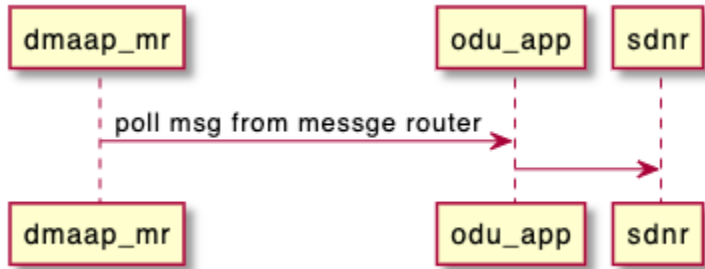# Deploy ODU-App in docker env

This page is out of date.
Please see the relevant page for the latest release: e.g. Release I - Run in Docker

This is a brief instruction on how to deploy odu-app along with mr, sdnr simulators in docker env and check logs etc.

Prerequisite

- *Docker*
- *make*
- *bash*
- *linux(ubuntu 18+)*

Installation

copy nonrtric repo from oran gerrit

---

clone nonrtric repo

```
git clone "https://gerrit.o-ran-sc.org/r/nonrtric"
```

---

go to sub-directory:

---

go to subfolder

```
cd test/usecases/odusliceassurance/goversion/
```

---

run "*docker-compose up -d*" , this docker-compose file is to build all images needed and make all these components up & running:

---

install oru-app, mr and sdnr sims

```
docker-compose up -d
```

After successful run, we should see the docker containers up & running:

```
Creating network "nonrtric-docker-net" with driver "bridge"
Building sdnr-mr-sim
[+] Building 2.2s (13/13) FINISHED
 => [internal] load build definition from Dockerfile-simulator
 => => transferring dockerfile: 1.16kB
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [internal] load metadata for docker.io/library/golang:1.17.1-bullseye
 => [internal] load metadata for gcr.io/distroless/base-debian10:latest
 => [internal] load build context
 => => transferring context: 82.70kB
 => [stage-1 1/4] FROM gcr.io/distroless/base-debian10@sha256:d2ce069a83a6407e98c7e0844f4172565f439dab683157bf93b6de20c5b46155
 => [build 1/4] FROM docker.io/library/golang:1.17.1-bullseye@sha256:a17096738ab2ef373b2bb8d3d6773cf7be88b90bca0a7da655e5816d211230f3
 => CACHED [build 2/4] WORKDIR /app
 => CACHED [build 3/4] COPY . ./
 => CACHED [build 4/4] RUN go build -o /sdnr-mr-sim ./stub/
 => CACHED [stage-1 2/4] COPY --from=build /sdnr-mr-sim .
 => CACHED [stage-1 3/4] COPY --from=build /app/stub/test-data.csv .
 => exporting to image
 => => exporting layers
 => => writing image sha256:0b26ae1970f00f3922ca30427eabb4365bafcf988ad0ed88df19f1a148d8b6c2
 => => naming to docker.io/library/goversion_sdnr-mr-sim

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
WARNING: Image for service sdnr-mr-sim was built because it did not already exist. To rebuild this image you must use `docker-compose buil
Building odu-app
[+] Building 2.7s (15/15) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 1.23kB
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [internal] load metadata for gcr.io/distroless/base-debian10:latest
 => [internal] load metadata for nexus3.o-ran-sc.org:10001/golang:1.17-bullseye
 => [stage-1 1/3] FROM gcr.io/distroless/base-debian10@sha256:d2ce069a83a6407e98c7e0844f4172565f439dab683157bf93b6de20c5b46155
 => [internal] load build context
 => => transferring context: 1.68kB
 => [build 1/7] FROM nexus3.o-ran-sc.org:10001/golang:1.17-bullseye@sha256:f89b6b9ec155b8c5e04d18fc23f6cb915e17ad8fe3f1cf7e9c7b7122a6c509a
 => CACHED [build 2/7] WORKDIR /app
 => CACHED [build 3/7] COPY go.mod ./
 => CACHED [build 4/7] COPY go.sum ./
 => CACHED [build 5/7] RUN go mod download
 => CACHED [build 6/7] COPY . ./
 => CACHED [build 7/7] RUN go build -o /oduclosedloop-sliceassurance
 => CACHED [stage-1 2/3] COPY --from=build /oduclosedloop-sliceassurance .
 => exporting to image
 => => exporting layers
 => => writing image sha256:5bc4653d4e3289be3cafb9c10b99223b4dcb25ffeb8d0f19be81f39f9c6af0f3
 => => naming to docker.io/library/goversion_odu-app

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
WARNING: Image for service odu-app was built because it did not already exist. To rebuild this image you must use `docker-compose build` a
Creating odu-app      ... done
Creating sdnr-mr-sim ... done
```

```
CONTAINER ID   IMAGE                   COMMAND                CREATED           STATUS           PORTS                             NAMES
e2e18cbf0d38   goversion_sdnr-mr-sim   "/sdnr-mr-sim"         About a minute ago Up About a minute 0.0.0.0:3904-3905->3904-3905/tcp  sdnr-mr-sim
088cc7e0cbb8   goversion_odu-app       "/oduclosedloop-slic…" About a minute ago Up About a minute 0.0.0.0:8086->8086/tcp            odu-app
```

