Release E - Build

This page describes how to build release E version of Non-RT RIC.

Note: In general, there is no need to build the images manually. All images for the release are available in nexus image repositories. Please refer to the page Release E - Run in Docker for running the release E Non-RT RIC.

Details of the architecture can be found from Release E page.

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Project Requirements

- Java 11 (make sure that JAVA_HOME environment variable points to correct Java version)
- Docker and docker-compose (latest)
- git (latest) - for downloading code repos
- Maven 3.6
  - **Note:** There are several build-time dependencies for ONAP Maven modules.
    Your Maven build settings will need to access the ONAP Maven repos, as described on this ONAP wiki page. (A sample ONAP Maven settings file is available).

Build Code

Build nonrtric containers

Download the nonrtric repo::

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

Build the code and create docker images

To build docker images of r-app-catalogue, information-coordinator-service, policy-management-service, helm-manager, dmaap-adaptor, dmaap-mediator-producer as well as images for the use caseso-du-slice-assurance ando-ru-closed-loop-consumer.

```
cd nonrtric
mvn clean install -Dmaven.test.skip=true
```

After build, you should be able to see logs like this:

If the build was successful images with following name and tag shall be built, use the command 'docker images' to view newly built images in the local docker registry.

```
$ docker images
o-ran-sc/nonrtric-r-app-catalogue                    1.0.2-SNAPSHOT
o-ran-sc/nonrtric-information-coordinator-service    1.2.1-SNAPSHOT
o-ran-sc/a1-policy-management-service                2.3.1-SNAPSHOT
o-ran-sc/nonrtric-helm-manager                       1.1.1-SNAPSHOT
o-ran-sc/nonrtric-dmaap-adaptor                      1.0.1-SNAPSHOT
o-ran-sc/nonrtric-dmaap-mediator-producer            1.0.1-SNAPSHOT
o-ran-sc/nonrtric-o-du-slice-assurance               1.0.2
o-ran-sc/nonrtric-o-ru-closed-loop-consumer          1.0.1
```

Build near-rt-ric-simulator container

Download the near-rt-ric-simulator repo (defaults to master branch - the simulator supports all available A1 versions):

```
git clone "https://gerrit.o-ran-sc.org/r/sim/a1-interface"
```

Create docker image

To create docker image near-rt-ric-simulator (note that the given image name must match the name given in docker startup later):

```
cd a1-interface/near-rt-ric-simulator
docker build -t near-rt-ric-simulator:latest .
```

You can check that the image is in docker using:

```
$ docker images
o-ran-sc/nonrtric-r-app-catalogue                    1.0.2-SNAPSHOT
o-ran-sc/nonrtric-information-coordinator-service    1.2.1-SNAPSHOT
o-ran-sc/a1-policy-management-service                2.3.1-SNAPSHOT
o-ran-sc/nonrtric-helm-manager                       1.1.1-SNAPSHOT
o-ran-sc/nonrtric-dmaap-adaptor                      1.0.1-SNAPSHOT
o-ran-sc/nonrtric-dmaap-mediator-producer            1.0.1-SNAPSHOT
o-ran-sc/nonrtric-o-du-slice-assurance               1.0.2
o-ran-sc/nonrtric-o-ru-closed-loop-consumer          1.0.1
near-rt-ric-simulator                                latest
```

Build nonrtric / Control panel and gateway containers

Download the nonrtric repo:

```
git clone "https://gerrit.o-ran-sc.org/r/portal/nonrtric-controlpanel" -b e-release
```

Build the code and create docker images

```
cd nonrtric-controlpanel
cd nonrtric-gateway
mvn clean install  -Dmaven.test.skip=true
docker build --build-arg JAR=nonrtric-gateway-1.1.0-SNAPSHOT.jar -t o-ran-sc/nonrtric-gateway:1.1.0-SNAPSHOT .

cd ../webapp-frontend
docker build -t o-ran-sc/nonrtric-controlpanel:2.3.0-SNAPSHOT .
```

You can check that the image is in docker using:

```
$ docker images
o-ran-sc/nonrtric-r-app-catalogue                  1.0.2-SNAPSHOT
o-ran-sc/nonrtric-information-coordinator-service  1.2.1-SNAPSHOT
o-ran-sc/a1-policy-management-service              2.3.1-SNAPSHOT
o-ran-sc/nonrtric-helm-manager                     1.1.1-SNAPSHOT
o-ran-sc/nonrtric-dmaap-adaptor                    1.0.1-SNAPSHOT
o-ran-sc/nonrtric-dmaap-mediator-producer          1.0.1-SNAPSHOT
o-ran-sc/nonrtric-o-du-slice-assurance             1.0.2
o-ran-sc/nonrtric-o-ru-closed-loop-consumer        1.0.1
near-rt-ric-simulator                              latest
o-ran-sc/nonrtric-gateway                          1.1.0-SNAPSHOT
o-ran-sc/nonrtric-controlpanel                     2.3.0-SNAPSHOT
```