ICN R3 Timeline

Goals

- Distributed Cloud Manager
- SD-eWAN Controller
- Openness Integration in ICN
- SFC in OVN4NFV
- ICN Readiness
- ICN Maturity

Timelines

Start Date	Release	Sprint	Notes
Jan 15th	v0.3.1	Sprint9 Sprint10 Sprint11	• ICN bugs • KUD Bugs - OVN, SRIOV, networking • KUD reset/scaling • KUD Deliverables - QAT, CMK • BPA operator reset, scaling • Virtlet Remote access • DCM - API, Design and architecture lighting talk. Phase 1 deliverables • SDWAN - API. Design and architecture lighting talk, Phase 1 deliverables • Openness, Design and architecture lighting talk, Phase 1 deliverables • KUD Updates lighting talk, Phase 1 deliverables • Akraino Maturity Lighting talk & plans • lab setup
Feb 26th	v0.3.2	Sprint12 Sprint13 Sprint14	• DCM, Phase 2 deliverables • SDWAN, Phase 2 deliverables • Openness, Phase 2 deliverables • KUD, Phase 2 deliverables • Akraino Maturity, CI/CD updates - Phase 1 deliverable
April 1st	v0.3.2	Sprint15- April 1st Sprint16 - April 15th Sprint17 - April 29th	• DCM, Phase 3 deliverables • SDWAN, Phase 3 deliverables • Openness, Phase 3 deliverables • KUD, Phase 3 deliverables • Akraino Maturity, Blue Val, CI/CD - Phase 2 deliverable
April 30th	v0.3.3		• DCM, Final deliverables • SDWAN, Final deliverables • Openness, Final deliverables • Infra Global controller, Final deliverables • KUD, Final deliverables • Akraino Maturity, Blue Val CI/CD - Final deliverable

	Release /Tag	Features	Plan/Status Tracking **(Please update your JIRAs and note any issues/road blocks with date stamp)**

Jan 15th	**v0.3.1**		Itohan Ukponmwan • Todo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
~~ICN-214~~ - DCM dev works DONE	~~ICN-230~~ - Install 2 Istio control planes in one cluster DONE	Sprint 10	Sprint 11	
~~ICN-214~~ - DCM dev works DONE	~~ICN-190~~ - Ramp up DCM DONE	Sprint 10	Sprint 11	
ICN-3 - Binary provisioning Agent controller IN PROGRESS	~~ICN-173~~ - BPA controller to throw error if the same hosts in multiple provisioning CR DONE	Sprint 9	Sprint 10	
	ICN-266 - Modify Istio to use different suffix IN PROGRESS	Sprint 13	Sprint 14	
	~~ICN-282~~ - Write DCM code to read from database DONE	Sprint 13	Sprint 14	
	~~ICN-294~~ - Ramp Up on Mongo DB GO API DONE	Sprint 13	Sprint 13	
	~~ICN-300~~ - Ramp up on Resource Synchronizer Library DONE	Sprint 14	Sprint 14	
	ICN-325 - Install istio on multiple namespaces IN PROGRESS	Sprint 14		
	ICN-326 - Figure out how to create user using ONAP4k8s resource sync TO DO	Sprint 14		

