# 5. WEB 서버 구축

### WAS 서버 컨테이너 생성

```
docker run --privileged -d --name WEBSVR -p 80:80 --net mynet --ip 192.168.119.117 std_setting_os_img /sbin/init
```

#### 잘 생성되었는지 확인

```
docker inspect -f '{{range .NetworkSettings.Networks}}{{.IPAddress}}{{end}}' WEBSVR

Hong-YoonKi@Hong-YoonKi-MacBookAir ~ % docker run --privileged -d --name WEBSVR -p 80:80 --net mynet --ip 192.168.119.117 std_setting_os_img /sbin/init d81b6dc2305d7002f0cab1e2be0afa9c42c65fe6df243111aa814af798a7b887a
Hong-YoonKi@Hong-YoonKi-MacBookAir ~ % docker ps
COMMAND CREATED STATUS PORTS
COMMAND CREATED STATUS PORTS
d81b6dc2305d std_setting_os_img "/sbin/init" 7 seconds ago Up 4 seconds 1520/tcp, 0.0.0.0:80->80/tcp, :::80->80/tcp, 8080/tcp WEBSVR
da2d98182168 std_setting_os_img "/sbin/init" 56 minutes ago Up 56 minutes 1520/tcp, 0.0.0.0:8080->8080/tcp, :::80->800/tcp, 8080/tcp WASSVR
Hong-YoonKi@Hong-YoonKi—MacBookAir ~ % docker inspect -f '{{range .NetworkSettings.Networks}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddress}}{{.IPAddre
```

잘 설치 된것 확인 가능

### Nginx 설치

### EPEL (Extra Packages for Enterprise Linux) 리포지토리를 설치

CentOS의 일부 버전엔 yum에 nginx가 없을 수 있다. 이를 해결하기 위해 EPEL을 설치한다.

```
yum install -y epel-release
Downloading packages:
epel-release-7-11.noarch.rpm
                                                             | 15 kB
                                                                         00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
                                                                               1/1
  Installing: epel-release-7-11.noarch
  Verifying : epel-release-7-11.noarch
                                                                               1/1
Installed:
  epel-release.noarch 0:7-11
Complete!
```

#### **Nginx install**

```
yum install -y nginx
```

```
Installed:
  nginx.x86_64 1:1.20.1-10.el7
Dependency Installed:
  centos-indexhtml.noarch 0:7-9.el7.centos
  centos-logos.noarch 0:70.0.6-3.el7.centos
  gperftools-libs.x86_64 0:2.6.1-1.el7
  make.x86_64 1:3.82-24.e17
  nginx-filesystem.noarch 1:1.20.1-10.el7
  openssl.x86_64 1:1.0.2k-26.el7_9
  openssl11-libs.x86_64 1:1.1.1k-5.el7
Complete!
[[root@d81b6dc2305d /]# nginx -v
nginx version: nginx/1.20.1
```

### Nainx 서비스 적용

#### Nginx start 및 enable

```
systemctl start nginx
 systemctl enable nginx
[root@d81b6dc2305d /]# systemctl status nginx
nginx.service - The nginx HTTP and reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; vendor preset
: disabled)
   Active: active (running) since Sat 2023-05-06 07:39:43 UTC; 2min 22s ago
Main PID: 239 (nginx)
   CGroup: /system.slice/nginx.service
            ├─239 nginx: master process /usr/sbin/nginx
            -240 nginx: worker process
-241 nginx: worker process
May 06 07:39:43 d81b6dc2305d systemd[1]: Starting The nginx HTTP and reverse....
May 06 07:39:43 d81b6dc2305d nginx[237]: nginx: the configuration file /etc/...k
May 06 07:39:43 d81b6dc2305d nginx[237]: nginx: configuration file /etc/ngin...1
May 06 07:39:43 d81b6dc2305d systemd[1]: Started The nginx HTTP and reverse ....
Hint: Some lines were ellipsized, use -1 to show in full.
```

# Nainx 작동 확인



403 forbidden이 뜨지만, 자세히 보면 밑에 nginx/1.20.1이라고 뜬다. web서버 자체의 구동엔 문제가 없어보인다.

## 최대 request 설정

/etc/nginx/nginx.conf을 수정

```
Hong-YoonKi — @b6d81fdfa1b1:/etc

GNU nano 2.3.1

File: nginx.cc

# For more information on configuration, see

# * Official English Documentation: http:/

# * Official Russian Documentation: http:/

user nginx;
worker_processes auto;
error_log /var/log/nginx/error.log;
pid /run/nginx.pid;

# Load dynamic modules. See /usr/share/doc/ninclude /usr/share/nginx/modules/*.conf;

events {

worker_connections 1024;
}
```

위의 events를 수정

```
events {
  worker_connections 100;
}
```

```
🔵 🛅 Hong-YoonKi — @b6d81fdfa1b1
  GNU nano 2.3.1
                              File: ngin
# For more information on configuration,
    * Official English Documentation: ht
    * Official Russian Documentation: ht
user nginx;
worker_processes auto;
error_log /var/log/nginx/error.log;
pid /run/nginx.pid;
# Load dynamic modules. See /usr/share/d
include /usr/share/nginx/modules/*.conf;
events {
    worker_connections 100;
}
http {
```