

PNF Plug'n'Play

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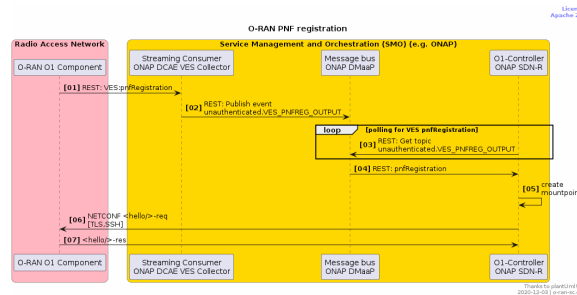
Note:

The first implementation of this use case was implemented and demonstrated for O-RAN-SC A release.

For the C release a regression test is required.

Message flow

Diagram



Description

1. The O-RAN component sends a VES 7.1 pnfRegistration event after its startup and/or its VES end-point-configuration.
2. The VES Collector verifies the content and forwards the event to the message bus (ONAP DMAap)
3. After initialization and startup of the O1-controller, the O1 controller starts polling on the message bus for topic "unauthenticated.VES_PNFREG_OUTPUT"
4. After such topic is received by the O1 Controller
5. ... the O1 Controller checks its content, if all information to setup an NetConf connections are part of the VES message content, a mountpoint is created to automatically establish a NetConf connection. The minimal content is
 - a. IP address in IPv4 or IPv6 format
 - b. the NetConf port: standard port number is 830
 - c. the security protocol; TLS or SSH and its user credentials
6. Once the SSH or TLS connection is established, the standard NetConf <hello> message is request.
7. If the security requirements for a NetConf connection are fulfilled, the NetConf Server of the O-RAN Component exposes its NetConf APIs and NetConf features.

Verification Command

The following command should display the new mounted device and its connection-status:

```
HTTP-GET
BasicAuth admin:Kp8bJ4SXszM0wX1hak3eHlcse2gAw84vaoGGmJvUy2U
Accept: application/yang-data+json

/rests/data/network-topology:network-topology/topology=topology-netconf?
content=nonconfig&fields=node(node-id;netconf-node-topology:connection-
status)
```