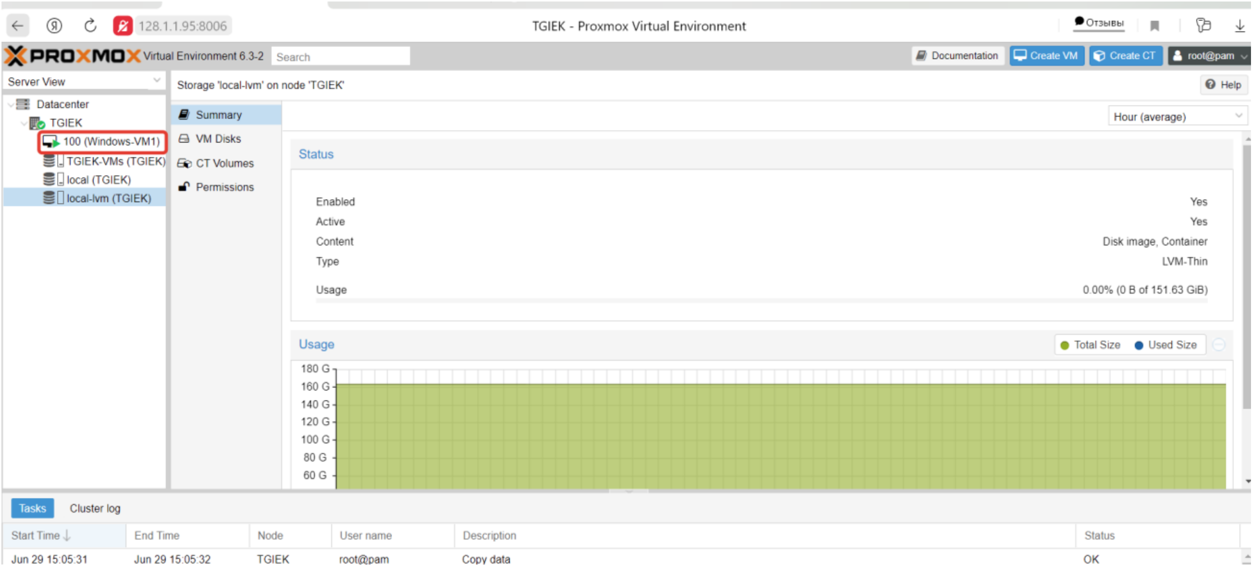
Сначала надо выбрать VM который не включён (если не зеленый значить VM отключен)



Storage 'local-lvm' on node 'TGIEK'

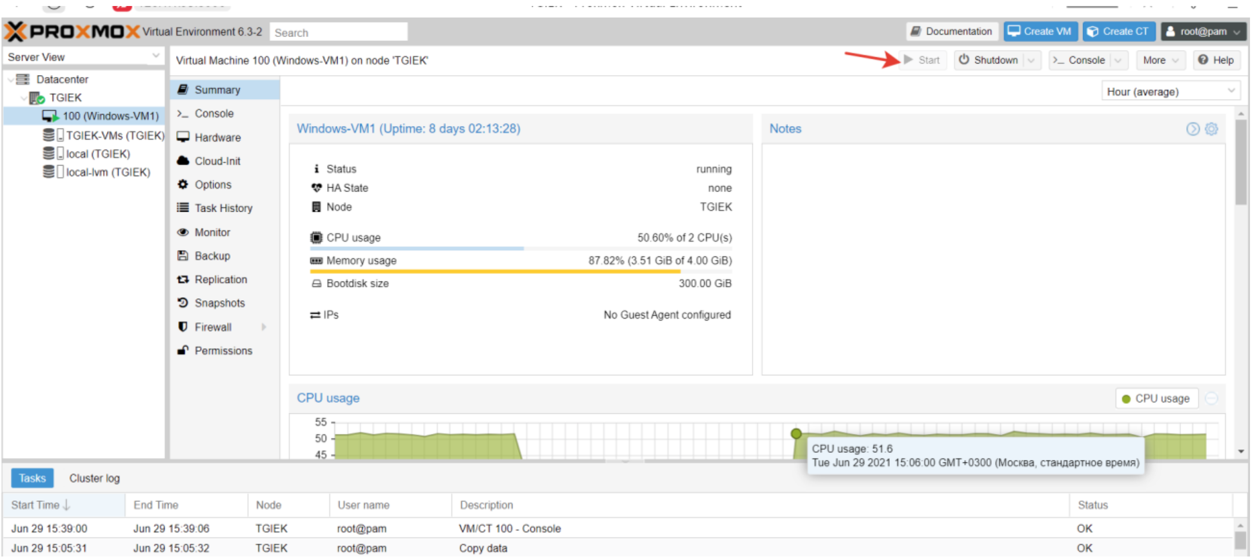
Status

Enabled	Yes
Active	Yes
Content	Disk image, Container
Type	LVM-Thin
Usage	0.00% (0 B of 151.63 GiB)

Usage

Start Time ↓	End Time	Node	User name	Description	Status
Jun 29 15:05:31	Jun 29 15:05:32	TGIEK	root@pam	Copy data	OK

Дальше надо включить VM



Virtual Machine 100 (Windows-VM1) on node 'TGIEK'

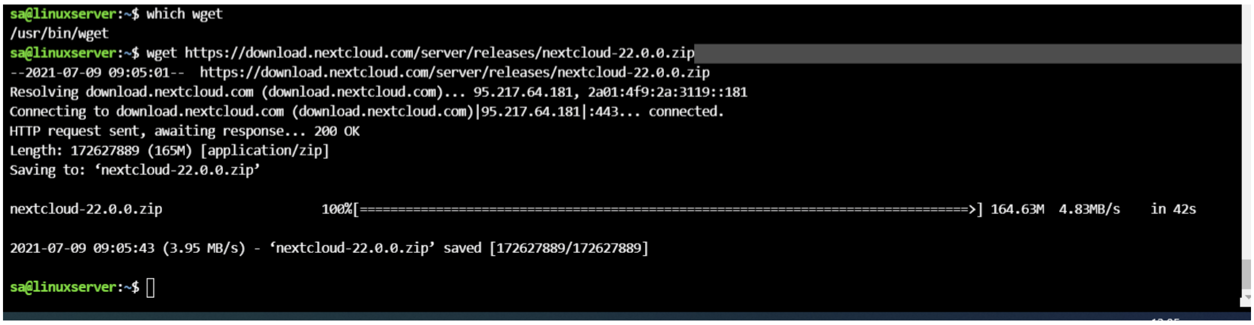
Windows-VM1 (Uptime: 8 days 02:13:28)

Status	running
HA State	none
Node	TGIEK
CPU usage	50.60% of 2 CPU(s)
Memory usage	87.82% (3.51 GiB of 4.00 GiB)
Bootdisk size	300.00 GiB
IPs	No Guest Agent configured

CPU usage: 51.6
Tue Jun 29 2021 15:06:00 GMT+0300 (Москва, стандартное время)

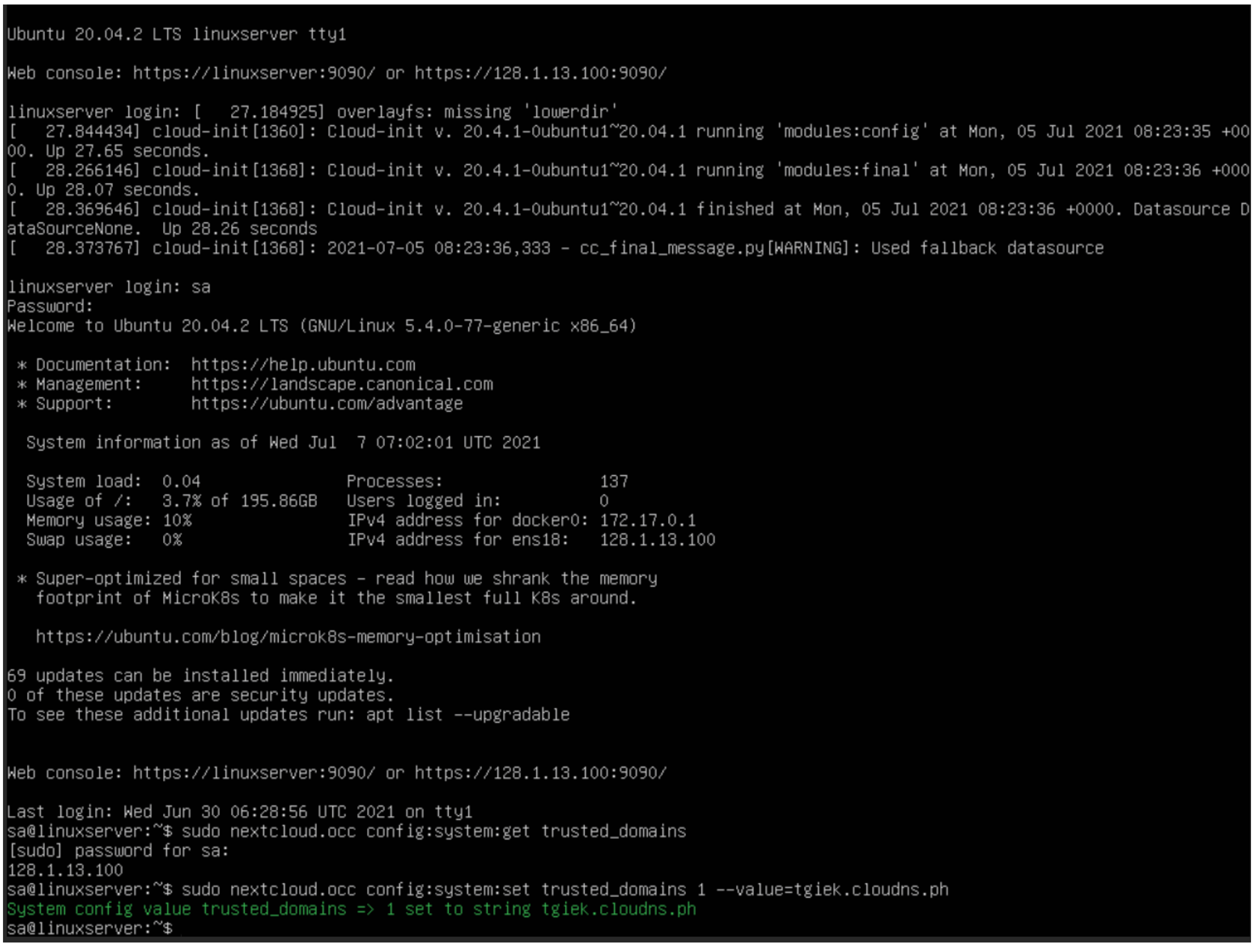
Start Time ↓	End Time	Node	User name	Description	Status
Jun 29 15:39:00	Jun 29 15:39:06	TGIEK	root@pam	VM/CT 100 - Console	OK
Jun 29 15:05:31	Jun 29 15:05:32	TGIEK	root@pam	Copy data	OK

Wget- Свободная неинтерактивная консольная программа для загрузки файлов по сети. Поддерживает протоколы HTTP, FTP и HTTPS, а также поддерживает работу через HTTP прокси-сервер. Программа включена почти во все дистрибутивы GNU/Linux.

