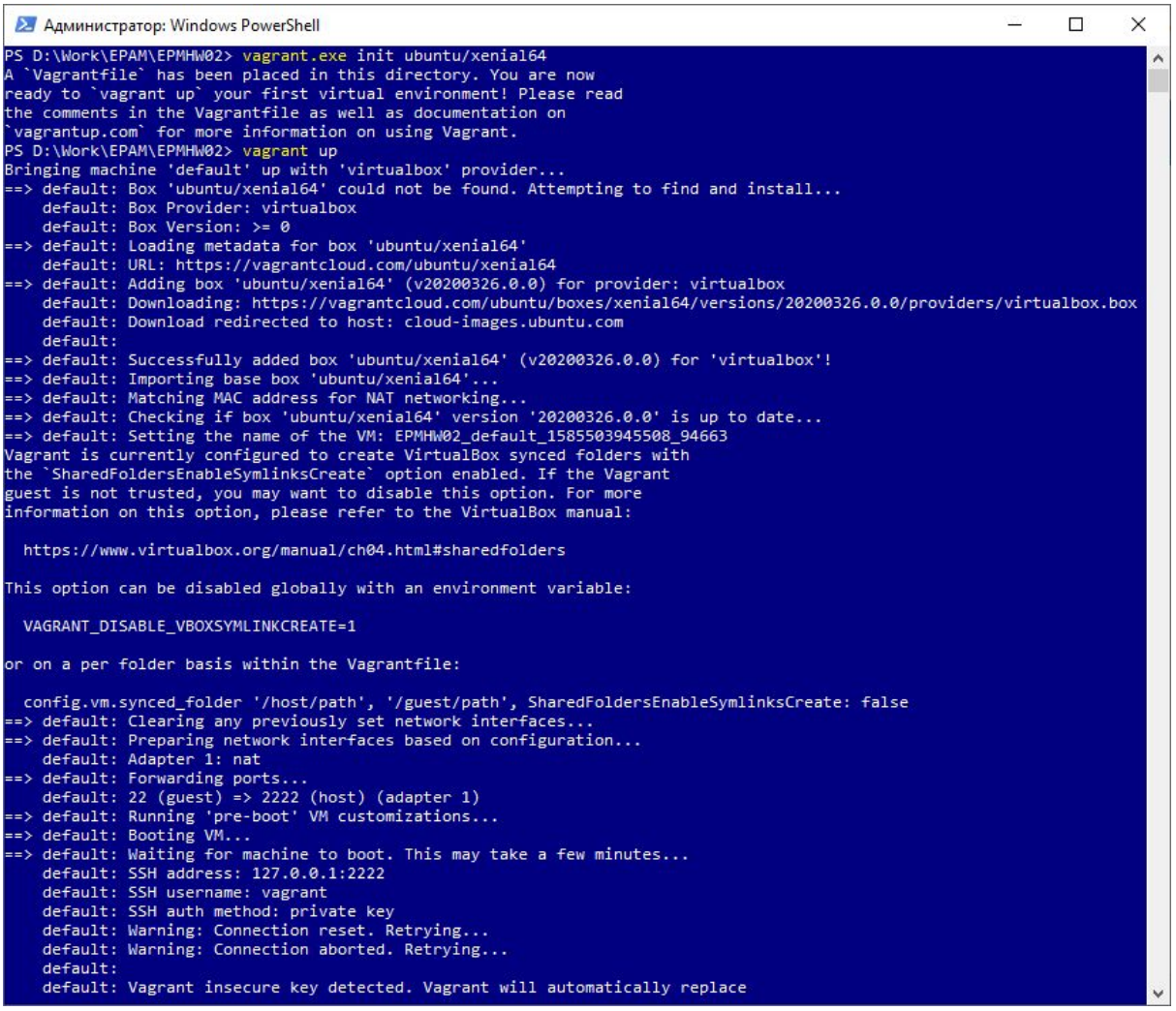


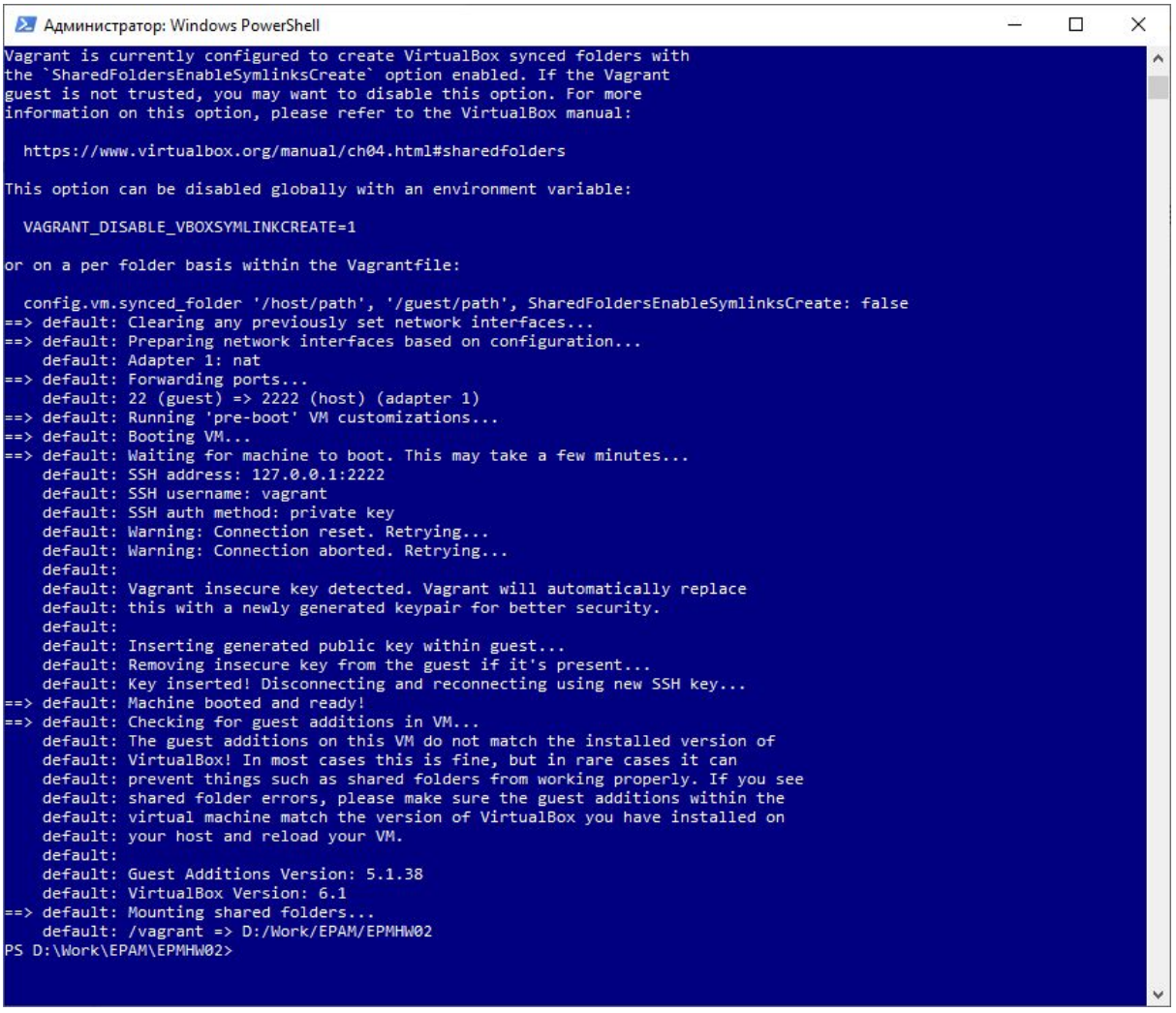

ubuntu02_Krupskiy [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
root@ubuntu02:~# ifconfig
enp0s8: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 10.0.2.5 netmask 255.255.255.0 broadcast 10.0.2.255
inet6 fe80::a00:27ff:fedf:baaa prefixlen 64 scopeid 0x20<link>
ether 08:00:27:df:ba:aa txqueuelen 1000 (Ethernet)
RX packets 34 bytes 5034 (5.0 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 42 bytes 3986 (3.9 KB)
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
inet6 ::1 prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 95 bytes 6937 (6.9 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 95 bytes 6937 (6.9 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
root@ubuntu02:~# ping 10.0.2.4 -c 4
PING 10.0.2.4 (10.0.2.4) 56(84) bytes of data.
64 bytes from 10.0.2.4: icmp_seq=1 ttl=64 time=0.757 ms
64 bytes from 10.0.2.4: icmp_seq=2 ttl=64 time=0.630 ms
64 bytes from 10.0.2.4: icmp_seq=3 ttl=64 time=0.564 ms
64 bytes from 10.0.2.4: icmp_seq=4 ttl=64 time=0.535 ms
--- 10.0.2.4 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3052ms
rtt min/avg/max/mdev = 0.535/0.621/0.757/0.089 ms
root@ubuntu02:~#
Right Ctrl

