KNI PAE Release 2 Notes

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Release Notes for the KNI Provider Access Edge

Summary

The Provider Access Edge blueprint aims to provide a platform for running NFV (e.g. vRAN, vBNG, SEBA) and MEC (e.g. MobileEdgeX) workloads on a small footprint, self-managing Kubernetes-on-bare metal cluster. The release 1 blueprint supports managing a whole edge stack only using Kubernetes resource configs (manifests). Edge stacks created with this blueprint can run both containerised and VM-based workloads (via KubeVirt) on a common platform. Release 1 also includes multi-network support (via Multus). Applications on top of this platform are managed via the Operator Framework.

In Release 2, we worked on general stability of the project, and we also added new features:

- functionality to deploy baremetal clusters in a total automated way
- · support for CentOS realtime nodes, and its realtime tuning
- added Ceph support for storage

What is Released

Components of the release (Akraino new)

Helper tool simplifying CI/CD based blueprint deployments into AWS, libvirt, and bare metal using the upstream OpenShift Kubernetes Distro (OKD): https://gerrit.akraino.org/r/admin/repos/kni/installer

Manifests for configuring Kubernetes cluster, and adding additional workloads for Mobile Edge Applications: https://gerrit.akraino.org/r/admin/repos/kni/blueprint-pae

All our code is released under Apache license: https://www.apache.org/licenses/LICENSE-2.0.html

Dependencies of the release (upstream version, patches)

- OKD v4.2 GA
- KubeVirt v0.20.2
- Ceph v14.2.3-20190904
- Multus commit d3a1815632cc3e1c7beb10165f960b4708d097fa

Upgrade Procedures

N/A

Release Data

Enhancements

N/A

Functionality changes fo Release 2

Baremetal deployment totally automated

New Features for Release 2

- Added support for Centos 7 RT nodes and realtime tuning
- · Added Ceph support

Version change

2.0.0

Module version changes

N/A

Document Version Changes

Version No.	Date	Author	Rationale
0.1	30-May-2019	KNI Blueprint Team	First Draft
1.0	15-Nov-2019	KNI Blueprint Team	Corrected version
2.0	25-Nov-2019	KNI Blueprint PAE team	Release 2 version

Deliverable

Software Deliverable

Software is available in the Akraino KNI repo.

Documentation Deliverable

- KNI PAE Architecture document
- KNI PAE Installation Guide
- KNI PAE Test document
- KNI PAE Release 2

Fixed Issues and Bugs

N/A

Known Limitations, Issues and Workarounds

System Limitations

Support for RHCOS-RT will be added in next releases. Open Air Interface will be added in next releases.

Known Issues

N/A

Workarounds

N/A