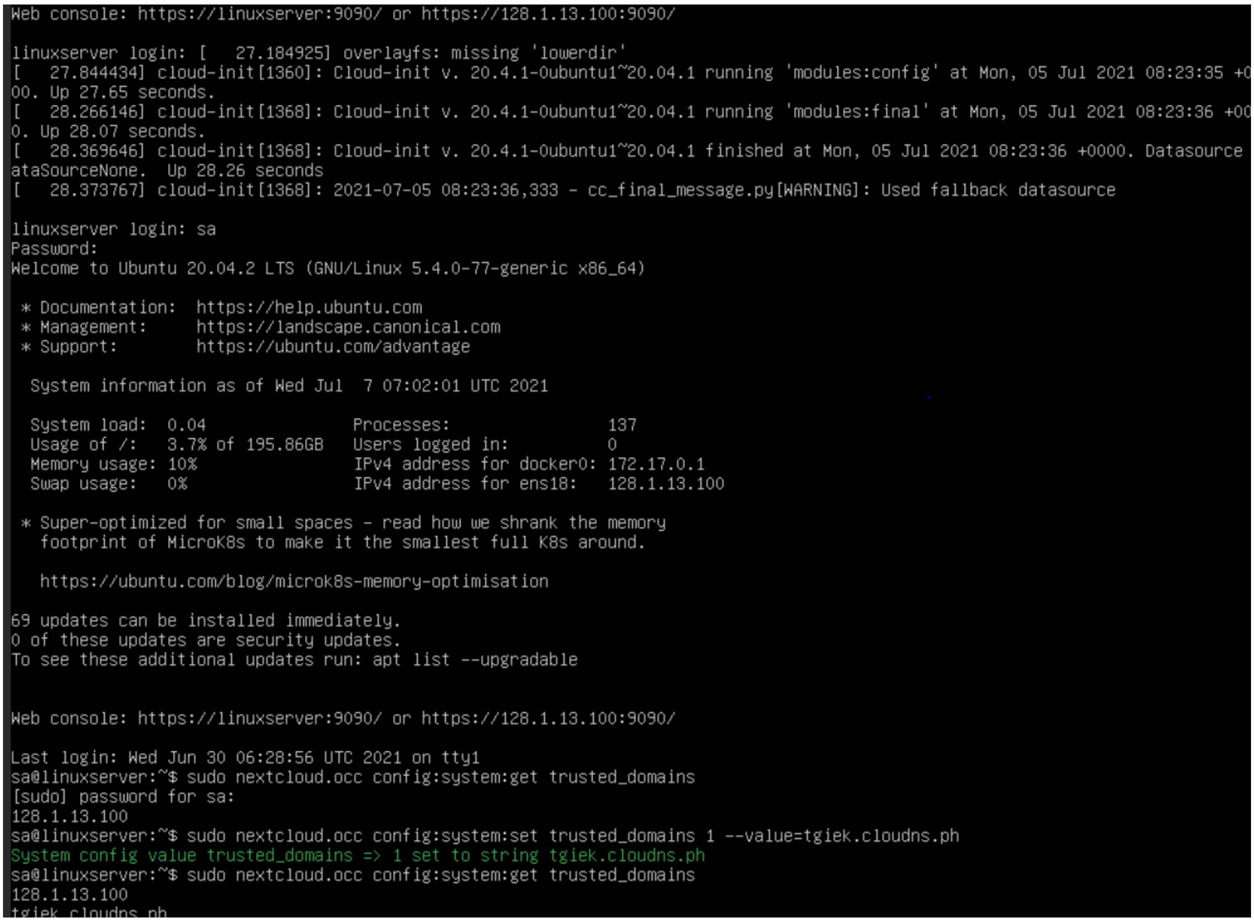


```
sa@linuxserver:~$ which wget
/usr/bin/wget
sa@linuxserver:~$ wget https://download.nextcloud.com/server/releases/nextcloud-22.0.0.zip
--2021-07-09 09:05:01--  https://download.nextcloud.com/server/releases/nextcloud-22.0.0.zip
Resolving download.nextcloud.com (download.nextcloud.com)... 95.217.64.181, 2a01:4f9:2a:3119::181
Connecting to download.nextcloud.com (download.nextcloud.com)|95.217.64.181|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 172627889 (165M) [application/zip]
Saving to: ‘nextcloud-22.0.0.zip’

nextcloud-22.0.0.zip             100%[===============================================================================>] 164.63M  4.83MB/s    in 42s

2021-07-09 09:05:43 (3.95 MB/s) - ‘nextcloud-22.0.0.zip’ saved [172627889/172627889]

sa@linuxserver:~$ 
```

добовление и проверка доверенный домен

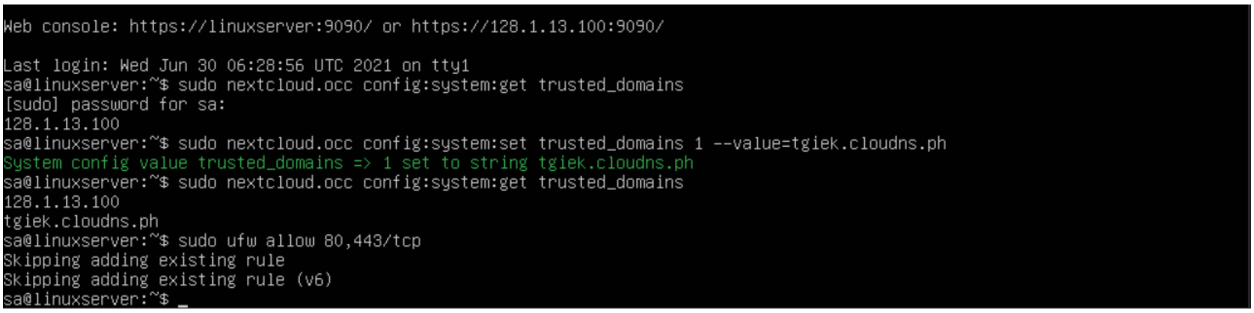


```
Ubuntu 20.04.2 LTS linuxserver tty1

Web console: https://linuxserver:9090/ or https://128.1.13.100:9090/

linuxserver login: [   27.184925] overlayfs: missing 'lowerdir'
[   27.844434] cloud-init[1360]: Cloud-init v. 20.4.1-0ubuntu1~20.04.1 running 'modules:config' at Mon, 05 Jul 2021 08:23:35 +00
00. Up 27.65 seconds.
[   28.266146] cloud-init[1368]: Cloud-init v. 20.4.1-0ubuntu1~20.04.1 running 'modules:final' at Mon, 05 Jul 2021 08:23:36 +000
0. Up 28.07 seconds.
[   28.369646] cloud-init[1368]: Cloud-init v. 20.4.1-0ubuntu1~20.04.1 finished at Mon, 05 Jul 2021 08:23:36 +0000. Datasource D
ataSourceNone.  Up 28.26 seconds
[   28.373767] cloud-init[1368]: 2021-07-05 08:23:36,333 - cc_final_message.py[WARNING]: Used fallback datasource

linuxserver login: sa
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 Wed Jul  7 07:02:01 UTC 2021

  System load:  0.04               Processes:               137
  Usage of /:   3.7% of 195.86GB   Users logged in:         0
  Memory usage: 10%                IPv4 address for docker0: 172.17.0.1
  Swap usage:   0%                 IPv4 address for ens18:   128.1.13.100

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

   https://ubuntu.com/blog/microk8s-memory-optimisation

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


Web console: https://linuxserver:9090/ or https://128.1.13.100:9090/

Last login: Wed Jun 30 06:28:56 UTC 2021 on tty1
sa@linuxserver:~$ sudo nextcloud.occ config:system:get trusted_domains
[sudo] password for sa:
128.1.13.100
sa@linuxserver:~$ sudo nextcloud.occ config:system:set trusted_domains 1 --value=tgiek.cloudns.ph
System config value trusted_domains => 1 set to string tgiek.cloudns.ph
sa@linuxserver:~$
```



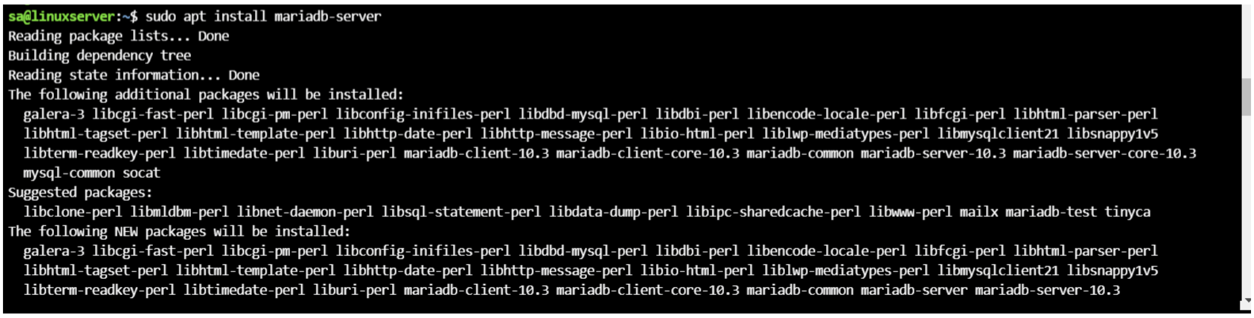
```
Web console: https://linuxserver:9090/ or https://128.1.13.100:9090/

linuxserver login: [   27.184925] overlayfs: missing 'lowerdir'
[   27.844434] cloud-init[1360]: Cloud-init v. 20.4.1-0ubuntu1~20.04.1 running 'modules:config' at Mon, 05 Jul 2021 08:23:35 +0
00. Up 27.65 seconds.
[   28.266146] cloud-init[1368]: Cloud-init v. 20.4.1-0ubuntu1~20.04.1 running 'modules:final' at Mon, 05 Jul 2021 08:23:36 +00
0. Up 28.07 seconds.
[   28.369646] cloud-init[1368]: Cloud-init v. 20.4.1-0ubuntu1~20.04.1 finished at Mon, 05 Jul 2021 08:23:36 +0000. Datasource
ataSourceNone.  Up 28.26 seconds
[   28.373767] cloud-init[1368]: 2021-07-05 08:23:36,333 - cc_final_message.py[WARNING]: Used fallback datasource

linuxserver login: sa
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 Wed Jul  7 07:02:01 UTC 2021

  System load:  0.04               Processes:               137
  Usage of /:   3.7% of 195.86GB   Users logged in:         0
  Memory usage: 10%                IPv4 address for docker0: 172.17.0.1
  Swap usage:   0%                 IPv4 address for ens18:   128.1.13.100

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

   https://ubuntu.com/blog/microk8s-memory-optimisation

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


Web console: https://linuxserver:9090/ or https://128.1.13.100:9090/

Last login: Wed Jun 30 06:28:56 UTC 2021 on tty1
sa@linuxserver:~$ sudo nextcloud.occ config:system:get trusted_domains
[sudo] password for sa:
128.1.13.100
sa@linuxserver:~$ sudo nextcloud.occ config:system:set trusted_domains 1 --value=tgiek.cloudns.ph
System config value trusted_domains => 1 set to string tgiek.cloudns.ph
sa@linuxserver:~$ sudo nextcloud.occ config:system:get trusted_domains
128.1.13.100
tgiek.cloudns.ph
```