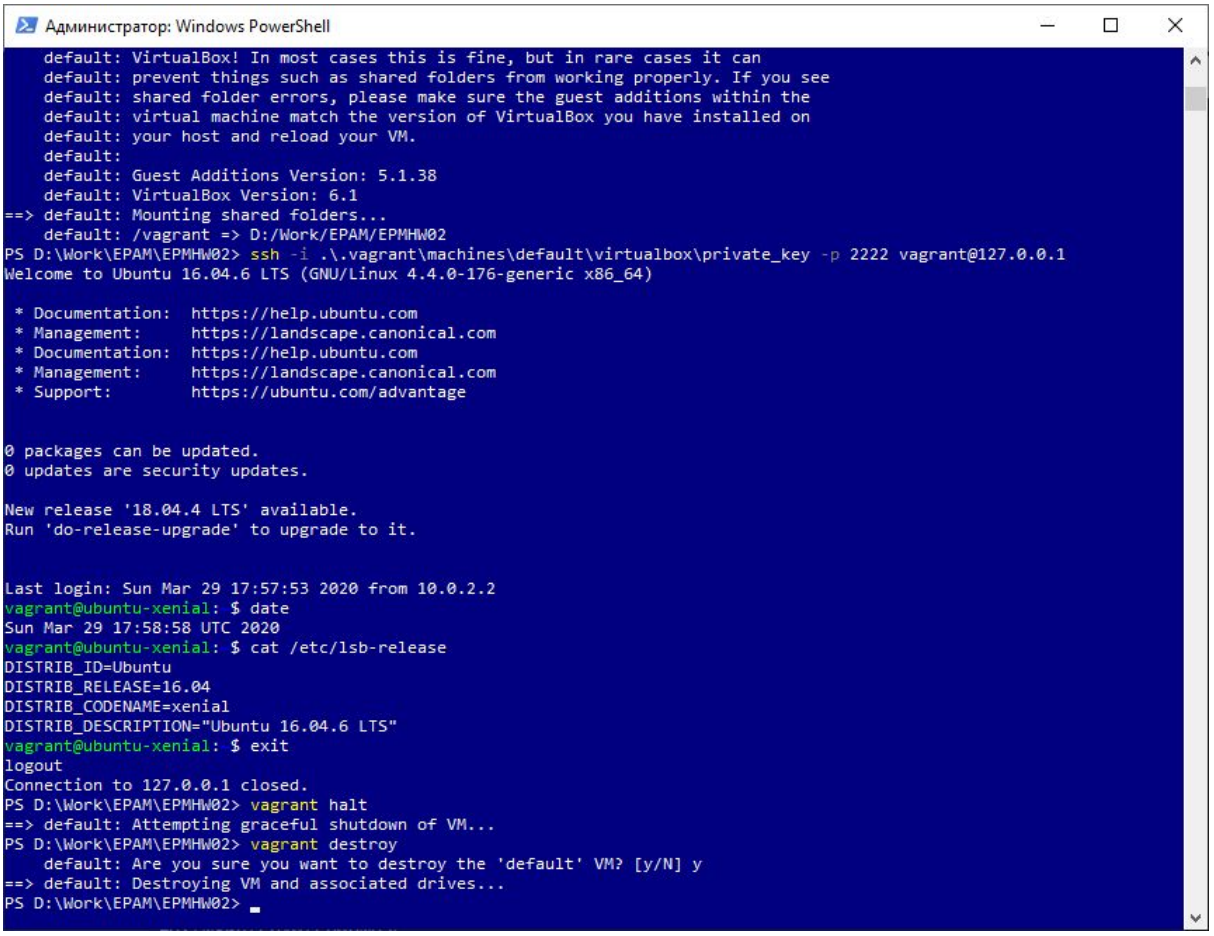

Администратор: Windows PowerShell
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe list
Usage:
VBoxManage list [--long|-l] [--sorted|-s] vms|runningvms|ostypes|hostdvds|hostfloppies|
intnets|bridgedifs|hostonlyifs|natnets|dhcpservers|
hostinfo|hostcpuids|hddbackends|hdds|dvds|floppies|
usbhost|usbfilters|systemproperties|extpacks|
groups|webcams|screenshotformats|cloudproviders|
cloudprofiles
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe list vms
"ubuntu01_Krupskiy" {0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb}
"ubuntu02_Krupskiy" {15f5c463-c05c-4589-a135-1c2eba50274c}
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe list groups
"/Ubunut group"
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe showvminfo 0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb
Name: ubuntu01_Krupskiy
Groups: /Ubunut group
Guest OS: Ubuntu (64-bit)
UUID: 0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb
Config file: D:\VBox\Ubunut group\ubuntu01_Krupskiy\ubuntu01_Krupskiy.vbox
Snapshot folder: D:\VBox\Ubunut group\ubuntu01_Krupskiy\Snapshots
Log folder: D:\VBox\Ubunut group\ubuntu01_Krupskiy\Logs
Hardware UUID: 0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb
Memory size 1024MB
Page Fusion: disabled
VRAM size: 16MB
CPU exec cap: 100%
HPET: disabled
CPUProfile: host
Chipset: piix3
Firmware: BIOS
Number of CPUs: 1
PAE: disabled
Long Mode: enabled
Triple Fault Reset: disabled
APIC: enabled
X2APIC: enabled
Nested VT-x/AMD-V: disabled
CPUID Portability Level: 0
CPUID overrides: None
Boot menu mode: message and menu
Boot Device 1: Floppy

