PCEI Landing Application

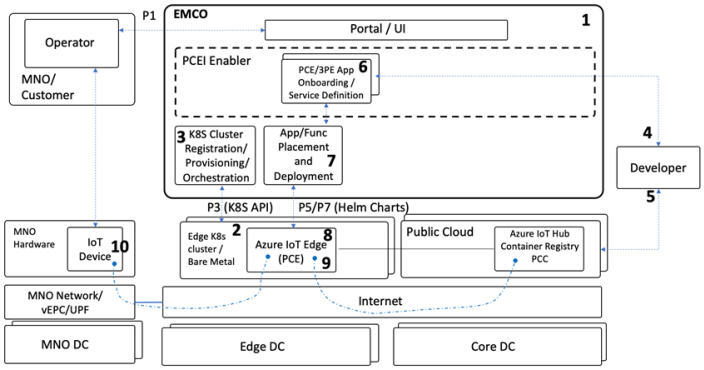
PCEI can be installed/enabled with Edge Multi-Cluster Orchestrator and accessible on common hardware and network environment for for onboarding and deployment of cloud native Public Cloud Edge (PCE) Apps from multiple clouds (Azure and AWS), deployment of a 3rd-Party Edge (3PE) App (ETSI MEC Location API App), as well as the end-to-end operation of the Apps on edge infrastructure:

- Common hardware and network
- Installation with Edge Multi-Cluster Orchestrator (EMCO, a.k.a. ONAP4K8S)
- User access to public Clouds (Azure or AWS)
- Operation access to supported edge infrastructure

PCEI enabler relieves users from troubles of API interoperability including API definition, API gateway functions (AAA, policy, security) and providing a secure, controllable, traceable, scalable and measurable way to access the APIs from diverse public edge cloud service providers.

Deploying Azure IoT Edge with PCEI

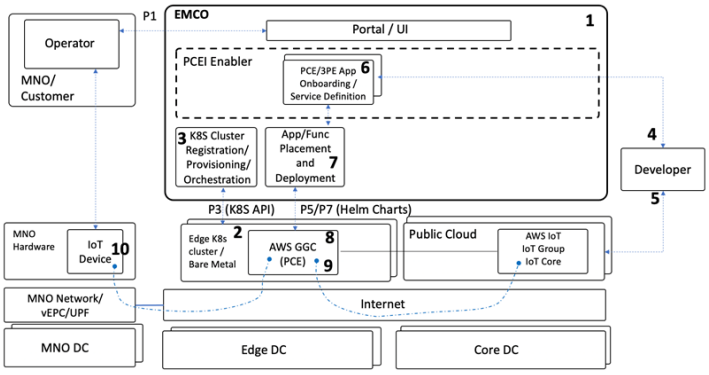
PCEI R4 Azure IoT Edge Deployment – Initial Implementation



1. Deploy EMCO
2. Deploy Edge K8S clusters
3. Onboard Edge K8S clusters onto EMCO
4. Provision Azure Core IoT Service and Push Custom Module for IoT Edge
5. Package Azure IoT Edge Helm Charts into EMCO application tar files
6. Onboard Azure IoT Edge as a service/application into EMCO
7. Deploy Azure IoT Edge onto the Edge K8S clusters
8. All pods came up and register with Azure cloud IoT Hub
9. Deploy a custom LPWA IoT module into Azure IoT Edge on the worker cluster
10. Successfully pass LPWA IoT messages from a simulated IoT device to Azure IoT Edge, decode messages and send Azure IoT Hub

Deploying AWS GreenGrassCore with PCEI

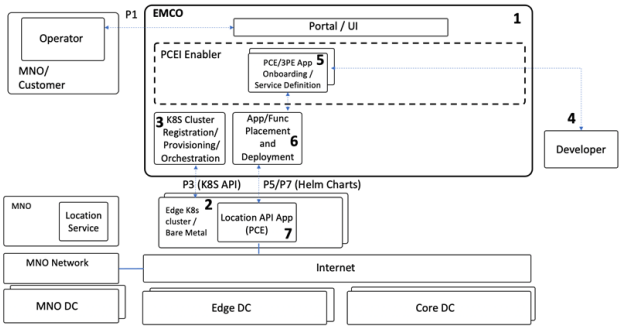
PCEI R4 AWS GGC Deployment – Initial Implementation



1. Deploy EMCO
2. Deploy Edge K8S clusters
3. Onboard Edge K8S clusters onto EMCO
4. Provision AWS IoT Core Service
5. Package AWS GGC Helm Charts into EMCO application tar files
6. Onboard AWS GGC as a service/application into EMCO
7. Deploy AWS GGC onto the Edge K8S clusters
8. All pods came up and register with AWS IoT Core

Deploying Location API App with PCEI

PCEI R4 Location API App Deployment – Initial Implementation



1. Deploy EMCO
2. Deploy Edge K8S clusters
3. Onboard Edge K8S clusters onto EMCO
4. Package Location API Helm Charts into EMCO application tar files
5. Onboard Location API as a service/application into EMCO
6. Deploy Location API App onto the Edge K8S clusters
7. All Location API pods came up

Notes:
PCEI R4 Location API App implementation is based on the ETSI MEC ISG MEC012 Location API described using OpenAPI.
The API is based on the Open Mobile Alliance's specification RESTful Network API for Zonal Presence
ETSI MEC013 V1.1.1 Location Service API Open Mobile Alliance (OMA) Zonal Presence API
PCEI R4 implementation does not support integration of Location API App with MNO Location Services