

Руководство по установке платформы Fastboard alt linux

для визуального анализа данных

Общие требования

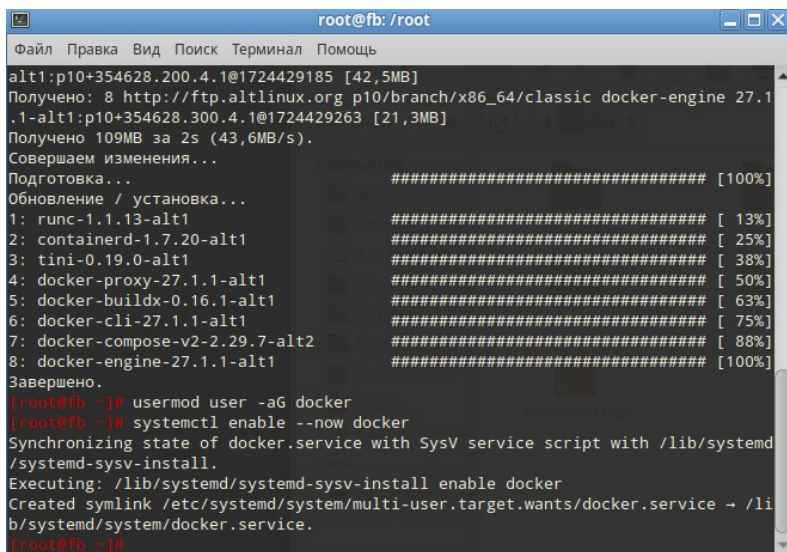
Установка производится на чистой системе, обновленной до актуального состояния.

1. Подготовка системы

```
$ su -  
# apt-get update  
# apt-get dist-upgrade  
# update-kernel  
# reboot
```

2. Установка Docker и Docker Compose

```
$ su -  
# apt-get install docker-engine docker-compose-v2  
# usermod имя_пользователя -aG docker  
# systemctl enable --now docker  
# docker network create resources //сразу создадим сеть для  
контейнеров  
# exit  
Перезагружаем систему
```



```
root@fb: /root  
Файл Правка Вид Поиск Терминал Помощь  
alt1:p10+354628.200.4.1@1724429185 [42,5MB]  
Получено: 8 http://ftp.altlinux.org p10/branch/x86_64/classic docker-engine 27.1  
.1-alt1:p10+354628.300.4.1@1724429263 [21,3MB]  
Получено 109MB за 2s (43,6MB/s).  
Совершаем изменения...  
Подготовка... ##### [100%]  
Обновление / установка...  
1: runc-1.1.13-alt1 ##### [ 13%]  
2: containerd-1.7.20-alt1 ##### [ 25%]  
3: tini-0.19.0-alt1 ##### [ 38%]  
4: docker-proxy-27.1.1-alt1 ##### [ 50%]  
5: docker-buildx-0.16.1-alt1 ##### [ 63%]  
6: docker-cli-27.1.1-alt1 ##### [ 75%]  
7: docker-compose-v2-2.29.7-alt2 ##### [ 88%]  
8: docker-engine-27.1.1-alt1 ##### [100%]  
Завершено.  
(root@fb ~)# usermod user -aG docker  
(root@fb ~)# systemctl enable --now docker  
Synchronizing state of docker.service with SysV service script with /lib/systemd  
/systemd-sysv-install.  
Executing: /lib/systemd/systemd-sysv-install enable docker  
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service - /li  
b/systemd/system/docker.service.  
(root@fb ~)#
```

3. Подготовка дистрибутива

1. Загрузите архив *.tar.gz в удобную директорию, например: /home/Имя_пользователя/Загрузки