Check logs on odu-app:

check logs
`docker logs odu-app`

We should be able to see a message like below:

```
chengkaiyan@Chengkais-MBP:~/oran/dep$ docker logs odu-app
{"level":"info","msg":"Polling new messages from DmaapMR","time":"2022-02-15T08:47:12Z"}
{"level":"info","msg":"Polling new messages from DmaapMR","time":"2022-02-15T08:47:42Z"}
{"level":"info","msg":" new metric has been added {DUId:O-DU-1211 CellId:cell-1 SliceDiff:1 SliceServiceType:2 RRMPolicyRatioId: PM:map[cell-1:729]}","time":"2022-02-15T08:47:42Z"}
{"level":"info","msg":" new policy has been added {PolicyRatioId:rrm-pol-2 PolicyMaxRatio:20 PolicyMinRatio:10 PolicyDedicatedRatio:15}","time":"2022-02-15T08:47:42Z"}
{"level":"info","msg":"Send Post Request to update DedicatedRatio for DU id: O-DU-1211 Policy id: rrm-pol-2","time":"2022-02-15T08:47:42Z"}
{"level":"info","msg":"Polling new messages from DmaapMR","time":"2022-02-15T08:48:13Z"}
{"level":"info","msg":" metric value has been updated, new value: 700","time":"2022-02-15T08:48:13Z"}
{"level":"info","msg":" metric with key {Duid:O-DU-1211 sd:1 sst:2} has been deleted","time":"2022-02-15T08:48:13Z"}
{"level":"info","msg":" new metric has been added {DUId:O-DU-1211 CellId:cell-1 SliceDiff:1 SliceServiceType:1 RRMPolicyRatioId: PM:map[cell-1:714]}","time":"2022-02-15T08:48:13Z"}
{"level":"info","msg":" new policy has been added {PolicyRatioId:rrm-pol-1 PolicyMaxRatio:20 PolicyMinRatio:10 PolicyDedicatedRatio:15}","time":"2022-02-15T08:48:13Z"}
{"level":"info","msg":"Send Post Request to update DedicatedRatio for DU id: O-DU-1211 Policy id: rrm-pol-1","time":"2022-02-15T08:48:13Z"}
{"level":"info","msg":"Polling new messages from DmaapMR","time":"2022-02-15T08:48:44Z"}
{"level":"info","msg":" metric with key {Duid:O-DU-1211 sd:1 sst:1} has been deleted","time":"2022-02-15T08:48:44Z"}
{"level":"info","msg":"Polling new messages from DmaapMR","time":"2022-02-15T08:49:15Z"}
{"level":"info","msg":" new metric has been added {DUId:O-DU-1211 CellId:cell-1 SliceDiff:1 SliceServiceType:2 RRMPolicyRatioId: PM:map[cell-1:726]}","time":"2022-02-15T08:49:15Z"}
```

Clean env

clean env

clean env
`docker-compose down`