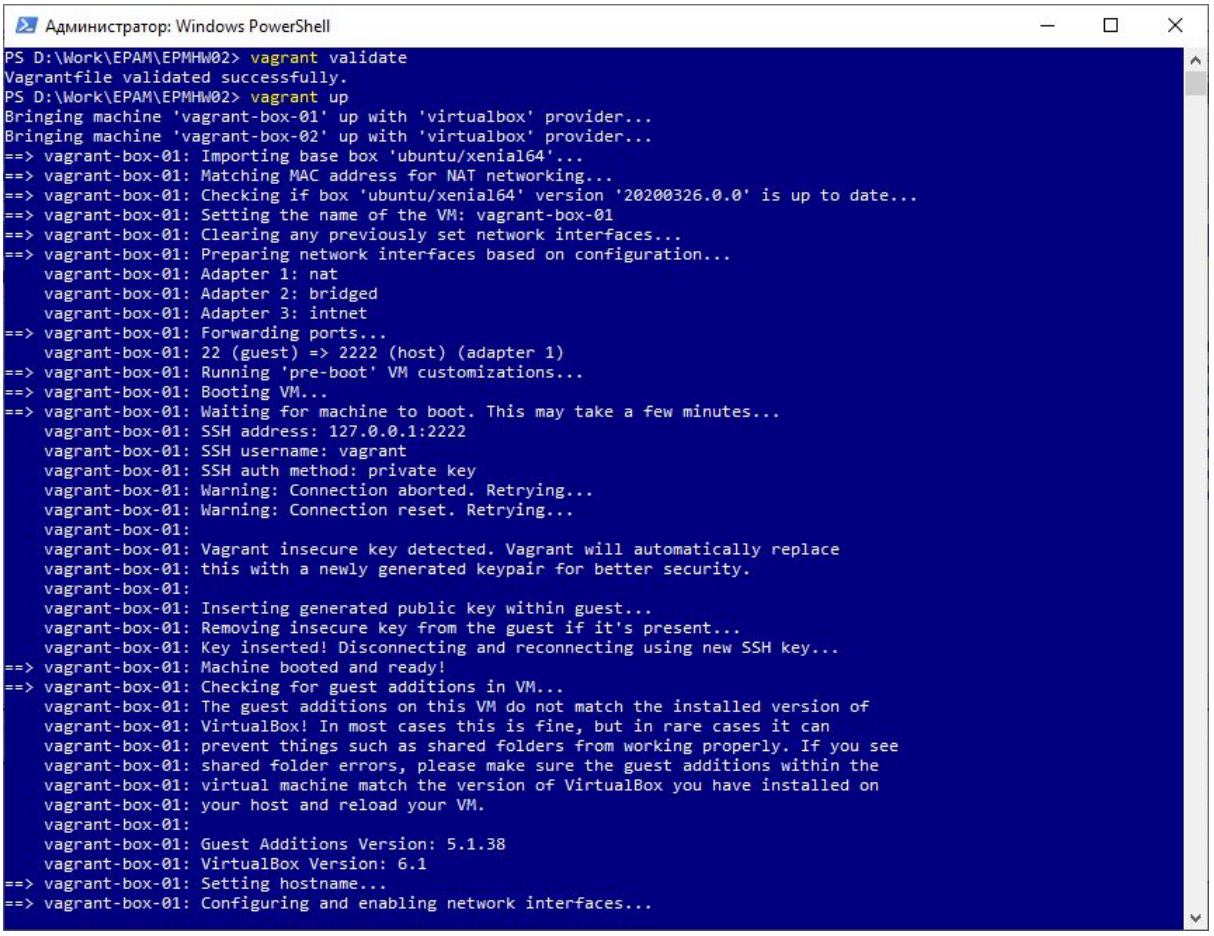

Администратор: Windows PowerShell
Bandwidth groups: <none>
Shared folders:
Name: 'vbox', Host path: 'D:\VBox' (machine mapping), readonly, auto-mount, mount-point: '/mnt'
Capturing: not active
Capture audio: not active
Capture screens: 0
Capture file: D:\VBox\Ubunut group\ubuntu01_Krupskiy\ubuntu01_Krupskiy.webm
Capture dimensions: 1024x768
Capture rate: 512kbps
Capture FPS: 25kbps
Capture options:
Guest:
Configured memory balloon size: 0MB
Snapshots:
Name: Snapshot01 (UUID: 08b3531c-d792-4b31-b90c-df3f47b2c0ce)
Name: Snapshot02 (UUID: f22fcede-2f4a-431c-8e32-4dc9df77e4fb)
Name: Snapshot03 (UUID: f36b3076-0673-492c-bc53-d4f15d97891b) *
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe startvm 0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb
Waiting for VM "0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb" to power on...
VM "0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb" has been successfully started.
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe controlvm 0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb poweroff
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe createvm --name ubuntu1604 --ostype Ubuntu_64 --register
Virtual machine 'ubuntu1604' is created and registered.
UUID: aa4a37fa-c556-47df-9958-75104061681f
Settings file: 'D:\VBox\ubuntu1604\ubuntu1604.vbox'
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe clonevm ubuntu1604 --name ubuntu1604_clone --register
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Machine has been successfully cloned as "ubuntu1604_clone"
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe modifyvm ubuntu1604 --nic1 natnetwork --nat-network1 NatNetwork
PS C:\Program Files\Oracle\VirtualBox> .\VBoxManage.exe snapshot 0dcdc441-d11e-4b2f-82c4-4bd70d5fe4fb take NewSnapshot
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Snapshot taken. UUID: 1bac8e18-fea1-41c3-8efe-b5b3f8cb1972
PS C:\Program Files\Oracle\VirtualBox>