Igor Duarte Cardoso

Bluval for ICN

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
~~ICN-214~~ - DCM dev works DONE	~~ICN-376~~ - DCM re-ramp on Itohan's docs DONE	Sprint 20		Istio
	~~ICN-380~~ - Install Istio for replicated control planes DONE	Sprint 20		Istio
	~~ICN-381~~ - Test forwarding traffic to custom suffix DONE	Sprint 20		Istio
	~~ICN-382~~ - Design+document APIs for Service Mesh deployment controller DONE	Sprint 20		Istio
	~~ICN-383~~ - Evaluate "Kubeconfig API (WORK IN PROGRESS)" DONE	Sprint 20		Istio
	~~ICN-384~~ - Evaluate apply.go implementation DONE	Sprint 20		Istio
	~~ICN-385~~ - Create Namespace in all clusters DONE	Sprint 21+		Istio
	~~ICN-386~~ - Create User in all clusters DONE	Sprint 21+		Istio
	~~ICN-387~~ - Create Quota in all clusters DONE	Sprint 22+		Istio
	~~ICN-388~~ - Create Service mesh in all clusters DONE	Sprint 22+		Istio
ICN-1 - Metal3 Baremetal Operator in ICN Stack IN PROGRESS	~~ICN-363~~ - Review Rama's ICN patches DONE	Sprint 18	Sprint 18	
ICN-217 - KuD R3 Release works IN PROGRESS	~~ICN-279~~ - ECMO V2 Integration in ICN R3 Release version DONE	Sprint 19	Sprint 19	
~~ICN-256~~ - ICN Bluval compliance for R3 DONE	~~ICN-342~~ - Test run of ICN Bluval DONE	Sprint 16	Sprint 16	
	~~ICN-253~~ - Deploy Jenkins ICN DONE	Sprint 16	Sprint 16	
	~~ICN-345~~ - Configure Jenkins for ICN Bluval DONE	Sprint 16	Sprint 16	
	~~ICN-346~~ - Implement changes for ICN Bluval private Jenkins DONE	Sprint 16	Sprint 16	
	~~ICN-347~~ - Remove ICN Bluval ci-management dependency DONE	Sprint 17	Sprint 17	
	~~ICN-348~~ - Investigate missing OS Bluval testing DONE	Sprint 17	Sprint 17	
	~~ICN-350~~ - Seek solution for k8s conformance Bluval failure DONE	Sprint 17	Sprint 17	
	~~ICN-357~~ - Investigate kubehunter failures DONE	Sprint 17	Sprint 17	
	~~ICN-360~~ - Jenkins Bluval: always fresh-install KUD cluster DONE	Sprint 18	Sprint 19	
	~~ICN-361~~ - Test Randy's remediations for kubehunter DONE	Sprint 18	Sprint 18	
	~~ICN-362~~ - Write ICN Bluval wiki page DONE	Sprint 18	Sprint 18	
	~~ICN-364~~ - Jenkins job configurations for long-term Bluval DONE	Sprint 18	Sprint 19	
	~~ICN-370~~ - Prepare final report for security SC DONE	Sprint 19	Sprint 19	

Enyinna Ochulor

- Todo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
~~ICN-214~~ - DCM dev works DONE	~~ICN-216~~ - Ramp on gRPC and REST in GO DONE	Sprint 9		
	~~ICN-226~~ - Model and Present Sample DCM DONE	Sprint 10		
	~~ICN-218~~ - Build DCM service - Add CRUD operations (without logic) DONE	Sprint 10		

Tingjie Chen

Persistent Memory Container Storage Interface (PMEM-CSI)

- Investigate the setup for PMEM-CSI demo
- Setup and Build Plugin for Optane PM
- Architecture and Use case design for PMEM

Epic	JIRA Story	Sprint /Estimated Completion Date	Status /Actual Completion Date	Notes
ICN-243 - Persistent Memory Container Storage Interface (PMEM-CSI) TO DO	~~ICN-244~~ - Investigate the setup for PMEM-CSI demo DONE	Sprint 10		
	~~ICN-267~~ - Setup and Build Device Plugin for Optane PM DONE	Sprint 13		Submit draft patch for enabling PMEM-CSI plugin in KUD repo.
	~~ICN-268~~ - Architecture and Use case Design for Optane PM DONE	Sprint 13		Proposed several scenarios for AEP and CSI usage for ICN, need the discussion and approval.
	~~ICN-324~~ - E2E support for PMEM-CSI plugin DONE	Sprint 15		E2E support for PMEM-CSI plugin
	~~ICN-325~~ - Documentation for AEP and PMEM-CSI plugin DONE	Sprint 15		Documentation for AEP and PMEM-CSI plugin

- SD-EWAN Restful API (MWAN3) definition
- WMAN3 Restful API POC
- SD-EWAN Service Restful API
  - Get available services (e.g. mwan3, ipsec, firewall)
  - Execute Service

Huifeng Le

Epic	JIRA Story	Sprint /Estimated Completion Date	Status /Actual Completion Date	Notes
ICN-190 - E2E usages for SDWAN module in ICN to support multiple cluster communcation through security WAN intertaces TO DO	~~ICN-211~~ - MWAN3 Restful API DONE	Sprint 9	Sprint 9	
	~~ICN-221~~ - EWAN Restful API POC DONE	Sprint 10	Sprint 10	
	~~ICN-222~~ - EWAN Restful API Go Client POC DONE	Sprint 10	Sprint 10	
	~~ICN-230~~ - EWAN Service Restful API DONE	Sprint 10	Sprint10	
	~~ICN-271~~ - EWAN MWAN3 API implementation DONE	Sprint 11	Sprint 11	
	~~ICN-272~~ - EWAN Firewall API definition DONE	Sprint 12	Sprint 12	
	~~ICN-273~~ - EWAN Firewall API implementation DONE	Sprint 13	Sprint 13	
	~~ICN-301~~ - EWAN Firewall CRD/Rest API integration DONE	Sprint 13		postpone to R3.1
	~~ICN-313~~ - PoC for integration scenario DONE	Sprint15	Sprint15	
	~~ICN-314~~ - SDEWAN E2E test scenario integration DONE	Sprint16	Sprint17	
	~~ICN-372~~ - SDEWAN Central Controller /Traffic Hub design DONE	Sprint21		
	~~ICN-391~~ - SDEWAN Central Controller: POC for golang Restful API Server DONE	Sprint21		

