

Deploy DMaaP message router in nonrtric

This page is out of date.

Please see the relevant page for the latest release: e.g. [Release 1 - Run in Docker](#)

This article helps you to deploy the NON-RT-RIC components using docker compose.

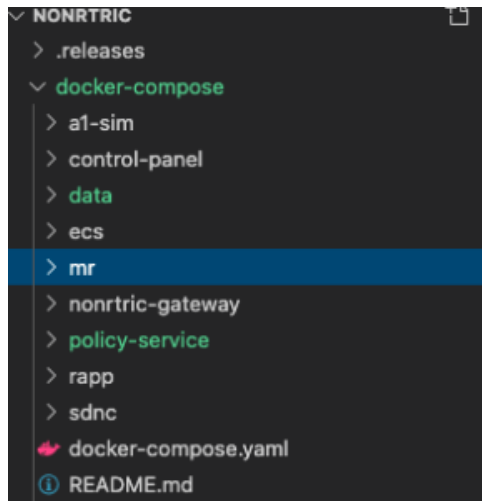
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Prerequisite

- *Docker*
- *Docker Compose*

Installation

Clone [nonrtric](#) and go to nonrtric/docker-compose/



You can see a few folders, each of them contains a docker-compose file for different components. You have the option to install the nonrtric with/without A1 controller/dmapp-mr based on your requirement.

NON-RT-RIC without A1 Controller, with dmaap-mr

withDmaap_nosdnc/docker-compose.yml

This file is to create nonrtric system without sdnc a1-controller, with dmapp-mr

nosdnc with dmaap-mr

```
docker-compose -f docker-compose.yaml -f control-panel/docker-compose.yaml -f policy-service/docker-compose.yaml -f mr/docker-compose.yaml up -d
```

You can see the docker containers with `docker ps`,

you should be able to see containers running as above.

You can create sample policy types/policy instances of both Standard & OSC Version.

Run the **fill_data.sh** script under directory `/data` to create some dummy data in the running system.

Command to load the data,

This will create,

- one policy type in a1-sim-OSC
- one service in policy agent
- three policies in a1-sim-OSC
- one policy in a1-sim-STD

Open the GUI to view all the policies & policy types created by the above script.

[http://localhost:\[control-panel-port\]/](http://localhost:[control-panel-port]/)

localhost:8080/policy

Max KI Home sthhub-proj

Non-RT RIC Control Panel

Policy Control

Policy Type

Description

^ < No type >

| Instance | Target | Owner | Last modified | Action |
|-----------------------------------|--------|----------|----------------------|-------------------------|
| 0f7bb041e1584b1fa17e87520d70a3102 | ric2 | service1 | 12/08/2020, 12:52:05 | <div></div> <div></div> |

^ 1

Type 1 policy type

| Instance | Target | Owner | Last modified | Action |
|-----------------------------------|--------|----------|----------------------|-------------------------|
| 0f7bb041e1584b1fa17e87520d70a3100 | ric1 | service1 | 12/08/2020, 12:52:05 | <div></div> <div></div> |
| 0f7bb041e1584b1fa17e87520d70a3101 | ric1 | service1 | 12/08/2020, 12:52:05 | <div></div> <div></div> |
| 0f7bb041e1584b1fa17e87520d70a3000 | ric1 | service1 | 12/08/2020, 12:52:04 | <div></div> <div></div> |

Manual test

send messages to dmaap-mr

```
cd nonrtric/docker-compose/data
curl -X POST "http://localhost:3904/events/A1-POLICY-AGENT-READ/" -H "accept: application/json" -H "Content-Type: application/json" --data-binary @testdata/dmaap-msg-policy-get.json
```

pull messages from dmaap-mr

```
curl -X GET "http://localhost:3904/events/A1-POLICY-AGENT-WRITE/users/policy-agent?timeout=15000&limit=100" -H "accept: application/json" -H "Content-Type: application/json" | jq .
```

You can see the messages from dmaap-mr topic **A1-POLICY-AGENT-WRITE**, with consumer group "**user**", consumer id "**policy-agent**"

```
chengkaiyan@Chengkais-MacBook-Pro:~/oran/docker-compose$ curl -X GET "http://localhost:3904/events/A1-POLICY-AGENT-WRITE/users/policy-agent?timeout=15000&limit=100" -H "accept: application/json" -H "Content-Type: application/json" | jq .
{
  "Total": 100,
  "Received": 2839,
  "Xferd": 0,
  "AverageSpeed": 4367,
  "TimeDload": 0,
  "TimeUpload": 0,
  "TimeTotal": 0,
  "TimeSpent": 0,
  "TimeLeft": 0,
  "CurrentSpeed": 4360
}
[
  {
    "requestId": "23343221",
    "correlationId": "1596363458549998500",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "OK",
    "timestamp": "2020-08-02 10:17:38.558324",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "1596363458549998501",
    "originatorId": "849e6c6b421",
    "type": "response",
    "message": "OK",
    "timestamp": "2020-08-02 10:17:38.558324",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "1596363459196978900",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "OK",
    "timestamp": "2020-08-02 10:17:39.197067",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "1596304565904621535",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "",
    "timestamp": "2020-08-01 17:56:05.905035",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "159630456656253556",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "",
    "timestamp": "2020-08-01 17:56:06.656949",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "159630456656253557",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "",
    "timestamp": "2020-08-01 17:56:06.656949",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "159630456656253558",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "",
    "timestamp": "2020-08-01 17:56:06.656949",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "1596304567017739720",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "{\"scope\":{\"qosId\":\"qos3000\"},\"ueId\":\"ue3000\"}",
    "timestamp": "2020-08-01 17:56:07.017744",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "1596304567017739720",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "{\"scope\":{\"qosId\":\"qos3100\"},\"ueId\":\"ue3100\"}",
    "timestamp": "2020-08-01 17:56:07.017744",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "1596304567017739720",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "{\"scope\":{\"qosId\":\"qos3100\"},\"ueId\":\"ue3100\"}",
    "timestamp": "2020-08-01 17:56:07.017744",
    "status": "200 OK"
  },
  {
    "requestId": "23343221",
    "correlationId": "1596304567017739720",
    "originatorId": "849e6c6b420",
    "type": "response",
    "message": "{\"scope\":{\"qosId\":\"qos3102\"},\"ueId\":\"ue3102\"}",
    "timestamp": "2020-08-01 17:56:07.017744",
    "status": "200 OK"
  }
]
```

Message format

create a policy via dmaap-mr

```
{
  "apiVersion": "1.0",
  "operation": "PUT",
  "correlationId": "1596304565904621535",
  "originatorId": "849e6c6b420",
  "payload": {
    "scope": {
      "ueId": "ue3000",
      "qosId": "qos3000"
    },
    "qosObjective": {
      "priorityLevel": 3000
    }
  },
  "requestId": "23343221",
  "target": "policy-agent",
  "timestamp": "2020-08-01 17:56:05.905035",
  "type": "request",
  "url": "/policy?id=0f7bb041e1584b1fa17e87520d70a3000&ric=ric1&service=service1&type=1"
}
```