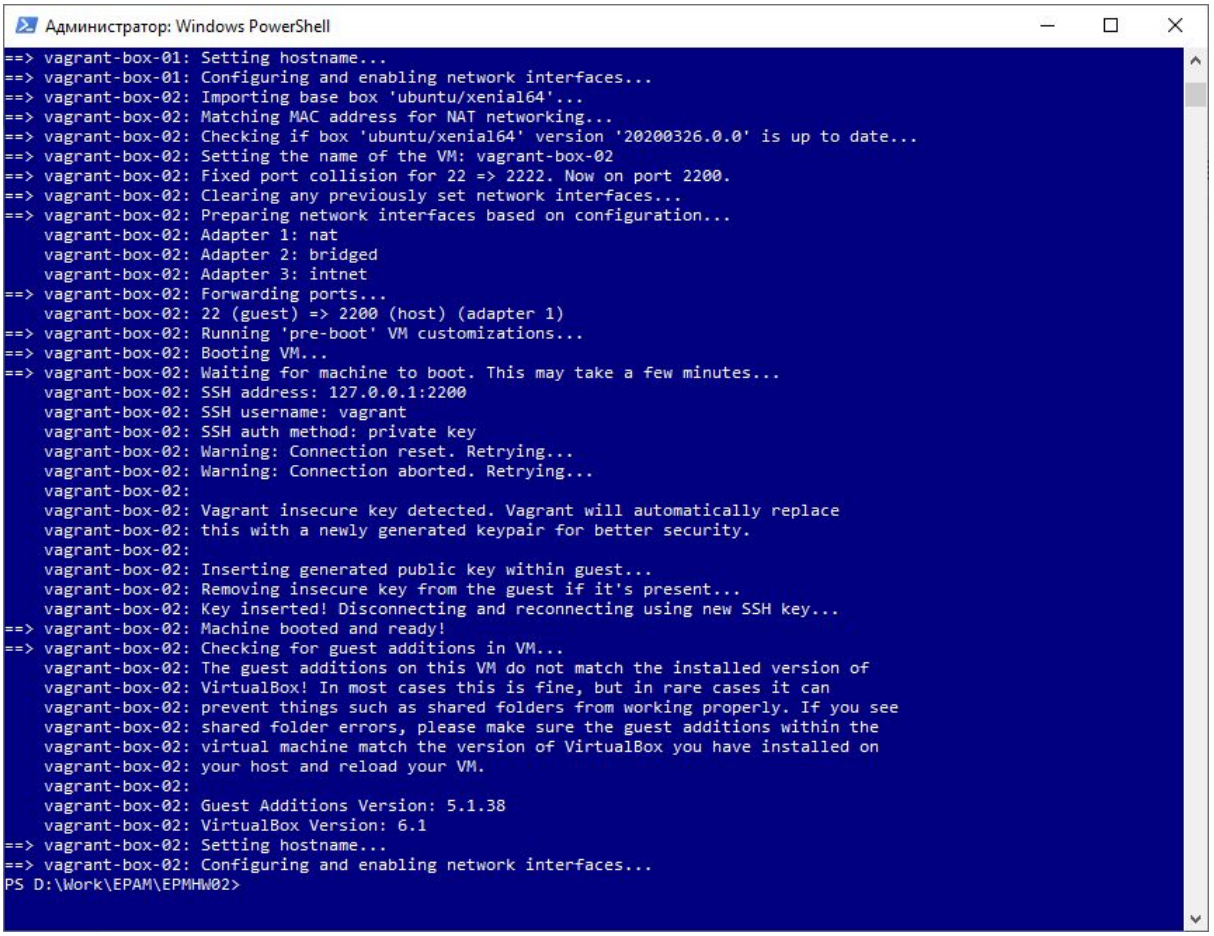

Oracle VM VirtualBox Manager
File Machine Snapshot Help
Tools
Ubunut group
ubuntu01_Krupskiy (New...)
Powered Off
ubuntu02_Krupskiy
Powered Off
ubuntu1604
Powered Off
ubuntu1604_clone
Powered Off
Take Delete Restore Properties Clone Settings Discard Start
Name
Taken
Snapshot01 27.03.2020 19:07 (2 days ago)
Snapshot02 27.03.2020 19:08 (2 days ago)
Snapshot03 27.03.2020 19:10 (2 days ago)
NewSnapshot 29.03.2020 20:31 (1 minute ago)
NewSnapshot 29.03.2020 20:31 (1 minute ago)
Current State (changed)