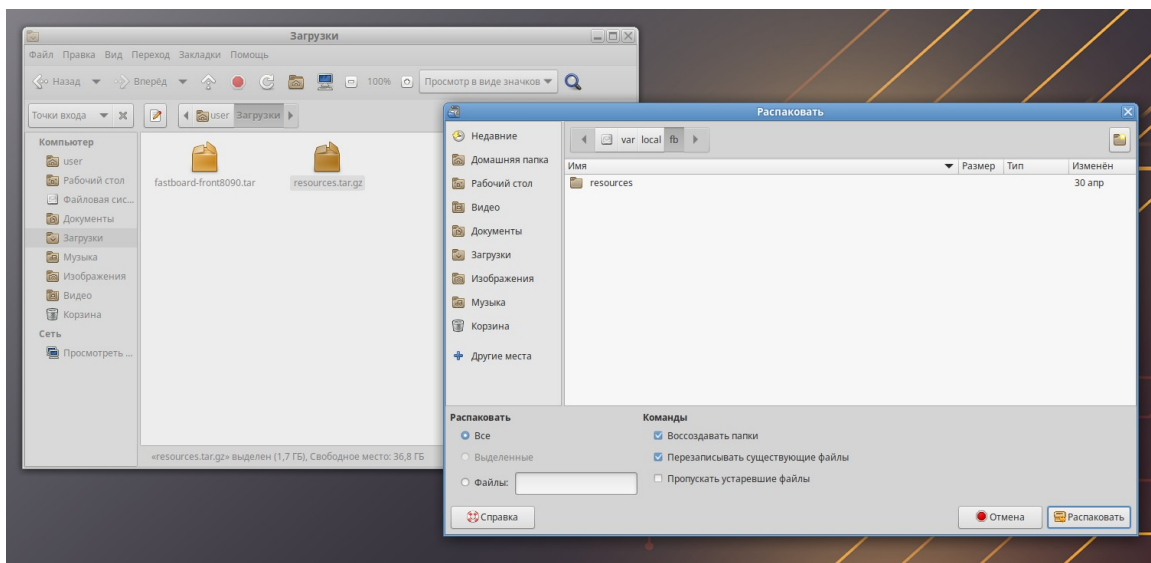
2. Создание директории для проекта.

```
$ su -  
# mkdir /var/local/fb  
# chown -R Имя_пользователя: Имя_пользователя /var/local/fb #  
Изменить владельца на Имя_пользователя  
# chmod -R 755 /var/local/fb # rwx для владельца, rx для  
группы и других  
# exit
```

```
[user@fb ~]$ su -  
Password:  
[root@fb ~]# mkdir /var/local/fb  
[root@fb ~]# chown -R user:user /var/local/fb  
[root@fb ~]# chmod -R 755 /var/local/fb
```

3. Распакуйте архив: /var/local/fb/

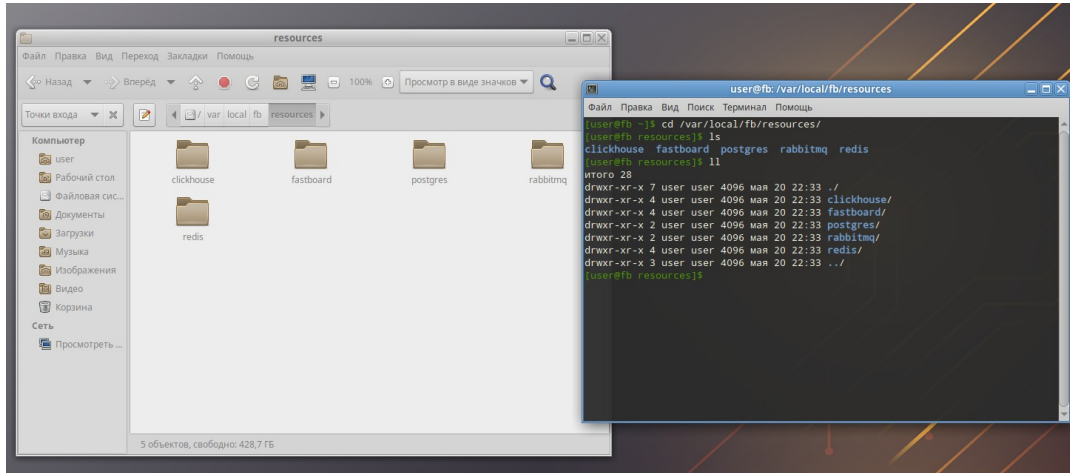
```
$ tar -xzvf fastboard.tar.gz -C /var/local/fb/
```



4. Развёртывание контейнеров

Перейдите в директорию с ресурсами:

```
$ cd /var/local/fb/resources/
```



PostgreSQL (PostGIS)

Образ: postgis/postgis:16-3.4

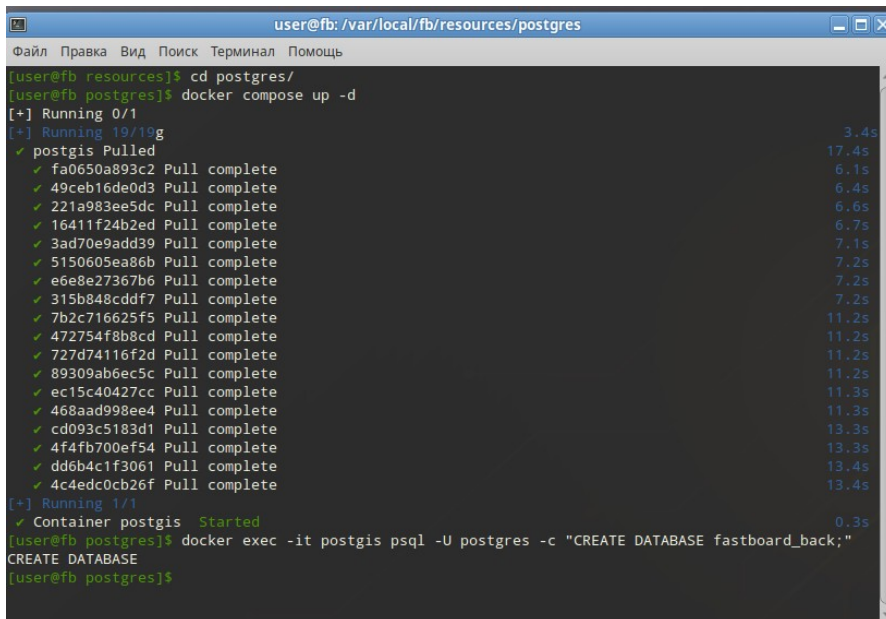
Логин: postgres

Пароль: postgres (можно изменить в docker-compose.yml)

```
$ cd postgres/
```

```
$ docker compose up -d
```

```
$ docker exec -it postgis psql -U postgres -c "CREATE DATABASE  
fastboard_back;"
```