- ICN R3 Delieverables

Kuralamudhan Ramakrishnan

- All bug fixed for ICN R2 and customer readiness
- DCM, SD-eWAN, Openness in ICN R3 release
- Offline deployment & Global controller completion in R3
- Launch & Performance Dashboard
- CI/CD system & ICN maturity

Epic	JIRA Stroy	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-61 - ICN CI / CD works TO DO	~~ICN-178~~ - ICN SDL works DONE	Sprint 9	Sprint 9	
ICN-1 - Metal3 Baremetal Operator in ICN Stack IN PROGRESS	~~ICN-193~~ - Metal3 Refactoring & ICN R2 bug Fixes - OS and user data DONE	Sprint 9	Sprint 11	
~~ICN-214~~ - DCM dev works DONE	~~ICN-192~~ - DCM lighting talk - API & Design development DONE	Sprint 9	Sprint 9	
ICN-191 - Integration OpenNESS with ICN TO DO	~~ICN-194~~ - Openness & SDWAN Lighting talks - API & design prep DONE	Sprint 9	Sprint 9	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-220~~ - Ramp up on OVN4NFV and running the patches DONE	Sprint 11	Sprint 11	
~~ICN-228~~ - Ramp up on OVN4NFV and running the patches DONE	~~ICN-267~~ - ICN script updates DONE	Sprint 11	Sprint 11	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-250~~ - OVN containerization DONE	Sprint 12	Sprint 12	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-263~~ - Adding OVN4K8s in Kubespray DONE	Sprint 14/15/16/17	Sprint 17	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-264~~ - Making OVN4NFV as the primary network DONE	Sprint 12/13	Sprint 13	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-293~~ - Refactoring OVN coding for OVN containerzation daemonset DONE	Sprint 13/14	Sprint 13/14	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-311~~ - Introducing Provider Network Direct type DONE	Sprint 14	Sprint 14	
ICN-1 - Metal3 Baremetal Operator in ICN Stack IN PROGRESS	~~ICN-321~~ - Bug fixes & Testing for ICN Baremetal Operator version DONE	Sprint 14	Sprint 14	
ICN-1 - Metal3 Baremetal Operator in ICN Stack IN PROGRESS	~~ICN-319~~ - Fix the ICN baremetal operator version DONE	Sprint 14	Sprint 14	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-322~~ - Bug fixes for the OVN4NFV-K8s plugin primary routing issues DONE	Sprint 15	Sprint 15	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-315~~ - Akraino ICN installation issue on baremetal server #ICN DONE	Sprint 15	Sprint 15	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-330~~ - CNI Server development in ONAP4K8s DONE	Sprint 16	Sprint 16	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-331~~ - CNI shim development in ONAP4K8s DONE	Sprint 16	Sprint 16	
ICN-189 - ICN CI/CD TO DO	~~ICN-351~~ - ICN BM and VM installer script improvement DONE	Sprint 17	Sprint 17	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-343~~ - Post review patches for OVN4NFV DONE	Sprint 20/21		
ICN-189 - ICN CI/CD TO DO	~~ICN-340~~ - Documentation and patch review for ICN Release DONE	Sprint 18/19/20		
ICN-236 - OVN4K8SNFV development work IN PROGRESS	~~ICN-350~~ - Post review for Kubespray DONE	Sprint 20/21		
ICN-189 - ICN CI/CD TO DO	~~ICN-359~~ - Code review and CI/CD Testing DONE	Sprint 18/19	Sprint 19	

ramamani yeleswarapu

- Todo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-1 - Metal3 Baremetal Operator in ICN Stack IN PROGRESS	ICN-225 - Nested K8s remote access use case IN PROGRESS	Sprint 12		
	~~ICN-261~~ - Create and test end-to-end verifier script for virtlet remote access use case DONE	Sprint 12	Sprint 12	
	~~ICN-262~~ - Create new ansible playbook for bpa in KuD for remote access use case DONE	Sprint 12	Sprint 12	
	ICN-291 - KUD patches for nestedk8s IN PROGRESS	Sprint 14		
	ICN-292 - ICN patch for nestedk8s changes IN PROGRESS	Sprint 14		

