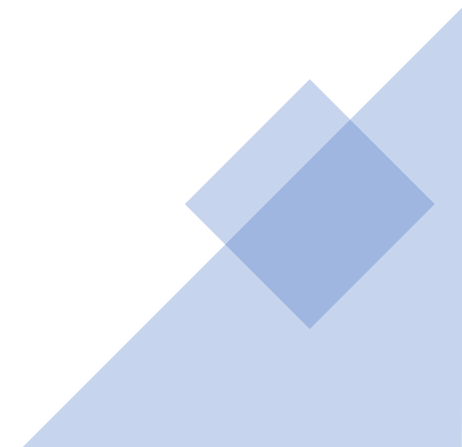




NONRTRIC Helm charts and Tests in it/dep repository



Agenda

- Standalone NONRTRIC helm charts
 - NONRTRIC helm charts under SMO-Install
 - Python based tests under SMO-Install
 - Demo on tests to validate RAPP deployment using ACM
- 



Standalone NONRTRIC helm charts

- Helm charts for NONRTRIC components is available under *itdep/dep/nonrtric* folder.
- Installation configurations can be controlled using `example_recipe.yaml`
- Instructions for this deployment is available under <https://wiki.o-ran-sc.org/display/RICNR/Release+F+-+Run+in+Kubernetes>

```
▼ dep
  > .releases
  > bin
  > chartstorage
  > ci
  > demos
  > docs
  ▼ nonrtric
    > data
    > helm
    ▼ RECIPE_EXAMPLE
      ! example_recipe.yaml
```

NONRTRIC helm charts under SMO

- Helm charts for NONRTRIC components is available under *itdep/dep/smo-install/oran_oom* folder.
- Installation configurations can be controlled using configurations under *itdep/dep/smo-install/helm-override* folder.
- Installation instructions can be found in README.md
- Standalone-nonrtric profile introduced for the standalone nonrtric installation using the charts build under smo-install

```
▼ smo-install
  ▼ helm-override
    > cnf
    > default
  ▼ pythonsdk-tests
    ! onap-override.yaml
    ! oran-override.yaml
  ▼ standalone-nonrtric
    ! oran-override.yaml
  > jenkins
  > multicloud-k8s
  > onap_oom
  > oran_oom
  > scripts
  > test
  > tests_oom
  ◆ .gitignore
  📄 LICENSE
  ⓘ README.md
```

```
> a1simulator
> aux-common
> controlpanel
> dist
> dmaapadapterservice
> dmaapmediatorservice
> helmmanager
> informationservice
> nonrtric
> nonrtric-common
> nonrtricgateway
> odu-app
> odu-app-ics-version
> oru-app
> policymanagementservice
> rappcatalogueservice
> ric-common
> topology
```