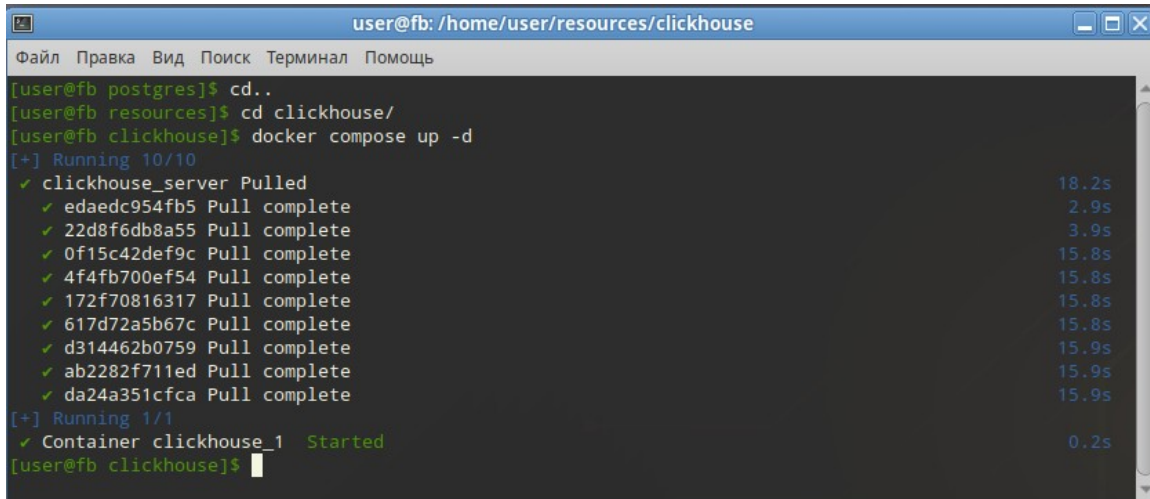
ClickHouse

Образ: clickhouse/clickhouse-server:23.8.2.7

Логин: admin

Пароль: Passw0rd (можно изменить в etc/users.xml)

```
$ cd..  
$ cd clickhouse/  
$ docker compose up -d
```

A terminal window titled 'user@fb: /home/user/resources/clickhouse' showing the execution of 'docker compose up -d'. It lists the pulling of the 'clickhouse_server' image and its components, followed by the starting of the 'clickhouse_1' container.

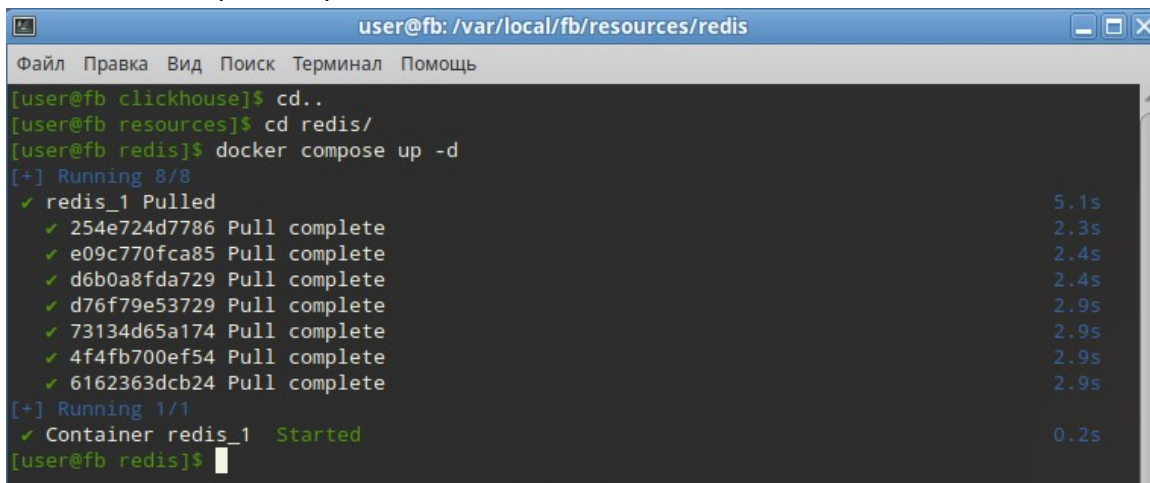
```
user@fb: /home/user/resources/clickhouse  
Файл Правка Вид Поиск Терминал Помощь  
[user@fb postgres]$ cd..  
[user@fb resources]$ cd clickhouse/  
[user@fb clickhouse]$ docker compose up -d  
[+] Running 10/10  
✓ clickhouse_server Pulled 18.2s  
✓ edaadc954fb5 Pull complete 2.9s  
✓ 22d8f6db8a55 Pull complete 3.9s  
✓ 0f15c42def9c Pull complete 15.8s  
✓ 4f4fb700ef54 Pull complete 15.8s  
✓ 172f70816317 Pull complete 15.8s  
✓ 617d72a5b67c Pull complete 15.8s  
✓ d314462b0759 Pull complete 15.9s  
✓ ab2282f711ed Pull complete 15.9s  
✓ da24a351cfca Pull complete 15.9s  
[+] Running 1/1  
✓ Container clickhouse_1 Started 0.2s  
[user@fb clickhouse]$
```