Открываем порты 443 и 80

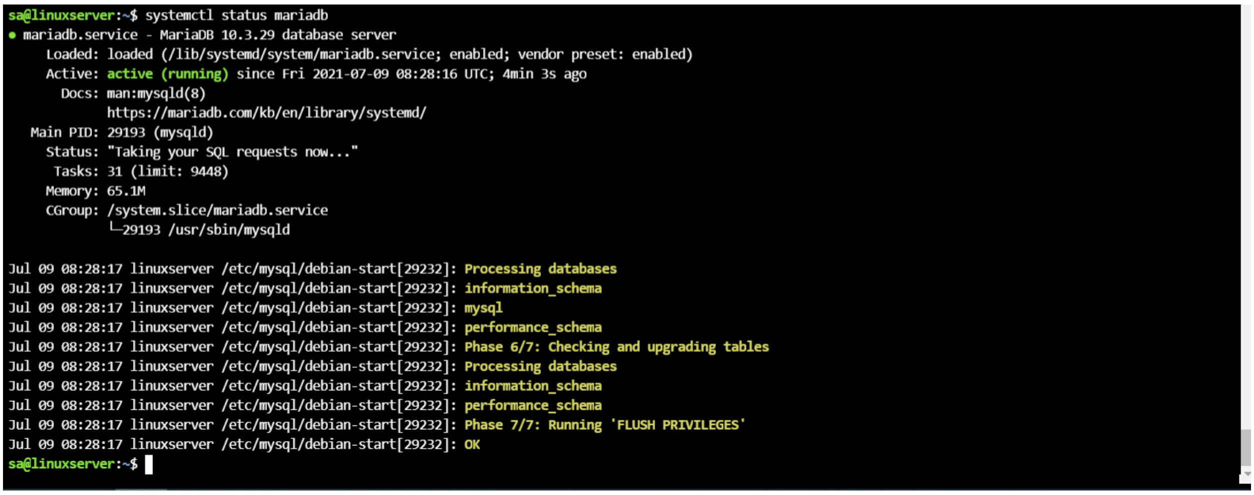


```
Web console: https://linuxserver:9090/ or https://128.1.13.100:9090/

Last login: Wed Jun 30 06:28:56 UTC 2021 on tty1
sa@linuxserver:~$ sudo nextcloud.occ config:system:get trusted_domains
[sudo] password for sa:
128.1.13.100
sa@linuxserver:~$ sudo nextcloud.occ config:system:set trusted_domains 1 --value=tgiek.cloudns.ph
System config value trusted_domains => 1 set to string tgiek.cloudns.ph
sa@linuxserver:~$ sudo nextcloud.occ config:system:get trusted_domains
128.1.13.100
tgiek.cloudns.ph
sa@linuxserver:~$ sudo ufw allow 80,443/tcp
Skipping adding existing rule
Skipping adding existing rule (v6)
sa@linuxserver:~$ _
```

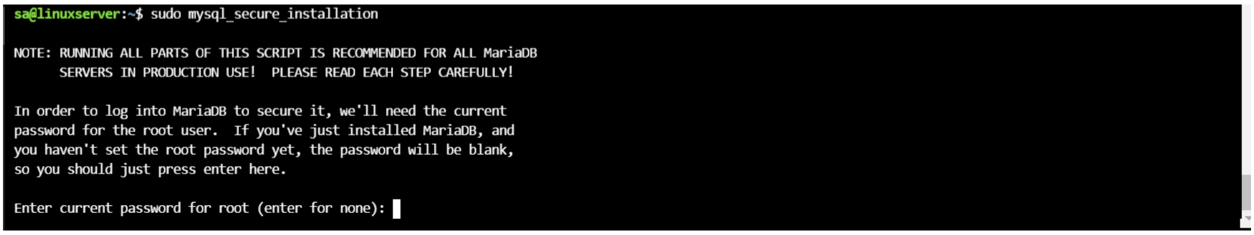
Установка Mariadb и Mysql



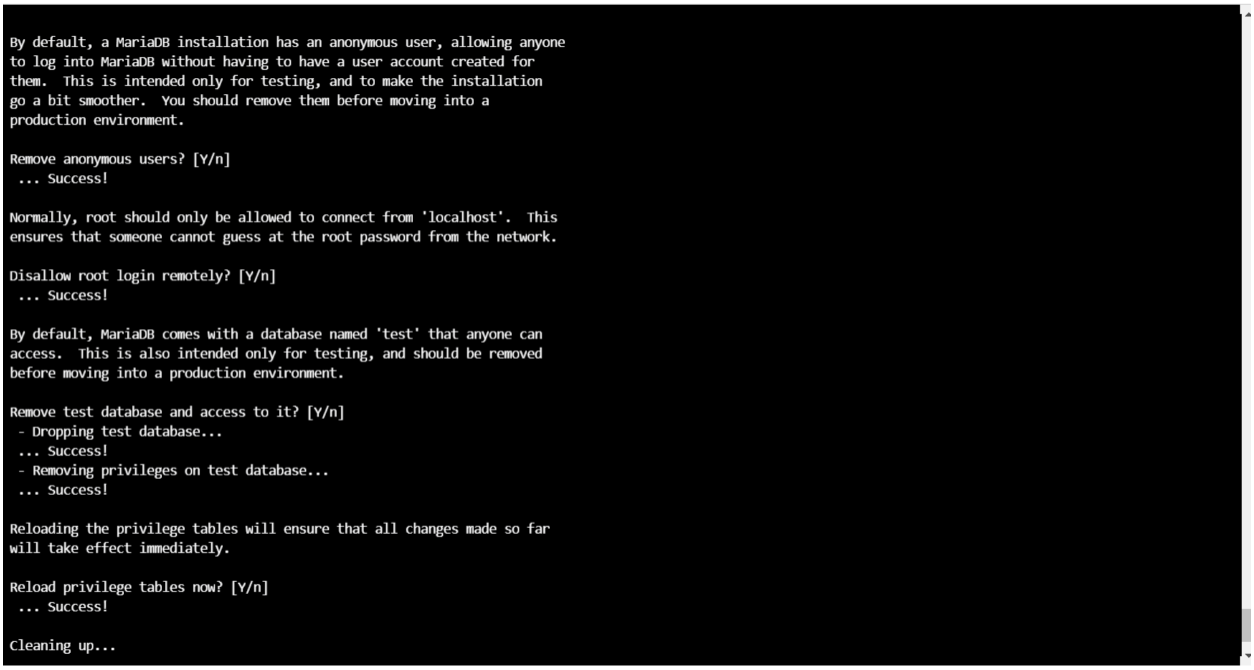
```
sa@linuxserver:~$ sudo apt install mariadb-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  galera-3 libcgi-fast-perl libcgi-pm-perl libconfig-inifiles-perl libdbd-mysql-perl libdbi-perl libencode-locale-perl libfcgi-perl libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmysqlclient21 libsnappy1v5
  libterm-readkey-perl libtimedate-perl liburi-perl mariadb-client-10.3 mariadb-client-core-10.3 mariadb-common mariadb-server-10.3 mariadb-server-core-10.3
  mysql-common socat
Suggested packages:
  libclone-perl libmldbm-perl libnet-daemon-perl libsql-statement-perl libdata-dump-perl libipc-sharedcache-perl libwww-perl mailx mariadb-test tinyca
The following NEW packages will be installed:
  galera-3 libcgi-fast-perl libcgi-pm-perl libconfig-inifiles-perl libdbd-mysql-perl libdbi-perl libencode-locale-perl libfcgi-perl libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmysqlclient21 libsnappy1v5
  libterm-readkey-perl libtimedate-perl liburi-perl mariadb-client-10.3 mariadb-client-core-10.3 mariadb-common mariadb-server mariadb-server-10.3
```