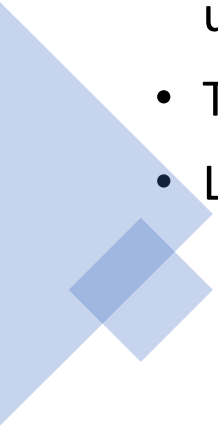
Python based tests under SMO

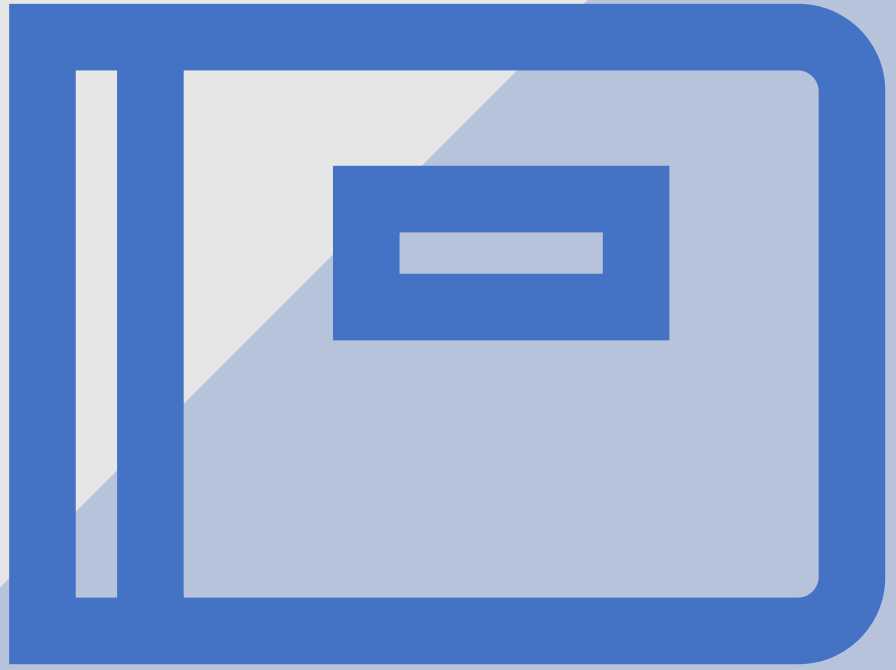
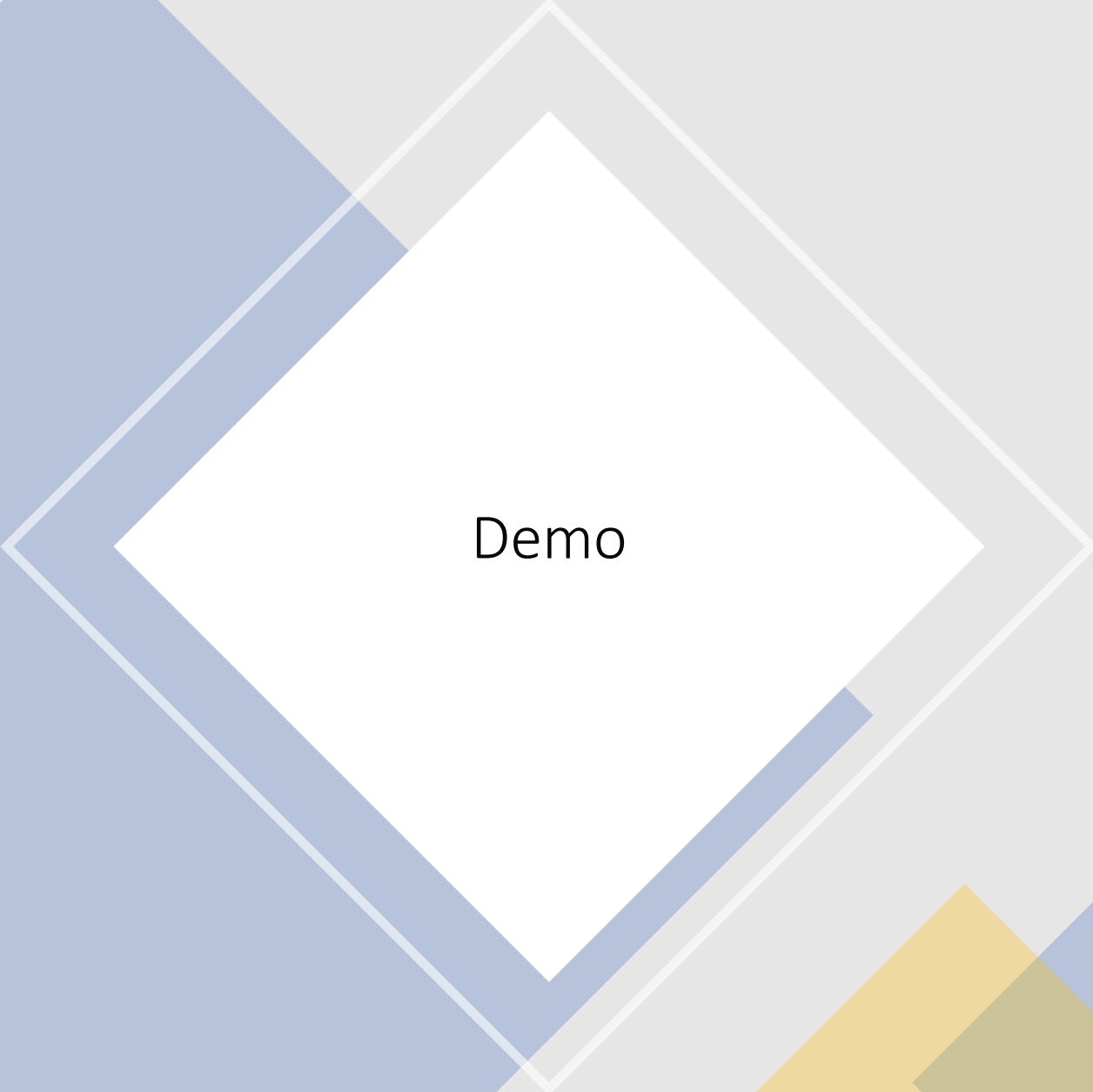
- Python based tests are available under `dep/smo-install/test/pythonsdk` folder
- It contains the SDK named as `oransdk`.
- Rapps under NONRTRIC are deployed using HELM participant.
- ACM tests are enabled and available in “`test_cl_k8s.py`”.
- Charts required for the tests are added under “`cl-test-helm-chart`”.
- Tox is used as test runner.
- Logs are available in `pythonsdk.debug.log`.

```
test
├── a1-validation
├── apex-policy-test
├── enable-sim-fault-report
├── pythonsdk
│   ├── .tox
│   ├── reports
│   └── src
│       ├── oransdk
│       └── orantests
├── unit-tests
├── .gitignore
├── LICENSE
├── pythonsdk.debug.log
├── README.md
├── tox.ini
└── topology-generator
```

```
oransdk
├── __pycache__
├── a1policymanagement
├── a1sim
├── configuration
├── dmaap
├── enrichmentservice
├── policy
│   ├── __pycache__
│   └── templates
│       ├── commission_apex.json.j2
│       ├── commission_k8s.json.j2
│       ├── create_instance_apex.json.j2
│       ├── create_instance_k8s.json.j2
│       ├── DeployPolicyPAP.json.j2
│       └── ToscaPolicy.json.j2
```

```
orantests
├── __pycache__
├── configuration
├── reports
├── resources
│   ├── cl-test-helm-chart
│   │   ├── odu-app-1.0.0.tgz
│   │   ├── odu-app-ics-version-1.0.0.tgz
│   │   └── oru-app-1.0.0.tgz
│   ├── faults-config
│   └── network-simulators-topology
├── smo
├── conftest.py
├── disable_test_apex_policy.py
├── disable_test_cl_apex.py
├── disable_test_o1.py
├── pythonsdk.debug.log
├── test_a1sim.py
└── test_cl_k8s.py
```