Redis

Образ: redis/redis8.0.1

Пароль: Passw0rd (можно изменить в etc/redis.conf)

```
$ cd..  
$ cd redis/  
$ docker compose up -d
```

A terminal window titled 'user@fb: /var/local/fb/resources/redis' showing the execution of 'docker compose up -d'. It lists the pulling of the 'redis_1' image and its components, followed by the starting of the 'redis_1' container.

```
user@fb: /var/local/fb/resources/redis  
Файл Правка Вид Поиск Терминал Помощь  
[user@fb clickhouse]$ cd..  
[user@fb resources]$ cd redis/  
[user@fb redis]$ docker compose up -d  
[+] Running 8/8  
✓ redis_1 Pulled 5.1s  
✓ 254e724d7786 Pull complete 2.3s  
✓ e09c770fca85 Pull complete 2.4s  
✓ d6b0a8fda729 Pull complete 2.4s  
✓ d76f79e53729 Pull complete 2.9s  
✓ 73134d65a174 Pull complete 2.9s  
✓ 4f4fb700ef54 Pull complete 2.9s  
✓ 6162363dcb24 Pull complete 2.9s  
[+] Running 1/1  
✓ Container redis_1 Started 0.2s  
[user@fb redis]$
```

RabbitMQ

Образ: rabbitmq:3.8-management

Логин/Пароль: fb_rabbit (изменяется в docker-compose.yml)

```
$ cd..
```

```
$ cd rabbitmq/
```

```
$ docker compose up -d
```

Дополнительно после успешного запуска контейнера:

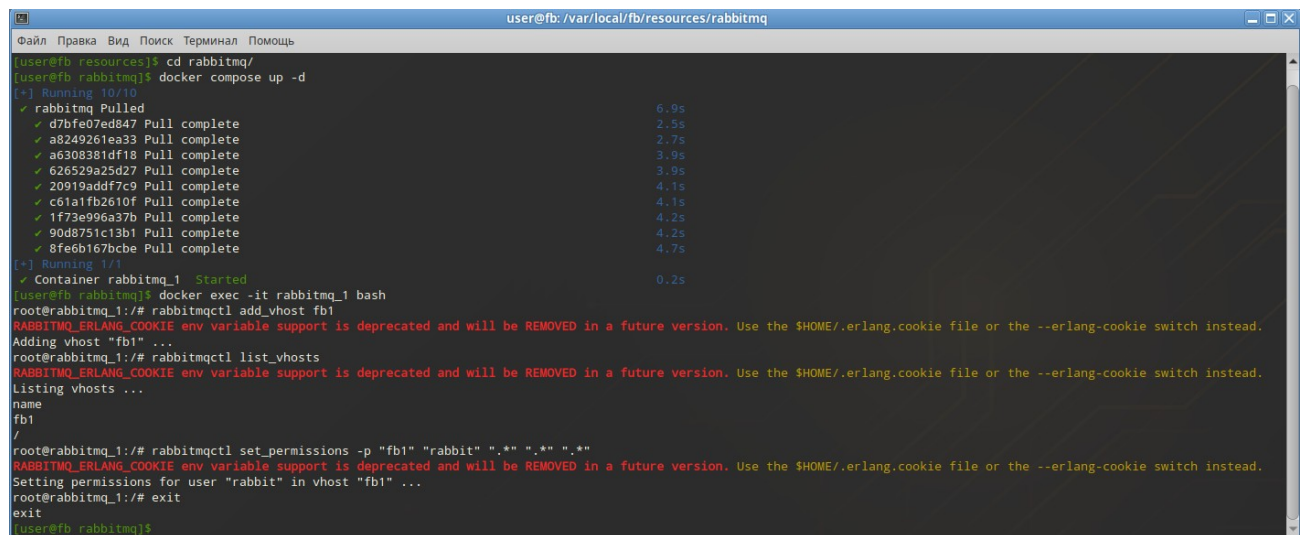
```
$ docker exec -it rabbitmq_1 bash
```

```
# rabbitmqctl add_vhost fb1
```

```
# rabbitmqctl list_vhosts
```

```
# rabbitmqctl set_permissions -p "fb1" "rabbit" ".*" ".*" ".*"
```

```
# exit
```



```
user@fb: /var/local/fb/resources/rabbitmq
Файл Правка Вид Поиск Терминал Помощь
[user@fb resources]$ cd rabbitmq/
[user@fb rabbitmq]$ docker compose up -d
[*] Running 10/10
✓ rabbitmq Pulled 6.9s
  d7bfe07ed847 Pull complete 2.5s
  a8249261ea33 Pull complete 2.7s
  a6308381df18 Pull complete 3.9s
  626529a25d27 Pull complete 3.9s
  20919addf7c9 Pull complete 4.1s
  c61a1fb2610f Pull complete 4.1s
  1f73e996a37b Pull complete 4.2s
  90d8751c13b1 Pull complete 4.2s
  8fe6b167bcbe Pull complete 4.7s
[*] Running 1/1
✓ Container rabbitmq_1 Started 0.2s
[user@fb rabbitmq]$ docker exec -it rabbitmq_1 bash
root@rabbitmq_1:/# rabbitmqctl add_vhost fb1
RABBITMQ_ERLANG_COOKIE env variable support is deprecated and will be REMOVED in a future version. Use the $HOME/.erlang.cookie file or the --erlang-cookie switch instead.
Adding vhost "fb1" ...
root@rabbitmq_1:/# rabbitmqctl list_vhosts
RABBITMQ_ERLANG_COOKIE env variable support is deprecated and will be REMOVED in a future version. Use the $HOME/.erlang.cookie file or the --erlang-cookie switch instead.
Listing vhosts ...
name
fb1
/
root@rabbitmq_1:/# rabbitmqctl set_permissions -p "fb1" "rabbit" ".*" ".*" ".*"
RABBITMQ_ERLANG_COOKIE env variable support is deprecated and will be REMOVED in a future version. Use the $HOME/.erlang.cookie file or the --erlang-cookie switch instead.
Setting permissions for user "rabbit" in vhost "fb1" ...
root@rabbitmq_1:/# exit
exit
[user@fb rabbitmq]$
```

