

Домашнее задание Урок 8

1. Переустановить операционную систему, подключить репозиторий Docker.

```
sudo apt-get install apt-transport-https ca-certificates curl gnupg-agent software-properties-common -y
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | apt-key add -
add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"
sudo apt update
sudo apt install docker-c
```

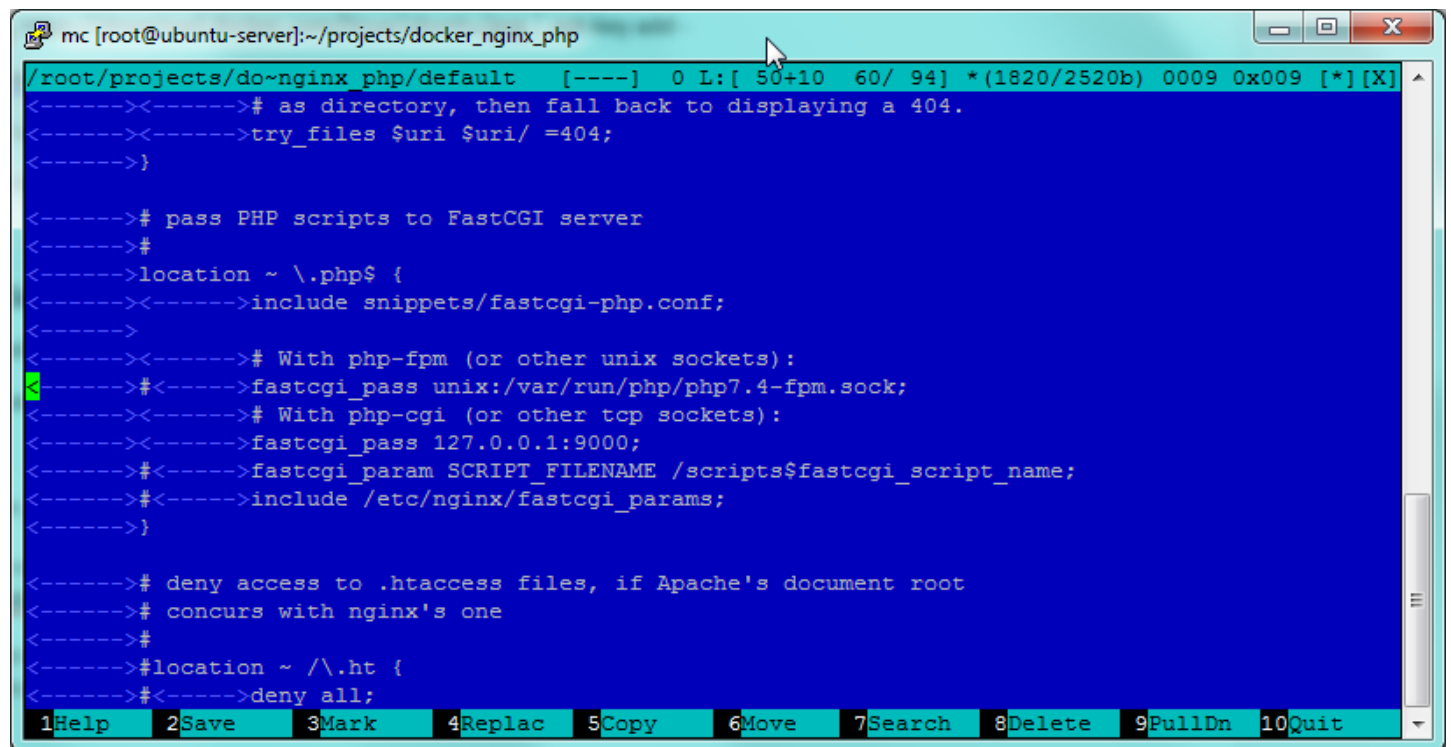
2. Запустить контейнер с Ubuntu.

```
docker pull ubuntu
docker run --detach --rm --name sleep ubuntu sleep 300
```

3. * Используя Dockerfile, собрать связку nginx + PHP-FPM в одном контейнере.

Я пошел таким путем: вот по этой статье <https://losst.ru/ustanovka-nginx-i-php-fpm-v-ubuntu-20-04>, я настроил nginx и php в своем сервере попутно записывая конфиги, которые правил.