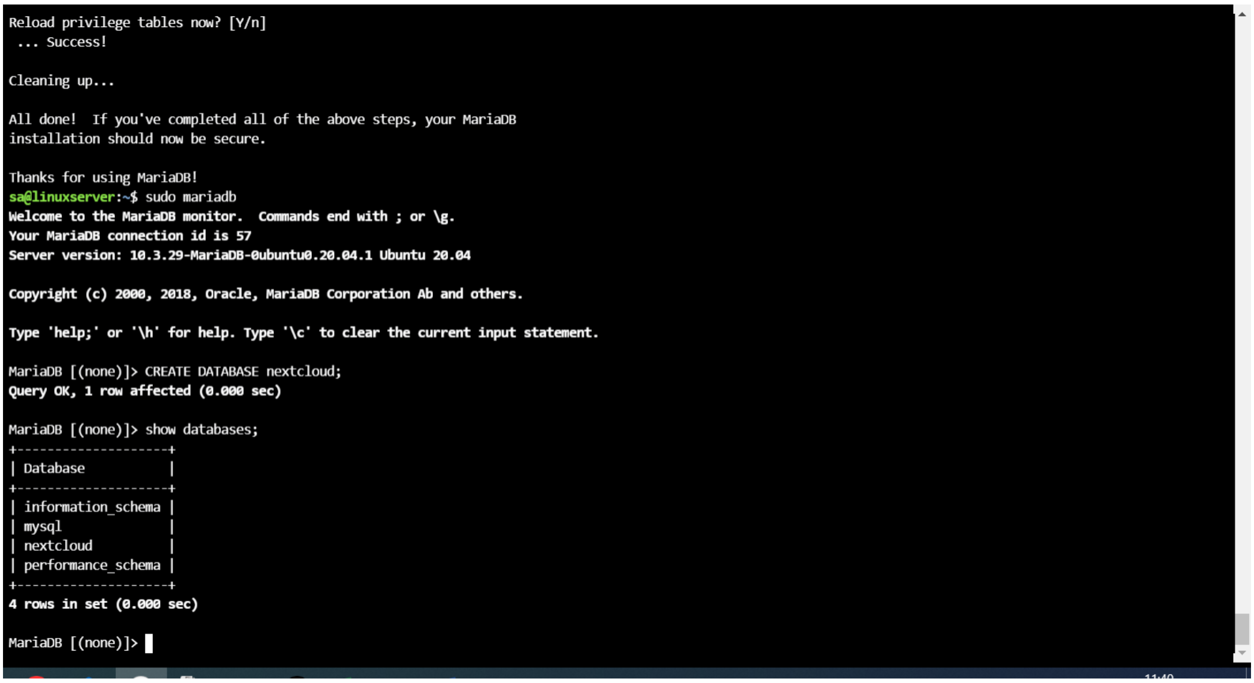
```
sa@linuxserver:~$ systemctl status mariadb
● mariadb.service - MariaDB 10.3.29 database server
     Loaded: loaded (/lib/systemd/system/mariadb.service; enabled; vendor preset: enabled)
     Active: active (running) since Fri 2021-07-09 08:28:16 UTC; 4min 3s ago
       Docs: man:mysqld(8)
             https://mariadb.com/kb/en/library/systemd/
   Main PID: 29193 (mysqld)
     Status: "Taking your SQL requests now..."
      Tasks: 31 (limit: 9448)
     Memory: 65.1M
     CGroup: /system.slice/mariadb.service
             └─29193 /usr/sbin/mysqld

Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: Processing databases
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: information_schema
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: mysql
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: performance_schema
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: Phase 6/7: Checking and upgrading tables
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: Processing databases
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: information_schema
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: performance_schema
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: Phase 7/7: Running 'FLUSH PRIVILEGES'
Jul 09 08:28:17 linuxserver /etc/mysql/debian-start[29232]: OK
sa@linuxserver:~$
```



```
sa@linuxserver:~$ sudo mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
      SERVERS IN PRODUCTION USE!  PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current
password for the root user.  If you've just installed MariaDB, and
you haven't set the root password yet, the password will be blank,
so you should just press enter here.

Enter current password for root (enter for none):
```



```
By default, a MariaDB installation has an anonymous user, allowing anyone
to log into MariaDB without having to have a user account created for
them.  This is intended only for testing, and to make the installation
go a bit smoother.  You should remove them before moving into a
production environment.

Remove anonymous users? [Y/n]
 ... Success!

Normally, root should only be allowed to connect from 'localhost'.  This
ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n]
 ... Success!

By default, MariaDB comes with a database named 'test' that anyone can
access.  This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n]
 - Dropping test database...
 ... Success!
 - Removing privileges on test database...
 ... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n]
 ... Success!

Cleaning up...
```



```
Reload privilege tables now? [Y/n]
 ... Success!

Cleaning up...

All done!  If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
sa@linuxserver:~$ sudo mariadb
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 57
Server version: 10.3.29-MariaDB-0ubuntu0.20.04.1 Ubuntu 20.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE nextcloud;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| nextcloud          |
| performance_schema |
+--------------------+
4 rows in set (0.000 sec)

MariaDB [(none)]>
```

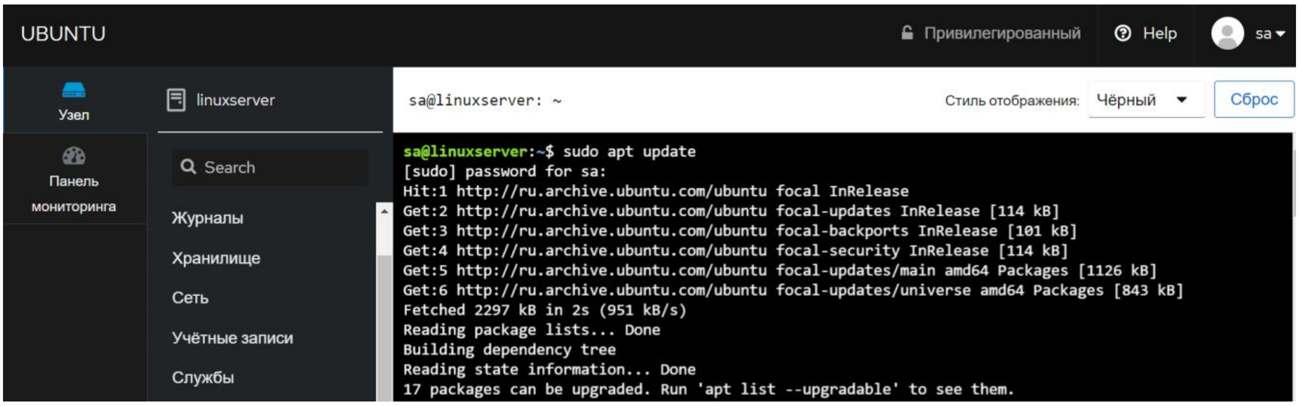
Docker — программное обеспечение для автоматизации развёртывания и управления приложениями в средах с поддержкой контейнеризации. Позволяет «упаковать» приложение со всем его окружением и зависимостями в контейнер, который может быть перенесён на любую Linux-систему с поддержкой cgroups в ядре, а также предоставляет среду по управлению контейнерами.

Установку Docker мы будем производить на базе серверной операционной системы Ubuntu 20.04

Установка

Перед началом установки обновим базу пакеты

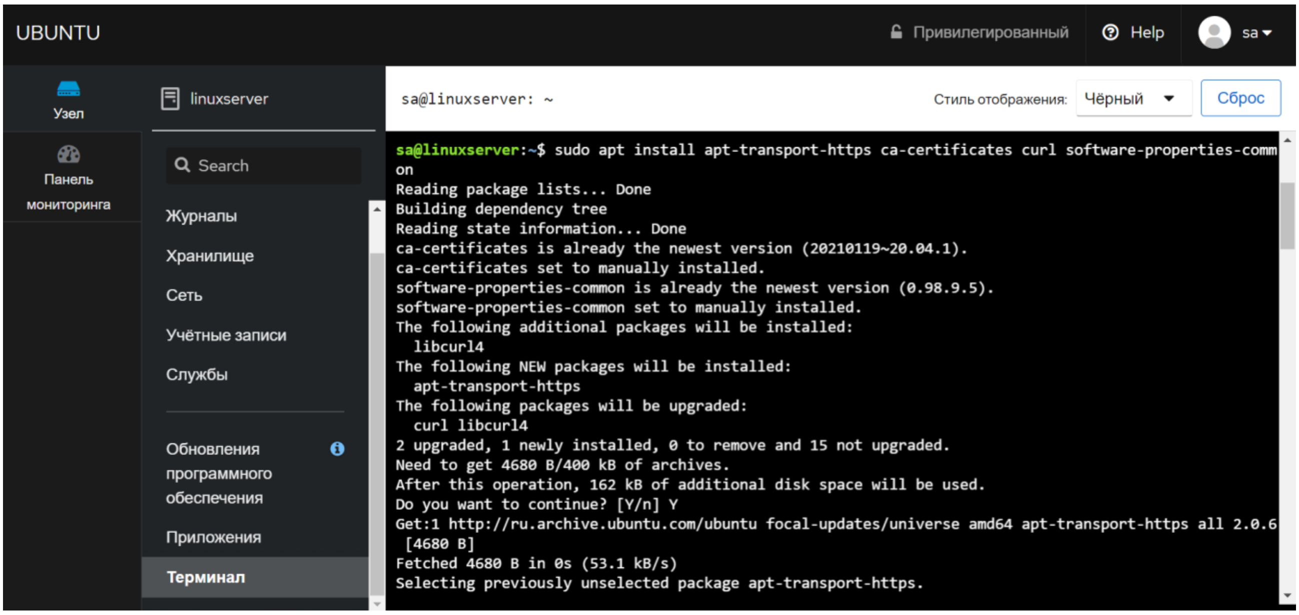
```
sudo apt update
```



```
sa@linuxserver:~$ sudo apt update
[sudo] password for sa:
Hit:1 http://ru.archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://ru.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
Get:4 http://ru.archive.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:5 http://ru.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1126 kB]
Get:6 http://ru.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [843 kB]
Fetched 2297 kB in 2s (951 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
17 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Следующим шагом будем установка необходимых пакетов для корректной работы docker

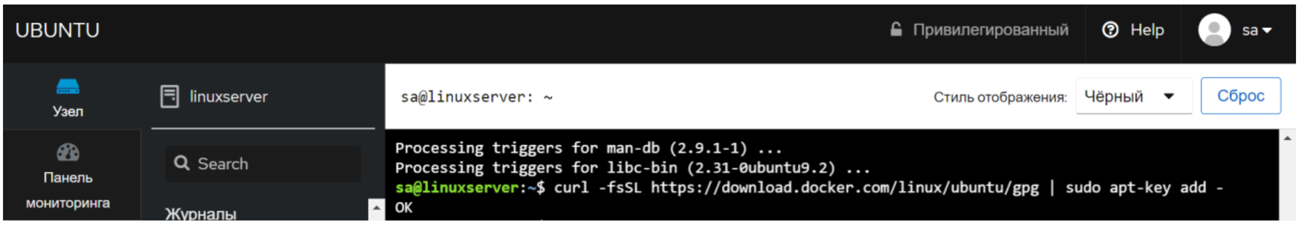
```
sudo apt install apt-transport-https ca-certificates curl software-properties-common
```



