

Урок 7. Управление пакетами и репозиториями. Основы сетевой безопасности

1. Подключить репозиторий с nginx любым удобным способом, установить nginx и потом удалить nginx, используя утилиту dpkg.

Скачал ключ

```
user1@ubuntu-server:~$ sudo wget https://nginx.org/keys/nginx_signing.key
--2022-05-10 09:05:00-- https://nginx.org/keys/nginx_signing.key
Resolving nginx.org (nginx.org)... 3.125.197.172, 52.58.199.22, 2a05:d014:edb:5704::6, .
..
Connecting to nginx.org (nginx.org)|3.125.197.172|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1561 (1.5K) [application/octet-stream]
Saving to: 'nginx_signing.key'

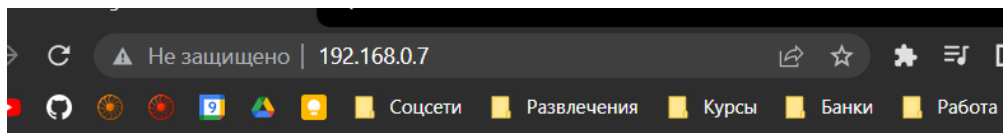
nginx_signing.key  100%[=====>] 1.52K  --.-KB/s  in 0s

2022-05-10 09:05:01 (59.2 MB/s) - 'nginx_signing.key' saved [1561/1561]

user1@ubuntu-server:~$
```

```
user1@ubuntu-server:~$ sudo apt-get install nginx
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjpeg-turbo8
  libjpeg8 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream libtiff5 libwebp6 libxpm4 nginx-common
  nginx-core
Suggested packages:
  libgd-tools fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjpeg-turbo8
  libjpeg8 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream libtiff5 libwebp6 libxpm4 nginx nginx-common
  nginx-core
0 upgraded, 17 newly installed, 0 to remove and 113 not upgraded.
Need to get 2,433 kB of archives.
After this operation, 7,891 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/main amd64 fonts-dejavu-core all 2.37-1
[1,041 kB]
Get:2 http://ru.archive.ubuntu.com/ubuntu focal/main amd64 fontconfig-config all 2.13.1-
2ubuntu3 [28.8 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu focal/main amd64 libfontconfig1 amd64 2.13.1-2
ubuntu3 [114 kB]
Get:4 http://ru.archive.ubuntu.com/ubuntu focal-updates/main amd64 libjpeg-turbo8 amd64
2.0.3-0ubuntu1.20.04.1 [117 kB]
Get:5 http://ru.archive.ubuntu.com/ubuntu focal/main amd64 libjpeg8 amd64 8c-2ubuntu8 [2
,194 B]
```

Nginx работает



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

Удалил nginx

```
user1@ubuntu-server:~$ sudo systemctl stop nginx.service
user1@ubuntu-server:~$ sudo dpkg --remove nginx
(Reading database ... 72329 files and directories currently installed.)
Removing nginx (1.18.0-0ubuntu1.3) ...
user1@ubuntu-server:~$ sudo dpkg --remove nginx-core
(Reading database ... 72326 files and directories currently installed.)
Removing nginx-core (1.18.0-0ubuntu1.3) ...
Processing triggers for man-db (2.9.1-1) ...
```

2. Установить пакет на свой выбор, используя snap.

Снова установил nginx

```
user1@ubuntu-server:~$ snap search nginx
Name                Version  Publisher  Notes  Summary
nginx-prometheus-exporter  0.9.0    lcomellini -      NGINX Prometheus Exporter for NGI
NX and NGINX Plus
nginxrtmp-minsikl     0.1      minsikl    -      Live Streaming server based on NG
INX and RTMP
qycli-nginx          1.21.6   hostyon    -      NGINX for qycli
user1@ubuntu-server:~$ snap install nginxrtmp-minsikl
error: access denied (try with sudo)
user1@ubuntu-server:~$ sudo snap install nginxrtmp-minsikl
nginxrtmp-minsikl 0.1 from minsik (minsikl) installed
user1@ubuntu-server:~$
```

3. Настроить iptables: разрешить подключения только на 22-й и 80-й порты.

```

user1@ubuntu-server:~$ sudo ufw status
Status: inactive
user1@ubuntu-server:~$ sudo ufw allow 22
Rules updated
Rules updated (v6)
user1@ubuntu-server:~$ sudo ufw allow 80
Rules updated
Rules updated (v6)
user1@ubuntu-server:~$ sudo ufw enable
Command may disrupt existing ssh connections. Proceed with operation (y|n)? y
Firewall is active and enabled on system startup
user1@ubuntu-server:~$ sudo ufw status
Status: active

To Action From
--
22 ALLOW Anywhere
80 ALLOW Anywhere
22 (v6) ALLOW Anywhere (v6)
80 (v6) ALLOW Anywhere (v6)

user1@ubuntu-server:~$

```

4. * Настроить проброс портов локально с порта 80 на порт 8080.

```

user1@ubuntu-server:~$ iptables -t nat -A PREROUTING -p tcp --dport 80 -j REDIRECT --to-port 8080
Fatal: can't open lock file /run/xtables.lock: Permission denied
user1@ubuntu-server:~$ sudo iptables -t nat -A PREROUTING -p tcp --dport 80 -j REDIRECT
--to-port 8080
user1@ubuntu-server:~$ sudo iptables -t nat -L
Chain PREROUTING (policy ACCEPT)
target prot opt source destination tcp dpt:http redir ports 8080

Chain INPUT (policy ACCEPT)
target prot opt source destination

Chain OUTPUT (policy ACCEPT)
target prot opt source destination

Chain POSTROUTING (policy ACCEPT)
target prot opt source destination

```