

# Установка ОС Rocky

## Часть 1

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## Информация

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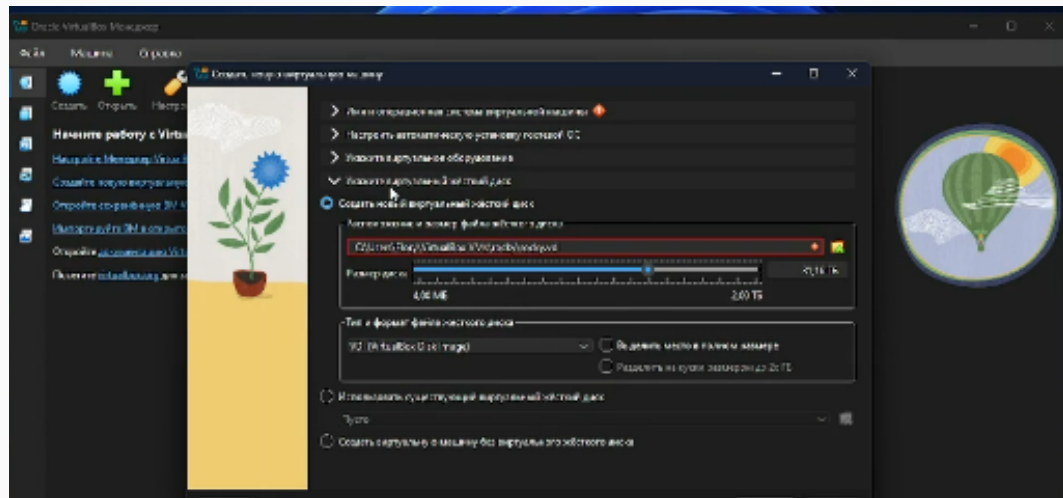
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## Вводная часть

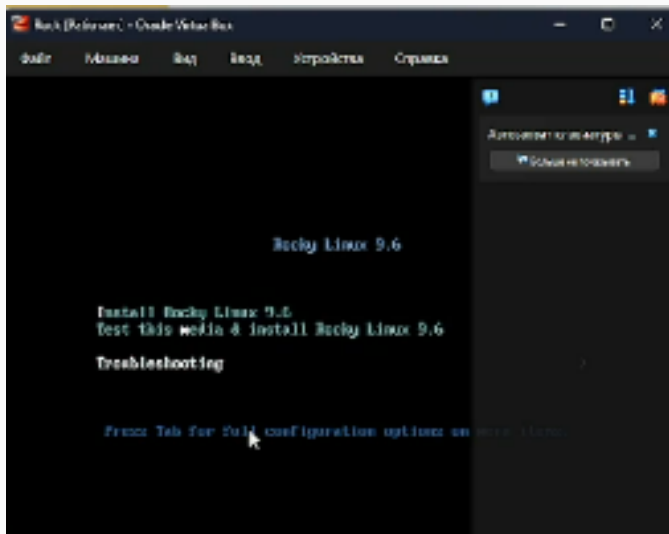
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# Установка операционной системы

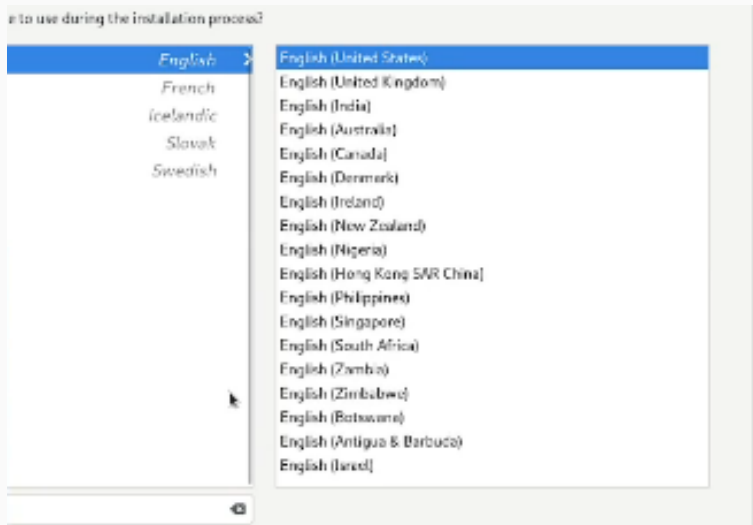
Первым делом добавим образ Rocky в VirtualBox



Перейдем к установке операционной системе Rocky.