Это файл настройки сайта по умолчанию default, который копируется в /etc/nginx/sites-available/default, в нем задается адрес куда nginx шлет запросы:



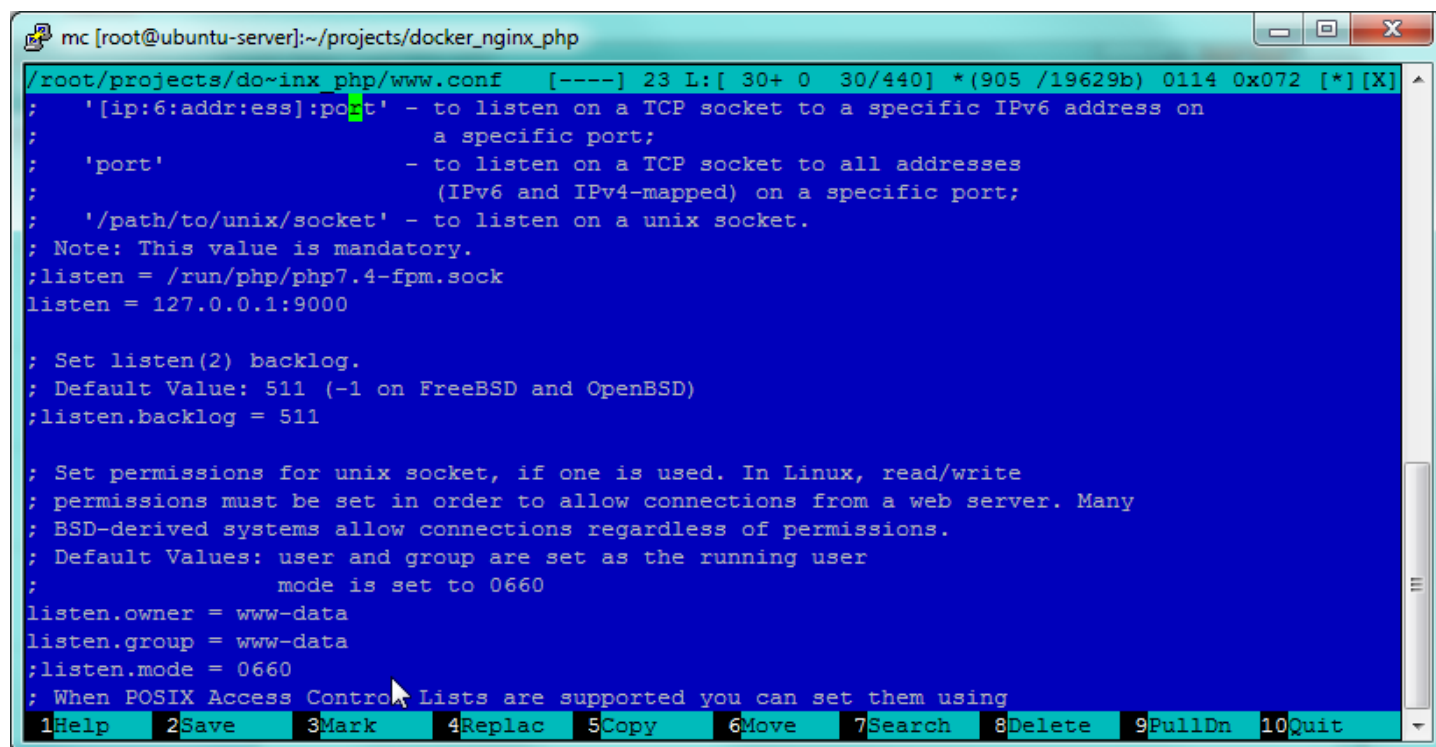
```
mc [root@ubuntu-server]:~/projects/docker_nginx_php
/root/projects/docker_nginx_php/default  [----]  0 L:[ 50+10  60/ 94] *(1820/2520b) 0009 0x009 [*][X]
<-----><-----># as directory, then fall back to displaying a 404.
<-----><----->try_files $uri $uri/ =404;
<----->}

<-----># pass PHP scripts to FastCGI server
<----->#
<----->location ~ /\.php$ {
<-----><----->include snippets/fastcgi-php.conf;
<----->
<-----><-----># With php-fpm (or other unix sockets):
<----->#<----->fastcgi_pass unix:/var/run/php/php7.4-fpm.sock;
<-----><-----># With php-cgi (or other tcp sockets):
<----->#<----->fastcgi_pass 127.0.0.1:9000;
<----->#<----->fastcgi_param SCRIPT_FILENAME /scripts$fastcgi_script_name;
<----->#<----->include /etc/nginx/fastcgi_params;
<----->}

<-----># deny access to .htaccess files, if Apache's document root
<-----># concurs with nginx's one
<----->#
<----->#location ~ /\.ht {
<----->#<----->deny all;

1Help  2Save  3Mark  4Replac  5Copy  6Move  7Search  8Delete  9PullDn  10Quit
```