Fastboard (v1.7.1)

Проверьте настройки подключения в `docker-compose.yml`, если меняли пароли и логины в других контейнерах

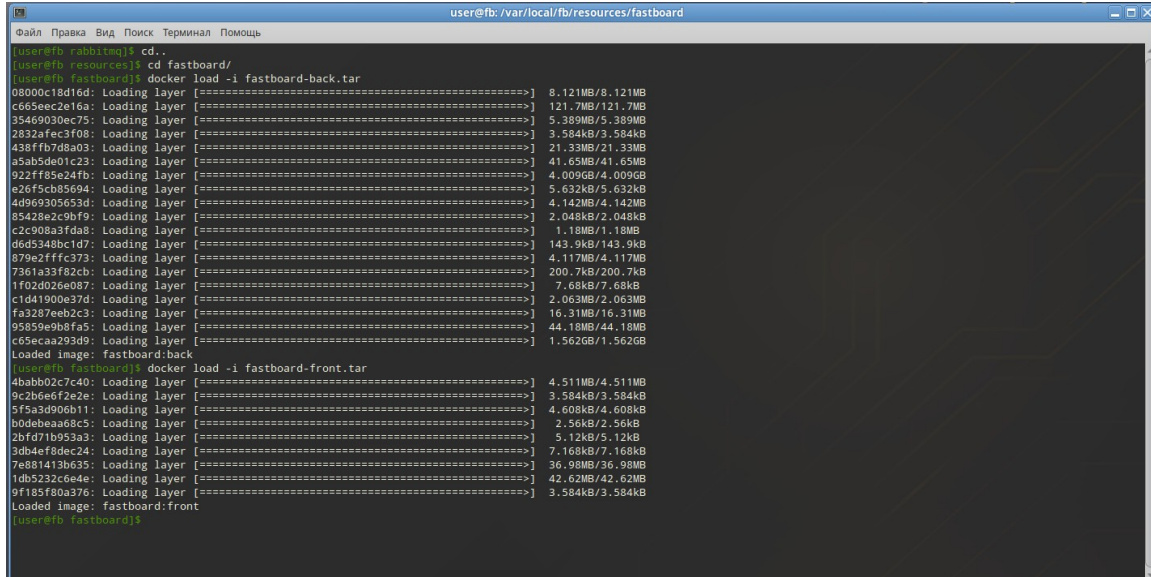
```
$ cd..
```

```
$ cd fastboard/
```

Дополнительно после успешного запуска контейнера:

```
$ docker load -i fastboard-back.tar
```

```
$ docker load -i fastboard-front.tar
```



```
user@fb: /var/local/fb/resources/fastboard
[user@fb rabbitmq]$ cd..
[user@fb resources]$ cd fastboard/
[user@fb fastboard]$ docker load -i fastboard-back.tar
08000c18d16d: Loading layer [=====] 8.121MB/8.121MB
c665eec2e16a: Loading layer [=====] 121.7MB/121.7MB
35469030ec75: Loading layer [=====] 5.389MB/5.389MB
2832afec3f08: Loading layer [=====] 3.584kB/3.584kB
438ff0708a03: Loading layer [=====] 21.33MB/21.33MB
a8abbde01c23: Loading layer [=====] 41.65MB/41.65MB
922ff85e24fb: Loading layer [=====] 4.009GB/4.009GB
e26f5cb5694: Loading layer [=====] 5.632kB/5.632kB
4d969305653d: Loading layer [=====] 4.142MB/4.142MB
85428e2c9bf9: Loading layer [=====] 2.048kB/2.048kB
c2c908a3fda8: Loading layer [=====] 1.18MB/1.18MB
d6d5348bc1d7: Loading layer [=====] 143.9kB/143.9kB
879e2ffcf373: Loading layer [=====] 4.117MB/4.117MB
7361a33f82cb: Loading layer [=====] 200.7kB/200.7kB
1f02d026e087: Loading layer [=====] 7.68kB/7.68kB
c1d41900e37d: Loading layer [=====] 2.063MB/2.063MB
fa3287eeb2c3: Loading layer [=====] 16.31MB/16.31MB
95859e9b8fa5: Loading layer [=====] 44.18MB/44.18MB
c05eca293d9: Loading layer [=====] 1.562GB/1.562GB
Loaded image: fastboard-back
[user@fb fastboard]$ docker load -i fastboard-front.tar
4habb02c7c40: Loading layer [=====] 4.511MB/4.511MB
9c2b6e6f2e2e: Loading layer [=====] 3.584kB/3.584kB
5f5a3d906b11: Loading layer [=====] 4.608kB/4.608kB
b0debeaa68c5: Loading layer [=====] 2.56kB/2.56kB