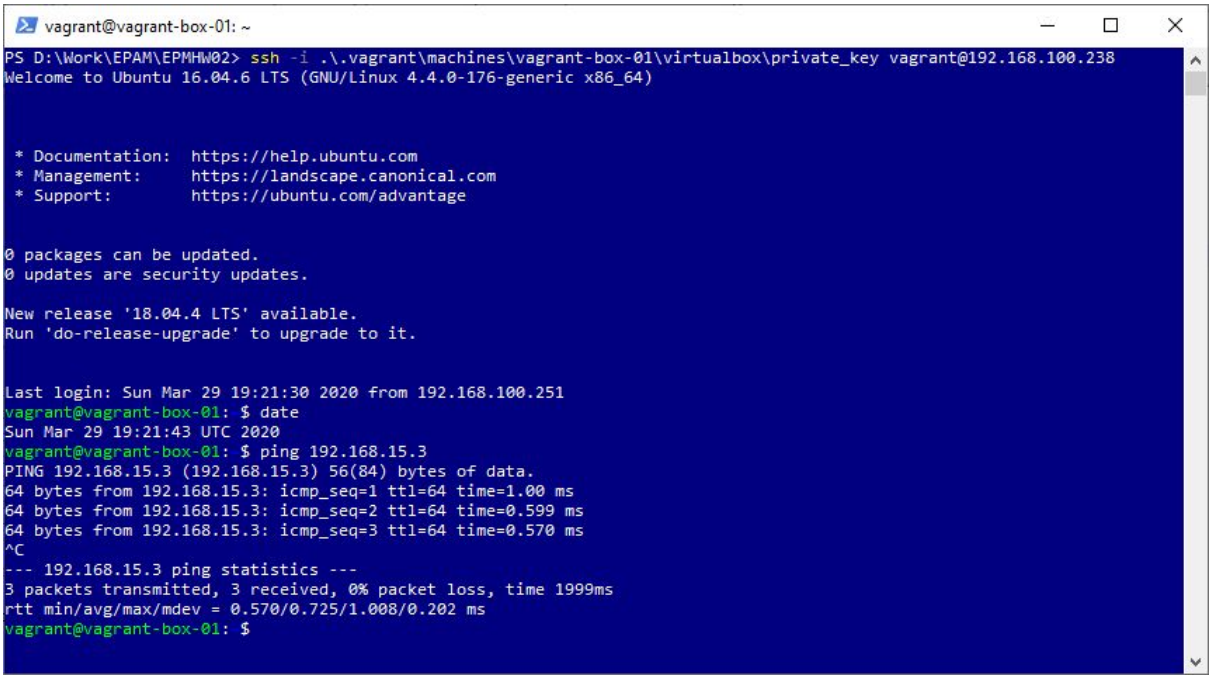

Администратор: Windows PowerShell
PS D:\Work\EPAM\EPMHW02> vagrant.exe init ubuntu/xenial64
A `Vagrantfile` has been placed in this directory. You are now
ready to `vagrant up` your first virtual environment! Please read
the comments in the Vagrantfile as well as documentation on
`vagrantup.com` for more information on using Vagrant.
PS D:\Work\EPAM\EPMHW02> vagrant up
Bringing machine 'default' up with 'virtualbox' provider...
==> default: Box 'ubuntu/xenial64' could not be found. Attempting to find and install...
default: Box Provider: virtualbox
default: Box Version: >= 0
==> default: Loading metadata for box 'ubuntu/xenial64'
default: URL: https://vagrantcloud.com/ubuntu/xenial64
==> default: Adding box 'ubuntu/xenial64' (v20200326.0.0) for provider: virtualbox
default: Downloading: https://vagrantcloud.com/ubuntu/boxes/xenial64/versions/20200326.0.0/providers/virtualbox.box
default: Download redirected to host: cloud-images.ubuntu.com
default:
==> default: Successfully added box 'ubuntu/xenial64' (v20200326.0.0) for 'virtualbox'!
==> default: Importing base box 'ubuntu/xenial64'...
==> default: Matching MAC address for NAT networking...
==> default: Checking if box 'ubuntu/xenial64' version '20200326.0.0' is up to date...
==> default: Setting the name of the VM: EPMHW02_default_1585503945508_94663
Vagrant is currently configured to create VirtualBox synced folders with
the `SharedFoldersEnableSymlinksCreate` option enabled. If the Vagrant
guest is not trusted, you may want to disable this option. For more
information on this option, please refer to the VirtualBox manual:
https://www.virtualbox.org/manual/ch04.html#sharedfolders
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: Running 'pre-boot' VM customizations...
==> 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: Warning: Connection reset. Retrying...
default: Warning: Connection aborted. Retrying...
default:
default: Vagrant insecure key detected. Vagrant will automatically replace