Сделаем язык интерфейса английским.



## Настройки выбора программ

Откроем настройки установки: выбор программ.





Отключим функцию KDUMP.

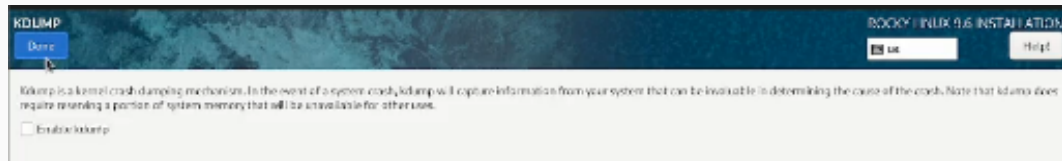


Рис. 5: sc5

## Включение сетевого соединения

Нам нужно включить сетевое соединение и в качестве имени узла установим свое имя пользователя.

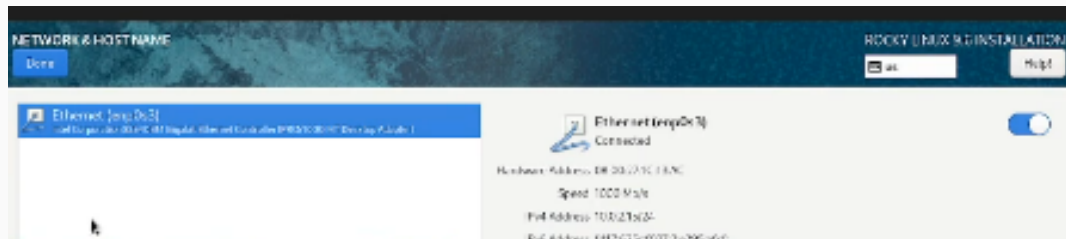


Рис. 6: sc6

Далее нам требуется установить пароль для root при использовании SSH, установим его.

ROOT PASSWORD

Done

ROCKY LINUX 9.6 INSTALLATION

Back Help

The root account is used for administering the system. Enter a password for the root user.

Root Password: [password field] [toggle]

[strength bar] Weak

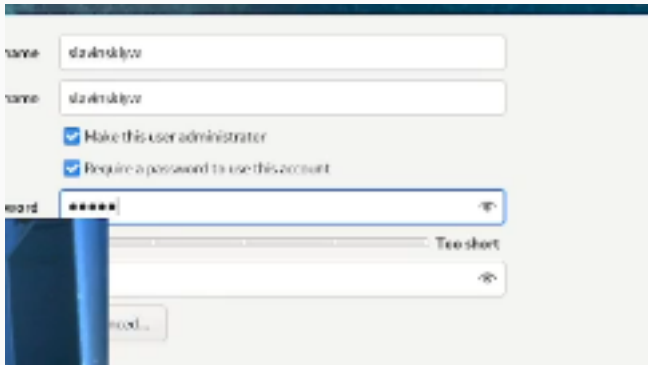
Confirm: [password field] [toggle]

☐ Lock root account

☐ Allow root SSH login with password

Рис. 7: sc7

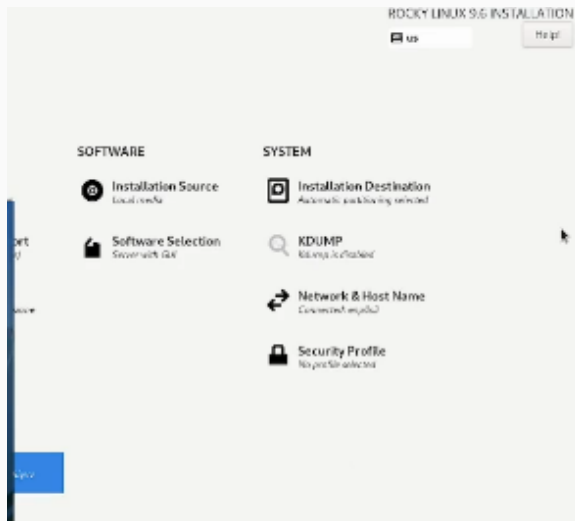
Затем зададим локального пользователя с правами администратора и зададим пароль.



