ELIOT R6 - IoT Gateway Release Notes

Release Notes for ELIOT IoT Gateway Blueprint

Summary

In ELIOT - IoT Gateway Blueprint Release 6.0, providing One Click Deployment (OCD) from Deployment node to automate installation, k8s based is provided on the IoTgateway node, Hawkbit for software rolling updates on Iot Gateway, Edge Gallery and services are added. (Refer to Features Table)

In this release, BP has been upgrade from EdgeGallery version 1.1 to version 1.5.1.

EdgeGallery in version 1.5.1 has been added following new features.

- Profile Management of southbound IoT devices
- Added image file management service to solve the problem of image file sharing between EdgeGallery central node modules
- Edgegallery unified portal for Developer, Appstore and MECM.
- Application incubation process optimisation in developer portal
- · All modules support data persistence capability

What is released

Components of the release

OCD (One Click Deployment) Node Components

• Ansible-playbook based single command for ELIOT environment installation.

Master Node Components

- MECM
- Appstore
- Developer Platform
- Hawkbit
- Portal

EDGE Node Components

- MEP Agent
- MEP Server
- Applcm (MEPM)
- EdgeX
- RabbitMQ
- OPC-UA

Dependencies of the release (upstream version, patches)

S. No	Software	Version	Remarks	
1.	Edge Gallery	1.5.1		
2.	Docker	18.09+		
3.	Kubernetes	1.18.7		
4.	EdgeX	Edinburgh	This old version used due to k8s deployment	
5.	OPC-UA	Geneva		

Upgrade Procedures

The ELIOT Cluster installed using Release 6.0 packages has to be uninstalled using uninstall scripts provided in the Release 5.0 .

After uninstall need to execute the Ansbile command using OCD. Details given in Installation Document.

Release Data

New Features

#	Feature	Category	Description
1	One Click Deployment	Platform Feature	OCD scripts optimisations for easier up gradation of EdgeGallery versions.
2	Edge Gallery	Platform Feature	upgrade EdgeGallery upstream from 1.1 to 1.5.1

Functionality changes

Not Applicable

Software Version Changes

#	Name	Category	Description
1.	Kubernetes	Software Enhancement	Version upgraded from 1.17.2 to 1.18

Enhancements

Not Applicable

Version change

1.0.0

Module version changes

Document Version Changes

Version No.	Date	Author	Rationale
0.1	20-August-2021	ELIOT Blueprint Team	First Draft

Deliverable

Software Deliverable

Software is available in https://gerrit.akraino.org/r/admin/repos/eliot

Documentation Deliverable

- ELIOT R6 IOTGateway API documentation
- ELIOT R6 IoT Gateway Architecture Document
- ELIOT R6 IoT Gateway Test Document
 ELIOT R6 IoT Gateway Installation Guide
 ELIOT R6 IoT Gateway Release Notes

Fixed Issues and Bugs

N/A

Known Limitations, Issues and Workarounds

System Limitations

N/A

Known Issues