```
sa@linuxserver:~$ sudo apt install apt-transport-https ca-certificates curl software-properties-comm
on
Reading package lists... Done
Building dependency tree
Reading state information... Done
ca-certificates is already the newest version (20210119~20.04.1).
ca-certificates set to manually installed.
software-properties-common is already the newest version (0.98.9.5).
software-properties-common set to manually installed.
The following additional packages will be installed:
  libcurl4
The following NEW packages will be installed:
  apt-transport-https
The following packages will be upgraded:
  curl libcurl4
2 upgraded, 1 newly installed, 0 to remove and 15 not upgraded.
Need to get 4680 B/400 kB of archives.
After this operation, 162 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ru.archive.ubuntu.com/ubuntu focal-updates/universe amd64 apt-transport-https all 2.0.6
 [4680 B]
Fetched 4680 B in 0s (53.1 kB/s)
Selecting previously unselected package apt-transport-https.
```

Добавляем ключ GPG официального репозитория Docker:

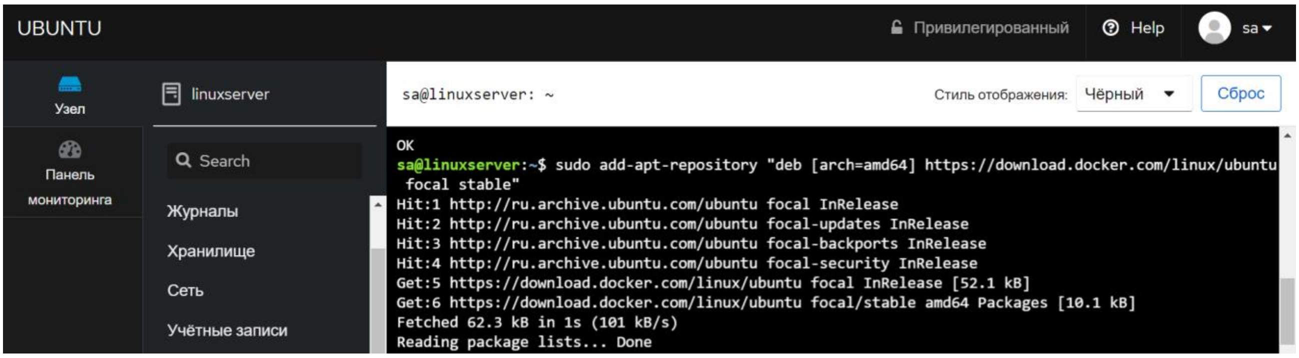
```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
```



```
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
sa@linuxserver:~$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
OK
```

Подключаем репозиторий Docker

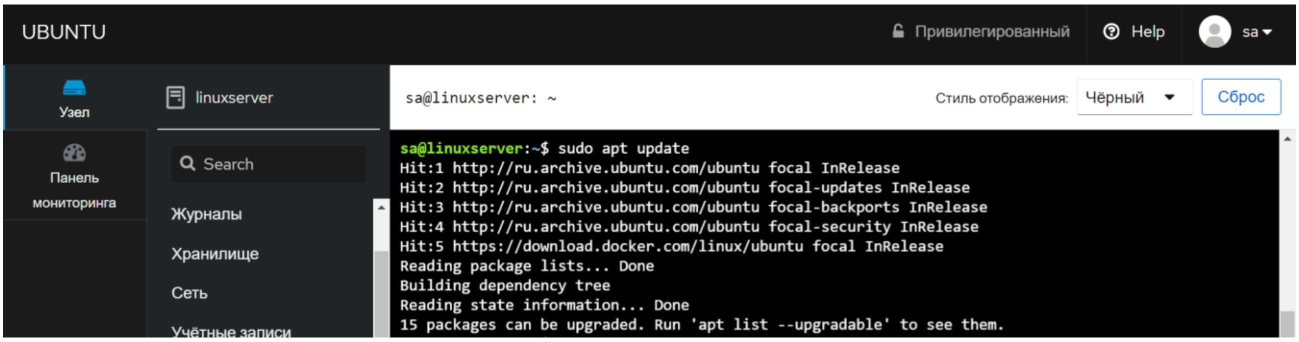
```
sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu focal stable"
```



```
OK
sa@linuxserver:~$ sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu
 focal stable"
Hit:1 http://ru.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://ru.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://ru.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 http://ru.archive.ubuntu.com/ubuntu focal-security InRelease
Get:5 https://download.docker.com/linux/ubuntu focal InRelease [52.1 kB]
Get:6 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [10.1 kB]
Fetched 62.3 kB in 1s (101 kB/s)
Reading package lists... Done
```

После добавления нового репозитория обязательно обновим базу пакетов, иначе при выполнении команды установки система не будет знать что этот пакет доступен

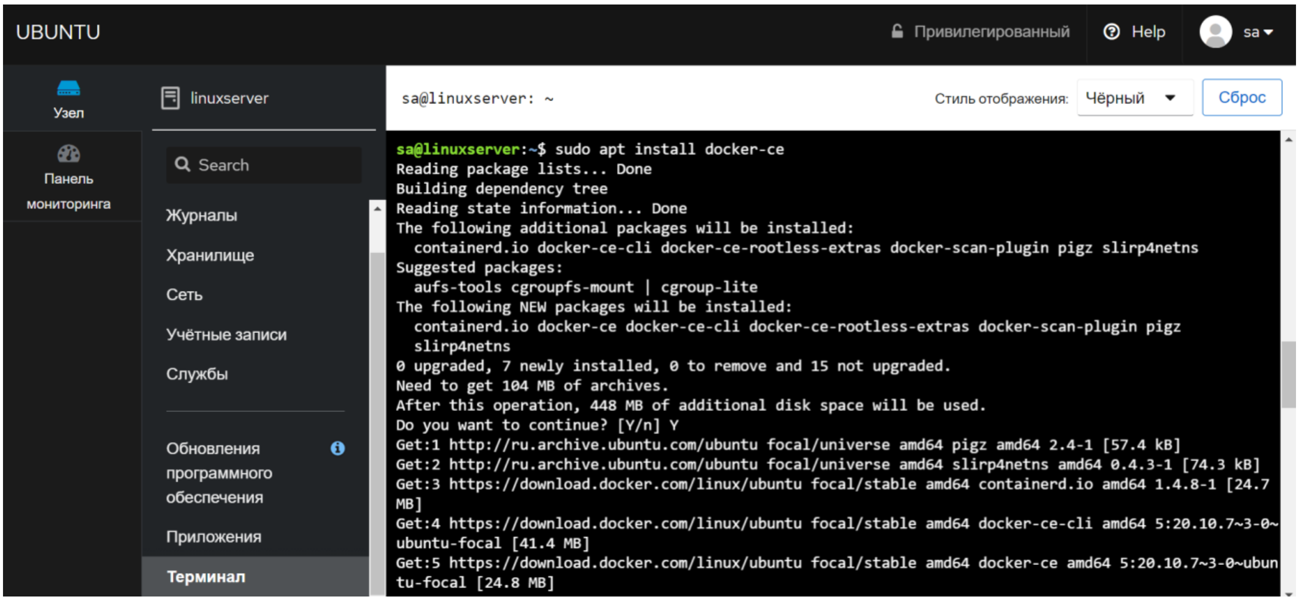
```
sudo apt update
```



```
sa@linuxserver:~$ sudo apt update
Hit:1 http://ru.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://ru.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://ru.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 http://ru.archive.ubuntu.com/ubuntu focal-security InRelease
Hit:5 https://download.docker.com/linux/ubuntu focal InRelease
Reading package lists... Done
Building dependency tree
Reading state information... Done
15 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Приступим к установке Docker

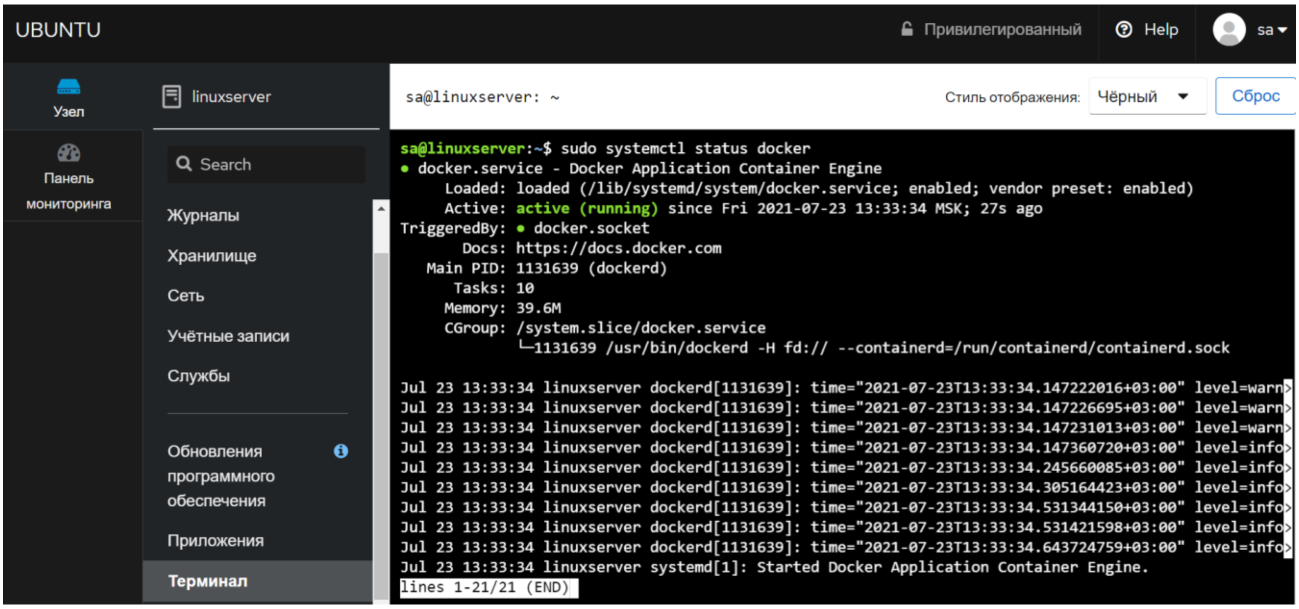
```
sudo apt install docker-ce
```



```
sa@linuxserver:~$ sudo apt install docker-ce
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  containerd.io docker-ce-cli docker-ce-rootless-extras docker-scan-plugin pigz slirp4netns
Suggested packages:
  aufs-tools cgroupfs-mount | cgroup-lite
The following NEW packages will be installed:
  containerd.io docker-ce docker-ce-cli docker-ce-rootless-extras docker-scan-plugin pigz
  slirp4netns
0 upgraded, 7 newly installed, 0 to remove and 15 not upgraded.
Need to get 104 MB of archives.
After this operation, 448 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ru.archive.ubuntu.com/ubuntu focal/universe amd64 pigz amd64 2.4-1 [57.4 kB]
Get:2 http://ru.archive.ubuntu.com/ubuntu focal/universe amd64 slirp4netns amd64 0.4.3-1 [74.3 kB]
Get:3 https://download.docker.com/linux/ubuntu focal/stable amd64 containerd.io amd64 1.4.8-1 [24.7
MB]
Get:4 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-cli amd64 5:20.10.7~3-0~
ubuntu-focal [41.4 MB]
Get:5 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce amd64 5:20.10.7~3-0~ubun
tu-focal [24.8 MB]
```

