

IDVOC

- docker-compose



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Docker cli limitations

- Docker cli is a bit limited for some cases
 - ◆ Lots of arguments
 - ◆ Needs to remember the arguments to restart/change/move the container
 - ◆ Can be considered config, but isn't in a config file
 - Against 12 factors



docker-compose

- Docker-compose translate a config file into docker commands
- Used to declare statically containers, networks, volumes, ...
- YAML format
- `docker-compose.yml`



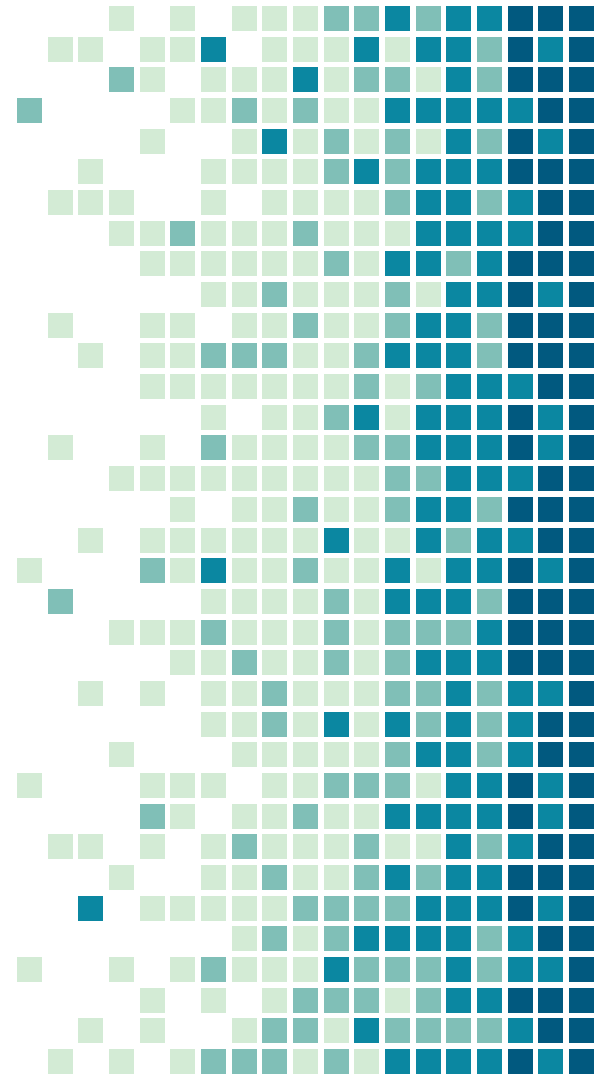
docker-compose

- `docker-compose up` to create and run the containers
- `docker-compose down` to stop and delete the containers
- `docker-compose start/stop` to start/stop the containers
- `docker-compose logs` to look at containers logs
- That's most of its CLI usage
- `docker-compose` is not a daemon, just a "translator" that reads YML to convert it to docker commands



About docker-compose.yml file

How to write this config file ?



```
1 ---
2
3 version: '3'
4
5 services:
6   netbox:
7     image: netboxcommunity/netbox:v3.0-ldap
8     user: '101'
9     depends_on:
10      - postgres
11      - redis
12     env_file: netbox.env
13     ports:
14       - 80:8080
15     volumes:
16       - /srv/netbox/media:/opt/netbox/netbox/media
17   postgres:
18     image: postgres:13-alpine
19     env_file: postgres.env
20     volumes:
21       - netbox-postgres-data:/var/lib/postgresql/data
22     ports:
23       - 5432:5432
24   redis:
25     image: redis:6-alpine
26     command:
27       - sh
28       - -c # this is to evaluate the $REDIS_PASSWORD from the env
29       - redis-server --appendonly yes --requirepass $$REDIS_PASSWORD ## $$ because of docker-compose
30     env_file: redis.env
31     volumes:
32       - netbox-redis-data:/data
33 volumes:
34   netbox-postgres-data: {}
35   netbox-redis-data: {}
```

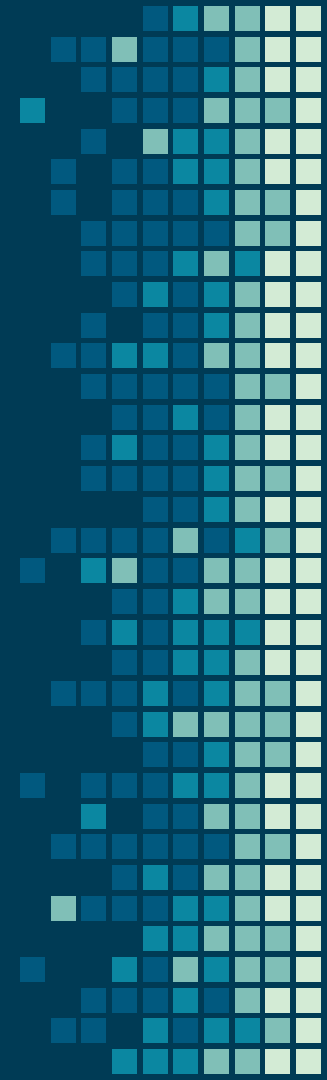
docker-compose.yml

→ ~Equivalent to:

```
1 docker run --name postgres_1 --env-file postgres.env -p 5432:5432 -v netbox-postgres-data:/var/lib/postgresql/data
  postgres:13-alpine && docker run --name redis_1 -v netbox-redis-data:/data --env-file redis.env --entrypoint sh redis:6-
  alpine -c redis-server --appendonly yes --requirepass $REDIS_PASSWORD && docker run --name netbox_1 --env-file netbox.env
  --user 101 -p 80:8080 -v /srv/netbox/media:/opt/netbox/netbox/media netboxcommunity/netbox:v3.0-ldap
```

Thanks !

Questions ?



Slides available on zarak.fr/

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