

# Лабораторная работа №1

## Основы информационной безопасности

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Приобретение практических навыков установки операционной системы на виртуальную машину, настройки минимально необходимых для дальнейшей работы сервисов.

## Выполнение работы

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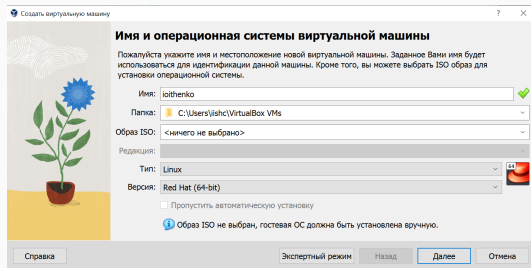


Рис. 1: Создание виртуальной машины

# Настройка параметров виртуальной машины

- Объем оперативной памяти
- Создание виртуального диска на 40 Гб
- Добавление образа оптического диска Rocky

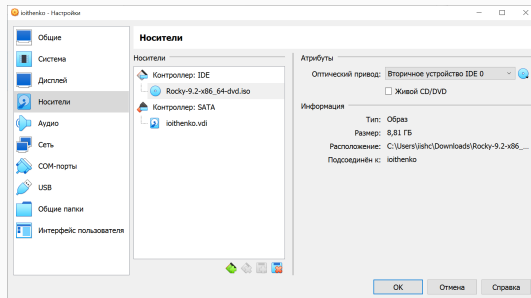


Рис. 2: Добавление привода оптического диска и выбор образа

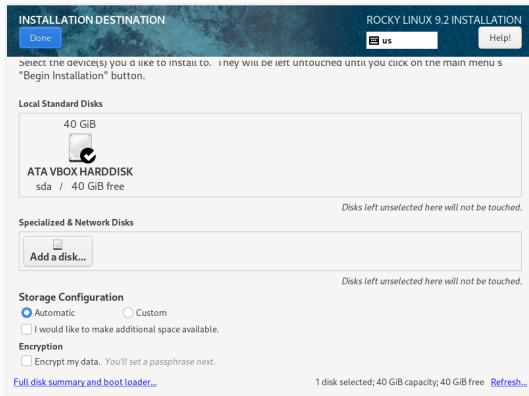


Рис. 3: Место установки

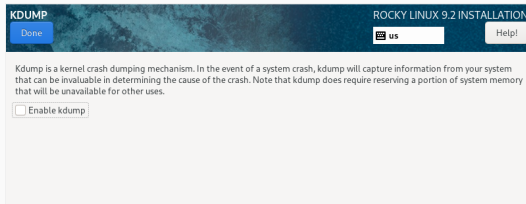


Рис. 4: Отключение

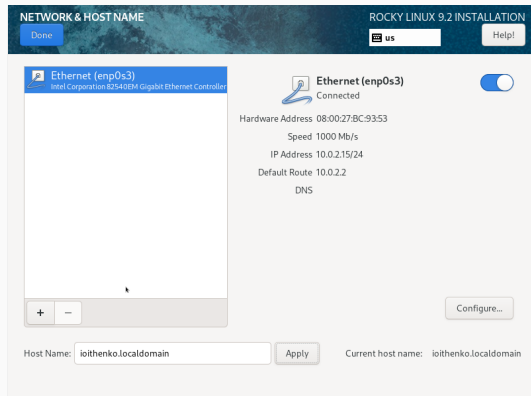
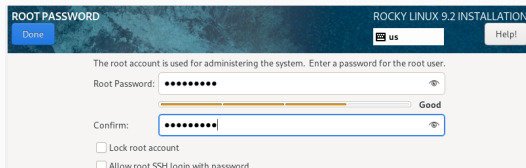


Рис. 5: Имя узла





The screenshot shows the 'ROOT PASSWORD' screen in the Rocky Linux 9.2 installation process. The header bar is dark blue with the title 'ROOT PASSWORD' on the left, 'ROCKY LINUX 9.2 INSTALLATION' on the right, and a 'Done' button. Below the header, there's a text instruction: 'The root account is used for administering the system. Enter a password for the root user.' The 'Root Password:' field contains ten black dots and has a strength indicator below it showing a yellow bar and the word 'Good'. The 'Confirm:' field also contains ten black dots. At the bottom, there are two unchecked checkboxes: 'Lock root account' and 'Allow root SSH login with password'. On the right side of the header, there's a language selector showing 'us' and a 'Help!' button.