Файл настройки php www.conf, который копируется в /etc/php/7.4/fpm/pool.d/www.conf, в нем указывается адрес и порт сервиса:

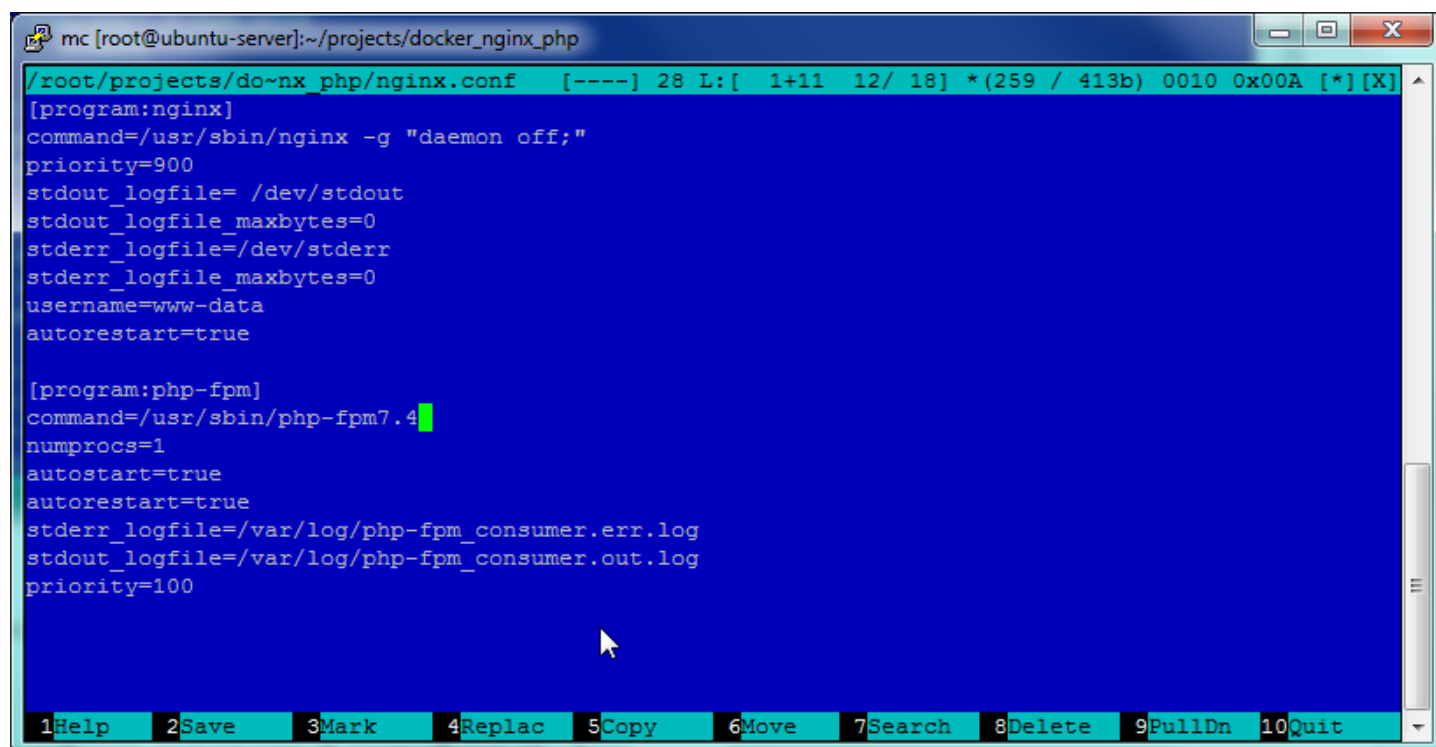


```
mc [root@ubuntu-server]:~/projects/docker_nginx_php
/root/projects/docker_nginx_php/www.conf  [----] 23 L:[ 30+ 0 30/440] *(905 /19629b) 0114 0x072 [*][X]
; '[ip:6:address]:port' - to listen on a TCP socket to a specific IPv6 address on
;                          a specific port;
; 'port'                  - to listen on a TCP socket to all addresses
;                          (IPv6 and IPv4-mapped) on a specific port;
; '/path/to/unix/socket' - to listen on a unix socket.
; Note: This value is mandatory.
;listen = /run/php/php7.4-fpm.sock
listen = 127.0.0.1:9000

; Set listen(2) backlog.
; Default Value: 511 (-1 on FreeBSD and OpenBSD)
;listen.backlog = 511

; Set permissions for unix socket, if one is used. In Linux, read/write
; permissions must be set in order to allow connections from a web server. Many
; BSD-derived systems allow connections regardless of permissions.
; Default Values: user and group are set as the running user
;                  mode is set to 0660
listen.owner = www-data
listen.group = www-data
;listen.mode = 0660
; When POSIX Access Control Lists are supported you can set them using
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```

Так же поправил файл, который вы давали для супервизора, добавил туда секцию для запуска php:



```
mc [root@ubuntu-server]:~/projects/docker_nginx_php
/root/projects/docker_nginx_php/nginx.conf  [----] 28 L:[ 1+11 12/ 18] *(259 / 413b) 0010 0x00A [*][X]
[program:nginx]
command=/usr/sbin/nginx -g "daemon off;"
priority=900
stdout_logfile= /dev/stdout
stdout_logfile_maxbytes=0
stderr_logfile=/dev/stderr
stderr_logfile_maxbytes=0
username=www-data
autorestart=true

[program:php-fpm]
command=/usr/sbin/php-fpm7.4
numprocs=1
autostart=true
autorestart=true
stderr_logfile=/var/log/php-fpm_consumer.err.log
stdout_logfile=/var/log/php-fpm_consumer.out.log
priority=100
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```

В каталоге html файл index.php, там одна строка phpinfo()

Вот такой итоговый докер файл:

```
mc [root@ubuntu-server]:~/projects/docker_nginx_php
/root/projects/docker_nginx_php/Dockerfile  [----]  0 L:[ 1+13 14/ 14] *(508 / 517b) 0069 0x045 [*][X]
FROM ubuntu
...
ENV TZ=Europe/Moscow
...
RUN apt-get update
RUN apt-get install -y nginx
RUN apt-get -y install php7.4 php7.4-cli php7.4-fpm php7.4-json php7.4-pdo php7.4-mysql php7.4-zip
RUN apt-get -y install supervisor.
COPY www.conf /etc/php/7.4/fpm/pool.d/www.conf
COPY default /etc/nginx/sites-available/default
COPY /html/index.php /var/www/html/index.php
COPY nginx.conf /etc/supervisor/conf.d/nginx.conf
CMD ["supervisord", "-n"]
EXPOSE 80
```

Собираем:

`docker build -t kto/web-server:v1.`

Останавливаем nginx и запускаем докер образ:

`docker run --name web_server -d -p 80:80 kto/web-server:v1`

```
root@ubuntu-server: ~
Process: 18110 ExecStop=/sbin/start-stop-daemon --quiet --stop --retry QUIT/5 --pidf
Main PID: 18040 (code=exited, status=0/SUCCESS)

Oct 18 15:23:43 ubuntu-server systemd[1]: Starting A high performance web server and a r
Oct 18 15:23:43 ubuntu-server systemd[1]: Started A high performance web server and a re
Oct 18 15:25:35 ubuntu-server systemd[1]: Stopping A high performance web server and a r
Oct 18 15:25:35 ubuntu-server systemd[1]: nginx.service: Succeeded.
Oct 18 15:25:35 ubuntu-server systemd[1]: Stopped A high performance web server and a re
root@ubuntu-server:~# systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
   Active: inactive (dead) since Mon 2021-10-18 15:25:35 UTC; 31min ago
     Docs: man:nginx(8)
   Process: 18037 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; >
   Process: 18039 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exi>
   Process: 18110 ExecStop=/sbin/start-stop-daemon --quiet --stop --retry QUIT/5 --pid>
 Main PID: 18040 (code=exited, status=0/SUCCESS)

Oct 18 15:23:43 ubuntu-server systemd[1]: Starting A high performance web server and a >
Oct 18 15:23:43 ubuntu-server systemd[1]: Started A high performance web server and a r>
Oct 18 15:25:35 ubuntu-server systemd[1]: Stopping A high performance web server and a >
Oct 18 15:25:35 ubuntu-server systemd[1]: nginx.service: Succeeded.
Oct 18 15:25:35 ubuntu-server systemd[1]: Stopped A high performance web server and a r>
lines 1-14/14 (END)
```

```
root@ubuntu-server: ~
Oct 18 15:25:35 ubuntu-server systemd[1]: nginx.service: Succeeded.
Oct 18 15:25:35 ubuntu-server systemd[1]: Stopped A high performance web server and a re
root@ubuntu-server:~# systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
   Active: inactive (dead) since Mon 2021-10-18 15:25:35 UTC; 31min ago
     Docs: man:nginx(8)
  Process: 18037 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; >
  Process: 18039 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exi>
  Process: 18110 ExecStop=/sbin/start-stop-daemon --quiet --stop --retry QUIT/5 --pid>
 Main PID: 18040 (code=exited, status=0/SUCCESS)

Oct 18 15:23:43 ubuntu-server systemd[1]: Starting A high performance web server and a >
Oct 18 15:23:43 ubuntu-server systemd[1]: Started A high performance web server and a r>
Oct 18 15:25:35 ubuntu-server systemd[1]: Stopping A high performance web server and a >
Oct 18 15:25:35 ubuntu-server systemd[1]: nginx.service: Succeeded.
Oct 18 15:25:35 ubuntu-server systemd[1]: Stopped A high performance web server and a r>
You have new mail in /var/mail/root
root@ubuntu-server:~# docker ps -a
CONTAINER ID   IMAGE                                COMMAND                                  CREATED        STATUS        P
ORTS
c2d5ac64984b   kto/web-server:v1                  "supervisord -n"                        12 minutes ago Up 12 minutes 0
.0.0.0:80->80/tcp, :::80->80/tcp
web_server
root@ubuntu-server:~#
```

