ICN R3 Release Notes

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Summary

ICN v0.4.0 is released as a part of ICN R3 release.

what is released?

We're pleased to announce the delivery of Akraino ICN R3 release. All the components are de-coupled and they can run standalone and they all integrated with ICN installation script.

components of the release (Akraino new)

The main themes of this release are:

Metal3 Provisioning script: Metal3 IPMI provisioning script and de-provisioning script for bare-metal and Virtual deployment with IPMI LAN protocol support

Binary Provisioning agent(BPA) Operator:

- BPA operator is provision k8s cluster in Bare-metal and virtual deployment provisioned by metal3. BPA operator uses the metal3 information
- BPA operator provision **nested K8s cluster**(K8s cluster inside a VM maintained by K8s). BPA manages k8s based VM under Cloud

Binary Provisioning agent(BPA) Rest API controller: Binary Provisioning agent Rest API controller runs as K8s service in the bootstrap cluster. Allow the user to upstream software, container images and OS images

Kubernetes deployment(KuD): KuD is the multi-cluster installer having 3 installation provision type to install k8s multi-cluster in Baremetal, VM and containerized solution. KUD is part of Multicloud-k8s project in ONAP. KUD is released with multiple components as folllows:

Software released and packaged with ICN:

Components	Link	License	Akraino Release target
Provision stack - Metal3	https://github.com/akraino-icn/baremetal-operator - v1.0-icn	Apache License 2.0	R3
Ironic - Ironic IPA downloader	https://github.com/akraino-icn/ironic-ipa-downloader - v1.0-icn	Apache License 2.0	R3
Ironic - Ironic image	https://github.com/akraino-icn/ironic-image - v1.0-icn	Apache License 2.0	R3
Ironic - Ironic Inspector Image	https://github.com/akraino-icn/ironic-inspector-image - v1.0-icn	Apache License 2.0	R3
Host Operating system	Ubuntu 18.04	GNU General Public License	R3

NIC drivers	XL710 - https://www.intel.com/content/dam/www/public/us/en/documents/datasheets/xl710-10-40-controller-datasheet.pdf	GNU General Public License Version 2	R3
QAT drivers	Intel® C627 Chipset - https://ark.intel.com/content/www/us/en/ark/products/97343/intel-c627-chipset.html	GNU General Public License Version 2	R3
Intel® Optane™ DC Persistent Memory	Intel® Optane™ DC 256GB Persistent Memory Module - https://www.intel.com/content/www/us/en/products/memory-storage/optane-dc-persistent-memory/optane-dc-256gb-persistent-memory-module.html PMDK: Persistent Memory Development Kit - https://github.com/pmem/pmdk/	SPDX-License-Identifier - BSD-3-Clause	R3
ONAP	https://git.onap.org/multicloud	Apache License 2.0	R3
Workloads	OpenWRT SDWAN - https://openwrt.org/	GNU General Public License Version 2	R3
KUD	https://git.onap.org/multicloud/k8s/	Apache License 2.0	R3
Kubespray	https://github.com/kubernetes-sigs/kubespray v2.12.6	Apache License 2.0	R3
K8s	https://github.com/kubernetes/kubeadm - v1.16.9	Apache License 2.0	R3
Docker	https://github.com/docker - 18.09	Apache License 2.0	R3
Virtlet	https://github.com/Mirantis/virtlet -1.4.4	Apache License 2.0	R3
SDN - OVN	https://github.com/ovn-org/ovn - 0.3.0	Apache License 2.0	R3
OpenvSwitch	https://github.com/openvswitch/ovs - 2.12	Apache License 2.0	R3
Ansible	https://github.com/ansible/ansible - 2.9.7	Apache License 2.0	R3
Helm	https://github.com/helm/helm - 2.9.1	Apache License 2.0	R3
Istio	https://github.com/istio/istio - 1.0.3	Apache License 2.0	R3
Rook/Ceph	https://rook.io/docs/rook/v1.0/helm-operator.html v1.0	Apache License 2.0	R3
MetalLB	https://github.com/danderson/metallb/releases - v0.7.3	Apache License 2.0	R3
OVN4NFV-K8Ss-Plugin	https://github.com/opnfv/ovn4nfv-k8s-plugin - v0.9.0	Apache License 2.0	
Device Plugins	https://github.com/intel/intel-device-plugins-for-kubernetes - SRIOV	Apache License 2.0	R3
Node Feature Discovery	• https://github.com/kubernetes-sigs/node-feature-discovery - 0.4.0	Apache License 2.0	R3
CNI	https://github.com/coreos/flannel/ - release tag v0.11.0 https://github.com/containernetworking/cni - release tag v0.7.0 https://github.com/containernetworking/plugins - release tag v0.8.1 https://github.com/containernetworking/cni#3rd-party-plugins - Multus v3.3tp, SRIOV CNI v2.0(with SRIOV Network Device plugin)	Apache License 2.0	R3

Dependencies of the release (upstream version, patches)

ICN BP depends on all software version in the table Software released and packaged with ICN:

Upgrade Procedures

not applicable

Release Data

TBD

Enhancements

Functionality changes

not applicable

New Features

not applicable

Version change

Module version changes

not applicable

Document Version Changes

not applicable

Deliverable

Software Deliverable

ICN repo is available here: ICN repo

Documentation Deliverable

version	Documents name	Authors	last update
v1.0	ICN Architecture Document	ICN Contributors	15 May 2020
v1.0	ICN Installation Guide	ICN Contributors	15 May 2020
v1.0	ICN Release Notes for ICN	ICN Contributors	15 May 2020
v1.0	ICN Test Document	ICN Contributors	15 May 2020

Document Version Changes

Version	Authors	Data released
v1.0	ICN Contributors	29 May 2020

Fixed Issues and Bugs

Issues are captured here- ICN fixed Issues and Bugs

Known Limitations, Issues and Workarounds

System Limitations

ICN BP works on Ubuntu 18.04

Known Issues

Issues	Description
ICN-365 - Getting issue details... STATUS	Reduce the KUD installation time with customs options

Workarounds

no work appliable

References