Рис. 6: Пароль для root

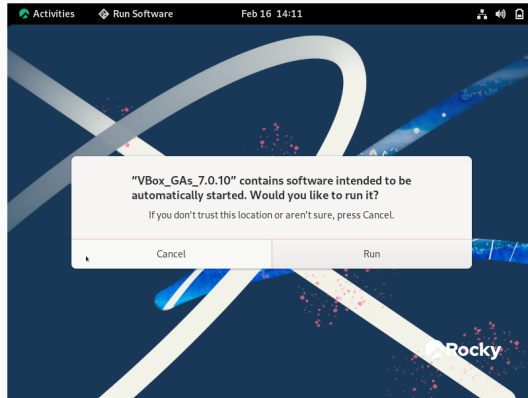
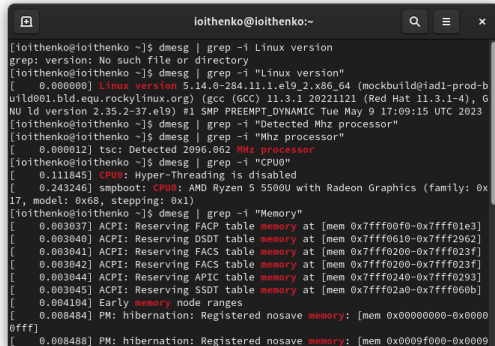


Рис. 7: Дополнения

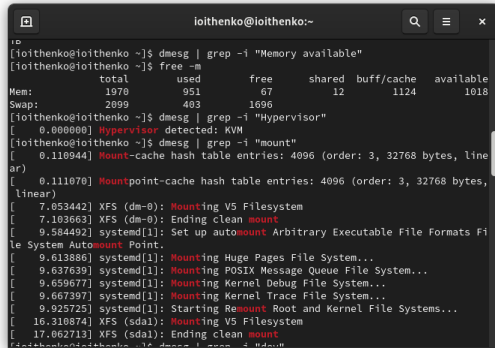
## Выполнение домашнего задания

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```
ioithenko@ioithenko:~  
[ioithenko@ioithenko ~]$ dmesg | grep -i Linux version  
grep: version: No such file or directory  
[ioithenko@ioithenko ~]$ dmesg | grep -i "Linux version"  
[ 0.000000] Linux version 5.14.0-284.11.1.el9_2.x86_64 (mockbuild@iad1-prod-b  
uild001.bld.equ.rockylinux.org) (gcc (GCC) 11.3.1 20221121 (Red Hat 11.3.1-4), G  
NU ld version 2.35.2-37.el9) #1 SMP PREEMPT_DYNAMIC Tue May 9 17:09:15 UTC 2023  
[ioithenko@ioithenko ~]$ dmesg | grep -i "Detected Mhz processor"  
[ioithenko@ioithenko ~]$ dmesg | grep -i "Mhz processor"  
[ 0.000012] tsc: Detected 2096.062 MHz processor  
[ioithenko@ioithenko ~]$ dmesg | grep -i "CPU0"  
[ 0.111845] CPU0: Hyper-Threading is disabled  
[ 0.243246] smpboot: CPU0: AMD Ryzen 5 5500U with Radeon Graphics (family: 0x  
17, model: 0x68, stepping: 0x1)  
[ioithenko@ioithenko ~]$ dmesg | grep -i "Memory"  
[ 0.003037] ACPI: Reserving FACP table memory at [mem 0x7fff00f0-0x7fff01e3]  
[ 0.003040] ACPI: Reserving DSDT table memory at [mem 0x7fff0610-0x7fff2962]  
[ 0.003041] ACPI: Reserving FACS table memory at [mem 0x7fff0200-0x7fff023f]  
[ 0.003042] ACPI: Reserving FACS table memory at [mem 0x7fff0200-0x7fff023f]  
[ 0.003044] ACPI: Reserving APIC table memory at [mem 0x7fff0240-0x7fff0293]  
[ 0.003045] ACPI: Reserving SSDT table memory at [mem 0x7fff02a0-0x7fff060b]  
[ 0.004104] Early memory node ranges  
[ 0.008484] PM: hibernation: Registered nosave memory: [mem 0x00000000-0x0000  
0fff]  
[ 0.008488] PM: hibernation: Registered nosave memory: [mem 0x0009f000-0x0009
```

Рис. 8: Информация