The screenshot shows the 'User Accounts' control panel window in Windows. The 'Name' field is filled with 'slavinskijv'. The 'Full Name' field is also filled with 'slavinskijv'. The checkbox 'Make this user administrator' is checked. The checkbox 'Require a password to use this account' is also checked. The 'Password' field is filled with six asterisks. A message 'Too short' is displayed below the password field, indicating that the password does not meet the minimum requirements. The 'Create a new user' button is visible at the bottom left.

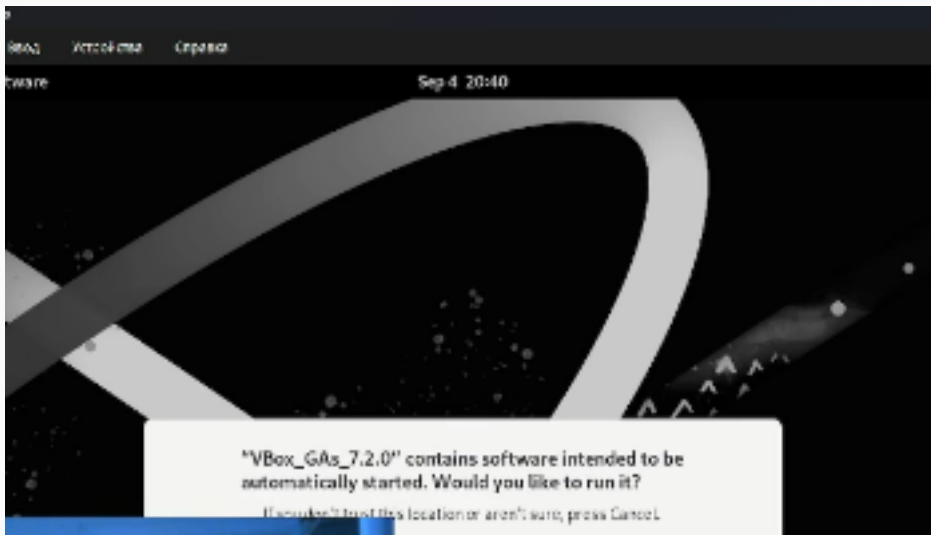
Рис. 8: sc8

Запустим установку.



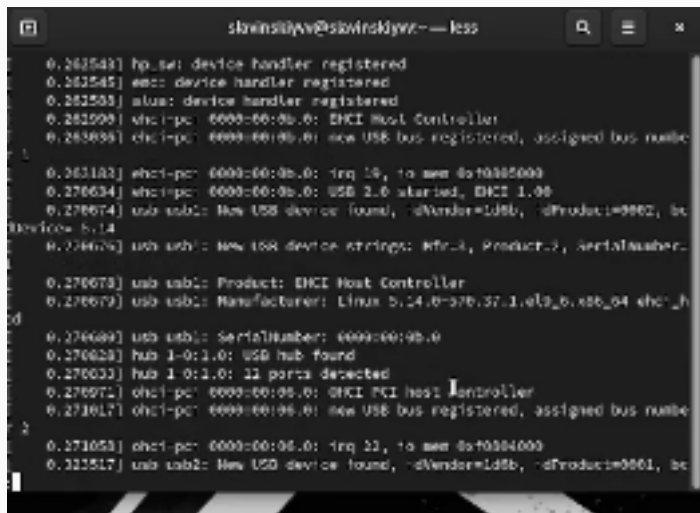
## Подключение образа диска дополнений

Нам нужно подключить образ диска дополнений гостевой ОС. Подключим.



