R3 - Release Notes of Enterprise Applications on Lightweight 5G Telco Edge (EALTEdge)

Summary

This is the **first release** for Enterprise Applications on Lightweight 5G Telco Edge (EALTEdge) Blueprint. The blueprint focuses on giving a complete ecosystem and platform for Telco-Edge solution. The overall architecture abides to the ETSI Recommended MEC Platform, in addition given some more components as added on Service.

The EALT Blueprint also focuses to give a Lightweight 5G Telco Edge which can be deployed on resource constraints hardware going.

The document provides details of the

What is released

Components of the release (Akraino new)

As part of this release EALTEdge blueprint released below mentioned components:

OCD (One Click Deployment) Node Components

- Ansible-playbook based single command for EALT environment installation.
- Command Line Interface for installation of various components of EALT Platform.

MECM (Multi Access Edge Computing Manager) Node Components

- APPLCM – Application Life Cycle Management component.
- Helm Chart for APPLCM
- Catalog

MEC Host (Multi Access Edge Computing Host) Node Components

- MEP Agent
- MEP Server

Dependencies of the release (Upstream Projects, Patches)

S. No	Software	Version	Remarks
1.	Kubespray	2.13	
2.	Docker	18.06	
3.	Kubernetes	1.16	
4.	K3S	1.18.2	
5.	Helm	3.0.2	

6.	Grafana	8-7.66.0	
7.	Calico	3.14.0	
8.	PostgresSQL	9.6	
9.	RabbitMQ	3.7	
10.	Prometheus	9.3.1	
11.	Kong	1.5.1	
12.	Vault	0.5.0	
13.	Cert-Manager	0.15.0	

Upgrade Procedures

Not Applicable

Release Data

Enhancements

Not Applicable

Functionality changes

Not Applicable

Upstream Software Version Changes

Not Applicable

Features

#	Name	Category	Description
1.	Lightweight MEC	Platform	Lightweight MEC solution including Edge (MEC Host) & Platform Manager (MEPM)
2.	OCD	Deployment Tool	One click deployment of manager & multiple edges
3.	Mutli-Arch and Multi-OS Support	Platform	Heterogeneous deployment with support of Multi-Arch & Multi OS.
4.	Bootstrap Script	Platform Feature	Installation scripts for EALT Platform
5.	Unified CLI	Platform Feature	Unified CLI for deployment as well as workload LCM
6.	APPLCM	Platform Feature	It handles the application Life cycle management of Applications which are being deployed on MEP. Like : Application Onboarding, Instantiation , Start/Stop etc.
7.	Service Registry	Platform Feature	It is used by applications to discover and locate the end-points for the services they require, and to publish their own service end-point for other applications to use.
8.	API Gateway	Platform Feature	Single point entry for MEP services.
9.	Secret and Certificate Management.	Platform Feature	Cloud Native Secret and Certificate Generation and Management

Version change

1.0.0

Module version changes

N/A

Document Version Changes

Version No.	Date	Author	Rationale

0.1	07-May-2019	EALTEdge Blueprint Team	First Draft

Deliverable

Software Deliverable

Software is available in https://gerrit.akraino.org/r/admin/repos/ealt-edge

Documentation Deliverable

R3 - API Documentation Enterprise Application on Lightweight 5G Telco Edge (EALTEdge)

R3 - Architecture Documentation of Enterprise Applications on Lightweight 5G Telco Edge (EALTEdge)

R3 - Installation Documentation of Enterprise Applications on Lightweight 5G Telco Edge (EALTEdge)

R3 - Release Notes of Enterprise Applications on Lightweight 5G Telco Edge EALTEdge

R3 - Test Documentation of Enterprise Applications on Lightweight 5G Telco Edge (EALTEdge)

Fixed Issues and Bugs

Not Applicable

Known Limitations, Issues and Workarounds

System Limitations

N/A

Known Issues

N/A