Demo

Flow of RAPP ACM deployment test

- Deploy chartmuseum server.
- Add chart museum repository details to ACM k8s participant.
- Upload toscas to commissioning.
- Create ACM instance. On successful creation ACM instance will be in UNINITIALIZED state.
- Move the ACM Instance to PASSIVE state.
- Verify the RAPP is up and running.
- Move the ACM Instance to UNINITIALIZED state.
- Cleanup – Remove chartmuseum configuration and Remove chartmuseum server

```
root@kubeflow-poc-vm-1:/home/ubuntu/itdep/dep/smo-install/test/pythonsdk# tox -e oran-tests
oran-tests installed: astroid==2.3.3,attrs==22.1.0,certifi==2022.9.24,cffi==1.15.1,chardet==3.0.4,coverage==6.5.0,cryptography==38.0.4,idna==2.10,iniconfig==1.1.1,isort==4.3.21,Jinja2==2.11.2,lazy-object-proxy==1.4.3,MarkupSafe==2.0.1,mccabe==0.6.1,onapsdk==9.0.0,oyaml==1.0,packaging==21.3,pluggy==1.0.0,py==1.11.0,pycparser==2.21,pydocstyle==5.1.1,pylint==2.4.4,pyOpenSSL==1.0.9,pyrsistent==0.19.2,PySocks==1.7.1,pytest==6.2.5,pytest-cov==2.10.1,PyYAML==6.0,requests==2.24.0,simplejson==3.17.2,six==1.16.0,snowballstemmer==2.2.0,toml==0.10.2,urllib3==1.25.11,waitress==2.11.2
oran-tests run-test-pre: PYTHONHASHSEED='1177748908'
oran-tests run-test: commands[0] | pytest -v --junit-xml=reports/junit/oran-tests.xml src/orantests/
error: You must provide one or more resources by argument or filename.
Example resource specifications include:
  '-f rsrc.yaml'
  '--filename=rsrc.json'
  '<resource> <name>'
  '<resource>'
No resources found in nonrtrc namespace.
/home/ubuntu/itdep/dep/smo-install/test/pythonsdk/.tox/oran-tests/lib/python3.8/site-packages/urllib3/connectionpool.py:981: InsecureRequestWarning: Unverified HTTPS request is being made
to host '183.158'. Adding certificate verification is strongly advised. See: https://urllib3.readthedocs.io/en/latest/advanced-usage.html#ssl-warnings
warnings.warn(
/home/ubuntu/itdep/dep/smo-install/test/pythonsdk/.tox/oran-tests/lib/python3.8/site-packages/urllib3/connectionpool.py:981: InsecureRequestWarning: Unverified HTTPS request is being made
to host '183.158'. Adding certificate verification is strongly advised. See: https://urllib3.readthedocs.io/en/latest/advanced-usage.html#ssl-warnings
warnings.warn(
Error from server (NotFound): namespaces "network" not found
===== test session starts =====
platform linux -- Python 3.8.15, pytest-6.2.5, py-1.11.0, pluggy-1.0.0 -- /home/ubuntu/itdep/dep/smo-install/test/pythonsdk/.tox/oran-tests/bin/python
cachedir: .tox/oran-tests/.pytest_cache
rootdir: /home/ubuntu/itdep/dep/smo-install/test/pythonsdk
plugins: cov-2.10.1
collected 4 items

src/orantests/test_alsim.py::test_alsim PASSED
src/orantests/test_cl_k8s.py::test_cl_oru_app_deploy PASSED
src/orantests/test_cl_k8s.py::test_cl_odu_app_smo_deploy PASSED
src/orantests/test_cl_k8s.py::test_cl_odu_app_ics_deploy PASSED

===== warnings summary =====
src/orantests/test_cl_k8s.py::test_cl_oru_app_deploy
src/orantests/test_cl_k8s.py::test_cl_odu_app_smo_deploy
src/orantests/test_cl_k8s.py::test_cl_odu_app_ics_deploy
/home/ubuntu/itdep/dep/smo-install/test/pythonsdk/.tox/oran-tests/lib/python3.8/site-packages/urllib3/connectionpool.py:981: InsecureRequestWarning: Unverified HTTPS request is being made
to host '183.158'. Adding certificate verification is strongly advised. See: https://urllib3.readthedocs.io/en/latest/advanced-usage.html#ssl-warnings
warnings.warn(

-- Docs: https://docs.pytest.org/en/stable/warnings.html
----- generated xml file: /home/ubuntu/itdep/dep/smo-install/test/pythonsdk/src/orantests/reports/junit/oran-tests.xml -----
===== 4 passed, 3 warnings in 389.69s (0:06:29) =====
----- summary -----
oran-tests: commands succeeded
congratulations :)
```


Questions?