## Вывод команды

Посмотрим вывод команды `dmesg | less`.



```
skwinsh@skwinsh: ~ — less
0.263543] hp_swt: device handler registered
0.263545] smc: device handler registered
0.263553] alua: device handler registered
0.263559] ehci-pci 0000:00:0b:0: EHCI Host Controller
0.263606] ehci-pci 0000:00:0b:0: new USB bus registered, assigned bus number 1
0.263622] ehci-pci 0000:00:0b:0: irq 18, io mem 0xf0385000
0.270634] ehci-pci 0000:00:0b:0: USB 2.0 started, EHCI 1.00
0.270674] usb usb1: New USB device found, idVendor=1d5b, idProduct=9902, bcdDevice= 5.14
0.270676] usb usb1: New USB device strings: Mfr=3, Product=3, SerialNumber=
0.270678] usb usb1: Product: EHCI Host Controller
0.270679] usb usb1: Manufacturer: Linux 5.14.0-376.37.1.el9_0.x86_64 ehci_hcd
0.270689] usb usb1: SerialNumber: 0000:00:0b:0
0.270628] hub 1-0:1.0: USB hub found
0.270633] hub 1-0:1.0: 11 ports detected
0.270671] ehci-pci 0000:00:0b:0: EHCI PCI host controller
0.271017] ehci-pci 0000:00:0b:0: new USB bus registered, assigned bus number 2
0.271053] ehci-pci 0000:00:0b:0: irq 23, io mem 0xf0384000
0.323517] usb usb2: New USB device found, idVendor=1d5b, idProduct=0901, bcdDevice= 5.14
```

## Вывод версии ядра

А с помощью команды `dmesg | grep -i`, можно найти то, что хотим найти. Давайте посмотрим версию ядра Linux.

```
slavinskiy@slavinskiy ~ % dmesg | less
[1] = Stopped
slavinskiy@slavinskiy ~ % dmesg | grep -i linux
[0.000000] Linux version 5.14.0-520.27.1.el9_6.x86_64 (mockbuild@adi-prod-build01.b
ld.egp.redhat.com) (gcc (GCC) 11.5.0 20210719 (Red Hat 11.5.0-6), GNU ld version 2.37
[2-53.el9) #1 SMP PREEMPT_DYNAMIC Thu Aug 28 10:11:06 UTC 2025
[0.000000] The list of certified hardware and cloud instances for Enterprise Linux 9
can be viewed at the Red Hat Ecosystem Catalog, https://catalog.redhat.com.
[0.000142] LSM: Initializing LSM-lockdown.capability,landlock,yama,integrity,selinux,
bpf
[0.000162] SELinux: Initializing.
[0.238730] ppa_core: LinuxPPS API ver. 1 registered
[0.238730] ppa_core: Software ver. 5.3.6 - Copyright 2005-2009 Rodolfo Giometti <giom
ett@linux.it>
[0.378679] usb usb1: Manufacturer: Linux 5.14.0-520.27.1.el9_6.x86_64 shc1_hcd
[0.333534] usb usb2: Manufacturer: Linux 5.14.0-520.27.1.el9_6.x86_64 shc1_hcd
[0.848075] Loaded X.509 cert 'Rocky Enterprise Software Foundation: Rocky Linux Drive
r Signing Cert 101: c0537f6c035c058314ac1601233adb63b93a1971'
[0.848080] Loaded X.509 cert 'Rocky Enterprise Software Foundation: Rocky Linux spotc
h Signing Cert 101: b0e6b0c732e07cbe4e4d0c51x793f0be6a19c5'
[0.848090] Loaded X.509 cert 'Rocky Enterprise Software Foundation: Rocky Linux DNA I
ntermediate CA: 01'
[0.844834] evm: security.selinux
```