- SD-EWAN CRD definition
- MWAN3 CRD definition
- SD-EWAN operator
  - Framework
  - Create SD-EWAN CNF based on SD-EWAN CRD

Cheng Li

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-190 - E2E usages for SDWAN module in ICN to support multiple cluster communcation through security WAN intertaces TO DO	~~ICN-209~~ - SDEWAN CRD definition DONE	Sprint 9	Sprint 9	
	~~ICN-210~~ - MWAN3 rule CRD definition DONE	Sprint 9	Sprint 9	
	~~ICN-205~~ - SDEWAN Operator Framework DONE	Sprint 10/11/12	Sprint 12	
	~~ICN-260~~ - Firewall CRD definition DONE	Sprint 12	Sprint 12	
	~~ICN-312~~ - Sdewan CRD re-design DONE	Sprint 13	Sprint14	
	~~ICN-320~~ - Sdewan controller framework DONE	Sprint14/15	Sprint 17	
	~~ICN-330~~ - Extract similar logical of CRD controllers DONE	Sprint 17	Sprint 17	Postpone to R3.1
	~~ICN-368~~ - implement label based permission system, phase one DONE	Sprint 18	Sprint 18	Postpone to R3.1
	~~ICN-369~~ - implement label based permission system, phase two DONE	Sprint 19	Sprint 19	Postpone to R3.1
	~~ICN-270~~ - Sdewan firewall controller implementation DONE	Sprint 13	Sprint 19	Postpone to R3.1
	~~ICN-288~~ - Add Sdewan firewall CRD DONE	Sprint 13	Sprint 19	Postpone to R3.1
	~~ICN-301~~ - EWAN Firewall CRD /Rest API integration DONE	Sprint 13		Postpone to R3.1
	~~ICN-313~~ - PoC for integration scenario DONE	Sprint15	Sprint15	
	~~ICN-314~~ - SDEWAN E2E test scenario integration DONE	Sprint16	Sprint17	

Akhila Kishore

- Todo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-217 - KuD R3 Release works IN PROGRESS	~~ICN-223~~ - KuD Clean up Script DONE	Sprint 10		
	~~ICN-227~~ - KuD lighting talk presentation DONE	Sprint 11		
	~~ICN-190~~ - Integrate QAT device plugin to KuD add-ons. DONE	Sprint 11/12		

Le Yao

- Todo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-217 - KuD R3 Release works IN PROGRESS	~~ICN-260~~ - KUD Multi Vagrant 18.04 issue DONE	Sprint 11/12/14/15	Sprint 15	
	~~ICN-281~~ - Vagrant vm can not get correct name server in ubuntu-1804. DONE	Sprint 11	Sprint 11	
	~~ICN-285~~ - Installer vm cannot install nfs because of nameserver issues. DONE	Sprint 12/14/15	Sprint 15	
	~~ICN-286~~ - All other VMs are unreachable for Installer VM DONE	Sprint 12	Sprint 12	
	~~ICN-303~~ - Compute01 no spcae left in KUD Multi Vagrant DONE	Sprint 12	Sprint 12	
	~~ICN-316~~ - Vagrant Box Build with base Ubuntu-18.04 for ICN DONE	Sprint 13	Sprint 13	
	~~ICN-208~~ - Upgrade the Kubespray 2.12 for KUD DONE	Sprint 16/17/18/19	Spring 19	
	~~ICN-327~~ - criproxy failed to start up after node reboot DONE	Sprint 16/17	Sprint 17	
	~~ICN-326~~ - Vagrant Virtlet testing not working in proxy testings DONE	Sprint 16	Sprint 16	
	~~ICN-237~~ - QAT device plugin deploy issue DONE	Sprint 18/19/20	Sprint 20	
	~~ICN-367~~ - KUD CI Folder installer DONE	Sprint 18/19	Sprint 19	
	~~ICN-377~~ - Catch the cnf Pod no IP error DONE	Sprint 19	Sprint 19	
	~~ICN-378~~ - Add watch function for cnf deployment and CR DONE	Sprint 19	Sprint 19	
	~~ICN-380~~ - Apply watch to all controllers and test DONE	Sprint 19	Sprint 19	
	~~ICN-354~~ - Fix ICN node reboot issue for the containerized version DONE	Sprint 19/20		
	~~ICN-393~~ - Create CNF helm chart DONE	Sprint 20		
	~~ICN-394~~ - Create helm chart for ICN SDEWAN controller DONE	Sprint 20		