2bfd71b953a3: Loading layer [=====] 5.12kB/5.12kB
3db4ef0de24: Loading layer [=====] 7.160kB/7.160kB
7a881413b635: Loading layer [=====] 26.98MB/26.98MB
1db5232c6e4e: Loading layer [=====] 42.62MB/42.62MB
9f185f80a376: Loading layer [=====] 3.584kB/3.584kB
Loaded image: fastboard-front
[user@fb fastboard]$
```

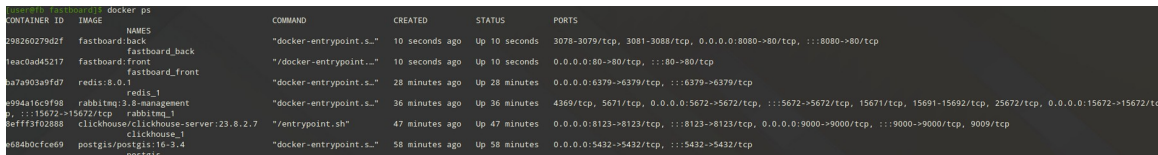
```
$ docker compose up -d
```



```
user@fb: /var/local/fb/resources/fastboard
[user@fb fastboard]$ docker compose up -d
[+] Running 2/2
 ✓ Container fastboard_front Started 0.3s
 ✓ Container fastboard_back Started 0.3s
[user@fb fastboard]$
```

Проверка работы Контейнеров

```
$ docker ps
```



CONTAINER ID	IMAGE	NAME	COMMAND	CREATED	STATUS	PORTS
29826027942f	fastboard-back	fastboard-back	"docker-entrypoint.s..."	10 seconds ago	Up 10 seconds	3078-3079/tcp, 3081-3088/tcp, 0.0.0.0:8080->80/tcp, :::8080->80/tcp
1eac0a045217	fastboard-front	fastboard-front	"/docker-entrypoint.s..."	10 seconds ago	Up 10 seconds	0.0.0.0:80->80/tcp, :::80->80/tcp
ba7a903a9fd7	redis:8.0.1	redis_1	"docker-entrypoint.s..."	28 minutes ago	Up 28 minutes	0.0.0.0:6379->6379/tcp, :::6379->6379/tcp
e994a16c9f98	rabbitmq:3.8-management	rabbitmq_1	"docker-entrypoint.s..."	36 minutes ago	Up 36 minutes	4369/tcp, 5671/tcp, 0.0.0.0:5672->5672/tcp, :::5672->5672/tcp, 15671/tcp, 15691-15692/tcp, 25672/tcp, 0.0.0.0:15672->15672/tcp, :::15672->15672/tcp
2efff3f0288	clickhouse/clickhouse-server:23.8.2	clickhouse_1	"entrypoint.sh"	47 minutes ago	Up 47 minutes	0.0.0.0:8123->8123/tcp, :::8123->8123/tcp, 0.0.0.0:9000->9000/tcp, :::9000->9000/tcp, 9009/tcp
e6840cfce69	postgres:16-3.4	postgres_1	"docker-entrypoint.s..."	58 minutes ago	Up 58 minutes	0.0.0.0:5432->5432/tcp, :::5432->5432/tcp

5. Настройка DNS (локальная)

Имена для комплектов ПО определяются отдельно и передаются заказчику.