## Вывод модели процессора

Далее посмотрим модель процессора.

```
slavinskiy@slavinskiy:~$ cat /sys/devices/system/cpu/topo/
0.014172: CPU topo: num. threads per package: 4
0.014172: CPU topo: Allowing 5 present CPUs plus 0 hotplug CPUs
0.018947: setup_percpu: NR_CPUS:8192 nr_cpumask_bits:5 nr_cpu_ids:5 nr_node_ids:1
0.019115: percpu: embedded 64 pages/cpu 5229280 68192 628972 01946579
0.019216: percpu-alloc: 5229280 68192 628972 01946579 01946579
0.019319: percpu-alloc: [0] 0 1 00 2 3 [0] 4 -
0.048532: SLUB: Hwalign=64, Order=0-3, MinObjects=0, CPUs=5, Nodes=1
0.047551: rcu: RCU restricting CPUs from NR_CPUS=8192 to nr_cpu_ids=5.
0.047554: rcu: Adjusting geometry for rcu_fanout_leaf=16, nr_cpu_ids=5
0.058696: RETSbleed: WARNING: Spectre v2 mitigation leaves CPU vulnerable to RETSbleed
attacks, data leaks possible!
0.058697: MMIO State Data: Vulnerable: Clear CPU buffers attempted, no microcode
0.173663: amprobe: CPU0: Intel(R) Core(TM) i5-10400 CPU @ 1.90GHz (family: 6x5, mod
el: 6xu5, stepping: 6x5)
0.173897: Performance Events: unsupported p4 CPU model 165 no PMU driver, software c
ounts only.
0.174753: smp: Bringing up secondary CPUs ...
0.174823: .... node #0, CPUs: #1 #2 #3 #4
0.188772: smp: Brought up 1 node, 5 CPUs
0.189609: cpu:0/0: using governor acpi
0.196665: cryptd: max_cpu_qlen set to 1024
0.216638: ACPI: _OSC evaluation for CPUs failed, trying _POC
0.225015: intel_pstate: CPU model not supported
slavinskiy@slavinskiy:~$
```

## Вывод доступной ОЗУ

Посмотрим объем доступной оперативной памяти.

```
slavinskyy@slavinskyy:~$ cat /proc/meminfo
```

```
[ 0.614186] PM: hibernation: Registered nosave memory: [mem 0x00000000-0x00000fff]  
[ 0.614187] PM: hibernation: Registered nosave memory: [mem 0x00002000-0x00003fff]  
[ 0.614188] PM: hibernation: Registered nosave memory: [mem 0x0000c000-0x0000ffff]  
[ 0.614189] PM: hibernation: Registered nosave memory: [mem 0x000f0000-0x000fffff]  
[ 0.614190] PM: hibernation: Registered nosave memory: [mem 0dffff0000-0dffffffffff]  
[ 0.614190] PM: hibernation: Registered nosave memory: [mem 0ae0000000-0afefeffff]  
[ 0.614191] PM: hibernation: Registered nosave memory: [mem 0xfec00000-0xfec0ffff]  
[ 0.614191] PM: hibernation: Registered nosave memory: [mem 0xfec00000-0xfedfffff]  
[ 0.614191] PM: hibernation: Registered nosave memory: [mem 0afee00000-0afeeeffff]  
[ 0.614191] PM: hibernation: Registered nosave memory: [mem 0afee00000-0afffffff]  
[ 0.614192] PM: hibernation: Registered nosave memory: [mem 0c00000000-0c0000ffff]  
[ 0.647300] MemTotal: 3413212K/335152K available (102354K kernel code, 5755K rdsblt, 13031K rdsblt  
to, 4048K init, 7884K bss, 58516K reserved, 0K cma-reserved)  
[ 0.664190] Freeing SMP alternatives memory: 42K  
[ 0.187872] slub/mm: Memory block size: 128KB  
[ 0.502122] MemCgroup: memory driver v2.3  
[ 0.832766] Freeing initrd memory: 55548K  
[ 0.882190] Freeing unused decrypted memory: 220K  
[ 0.882478] Freeing unused kernel image (initramfs) memory: 484K  
[ 0.882415] Freeing unused kernel image (rootfs/init) memory: 70K  
[ 1.002190] vmwgfx 0000:00:02.0: [drm] Legacy memory limit: vRAM = 16384 KiB, TDR = 2048 KiB  
, surface = 80704 KiB  
[ 1.002190] vmwgfx 0000:00:02.0: [drm] Maximum display memory size is 26880 KiB  
slavinskyy@slavinskyy:~$
```

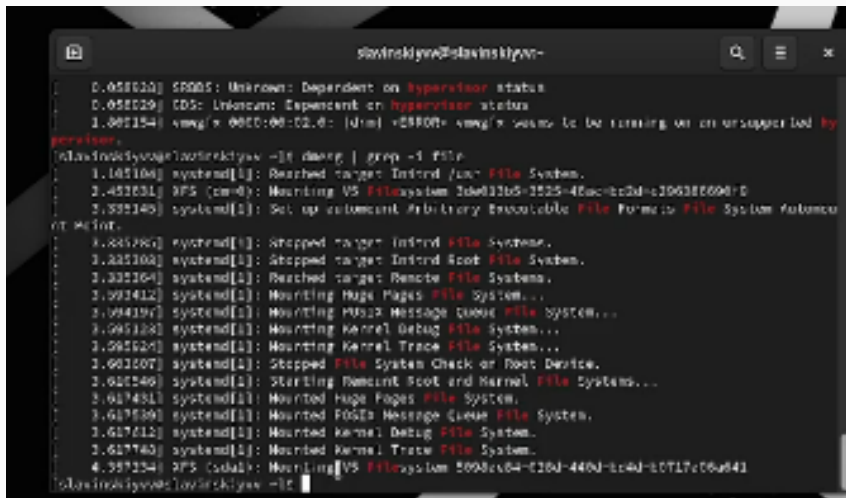
Тип обнаруженного гипервизора.

```
slawinskiy@slawinskiy ~$ dmesg | grep -i Memory: available
[ 0.000000] Memory: 3600000K available
[ 0.000000] On node 0, zone DMA: 1 pages in unavailable ranges
[ 0.000000] On node 0, zone Normal: 16 pages in unavailable ranges
[ 0.000000] [see 00000000-00000000] www.kernel.org for PCI devices
[ 0.000000] Memory: 3600000K available (3600000K kernel code, 3600000K data, 3600000K bss, 3600000K reserved, 3600000K reserved)
[ 0.000000] vmgfx 0000:00:02.0: [drm] available shader model: Legacy.
slawinskiy@slawinskiy ~$ dmesg | grep -i Hypervisor
[ 0.000000] Hypervisor detected: KVM
[ 0.000000] SRIO: Unknown: Dependent on Hypervisor status
[ 0.000000] GDS: Unknown: Dependent on Hypervisor status
[ 0.000000] vmgfx 0000:00:02.0: [drm] +RDRB: vmgfx seems to be running on an
slawinskiy@slawinskiy ~$
```

Рис. 16: sc16

## Вывод тип файловой системы и последовательности монтирования

И в конце посмотрим тип файловой системы и последовательность монтирования файловых систем



```
slawinski@slawinski:~$  
0.058020] SPOBS: Unknown: Dependent on hypervisor status  
0.058029] CDS: Unknown: Dependent on hypervisor status  
1.001154] vmwg/0000:00:02.0: [Dim] +28800+ vmwg/0 seems to be running, we are unsupported by  
hypervisor.  
slawinski@slawinski:~$ journalctl --no-pager | grep -i file  
1.105104] systemd[1]: Reached target Initrd File System.  
2.452631] NFS (cm=0): Mounting VS Filesystem 34e033b5-3525-48ac-b23d-c3d6388608f0  
3.335149] systemd[1]: Set up automatic Arbitrary Executable File Format: File System Automount  
or Mount.  
3.845286] systemd[1]: Stopped target Initrd File System.  
3.825302] systemd[1]: Stopped target Initrd Root File System.  
3.325304] systemd[1]: Reached target Remote File Systems.  
3.092412] systemd[1]: Mounting Huge Pages File System...  
3.094397] systemd[1]: Mounting NFS: Message Queue File System...  
3.095122] systemd[1]: Mounting Kernel Debug File System...  
3.095524] systemd[1]: Mounting Kernel Trace File System...  
3.001007] systemd[1]: Stopped File System Check on Root Device.  
3.020540] systemd[1]: Starting Remote Root and Kernel File Systems...  
3.017431] systemd[1]: Mounted Huge Pages File System.  
3.017530] systemd[1]: Mounted NFS: Message Queue File System.  
3.017612] systemd[1]: Mounted Kernel Debug File System.  
3.017740] systemd[1]: Mounted Kernel Trace File System.  
4.057234] NFS (cm=0): Mounting VS Filesystem 5098e64-c36d-446d-bc4d-b0717c06a641  
slawinski@slawinski:~$
```