

ICN R5 Timeline

Goals

- TBD

JIRA TRACKER

Features	Plan/Status Tracking (Please update your JIRAs and note any issues/road blocks with date stamp)				
- 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 communication through security WAN interfaces 	 ICN-211 - MWAN3 Restful API 	Sprint 9	Sprint 9	
		 ICN-221 - EWAN Restful API POC 	Sprint 10	Sprint 10	
		 ICN-222 - EWAN Restful API Go Client POC 	Sprint 10	Sprint 10	
		 ICN-238 - EWAN Service Restful API 	Sprint 10	Sprint10	
		 ICN-271 - EWAN MWAN3 API implementation 	Sprint 11	Sprint 11	
		 ICN-273 - EWAN Firewall API definition 	Sprint 12	Sprint 12	
		 ICN-273 - EWAN Firewall API implementation 	Sprint 13	Sprint 13	
		 ICN-301 - EWAN Firewall CRD/Rest API integration 	Sprint 13	Sprint20	postpone to R3.1
		 ICN-313 - PoC for integration scenario 	Sprint15	Sprint15	
		 ICN-314 - SDEWAN E2E test scenario integration 	Sprint16	Sprint17	
		 ICN-372 - SDEWAN Central Controller/Traffic Hub design 	Sprint23		
		 ICN-391 - SDEWAN Central Controller: POC for golang Restful API Server 	Sprint21	Sprint21	
		 ICN-420 - SDEWAN Central Controller: POC for rsync integration 	Sprint23	Sprint23	
		 ICN-427 - SDEWAN Central Controller: POC for remote k8s connection through hub 	Sprint24	Sprint24	
		 ICN-447 - SDEWAN Central Controller: Cert Manager Utility 	Sprint25	Sprint25	
		 ICN-440 - SDEWAN Central Controller: framework with basic features 	Sprint26	Sprint27	
		 ICN-454 - SDEWAN Central Controller: IP Address Manager 	Sprint26	Sprint26	
		 ICN-484 - SDEWAN Central Controller: Hub Manager 	Sprint28/Sprint29 /Sprint30	Sprint30	
		 ICN-485 - SDEWAN Central Controller: Connection Manager 	Sprint28	Sprint28	
		 ICN-493 - SDEWAN Central Controller: Device Manager 	Sprint29/Sprint30 /Sprint31	Sprint37	

+ ICN-1 - Metal3 Baremetal Operator in ICN Stack IN PROGRESS	🚩 ICN-310 - 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-320 - CNI Server development in ONAP4K8s DONE	Sprint 16	Sprint 16	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-321 - CNI shim development in ONAP4K8s DONE	Sprint 16	Sprint 16	
+ ICN-189 - ICN CI/CD TO DO	🟢 ICN-361 - 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	Sprint 21	
+ ICN-189 - ICN CI/CD TO DO	🟢 ICN-346 - Documentation and patch review for ICN Release DONE	Sprint 18/19/20	Sprint 21	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-358 - Post review for Kubespray DONE	Sprint 20/21	Sprint 21	
+ ICN-189 - ICN CI/CD TO DO	🟢 ICN-359 - Code review and CI/CD Testing DONE	Sprint 18/19	Sprint 19	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-403 - Unit testing in OVN4NFV CNI DONE	Sprint 24/25/26	Sprint 26	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-406 - OVN4NFV Kubespray with Centos 7 DONE	Sprint 24/25/26	Sprint 26	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-404 - OVN4NFV Service Function Chaining development DONE	Sprint 22	sprint 22	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-408 - EMCO and SFC demo preparation DONE	Sprint 22	sprint 22	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-415 - Dev. rebased OVN4NFV SFC development with Kubespray DONE	Sprint 23	Sprint 23	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-416 - Test rebased OVN4NFV SFC Development with Kubespray DONE	Sprint 23	Sprint 23	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-435 - SFC Demo DONE	Sprint 24	Sprint 24	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-434 - ICN SDL works DONE	Sprint 29/30	Sprint 30	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-426 - SRIOV and SFC chaining CR proposal DONE	Sprint 24/25	Sprint 25	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-452 - Ramp up on OVN with VLAN and OVN Load balancer DONE	Sprint 28/29	Sprint 29	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-459 - Creating OVN ACL based Network policy PoC DONE	Sprint 28/29/30	Sprint 30	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-460 - Network Policy Controller initial PoC work DONE	Sprint 28/29/30	Sprint 30	
+ ICN-189 - ICN CI/CD TO DO	🟢 ICN-502 - ICN Documentation and release works DONE	Sprint 30/31	Sprint 31	
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-505 - Network Policy Port Group creating using OVS ACN ACL IN PROGRESS	Sprint 32/33	Sprint 33	Moved to backlog
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-506 - Construct Egress /Ingress OVN ACL based on the NP Matches IN PROGRESS	Sprint 32/33	Sprint 33	Moved to backlog
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-507 - Network Policy Namespace selector and Pod Selector DONE	Sprint 32/33	Sprint 33	Moved to backlog
+ ICN-236 - OVN4K8SNFV development work IN PROGRESS	🟢 ICN-520 - Enhance SFC to have multiple left/Right Network DONE	Sprint 34/35	Sprint 35	

ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-530 - Adding additional route in the pods(both running and creating) DONE	Sprint 34/35	Sprint 35	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-531 - Testing additional SFC features DONE	Sprint 36/37	Sprint 38	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-542 - SFC connectivity using pod labels alone DONE	Sprint 36/37	Sprint 37	
ICN-534 - Testing additional SFC features DONE	ICN-548 - SFC connectivity using Pod labels and Provider networks DONE	Sprint 36/37	Sprint 37	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-564 - Jira project doesn't exist or you don't have permission to view it.	Sprint 38/39/40	n/a	Moved to Todd Malsbary - ICN-593 - Enable nodus (formerly ovn4nfv-k8s-network-controller) to work with multiple multus networks DONE
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-566 - OVN4NFV-K8S-Plugin ACL framework DONE	Sprint 38	Sprint 38	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-566 - Draft proposal for SFC with K8s NPWG DONE	Sprint 38	Sprint 38	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-579 - Network Policy initial phase 1 DONE	Sprint 39/40/41	Sprint 41	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-574 - Network and Service Function Chaining in a single CR DONE	Sprint 39	Sprint 39	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-578 - Kata container with SFC testing DONE	Sprint 39/40	Sprint 40	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-584 - Dynamic virtual network creation DONE	Sprint 40/41/42	Sprint 42	
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-593 - Ip rules to redirect primary network in the SFC IN PROGRESS	Sprint 43/44		
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-595 - SFC proxy PoC IN PROGRESS	Sprint 43/44		
ICN-236 - OVN4K8SNFV development work IN PROGRESS	ICN-597 - Nodus - Ubuntu LTS 20.04 TO DO	Sprint 43/44		

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-363 - Compute01 no spcae left in KUD Multi Vagrant DONE	Sprint 12	Sprint 12	
	ICN-216 - Vagrant Box Build with base Ubuntu-18.04 for ICN DONE	Sprint 13	Sprint 13	
	ICN-368 - Upgrade the Kubespray 2.12 for KUD DONE	Sprint 16/17/18/19	Sprint 19	
	ICN-227 - criproxy failed to start up after node reboot DONE	Sprint 16/17	Sprint 17	

 ICN-336 - Vagrant Virtlet testing not working in proxy testings DONE	Sprint 16	Sprint 16	
 ICN-337 - 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	Sprint 31	
 ICN-399 - Create CNF helm chart DONE	Sprint 20	Sprint 20	
 ICN-384 - Create helm chart for ICN SDEWAN controller DONE	Sprint 20	Sprint 20	
 ICN-412 - A watch to monitor the service IPs changes DONE	Sprint 22	Sprint 22	
 ICN-412 - A new custom Service controller to hold watch function DONE	Sprint 22	Sprint 22	
 ICN-430 - Implement the service RESTful API DONE	Sprint 24/25/26/27	Sprint 27	
 ICN-445 - Implement the CR for Services DONE	Sprint 26/27	Sprint 27	
 ICN-446 - Change the Firewall restart script to update the iptables NAT rules DONE	Sprint 26/27	Sprint 27	
 ICN-455 - Implement the CR for Application DONE	Sprint 29/30/31	Sprint 31	
 ICN-481 - Implement RESTful API for Application DONE	Sprint 29/30	Sprint 30	
 ICN-492 - Test the network connection PoC with Calico as default network DONE	Sprint 29	Sprint 29	
 ICN-495 - Create the Application network access PoC for flannel and OVN DONE	Sprint 28	Sprint 28	
 ICN-508 - Create Non-root user in CNF DONE	Sprint 31	Sprint 31	
 ICN-509 - Update scripts from helm version v2 to v3 DONE	Sprint 30	Sprint 30	
 ICN-510 - CNF configuration and rule change DONE	Sprint 30	Sprint 30	
 ICN-511 - Handle some missing errors and response it DONE	Sprint 31	Sprint 31	
 ICN-512 - License updates in CNF RESTful API DONE	Sprint 31	Sprint 31	
 ICN-514 - Add watch mechanism for pod to auto sync DONE	Sprint 32	Sprint 32	
 ICN-522 - Route CR controller implementation DONE	Sprint 34/35	Sprint 35	
 ICN-523 - Route CNF RESTful API implementation DONE	Sprint 33	Sprint 33	
 ICN-522 - Register service and applicaion CR to webhook DONE	Sprint 34	Sprint 34	
 ICN-533 - Enhance CNF RESTful API DONE	Sprint 33	Sprint 33	
 ICN-534 - Watch the CNF deployment status and sync DONE	Sprint 33	Sprint 33	