Откройте файл hosts:

```
$ su -  
# nano /etc/hosts
```

Добавьте в конец файла:

```
127.0.0.1 back.fb.local  
127.0.0.1 front.fb.local
```

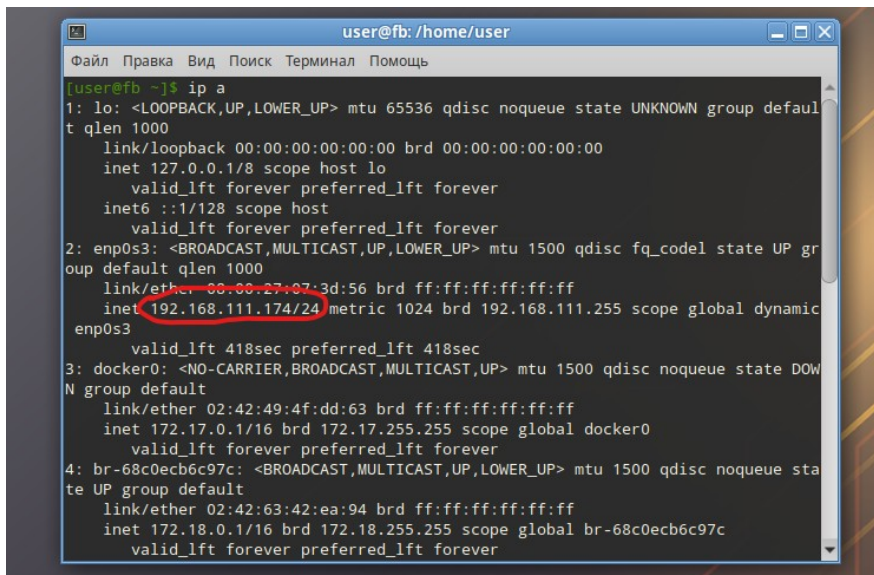
6. Настройка DNS (на роутере или dns сервере)

back.fb.local – локальный ip

front.fb.local – локальный ip

```
$ ip a
```

Ищем интерфейс который соответствует локальному



```
user@fb: /home/user  
[user@fb ~]$ ip a  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid_lft forever preferred_lft forever  
    inet6 ::1/128 scope host  
        valid_lft forever preferred_lft forever  
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000  
    link/ether 00:00:27:07:3d:56 brd ff:ff:ff:ff:ff:ff  
    inet 192.168.111.174/24 metric 1024 brd 192.168.111.255 scope global dynamic  
        valid_lft 418sec preferred_lft 418sec  
3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default  
    link/ether 02:42:49:4f:dd:63 brd ff:ff:ff:ff:ff:ff  
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0  
        valid_lft forever preferred_lft forever  
4: br-68c0ecb6c97c: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default  
    link/ether 02:42:63:42:ea:94 brd ff:ff:ff:ff:ff:ff  
    inet 172.18.0.1/16 brd 172.18.255.255 scope global br-68c0ecb6c97c  
        valid_lft forever preferred_lft forever
```

Пример на микротоке:

#	Name	Regexp	Type	Value	TTL (s)
0	router.lan		A	192.168.111.1	1d 00:00:00
1	front.fb.local		A	192.168.111.174	1d 00:00:00
2	back.fb.local		A	192.168.111.174	1d 00:00:00

3 items

7. Первый вход и активация

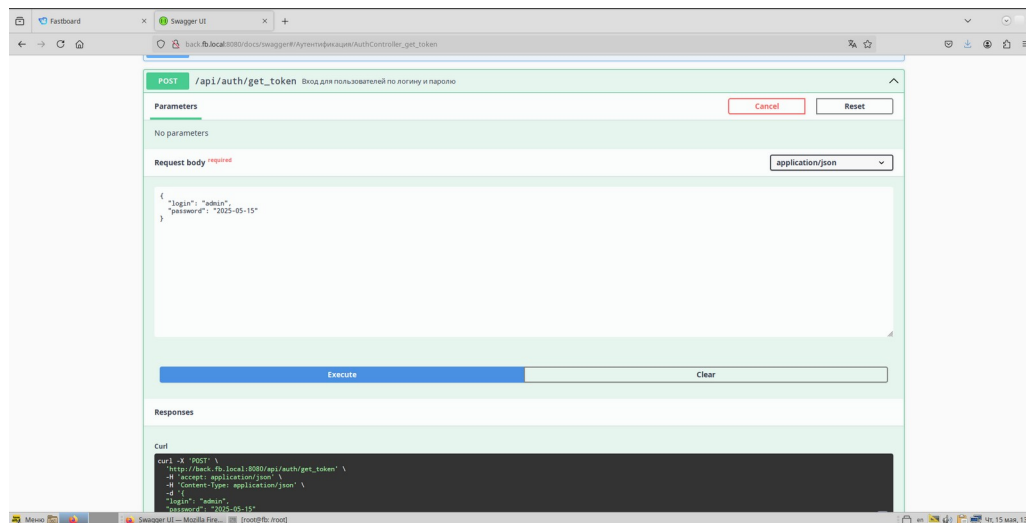
Перейдите по адресу: ваш_бэкенд/docs/swagger в нашем случае (<http://back.fb.local:8090/docs/swagger>)

