Far Edge Distributed Blueprint
Distributed Far Edge Server

- Geographically distributed multi-region deployment,
- Central Datacenter providing Orchestration and Synchronization Services,
- Geographically distributed Edge Sites of various sizes
Distributed Far Edge Blueprint Value Proposition

› Addresses edge and far edge use cases
› Lowers OPEX by providing a single pane of glass to manage multiple (100s-1000s) of remote nodes
› Drive down Day 2 operations costs
› Central point for deploying and managing workl
› Redundant, hyper converged clouds
› Autonomous nodes, L3 network connection for control plane
Distributed Far Edge Blueprint Akraino R1

- Added EdgeX Foundry as VM workloads to be distributed at far edge
- Preintegrated in StarlingX
- Little dependency on Akraino CI/CD
Distributed Far Edge Akraiino R2 Blueprint

- Added EdgeX Use Case workload
- Deployed as containers
- Still many projects are preintegrated in StarlingX
- Adds Kubernetes scheduling and workload provisioning
- OpenStack as a containers
- Better integration with Akraiino CI/CD
Distributed Far Edge StarlingX R2 / AkraiSo R2

• Heterogeneous Distribution of Kubernetes and OpenStack Clouds
  • Central Cloud – system controller
    • Hosting Shared Services
    • System-wide Infrastructure Orchestration functions

System Controller
  • Platform Management & Orchestration
  • Host Sharing Services
  • System-wide Infrastructure Orchestration functions

Remote geographically dispersed edge clouds
  • Communication with system controller via REST APIs / L3
  • Running a control Plane for autonomous operation

Edge 1
  • Controller
  • Containerized Apps
  • Optional Containerized Openstack
  • Container Platform
  • worker-0 … worker-x

Edge 2
  • AIO SX/DX
  • Containerized Apps
  • Optional Containerized Openstack
  • Container Platform

Edge N
  • Controller
  • Containerized Apps
  • Container Platform
  • worker-0 … worker-x