

Отчёт по выполнению лабораторной работы №1

Установка Roku

Коровкин Н. М.

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Российский университет дружбы народов, Москва, Россия

Информация

- Коровкин Никита Михайлович
- Студент
- Российский университет дружбы народов
- 1132246835@pfur.ru

Установить Linux Rocky и ознакомиться с его возможностями

Установить ОС и выдолнить домашнее задание

Выполнение лабораторной работы

Первым этапом является создание виртуальной машины. Откроем UTM загрузим образ с диска и начнем выбирать нужные характеристики.

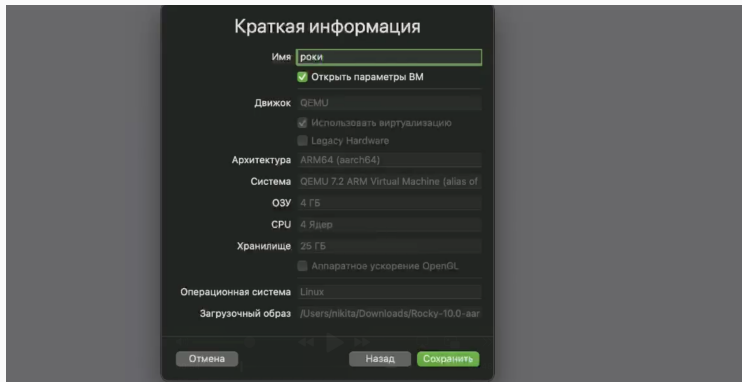


Рис. 1: Настройка машины

Запуск машины

Затем запускаем и выбираем язык

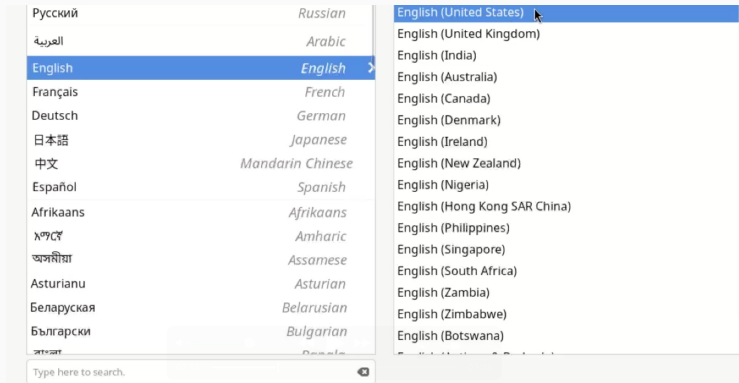


Рис. 2: выбор языка

Выбираем диск для установки

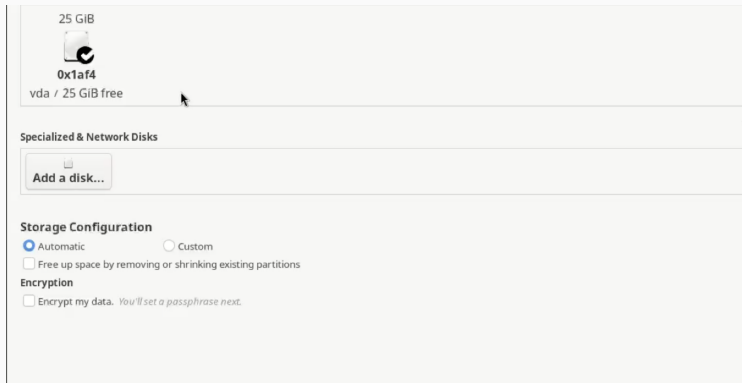


Рис. 3: диск для установки

Рут аккаунт

The root account is used for administering the system.

The root user (also known as super user) has complete access to the entire system. For this reason, logging into this system as the root user is best done only to perform system maintenance or administration.

☐ **Disable root account**

Disabling the root account will lock the account and disable remote access with root account. This will prevent unintended administrative access to the system.

☒ **Enable root account**

Enabling the root account will allow you to set a root password and optionally enable remote access to root account on this system.

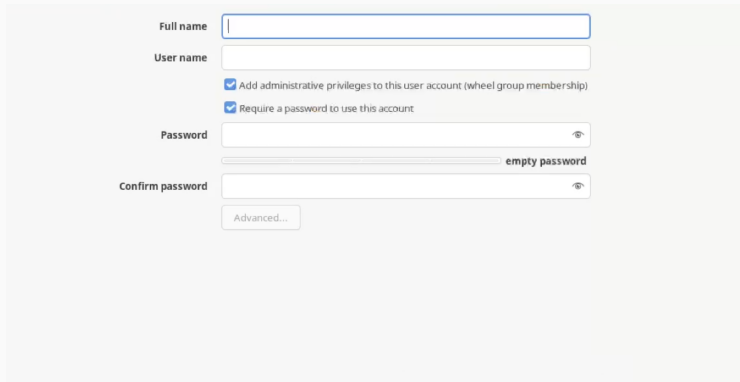
Root Password:

Confirm:

☐ Allow root SSH login with password

Рис. 4: рут

Регистрируем аккаунт.



A user registration form with the following fields and options:

- Full name**: A text input field.
- User name**: A text input field.
- ☒ Add administrative privileges to this user account (wheel group membership)
- ☒ Require a password to use this account
- Password**: A text input field with a visibility toggle (eye icon). Below the field is a progress bar and the text "empty password".
- Confirm password**: A text input field with a visibility toggle (eye icon).
- Advanced...**: A button to expand additional options.

Рис. 5: регистрация

Затем включаем режим разработчика

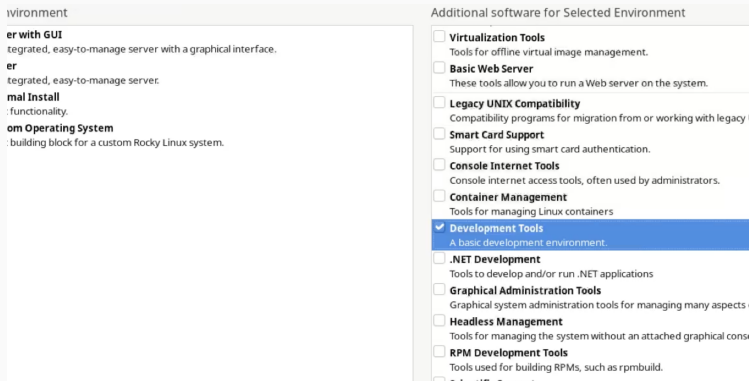
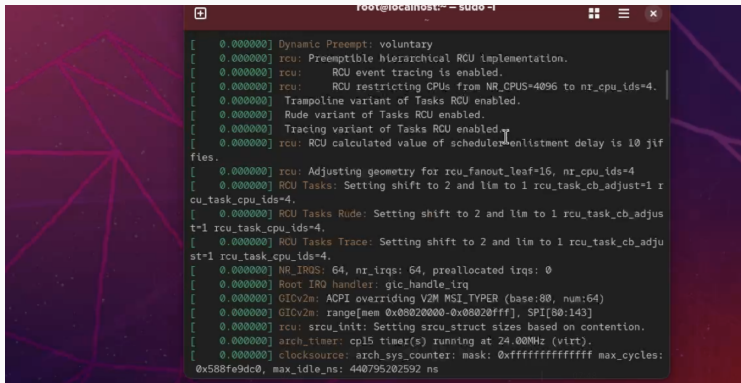


Рис. 6: режим разработчика

Используем команду чтобы узнать характеристики



```
root@rcallhost:~# sudo -i
[ 0.000000] Dynamic Preempt: voluntary
[ 0.000000] rcu: Preemptible hierarchical RCU implementation.
[ 0.000000] rcu: RCU event tracing is enabled.
[ 0.000000] rcu: RCU restricting CPUs from NR_CPUS=4096 to nr_cpu_ids=4.
[ 0.000000] Trampoline variant of Tasks RCU enabled.
[ 0.000000] Rude variant of Tasks RCU enabled.
[ 0.000000] Tracing variant of Tasks RCU enabled.
[ 0.000000] rcu: RCU calculated value of scheduler-enlistment delay is 10 jif
files.
[ 0.000000] rcu: Adjusting geometry for rcu_fanout_leaf=16, nr_cpu_ids=4
[ 0.000000] RCU Tasks: Setting shift to 2 and lim to 1 rcu_task_cb_adjust=1 r
cu_task_cpu_ids=4.
[ 0.000000] RCU Tasks Rude: Setting shift to 2 and lim to 1 rcu_task_cb_adju
st=1 rcu_task_cpu_ids=4.
[ 0.000000] RCU Tasks Trace: Setting shift to 2 and lim to 1 rcu_task_cb_adju
st=1 rcu_task_cpu_ids=4.
[ 0.000000] NR_IRQS: 64, nr_irqs: 64, preallocated irq: 0
[ 0.000000] Root IRQ handler: gic_handle_irq
[ 0.000000] GICv2m: ACPI overriding V2M MSI_TYPER (base:80, num:64)
[ 0.000000] GICv2m: range[mem 0x08020000-0x08020fff], SPI[80:143]
[ 0.000000] rcu: srcu_init: Setting srcu_struct sizes based on contention.
[ 0.000000] arch_timer: cp15 timer(s) running at 24.00MHz (virt).
[ 0.000000] clocksource: arch_sys_counter: mask: 0xffffffffffffff max_cycles:
0x588fe9dc0, max_idle_ns: 440795202592 ns
```

Рис. 7: узнаем характеристики

Узнаем теперь информацию о процессоре

```
[ 0.048185] CPU1: Booted secondary processor 0x0000000001 [0x610f0000]
[ 0.059979] CPU2: Booted secondary processor 0x0000000002 [0x610f0000]
[ 0.082974] CPU3: Booted secondary processor 0x0000000003 [0x610f0000]
[ 0.083134] SMP: Total of 4 processors activated.
[ 0.094997] ACPI: Added _OSI(Processor Device)
[ 0.094998] ACPI: Added _OSI(Processor Aggregator Device)
root@localhost:~#
```

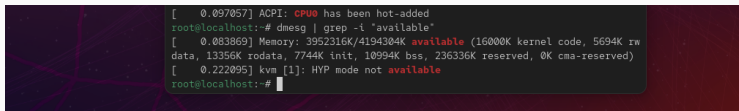
Рис. 8: узнаем характеристики

Затем о ЦПУ

```
[ 0.094997] ACPI: Added _OSI(Processor Device)
[ 0.094998] ACPI: Added _OSI(Processor Aggregator Device)
root@localhost:~# dmesg | grep -i "CPU0"
[ 0.000000] Detected PIPT I-cache on CPU0
[ 0.097057] ACPI: CPU0 has been hot-added
root@localhost:~#
```

Рис. 9: узнаем характеристики

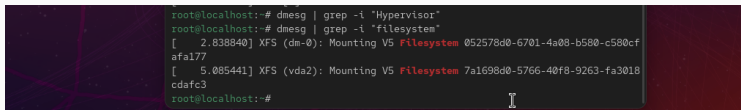
Памяти

A terminal window with a dark background and green text. It shows kernel boot logs. The first line is a timestamped message: "[0.097057] ACPI: CPU0 has been hot-added". The second line is a command prompt and command: "root@localhost:~# dmesg | grep -i 'available'". The third line is a timestamped message: "[0.083869] Memory: 3952316K/4194304K available (16000K kernel code, 5694K rw data, 13356K rodata, 7744K init, 10994K bss, 236336K reserved, 0K cma-reserved)". The fourth line is a timestamped message: "[0.222095] kvm [1]: HYP mode not available". The prompt "root@localhost:~#" is followed by a cursor.

```
[ 0.097057] ACPI: CPU0 has been hot-added
root@localhost:~# dmesg | grep -i "available"
[ 0.083869] Memory: 3952316K/4194304K available (16000K kernel code, 5694K rw
data, 13356K rodata, 7744K init, 10994K bss, 236336K reserved, 0K cma-reserved)
[ 0.222095] kvm [1]: HYP mode not available
root@localhost:~#
```

Рис. 10: узнаем характеристики

и файловой системе

A terminal window with a dark background and green text. The prompt is 'root@localhost:~#'. The first command is 'dmesg | grep -i "Hypervisor"', which returns no output. The second command is 'dmesg | grep -i "filesystem"', which returns two lines of log messages. The first line is '[2.838840] XFS (dm-0): Mounting V5 Filesystem 052578d0-6701-4a08-b500-c580cfafa177'. The second line is '[5.085441] XFS (vda2): Mounting V5 Filesystem 7a1698d0-5766-40f8-9263-fa3018cdafc3'. The prompt returns to 'root@localhost:~#'.

```
root@localhost:~# dmesg | grep -i "Hypervisor"
root@localhost:~# dmesg | grep -i "filesystem"
[ 2.838840] XFS (dm-0): Mounting V5 Filesystem 052578d0-6701-4a08-b500-c580cfafa177
[ 5.085441] XFS (vda2): Mounting V5 Filesystem 7a1698d0-5766-40f8-9263-fa3018cdafc3
root@localhost:~#
```

Рис. 11: узнаем характеристики

в результате выполнения работы была установлена система