Найдите метод `get_token`, нажмите TRY OUT и введите:

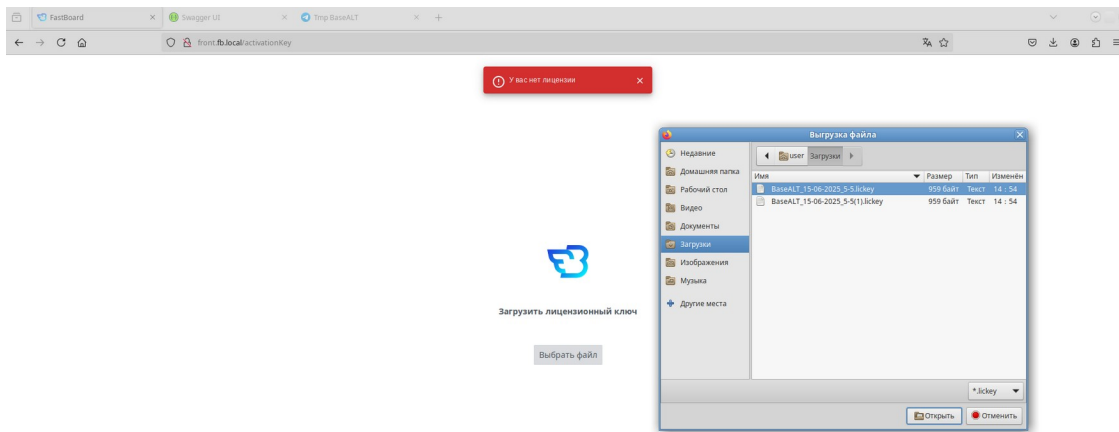
Логин: `admin`

Пароль: дата первого запуска контейнеров в формате ГГГГ-ММ-ДД

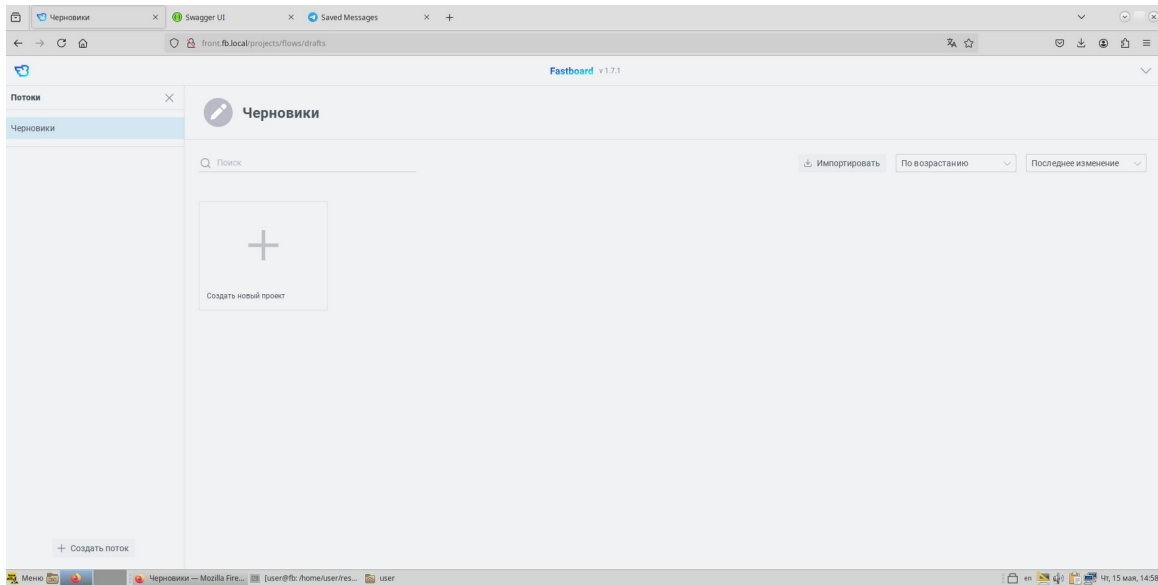
Нажмите EXECUTE



Заходим по адресу <http://front.fb.local:8081/> вводим логин пароль от admin и добавляем ключ переданный с дистрибутивом.



После чего установку и активацию ПО можно считать оконченной



8. Проверка доступа из сети

После перехода по <http://front.fb.local:8081> из локальной сети должен открываться логин Fastboard