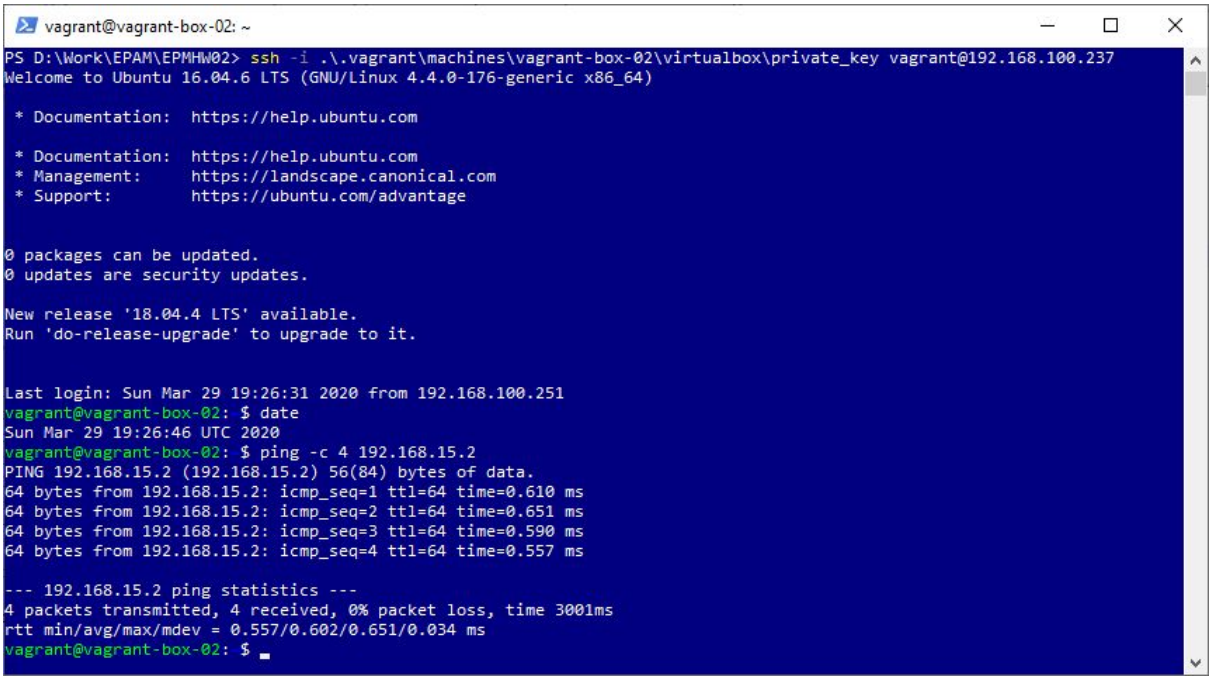

Администратор: Windows PowerShell
Vagrant is currently configured to create VirtualBox synced folders with
the `SharedFoldersEnableSymlinksCreate` option enabled. If the Vagrant
guest is not trusted, you may want to disable this option. For more
information on this option, please refer to the VirtualBox manual:
https://www.virtualbox.org/manual/ch04.html#sharedfolders
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: Running 'pre-boot' VM customizations...
==> 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: Warning: Connection reset. Retrying...
default: Warning: Connection aborted. Retrying...
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: 5.1.38
default: VirtualBox Version: 6.1
==> default: Mounting shared folders...
default: /vagrant => D:/Work/EPAM/EPMHW02
PS D:\Work\EPAM\EPMHW02>


Администратор: Windows PowerShell
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: 5.1.38
default: VirtualBox Version: 6.1
==> default: Mounting shared folders...
default: /vagrant => D:/Work/EPAM/EPMHW02
PS D:\Work\EPAM\EPMHW02> ssh -i .\.vagrant\machines\default\virtualbox\private_key -p 2222 vagrant@127.0.0.1
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-176-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
0 packages can be updated.
0 updates are security updates.
New release '18.04.4 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Sun Mar 29 17:57:53 2020 from 10.0.2.2
vagrant@ubuntu-xenial: $ date
Sun Mar 29 17:58:58 UTC 2020
vagrant@ubuntu-xenial: $ cat /etc/lsb-release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=16.04
DISTRIB_CODENAME=xenial
DISTRIB_DESCRIPTION="Ubuntu 16.04.6 LTS"
vagrant@ubuntu-xenial: $ exit
logout
Connection to 127.0.0.1 closed.
PS D:\Work\EPAM\EPMHW02> vagrant halt
==> default: Attempting graceful shutdown of VM...
PS D:\Work\EPAM\EPMHW02> vagrant destroy
default: Are you sure you want to destroy the 'default' VM? [y/N] y
==> default: Destroying VM and associated drives...
PS D:\Work\EPAM\EPMHW02>


Администратор: Windows PowerShell
PS D:\Work\EPAM\EPMHW02> vagrant validate
Vagrantfile validated successfully.
PS D:\Work\EPAM\EPMHW02> vagrant up
Bringing machine 'vagrant-box-01' up with 'virtualbox' provider...
Bringing machine 'vagrant-box-02' up with 'virtualbox' provider...
==> vagrant-box-01: Importing base box 'ubuntu/xenial64'...
==> vagrant-box-01: Matching MAC address for NAT networking...
==> vagrant-box-01: Checking if box 'ubuntu/xenial64' version '20200326.0.0' is up to date...
==> vagrant-box-01: Setting the name of the VM: vagrant-box-01
==> vagrant-box-01: Clearing any previously set network interfaces...
==> vagrant-box-01: Preparing network interfaces based on configuration...
vagrant-box-01: Adapter 1: nat
vagrant-box-01: Adapter 2: bridged
vagrant-box-01: Adapter 3: intnet
==> vagrant-box-01: Forwarding ports...
vagrant-box-01: 22 (guest) => 2222 (host) (adapter 1)
==> vagrant-box-01: Running 'pre-boot' VM customizations...
==> vagrant-box-01: Booting VM...
==> vagrant-box-01: Waiting for machine to boot. This may take a few minutes...
vagrant-box-01: SSH address: 127.0.0.1:2222
vagrant-box-01: SSH username: vagrant
vagrant-box-01: SSH auth method: private key
vagrant-box-01: Warning: Connection aborted. Retrying...
vagrant-box-01: Warning: Connection reset. Retrying...
vagrant-box-01:
vagrant-box-01: Vagrant insecure key detected. Vagrant will automatically replace
vagrant-box-01: this with a newly generated keypair for better security.
vagrant-box-01:
vagrant-box-01: Inserting generated public key within guest...
vagrant-box-01: Removing insecure key from the guest if it's present...
vagrant-box-01: Key inserted! Disconnecting and reconnecting using new SSH key...
==> vagrant-box-01: Machine booted and ready!
==> vagrant-box-01: Checking for guest additions in VM...
vagrant-box-01: The guest additions on this VM do not match the installed version of
vagrant-box-01: VirtualBox! In most cases this is fine, but in rare cases it can
vagrant-box-01: prevent things such as shared folders from working properly. If you see
vagrant-box-01: shared folder errors, please make sure the guest additions within the
vagrant-box-01: virtual machine match the version of VirtualBox you have installed on
vagrant-box-01: your host and reload your VM.
vagrant-box-01:
vagrant-box-01: Guest Additions Version: 5.1.38
vagrant-box-01: VirtualBox Version: 6.1
==> vagrant-box-01: Setting hostname...
==> vagrant-box-01: Configuring and enabling network interfaces...


