Acumos DCAE Integration

For Frankfurt release, DCAE will add new software component "Acumos-DCAE Adapter" which will provide a client interface to receive ML models from an Acumos catalog to ONAP DCAE. This adapter will generate the required metadata artifacts (Microservice component spec, data-format) and to onboard them directly into the DCAE CLI-DB. The subsequent Service Assurance flow design, Microservice configurations, and blueprint generation will be supported by the new DCAE MOD components, which will be delivered under Frankfurt Self Serve Control Loops v2.

The "Acumos-DCAE Adapter" transforms an Acumos ML model into an ONAP compatible DCAE Microservice in order for it to run in an ONAP DCAE environment.

1. The Adapter provides a DCAE model runner to wrap the ML model from Acumos to in order to produce a microservice that is compatible in DMaAP environment.
2. The Adapter generates Microservice metadata (i.e., the Component Spec.json and Dataformat.json) for onboarding to DCAE Design environment.
3. The Adapter generates k8s/Docker executable image for onboarding to DockerCentral (Nexus).

Architecture

Adapter API

1. The "Acumos-DCAE Adapter" supports Acumos E5 client interface for federated ML models from an Acumos catalog.
2. The "Acumos-DCAE Adapter" uses DCAE Onboarding APIs for automated Microservice onboarding to CLI-DB, also submits the Microservice Image to DockerCentral image repository.

Sample Models

https://gerrit.acumos.org/r/gitweb?p=python-dcae-model-runner.git;a=tree;f=example;h=9ed808e722f2b1266eac9e7e9f583a5848e78a5b;hb=f9574de98e3e3ec3e34026a28e141f797eb59d6e

Repository

https://gerrit.onap.org/r/gitweb?p=dcaegen2/platform.git;a=tree;f=adapter/acumos;h=c391659ce042f856494fe6f871cd83f428be2a03;hb=refs/heads/master

Usecase Targeted

Due to lack of specific end-to-end usecase (in Frankfurt), integration was demonstrated using generic models from AT&T/Acumos Instance into DCAE-MOD.

Demo recording and details - 2020-04-16 DCAE Demo

Deliverables

- Helm Chart
- Acumos adapter docker container

Refer Acumos Adapter Installation