После установки Docker проверим, запущен ли демон

```
sudo systemctl status docker
```



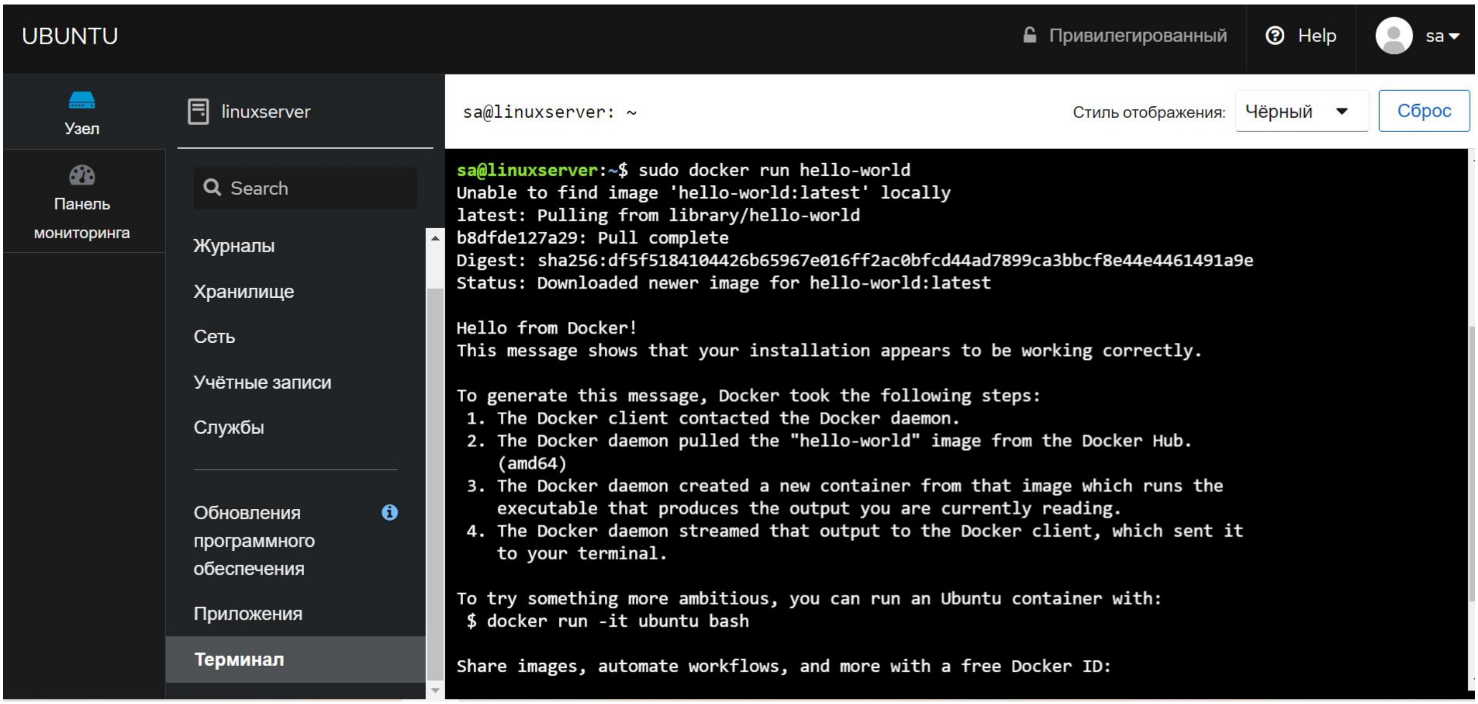
```
sa@linuxserver:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
     Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
     Active: active (running) since Fri 2021-07-23 13:33:34 MSK; 27s ago
TriggeredBy: ● docker.socket
       Docs: https://docs.docker.com
   Main PID: 1131639 (dockerd)
      Tasks: 10
     Memory: 39.6M
     CGroup: /system.slice/docker.service
             └─1131639 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.147222016+03:00" level=warn>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.147226695+03:00" level=warn>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.147231013+03:00" level=warn>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.147360720+03:00" level=info>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.245660085+03:00" level=info>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.305164423+03:00" level=info>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.531344150+03:00" level=info>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.531421598+03:00" level=info>
Jul 23 13:33:34 linuxserver dockerd[1131639]: time="2021-07-23T13:33:34.643724759+03:00" level=info>
Jul 23 13:33:34 linuxserver systemd[1]: Started Docker Application Container Engine.
lines 1-21/21 (END)
```

Запуск первого Docker контейнера

Образы контейнеров Docker загружаются с Docker Hub

Загрузим тестовый контейнер hello-world

```
docker run hello-world
```

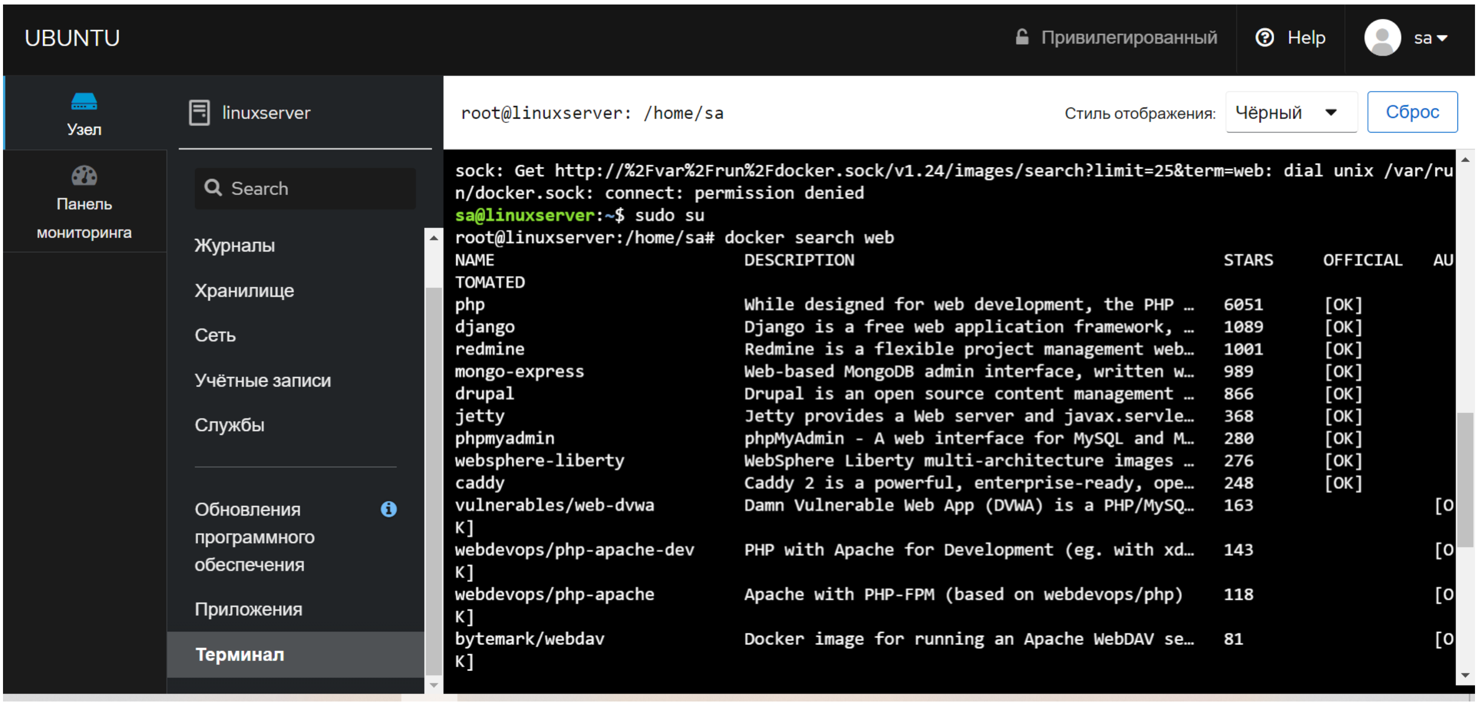


```
sa@linuxserver: ~
```

```
sa@linuxserver:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
b8dfde127a29: Pull complete
Digest: sha256:df5f5184104426b65967e016ff2ac0bfcd44ad7899ca3bbcf8e44e4461491a9e
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
```

Для поиска образов в Docker Hub используется команда search и ключевое слово поиска. К примеру вывод всех контйенеров в которых упоминается web

```
docker search web
```