Liang Ding

ICN-296 - add CMK support in multicloud/k8s KuD IN PROGRESS

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-217 - KuD R3 Release works IN PROGRESS	ICN-296 - add CMK support in multicloud/k8s KuD IN PROGRESS			

Ruoyu Ying

- Todo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-190 - E2E usages for SDWAN module in ICN to support multiple cluster communcation through security WAN intertaces TO DO				
	~~ICN-242~~ - Investigate IPSec implementation in strongswan DONE	Sprint 11/12		
	~~ICN-275~~ - IPSec CRD Design DONE	Sprint 11/12	Sprint 11	
	~~ICN-276~~ - IPSec RESTful API Design DONE	Sprint 11/12	Sprint 11	
	~~ICN-289~~ - IPSec CRD and REST API implementation DONE	Sprint 18	Sprint 18	
	~~ICN-313~~ - PoC for integration scenario DONE	Sprint15	Sprint15	
	~~ICN-314~~ - SDEWAN E2E test scenario integration DONE	Sprint16	Sprint17	
	~~ICN-390~~ - SDEWAN end-to-end scenario with CRD & controller DONE	Sprint19	Sprint19	
	~~ICN-375~~ - Enable end-to-end test scenario in bare-metal DONE	Sprint20/21		
	~~ICN-373~~ - SDEWAN CNF: enable VTI router based IPSec DONE	Sprint21/22		
	~~ICN-414~~ - Demos to showcase sdewan functionalities DONE	Sprint23/24	Sprint 23	
	ICN-451 - Investigation on BGP /OSPF support IN PROGRESS	Sprint 26/27		

Matt Welch

- EdgeX Foundary install with KUD and demo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-239 - Install EdgeX Foundary using KUD, with tests and usage demo IN PROGRESS	~~ICN-229~~ - Create test to verify edgeX foundry services DONE	Sprint 14	Sprint 14	
	ICN-237 - Create demo for EdgeX Foundary IN PROGRESS	Sprint 14		
	ICN-304 - Convert EdgeX docker compose files into K8s deployments IN PROGRESS	Sprint 14		
	ICN-324 - Document EdgeXFoundry docker-compose process in Wiki IN PROGRESS	Sprint 14		

- OpenNESS 19.12 evaluation
- OpenNESS gap investigation for ICN integration
  - Network Policy
  - Cross-Node communication
  - OS (Ubuntu 18.04)
  - DNS
  - Security

Chenjie Xu

Epic	Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-191 - Integration OpenNESS with ICN TO DO	~~ICN-213~~ - OpenNESS gap for Network Policy DONE	Sprint 9	Sprint 9	
	~~ICN-232~~ - OpenNESS gap for OS (Ubuntu) DONE	Sprint 10	Sprint 10	
	~~ICN-233~~ - OpenNESS gap for Cross-Node communication DONE	Sprint 10	Sprint 10	
	~~ICN-245~~ - OpenNESS gap for DNS DONE	Sprint 10	Sprint 10	
	~~ICN-246~~ - OpenNESS gap for Security DONE	Sprint 10	Sprint 17	
	~~ICN-278~~ - Investigate Openness integration for multus, sriov, nfd, bios, fpga, cmk, topology manger DONE	Sprint 12	Sprint 12	
	~~ICN-277~~ - Openness_deployer PR in ICN tool folder DONE	Sprint 12	Sprint 17	
	~~ICN-297~~ - Develop test cases for multus, sriov cni, sriov network device plugin, nfd, CMK, topology manager DONE	Sprint 12/13	Sprint 17	
	~~ICN-298~~ - Integrate eaa via onap4k8s DONE	Sprint 12/13	Sprint 17	
	~~ICN-332~~ - Ensure that EAA supports distributed applications DONE	Sprint 15/16	Sprint 17	
	ICN-333 - Investigate OpenNESS 20.03 IN PROGRESS	Sprint 16		
	ICN-340 - Integrate Topology Manager IN PROGRESS	Sprint 16		