Переходим по адресу 192.168.25.104/index.php

Обучение ОдинЭсс Гамесы Автомобиле

Не защищено | 192.168.25.104/index.php

Сервисы Gmail YouTube Карты Выполнен импорт

Список для чтения

PHP Version 7.4.3

php

System	Linux c2d5ac64984b 5.4.0-88-generic #99-Ubuntu SMP Thu Sep 23 17:29:00 UTC 2021 x86_64
Build Date	Aug 13 2021 05:39:12
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.4/fpm
Loaded Configuration File	/etc/php/7.4/fpm/php.ini
Scan this dir for additional .ini files	/etc/php/7.4/fpm/conf.d
Additional .ini files parsed	/etc/php/7.4/fpm/conf.d/10-mysqlnd.ini, /etc/php/7.4/fpm/conf.d/10-opcache.ini, /etc/php/7.4/fpm/conf.d/10-pdo.ini, /etc/php/7.4/fpm/conf.d/15-xml.ini, /etc/php/7.4/fpm/conf.d/20-bcmath.ini, /etc/php/7.4/fpm/conf.d/20-calendar.ini, /etc/php/7.4/fpm/conf.d/20-curl.ini, /etc/php/7.4/fpm/conf.d/20-dom.ini, /etc/php/7.4/fpm/conf.d/20-exif.ini, /etc/php/7.4/fpm/conf.d/20-ffi.ini, /etc/php/7.4/fpm/conf.d/20-fileinfo.ini, /etc/php/7.4/fpm/conf.d/20-ftp.ini, /etc/php/7.4/fpm/conf.d/20-gd.ini, /etc/php/7.4/fpm/conf.d/20-gettext.ini, /etc/php/7.4/fpm/conf.d/20-iconv.ini, /etc/php/7.4/fpm/conf.d/20-json.ini, /etc/php/7.4/fpm/conf.d/20-mbstring.ini, /etc/php/7.4/fpm/conf.d/20-mysqli.ini, /etc/php/7.4/fpm/conf.d/20-pdo_mysql.ini, /etc/php/7.4/fpm/conf.d/20-phar.ini, /etc/php/7.4/fpm/conf.d/20-posix.ini, /etc/php/7.4/fpm/conf.d/20-readline.ini, /etc/php/7.4/fpm/conf.d/20-shmop.ini, /etc/php/7.4/fpm/conf.d/20-simplexml.ini, /etc/php/7.4/fpm/conf.d/20-sockets.ini, /etc/php/7.4/fpm/conf.d/20-sysvmsg.ini, /etc/php/7.4/fpm/conf.d/20-sysvsem.ini, /etc/php/7.4/fpm/conf.d/20-sysvshm.ini, /etc/php/7.4/fpm/conf.d/20-tokenizer.ini, /etc/php/7.4/fpm/conf.d/20-xmlreader.ini, /etc/php/7.4/fpm/conf.d/20-xmlwriter.ini, /etc/php/7.4/fpm/conf.d/20-xsl.ini, /etc/php/7.4/fpm/conf.d/20-zip.ini
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902
Zend Extension Build	API320190902,NTS
PHP Extension Build	API20190902,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled