

Multi-Container Application Deployment

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File Edit View Search Terminal Help

```
snehal@ubuntu:~/assignment$ ls
```

```
app_1  app_2  app_3  docker-compose.yml  Dockerfile  volfile
```

```
snehal@ubuntu:~/assignment$
```

Dockerfile/index.html can be configured as follows:

```
snehal@ubuntu:~/assignment/app_1$ cd ..
snehal@ubuntu:~/assignment$ cd app_2
snehal@ubuntu:~/assignment/app_2$ ls
Dockerfile  index.html
snehal@ubuntu:~/assignment/app_2$ cat Dockerfile
FROM nginx:latest

COPY index.html /usr/share/nginx/html
snehal@ubuntu:~/assignment/app_2$ cat index.html
<html>
<body style="background-color:red;">
<h1>Application 1 Container!</h1>
</body>
</html>
```

Write a yaml file:

```
snehal@ubuntu:~/assignment$ cat docker-compose.yml
version: '3'
services:
  app_1:
    build: ./app_1
    image: app1_img
    ports:
      - "91:80"
  app_2:
    image: app2_img
    build: ./app_2
    ports:
      - "92:80"
  app_3:
    image: app3_img
    build: ./app_3
    ports:
      - "93:80"
```

```

snehal@ubuntu:~/assignment$ docker-compose up
Creating app_1_container ...
Creating app_3_container ...
Creating app_2_container ...
Creating app_1_container ...
Creating app_2_container ...
Creating app_3_container ... done
Attaching to app_2_container, app_1_container, app_3_container
app_2_container | /docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
app_2_container | /docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
app_2_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
app_2_container | 10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
app_2_container | 10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
app_2_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
app_2_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
app_2_container | /docker-entrypoint.sh: Configuration complete; ready for start up
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: using the "epoll" event method
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: nginx/1.23.4
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: built by gcc 10.2.1 20210110 (Debian 10.2.1-6)
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: OS: Linux 4.15.0-208-generic
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: start worker processes
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: start worker process 29
app_2_container | 2023/04/19 14:45:46 [notice] 1#1: start worker process 30
app_1_container | /docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
app_1_container | /docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
app_1_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
app_3_container | /docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
app_3_container | /docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
app_3_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
app_3_container | 10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
app_1_container | 10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf

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app_1_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
app_3_container | /docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
app_3_container | /docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
app_3_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
app_3_container | 10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
app_1_container | 10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
app_1_container | 10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
app_1_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
app_1_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
app_1_container | /docker-entrypoint.sh: Configuration complete; ready for start up
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: using the "epoll" event method
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: nginx/1.23.4
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: built by gcc 10.2.1 20210110 (Debian 10.2.1-6)
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: OS: Linux 4.15.0-208-generic
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: start worker processes
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: start worker process 30
app_1_container | 2023/04/19 14:45:47 [notice] 1#1: start worker process 31
app_3_container | 10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
app_3_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
app_3_container | /docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
app_3_container | /docker-entrypoint.sh: Configuration complete; ready for start up
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: using the "epoll" event method
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: nginx/1.23.4
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: built by gcc 10.2.1 20210110 (Debian 10.2.1-6)
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: OS: Linux 4.15.0-208-generic
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: start worker processes
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: start worker process 28
app_3_container | 2023/04/19 14:45:48 [notice] 1#1: start worker process 29
app_1_container | 172.18.0.1 - - [19/Apr/2023:14:50:51 +0000] "GET / HTTP/1.1" 200 93 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/110.0.0.0 Safari/537.36"

```

```
/112.0" "-"
app_1_container | 2023/04/19 14:50:51 [error] 31#31: *1 open() "/usr/share/nginx/html/favicon.ico" failed (2: No such file or directory), client: 172.18.0.1, server: localhost, request: "GET /favicon.ico HTTP/1.1", host: "localhost:91", referer: "http://localhost:91/"
app_2_container | 172.18.0.1 - - [19/Apr/2023:14:51:54 +0000] "GET / HTTP/1.1" 200 93 "-" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/112.0" "-"
app_2_container | 172.18.0.1 - - [19/Apr/2023:14:51:55 +0000] "GET /favicon.ico HTTP/1.1" 404 153 "http://localhost:92/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/112.0" "-"
app_2_container | 2023/04/19 14:51:55 [error] 30#30: *1 open() "/usr/share/nginx/html/favicon.ico" failed (2: No such file or directory), client: 172.18.0.1, server: localhost, request: "GET /favicon.ico HTTP/1.1", host: "localhost:92", referer: "http://localhost:92/"
app_2_container | 172.18.0.1 - - [19/Apr/2023:14:52:04 +0000] "GET / HTTP/1.1" 200 93 "-" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/112.0" "-"
app_3_container | 172.18.0.1 - - [19/Apr/2023:14:53:14 +0000] "GET / HTTP/1.1" 200 171 "-" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/112.0" "-"
app_3_container | 2023/04/19 14:53:15 [error] 28#28: *1 open() "/usr/share/nginx/html/favicon.ico" failed (2: No such file or directory), client: 172.18.0.1, server: localhost, request: "GET /favicon.ico HTTP/1.1", host: "localhost:93", referer: "http://localhost:93/"
app_3_container | 172.18.0.1 - - [19/Apr/2023:14:53:15 +0000] "GET /favicon.ico HTTP/1.1" 404 153 "http://localhost:93/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/112.0" "-"
```