```
ioithenko@ioithenko:~  
[ioithenko@ioithenko ~]$ dmesg | grep -i "Memory available"  
[ioithenko@ioithenko ~]$ free -m  
              total        used          free      shared  buff/cache   available  
Mem:           1970         951           67          12        1124        1018  
Swap:           2099         403          1696  
[ioithenko@ioithenko ~]$ dmesg | grep -i "Hypervisor"  
[ 0.000000] Hypervisor detected: KVM  
[ioithenko@ioithenko ~]$ dmesg | grep -i "mount"  
[ 0.110944] Mount-cache hash table entries: 4096 (order: 3, 32768 bytes, linear)  
[ 0.111070] Mountpoint-cache hash table entries: 4096 (order: 3, 32768 bytes, linear)  
[ 7.053442] XFS (dm-0): Mounting V5 Filesystem  
[ 7.103663] XFS (dm-0): Ending clean mount  
[ 9.584492] systemd[1]: Set up automount Arbitrary Executable File Formats File System Automount Point.  
[ 9.613886] systemd[1]: Mounting Huge Pages File System...  
[ 9.637639] systemd[1]: Mounting POSIX Message Queue File System...  
[ 9.659677] systemd[1]: Mounting Kernel Debug File System...  
[ 9.667397] systemd[1]: Mounting Kernel Trace File System...  
[ 9.925725] systemd[1]: Starting Remount Root and Kernel File Systems...  
[ 16.310874] XFS (sda1): Mounting V5 Filesystem  
[ 17.062713] XFS (sda1): Ending clean mount  
[ioithenko@ioithenko ~]$ dmesg | grep -i "dmesg"
```

Рис. 9: Информация

```
ioithenko@ioithenko:~  
[ 0.943351] input: ImExPS/2 Generic Explorer Mouse as /dev/devices/platform/i8042/serio1/input/input4  
[ 2.440086] systemd[1]: Listening on Journal Socket (/dev/log).  
[ 2.557156] systemd[1]: Starting Create Static Device Nodes in /dev...  
[ 2.612193] systemd[1]: Finished Create Static Device Nodes in /dev.  
[ 3.815444] input: Video Bus as /dev/devices/LNXSYSTM:00/LNXXSYBUS:00/PNP0A03:00/LNXVIDEO:00/input/input5  
[ 8.392739] systemd[1]: Relabelled /dev, /dev/shm, /run, /sys/fs/cgroup in 199.689ms.  
[ 9.611158] systemd[1]: Activating swap /dev/mapper/rl-swap...  
[ 9.644465] Adding 2150396k swap on /dev/mapper/rl-swap. Priority:-2 extents:1 across:2150396k FS  
[ 10.081486] systemd[1]: Activated swap /dev/mapper/rl-swap.  
[ 15.037092] input: PC Speaker as /dev/devices/platform/pcspkr/input/input6  
[ 527.813777] input: VirtualBox mouse integration as /dev/devices/pci0000:00/0000:00:04.0/input/input7  
ioithenko@ioithenko ~]$ df -Th | grep -i "/dev"  
devtmpfs          devtmpfs  4.0M    0  4.0M    0% /dev  
tmpfs             tmpfs     986M    0  986M    0% /dev/shm  
/dev/mapper/rl-root xfs       37G   6.0G   31G   17% /  
/dev/sdal         xfs      1014M  258M   757M   26% /boot  
/dev/sr0          iso9660   52M   52M    0 100% /run/media/ioithenko/VBox_GA  
s_7.0.10  
ioithenko@ioithenko ~]$
```

Рис. 10: Информация

В ходе выполнения лабораторной работы я приобрела практические навыки установки операционной системы Linux дистрибутив Rocky на виртуальную машину, настройки минимально необходимых для дальнейшей работы сервисов.