R5 Release Notes

Summary

The purpose of this blueprint is an end-to-end technology solution for mobile game deployed across multiple heterogeneous edge nodes using various network access protocols such as mobile and WiFi and others. This blueprint demonstrates how an application leverages a distributed and multi access network edge environment in order to get all the benefits of edge computing.

This is the very first release of this new blueprint as part of the Akraino PCEI family. Current focus for this release is to enable open source Karmada based cloud federation & EdgeMesh functionality.

What is released

Components of the release

- **Federation Scheduler**: As a "Global Scheduler", responsible for application QoS oriented global scheduling in accordance to the placement policies. Essentially, it refers to a decision-making capability that can decide how workloads should be spread across different clusters similar to how a human operator would. It maintains the resource utilization information for all the MEC edge cloud sites.
- **EdgeMesh**: Provides support for service mesh capabilities for the edge clouds in support of microservice communication cross cloud and edges.

Dependencies of the release

Upstream projects :

- Karmada

- EdgeMesh

- KubeEdge version 1.4

- Kubernetes version 1.19

Release Data

Software Deliverable

https://github.com/karmada-io/karmada

https://github.com/kubeedge/edgemesh

Documentation Deliverable

- R5 API Document
- R5 Architecture Document
- R5 Datasheet
- R5 End-to-End Validation Guide
- R5 Installation Guide
- R5 Release Notes
- R5 Test Document

Known Limitations, Issues and Workarounds

N/A