 ICN-543 - CNF status response for route request DONE	Sprint 35/36	Sprint 36	
 ICN-544 - Rule CR controller DONE	Sprint 37	Sprint 37	
 ICN-545 - Rule CNF RESTful API DONE	Sprint 36/37	Sprint 37	
 ICN-566 - CNF status response for rule request DONE	Sprint 37	Sprint 37	
 ICN-571 - CNF helm charts safe update for OpenNess DONE	Sprint 37	Sprint 37	
 ICN-566 - Fix loop errors and lint errors (shell, go, yaml) DONE	Sprint 38	Sprint 38	
 ICN-567 - CNF status response for contrack query DONE	Sprint 38	Sprint 38	
 ICN-568 - Copyright fix for OpenNESS integration DONE	Sprint 38	Sprint 38	
 ICN-568 - Update CNF base image to latest stable version 19.07 and verify DONE	Sprint 39	Sprint 39	
 ICN-570 - Build CNF OpenWrt image with custom applications DONE	Sprint 40	Sprint 40	
 ICN-585 - BKM - Build custom application based on OpenWRT source code DONE	Sprint 40	Sprint 40	
 ICN-586 - Fix the contrack and route query errors DONE	Sprint 41	Sprint 41	
 ICN-590 - PoC - Build SCC/RSync image and test with latest rsync code DONE	Sprint 41/42	Sprint 42	
 ICN-587 - Rsync CNF status in overlay controller DONE	Sprint 42	Sprint 42	
 ICN-599 - Integrate latest ewo cnf and crd to icn/sdwan DONE	Sprint 43	Sprint 42	
 ICN-600 - Fix sdewan ewo CI/CD issues and change in icn/sdwan DONE	Sprint 43	Sprint 43	
 ICN-601 - Update codes based on golangci-lint version to 1.40.1 DONE	Sprint 44	Sprint 44	
 ICN-602 - Integrate istio into sdewan overlay controller IN PROGRESS	Sprint 44/45		
 ICN-604 - Fix the null point bug in icn/sdwan and ewo DONE	Sprint 44	Sprint 44	
 ICN-605 - Docs: Setup and guide to integrate auth/virtual_service with istio TO DO	Sprint 45		

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 communication through security WAN interfaces TO DO	ICN-242 - Investigate IPSec implementation in strongswan DONE	Sprint 11/12		
	ICN-276 - IPSec CRD Design DONE	Sprint 11/12	Sprint 11	
	ICN-276 - IPSec RESTful API Design DONE	Sprint 11/12	Sprint 11	
	ICN-280 - 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-300 - SDEWAN end-to-end scenario with CRD & controller DONE	Sprint19	Sprint19	
	ICN-376 - Enable end-to-end test scenario in bare-metal DONE	Sprint20/21		De-prioritized
	ICN-373 - SDEWAN CNF: enable VTI router based IPSec DONE	Sprint21/22	Sprint 26	
	ICN-451 - Investigation on BGP /OSPF support IN PROGRESS	Sprint26/27		De-prioritized
	ICN-484 - SDEWAN Central Controller: Hub Manager DONE	Sprint 28/29/Sprint30		
	ICN-500 - SDEWAN Central Controller: Setup Demo on BM environment DONE	Sprint29/Sprint30	Sprint30	
	ICN-503 - SDEWAN R4 CI testing DONE	Sprint30	Sprint30	
	ICN-493 - SDEWAN Central Controller: Device Manager DONE	Sprint33/34	Sprint34	
	ICN-494 - SDEWAN Central Controller: Hub-Device Manager DONE	Sprint33/34	Sprint34	
	ICN-563 - E2E demo for HCL DONE	Sprint 35/36	Sprint 38	
	ICN-582 - Add status query for IPSEC DONE	Sprint 39/40	Sprint 40	
	ICN-592 - NGS demo support IN PROGRESS	Sprint 41/42		
	ICN-589 - SDEWAN Central Controller: Multiple Hubs support IN PROGRESS	Sprint 44/45		
	ICN-606 - E2E scenario with upgraded cnf(19.07) IN PROGRESS	Sprint 44/45		