Администратор: Windows PowerShell
==> vagrant-box-01: Setting hostname...
==> vagrant-box-01: Configuring and enabling network interfaces...
==> vagrant-box-02: Importing base box 'ubuntu/xenial64'...
==> vagrant-box-02: Matching MAC address for NAT networking...
==> vagrant-box-02: Checking if box 'ubuntu/xenial64' version '20200326.0.0' is up to date...
==> vagrant-box-02: Setting the name of the VM: vagrant-box-02
==> vagrant-box-02: Fixed port collision for 22 => 2222. Now on port 2200.
==> vagrant-box-02: Clearing any previously set network interfaces...
==> vagrant-box-02: Preparing network interfaces based on configuration...
vagrant-box-02: Adapter 1: nat
vagrant-box-02: Adapter 2: bridged
vagrant-box-02: Adapter 3: intnet
==> vagrant-box-02: Forwarding ports...
vagrant-box-02: 22 (guest) => 2200 (host) (adapter 1)
==> vagrant-box-02: Running 'pre-boot' VM customizations...
==> vagrant-box-02: Booting VM...
==> vagrant-box-02: Waiting for machine to boot. This may take a few minutes...
vagrant-box-02: SSH address: 127.0.0.1:2200
vagrant-box-02: SSH username: vagrant
vagrant-box-02: SSH auth method: private key
vagrant-box-02: Warning: Connection reset. Retrying...
vagrant-box-02: Warning: Connection aborted. Retrying...
vagrant-box-02:
vagrant-box-02: Vagrant insecure key detected. Vagrant will automatically replace
vagrant-box-02: this with a newly generated keypair for better security.
vagrant-box-02:
vagrant-box-02: Inserting generated public key within guest...
vagrant-box-02: Removing insecure key from the guest if it's present...
vagrant-box-02: Key inserted! Disconnecting and reconnecting using new SSH key...
==> vagrant-box-02: Machine booted and ready!
==> vagrant-box-02: Checking for guest additions in VM...
vagrant-box-02: The guest additions on this VM do not match the installed version of
vagrant-box-02: VirtualBox! In most cases this is fine, but in rare cases it can
vagrant-box-02: prevent things such as shared folders from working properly. If you see
vagrant-box-02: shared folder errors, please make sure the guest additions within the
vagrant-box-02: virtual machine match the version of VirtualBox you have installed on
vagrant-box-02: your host and reload your VM.
vagrant-box-02:
vagrant-box-02: Guest Additions Version: 5.1.38
vagrant-box-02: VirtualBox Version: 6.1
==> vagrant-box-02: Setting hostname...
==> vagrant-box-02: Configuring and enabling network interfaces...
PS D:\Work\EPAM\EPMHW02>


vagrant@vagrant-box-01: ~
PS D:\Work\EPAM\EPMHW02> ssh -i .\.vagrant\machines\vagrant-box-01\virtualbox\private_key vagrant@192.168.100.238
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-176-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
0 packages can be updated.
0 updates are security updates.
New release '18.04.4 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Sun Mar 29 19:21:30 2020 from 192.168.100.251
vagrant@vagrant-box-01: $ date
Sun Mar 29 19:21:43 UTC 2020
vagrant@vagrant-box-01: $ ping 192.168.15.3
PING 192.168.15.3 (192.168.15.3) 56(84) bytes of data.
64 bytes from 192.168.15.3: icmp_seq=1 ttl=64 time=1.00 ms
64 bytes from 192.168.15.3: icmp_seq=2 ttl=64 time=0.599 ms
64 bytes from 192.168.15.3: icmp_seq=3 ttl=64 time=0.570 ms
^C
--- 192.168.15.3 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 1999ms
rtt min/avg/max/mdev = 0.570/0.725/1.008/0.202 ms
vagrant@vagrant-box-01: $


vagrant@vagrant-box-02: ~
PS D:\Work\EPAM\EPMHW02> ssh -i .\.vagrant\machines\vagrant-box-02\virtualbox\private_key vagrant@192.168.100.237
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-176-generic x86_64)
* Documentation: https://help.ubuntu.com
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
0 packages can be updated.
0 updates are security updates.
New release '18.04.4 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Sun Mar 29 19:26:31 2020 from 192.168.100.251
vagrant@vagrant-box-02: $ date
Sun Mar 29 19:26:46 UTC 2020
vagrant@vagrant-box-02: $ ping -c 4 192.168.15.2
PING 192.168.15.2 (192.168.15.2) 56(84) bytes of data.
64 bytes from 192.168.15.2: icmp_seq=1 ttl=64 time=0.610 ms
64 bytes from 192.168.15.2: icmp_seq=2 ttl=64 time=0.651 ms
64 bytes from 192.168.15.2: icmp_seq=3 ttl=64 time=0.590 ms
64 bytes from 192.168.15.2: icmp_seq=4 ttl=64 time=0.557 ms
--- 192.168.15.2 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3001ms
rtt min/avg/max/mdev = 0.557/0.602/0.651/0.034 ms
vagrant@vagrant-box-02: $