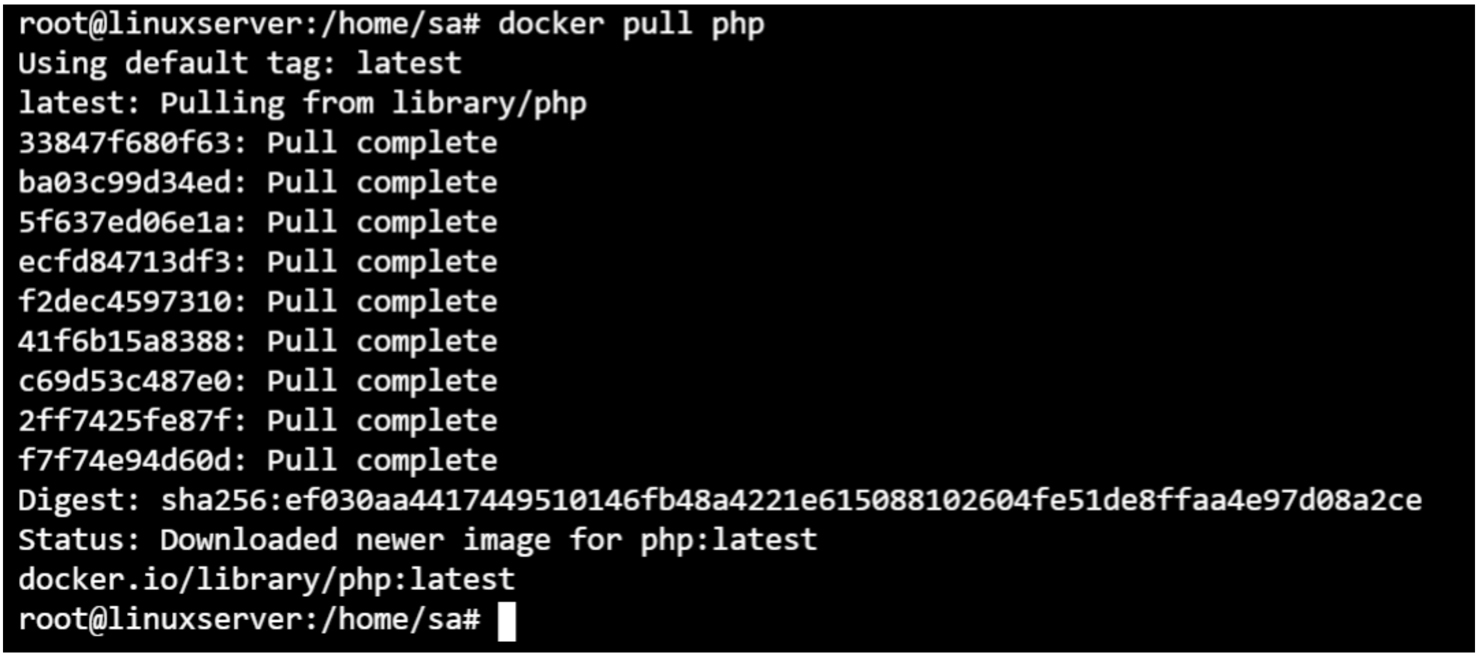
```
root@linuxserver: /home/sa
```

```
sock: Get http://%2Fvar%2Frun%2Fdocker.sock/v1.24/images/search?limit=25&term=web: dial unix /var/ru
n/docker.sock: connect: permission denied
sa@linuxserver:~$ sudo su
root@linuxserver:/home/sa# docker search web
NAME                         DESCRIPTION                                     STARS     OFFICIAL   AU
TOMATED
php                          While designed for web development, the PHP …   6051      [OK]
django                       Django is a free web application framework, …   1089      [OK]
redmine                      Redmine is a flexible project management web…   1001      [OK]
mongo-express                Web-based MongoDB admin interface, written w…   989       [OK]
drupal                       Drupal is an open source content management …   866       [OK]
jetty                        Jetty provides a Web server and javax.servle…   368       [OK]
phpmyadmin                   phpMyAdmin - A web interface for MySQL and M…   280       [OK]
websphere-liberty            WebSphere Liberty multi-architecture images …   276       [OK]
caddy                        Caddy 2 is a powerful, enterprise-ready, ope…   248       [OK]
vulnerables/web-dvwa         Damn Vulnerable Web App (DVWA) is a PHP/MySQ…   163                  [O
K]
webdevops/php-apache-dev     PHP with Apache for Development (eg. with xd…   143                  [O
K]
webdevops/php-apache         Apache with PHP-FPM (based on webdevops/php)    118                  [O
K]
bytemark/webdav              Docker image for running an Apache WebDAV se…   81                   [O
K]
```

Для того чтобы загрузить нужный контейнер достаточно выполнить pull и указать имя контейнера

```
docker pull php
```

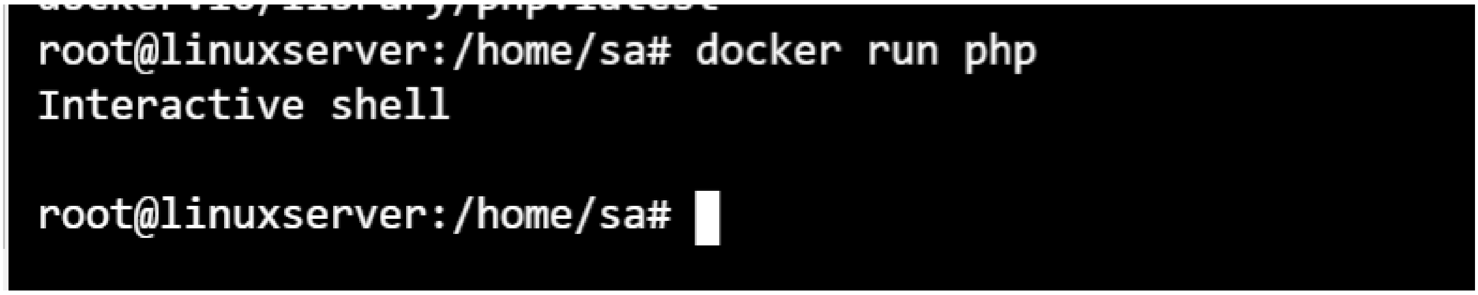
После загрузки контейнера его нужно будет запустить командой run



```
root@linuxserver:/home/sa# docker pull php
Using default tag: latest
latest: Pulling from library/php
33847f680f63: Pull complete
ba03c99d34ed: Pull complete
5f637ed06e1a: Pull complete
ecfd84713df3: Pull complete
f2dec4597310: Pull complete
41f6b15a8388: Pull complete
c69d53c487e0: Pull complete
2ff7425fe87f: Pull complete
f7f74e94d60d: Pull complete
Digest: sha256:ef030aa4417449510146fb48a4221e615088102604fe51de8ffaa4e97d08a2ce
Status: Downloaded newer image for php:latest
docker.io/library/php:latest
root@linuxserver:/home/sa#
```

```
docker run php
```

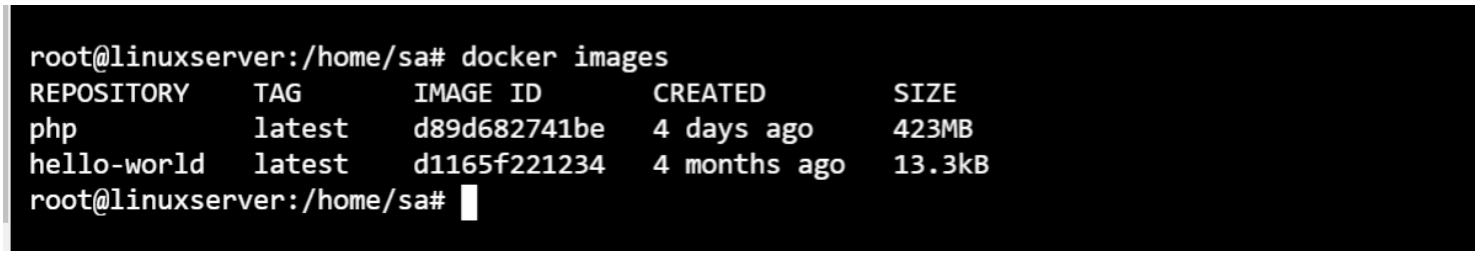
Еще одна команда которая может вам пригодится - просмотр загруженных образов.



```
root@linuxserver:/home/sa# docker run php
Interactive shell

root@linuxserver:/home/sa#
```

```
docker images
```

Она выводит все образы которые были загружены на сервер



```
root@linuxserver:/home/sa# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
php           latest    d89d682741be   4 days ago     423MB
hello-world   latest    d1165f221234   4 months ago   13.3kB
root@linuxserver:/home/sa#
```

Установка и запуск сервера Collabora

На практике лучше работает Collabora, установленная в качестве docker-контейнера.

После готов, как мы установили и запустили Docker, для получения нужного нам контейнера вводим команду:

```
docker pull collabora/code
```

Процесс загрузки займет несколько минут — в итоге мы должны увидеть:

```
Status: Downloaded newer image for collabora/code:latest
```

Для запуска контейнера нам нужен правильный сертификат, полученный на домен. Его можно купить или запросить бесплатно в Let's Encrypt. Предположим, что мы сохранили наш сертификат по пути **/etc/letsencrypt/live/collabora.superadmins.co**

Команда для запуска контейнера с сервером collabora следующая:

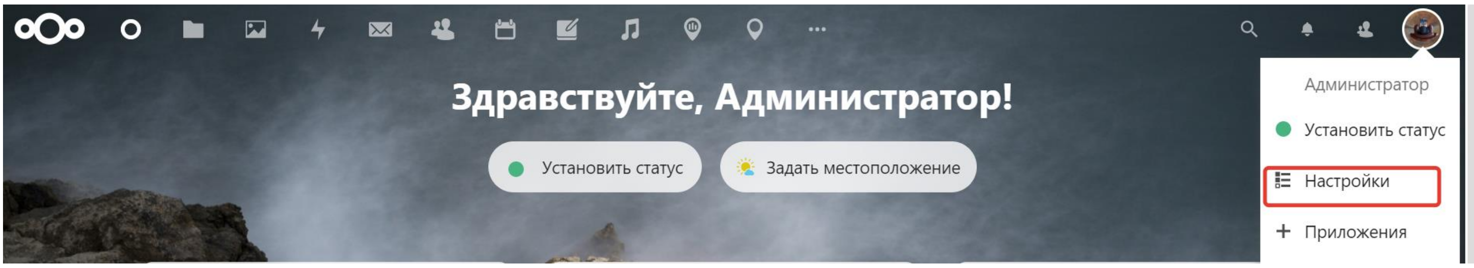
```
docker run --name collabora -t -d -p 9980:9980 --add-host "nextcloud.superadmins.co":128.1.26.200 -v
"/etc/letsencrypt/live/collabora.superadmins.co/fullchain.pem":/etc/loolwsd/ca-chain.cert.pem -v "/e
tc/letsencrypt/live/collabora. superadmins.co/privkey.pem":/etc/loolwsd/key.pem -v "/etc/letsencrypt
/live/collabora.superadmins.co/fullchain.pem":/etc/loolwsd/cert.pem -e 'DONT_GEN_SSL_CERT=true' -e "
domain=nextcloud\\.dmosk\\.ru" -e "dictionaries=en ru" -e "username=admin" -e "password=passadmin" -
-restart always --cap-add MKNOD collabora/code
```

** в итоге, наш контейнер будет слушать сетевые запросы на порту **9980** (параметр **-p**); мы добавим для разрешения имени **nextcloud.superadmins.co** (нашего сервера Nextcloud) IP-адрес **128.1.26.200** (**--add-host**); в контейнер добавим файлы сертификатов (**-v**); в конфигурацию collabora добавим запрет на создание нового сертификата, добавим наш сервер nextcloud для разрешения подключаться к серверу; используем русский и английские языки; задаем логин и пароль для администратора nextcloud.*

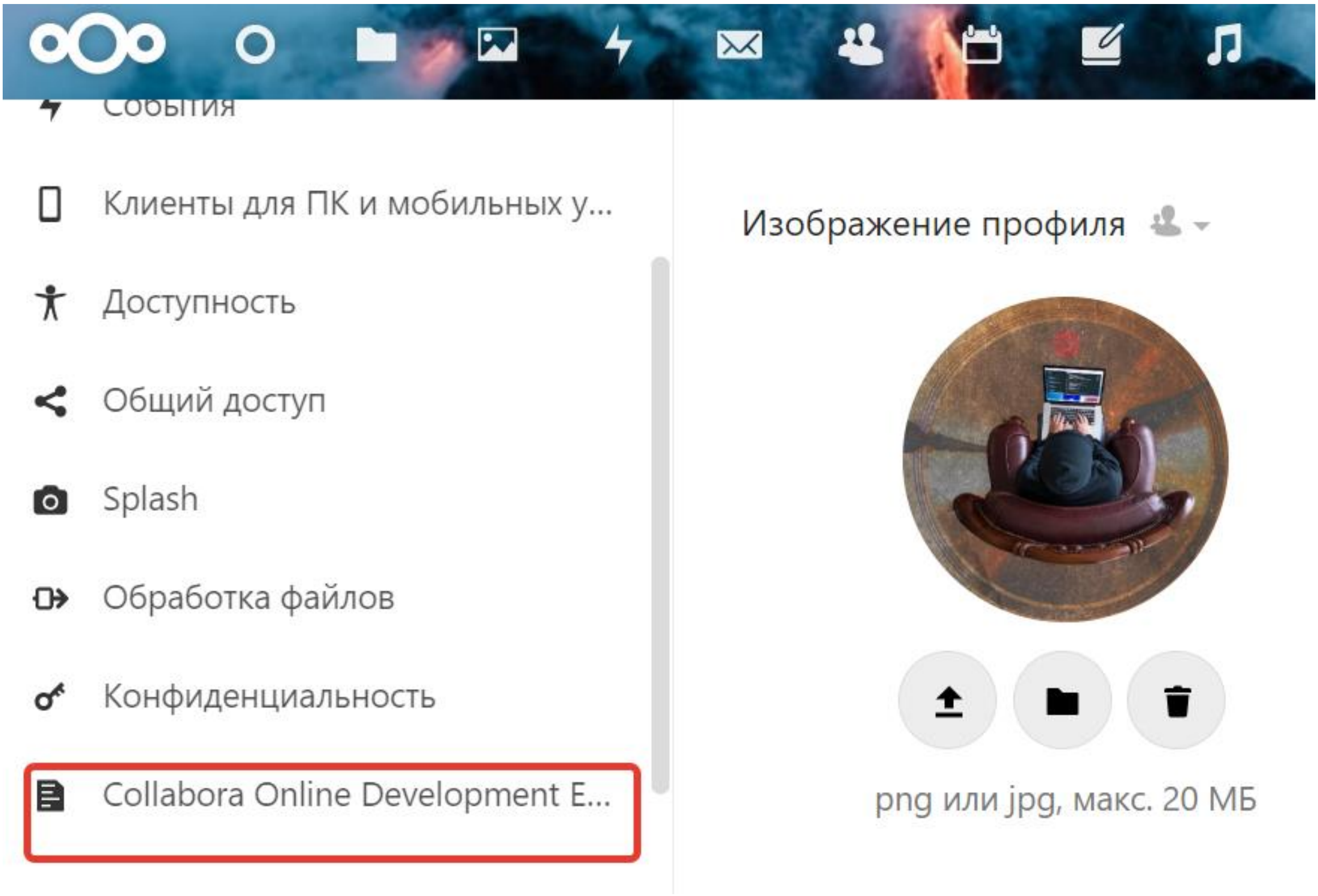
Настройка Nextcloud

В данной инструкции мы рассмотрим пример связки Collabora с Nextcloud.
Для Owncloud действия будут похожи.

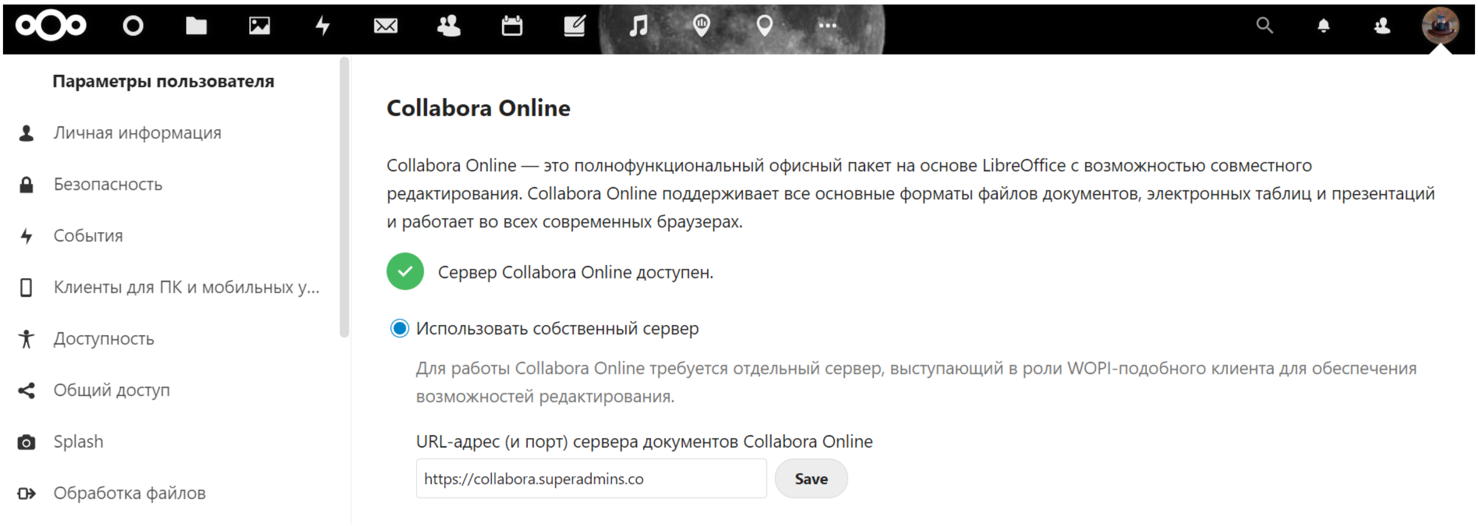
Для интеграции Collabora с Nextcloud заходим на веб-интерфейс последней и заходим в настройки:



В меню слева кликаем по **Collabora Online Development Edition**:



В поле **URL-адрес (и порт) сервера документов Collabora Online** добавляем адрес нашего сервера collabora:



Collabora Online

Collabora Online — это полнофункциональный офисный пакет на основе LibreOffice с возможностью совместного редактирования. Collabora Online поддерживает все основные форматы файлов документов, электронных таблиц и презентаций и работает во всех современных браузерах.

✓ Сервер Collabora Online доступен.

● Использовать собственный сервер

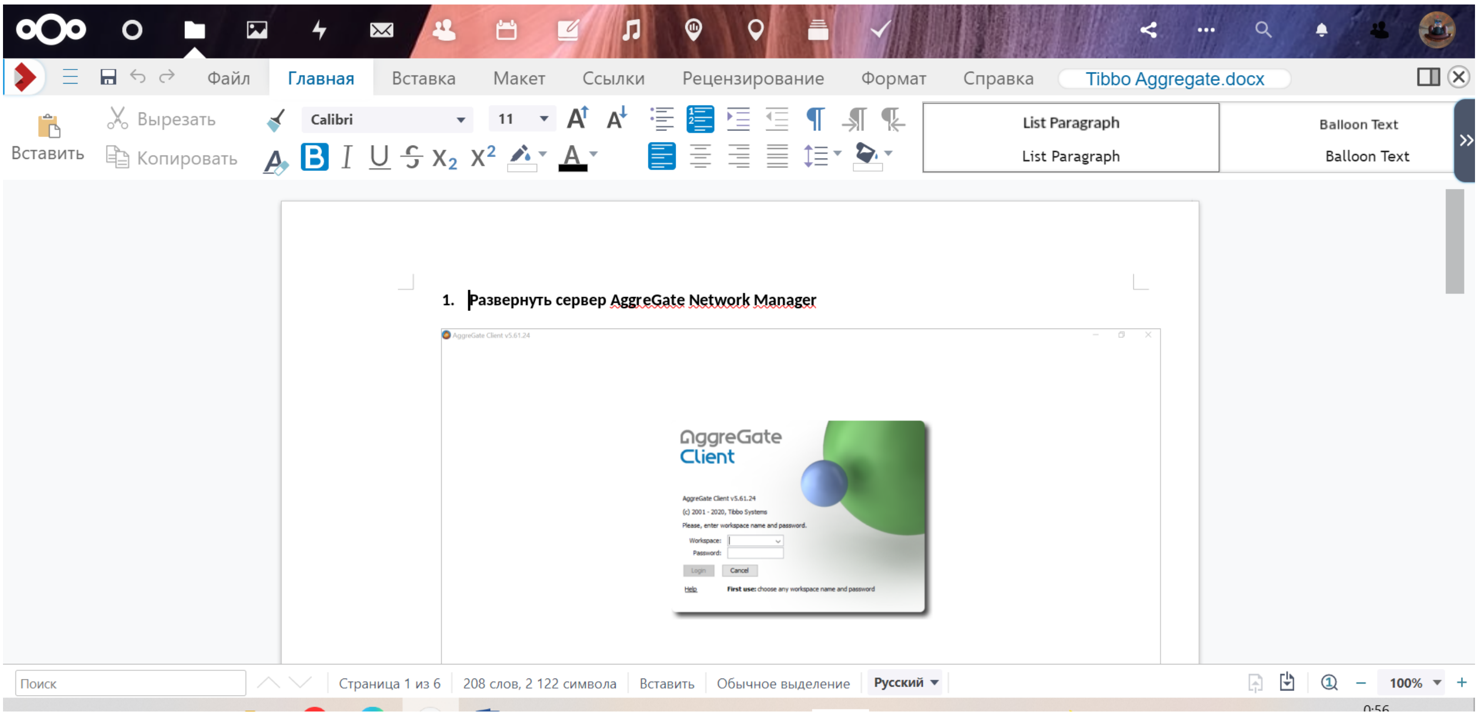
Для работы Collabora Online требуется отдельный сервер, выступающий в роли WOPI-подобного клиента для обеспечения возможностей редактирования.

URL-адрес (и порт) сервера документов Collabora Online

https://collabora.superadmins.co

** важно, чтобы запрос был на доменное имя. Таким образом, домен должен быть зарегистрирован в DNS. Если у нас есть недочеты с сертификатом (например, нет* *полной цепочки) ставим галочку* ***Отключить проверку сертификата (небезопасно)***.

Переходим к папкам и файлам на облачном сервисе. Пробуем открыть любой документ docx или создать новый — он должен открыться в Collabora:



1. Развернуть сервер AggreGate Network Manager

Управление контейнерами

Просмотр списка активных контейнеров

```
docker ps
```

Вывод будет следующий

```
CONTAINER ID        IMAGE               COMMAND             CREATED
```

Просмотр контейнеров системы

```
docker ps -a
```

Список последних созданных контейнеров

```
docker ps -l
```