Todd Malsbary

• Todo

Epic	JIRA Story	Sprint/Estimated Completion Date	Status/Actual Completion Date	Notes
ICN-5 - Kud for ICN TO DO	ICN-433 - Creating EMCO V2 script in KUD DONE	Sprint 23	Sprint 24	
	ICN-448 - Create plugin test script for vFW for EMCO V2 script in KUD DONE	Sprint 25	Sprint 27	

	 ICN-456 - Run vFW V2 test script as part of ICN install DONE	Sprint 26	Sprint 29	
	 ICN-470 - Review and update plugin_fw_v2.sh for changes to genericPlacementIntent DONE	Sprint 27	Sprint 27	
	 ICN-486 - Update plugin_fw_v2.sh to use emcoctl DONE	Sprint 28	Sprint 43	
	 ICN-486 - Upgrade the Kubespray 2.14 for KUD DONE	Sprint 28	Sprint 30	
	 ICN-513 - Installed kernel cmdline needs intel_iommu=on iommu=pt to support QAT DONE	Sprint 31	Sprint 31	
	 ICN-487 - Get blual running as part of CI for R4 release DONE	Sprint 29	Sprint 29	
	 ICN-505 - Resolve security PASS /FAIL criteria for R4 DONE	Sprint 30	Sprint 31	
	 ICN-453 - Re-playing the vm-setup /setup-playbook causes subsequent provisioning to fail DONE	Sprint 26	Sprint 29	
	 ICN-475 - Baremetal deploy make_bm_hosts step fails when baremetal-operator repo is not present DONE	Sprint 27	Sprint 29	
	 ICN-476 - ".02_verify.sh: line 22: [: too many arguments" when the state is "registration error" DONE	Sprint 27	Sprint 29	
	 ICN-477 - interface is spelled interface (missing r) in several places DONE	Sprint 27	Sprint 29	
	 ICN-483 - metal3 provisioning fails for nvme devices DONE	Sprint 28	Sprint 29	
	 ICN-496 - The ironic-python-agent tar link on http://images.rdoproject.com is gone which breaks bare metal deploy DONE	Sprint 28	Sprint 29	
	 ICN-497 - username and password from nodes.json are unused DONE	Sprint 29	Sprint 29	
	 ICN-504 - Clean steps should treat missing resources as already deleted DONE	Sprint 30	Sprint 31	
	 ICN-573 - Enable static configuration of BareMetalHost interfaces DONE	Sprint 39	Sprint 39	
	 ICN-537 - Create multicloud-emco charts in OOM repository DONE	Sprint 34	Sprint 34	
 ICN-516 - Install addons via EMCO IN PROGRESS	 ICN-517 - Review existing addons and plan for migrating to EMCO deploy DONE	Sprint 33	Sprint 35	
	 ICN-546 - Replace cmk addon with helm chart DONE	Sprint 36/37	Sprint 39	
	 ICN-548 - Replace multus addon with helm chart DONE	Sprint 37	Sprint 39	
	 ICN-551 - Replace nfd addon with helm chart DONE	Sprint 37	Sprint 39	
	 ICN-553 - Replace qat addon with helm chart DONE	Sprint 37/38	Sprint 39	
	 ICN-552 - Replace sriov addon with helm chart DONE	Sprint 38	Sprint 39	
	 ICN-550 - Replace ovn4nlv addon with helm chart DONE	Sprint 38	Sprint 39	

	 IGN-562 - Update emco deploy to 21.03 release DONE	Sprint 39	Sprint 40	
	 IGN-561 - Deploy addons with emco DONE	Sprint 39	Sprint 40	
 IGN-520 - Comprehensive OVN4NFV connectivity tests DONE	 IGN-521 - Create manual deployment of SFC setup DONE	Sprint 33	Sprint 34	
	 IGN-536 - Automate deployment of SFC setup DONE	Sprint 33	Sprint 34	
	 IGN-536 - Automate OVN4NFV connectivity tests DONE	Sprint 34	Sprint 38	
 IGN-510 - Replace virtlet with kubevirt DONE	 IGN-541 - Create kubvirt addon playbook and test script DONE	Sprint 35	Sprint 43	
	 IGN-542 - Replace usage of virtlet in emco plugin_fw_v2 test with kubevirt DONE	Sprint 35		
	 IGN-501 - Enable nodus (formerly ovn4ntv-k8s-network-controller) to work with multiple multus networks DONE	Sprint 40	Sprint 42	
	 IGN-506 - Enable CI/CD for Kata-configured builds DONE	Sprint 42	Sprint 42	