

K8S based Cloud Region Support

Purpose

Enable support for deploying Virtualized and Containerized networking workloads in Kubernetes based Cloud regions through MultiCloud/k8s plugin.

Scope:

- Enable the support for Helm charts based deployment.
- Show case using vFirewall use case.
 - Show case Legacy model (where firewall, traffic generator and sink are VMs)
 - Show case Hybrid model (where firewall is a container, traffic generator as a container and sink is VMs)
- Show case using EdgeXFoundry use case.

Owner: [Ritu Sood](#) and [Kiran Kamineni](#)














Contributing companies: Intel, VMWare

Interested Operators : Verizon, ATT

Use Case Name

Showcase VNF	Test Environment	Integration Team Liaison
vFirewall	Intel/Windriver lab	Akhila Kishore and Ritu Sood
EdgeXFoundry	Intel/Windriver lab	Akhila Kishore and Kiran Kamineni

Development Status

Project	PTL	JIRA Epic / User Story*	Requirements	Status
MultiCloud	Bin Yang	<div><div> ONAPARC-359 - MultiCloud K8S plugin - Helm Charts support CLOSED</div><div> ONAPARC-349 - K8S Plugin in Multi-Cloud to follow the instantiation NB API of Multi-Cloud CLOSED</div><div> ONAPARC-337 - Multi-Cloud to support storing Cloud specific artifacts CLOSED</div><div> ONAPARC-348 - Multi-Cloud K8S Plugin to support profiles for resource-bundle Environment and Day0 Configurations CLOSED</div><div> MULTICLOUD-454 - Provider network support when OVN is used CLOSED</div><div> ONAPARC-351 - Multi-Cloud Network subplugin & OVN support CLOSED</div><div> ONAPARC-364 - vFirewall CSARs OPEN</div><div> MULTICLOUD-499 - EdgeXFoundry use case CLOSED</div><div> ONAPARC-336 - SDC Client in Multi-Cloud OPEN</div><div> MULTICLOUD-464 - Day 2 configuration CLOSED</div><div> MULTICLOUD-592 - KRD should not instantiate K8S plugin CLOSED</div></div>	<ol style="list-style-type: none">1. Add Helm Charts support2. Manage and store Cloud artifacts3. Enable the K8s plugin in MultiCloud/Framework project4. OVN4NFV Integration.5. Modify plugin functional tests to support EdgeXFoundry6. SDC Client to receive cloud specific artifacts (e.g Helm)	
AAI	James Forsyth	<div><div> MULTICLOUD-470 - MultiCloud K8S plugin to use information in A&AI to reach K8S Cloud regions CLOSED</div><div> ONAPARC-355 - K8S Cloud region reach ability information in ESR/A&AI OPEN</div></div>	<ol style="list-style-type: none">1. Reach ability information2. Plugin consume AAI information	

SDC	Ofir Sonsino	<div> ONAPARC-335 - Supporting Cloud specific artifacts in CSARs CLOSED </div> <div> SDC-2044 - SDC supports K8S plugin to add cloud specific artifacts CLOSED </div> <div> SDC-2046 - create User and Password for Multicloud component to access secure api CLOSED </div>	1. Add non-HEAT files support to SDC 2. Add K8S plugin artifact support 3. Add User and Password for multicloud client	
SO	Seshu Kumar Mudiganti	<div> SO-1353 - SO to be made independent of Cloud technologies CLOSED </div>	1. Make it more cloud agnostic	
Integration	Helen Chen	<div> MULTICLOUD-403 - Create CSIT for K8s plugin service CLOSED </div>	1. Create CSIT	
OOM		<div> ONAPARC-363 - OOM Helm charts for K8S Plugin service CLOSED </div>	1. Create Helm charts for deploying the K8s plugin service	

*Each Requirement should be tracked by its own User Story in JIRA

Testing

Current Status

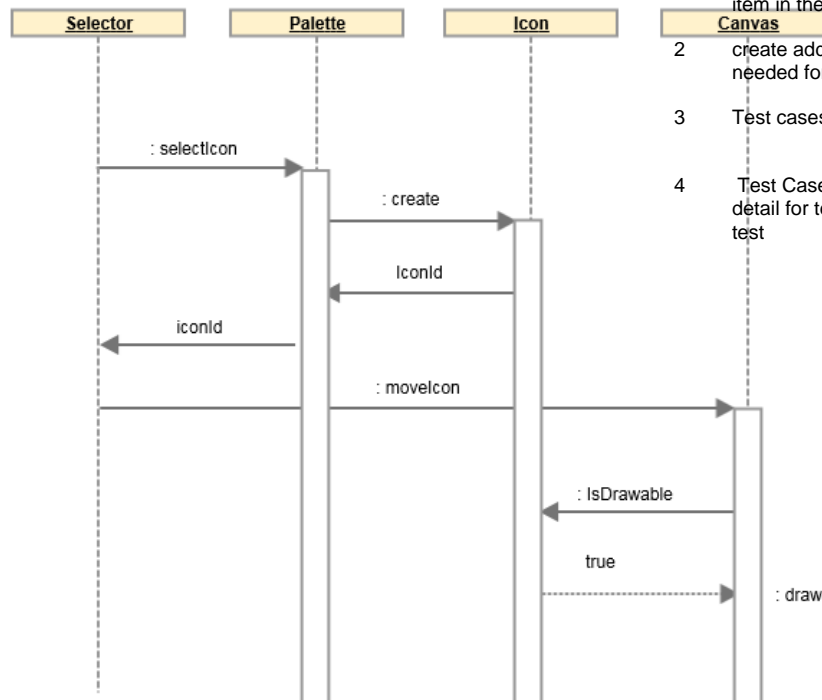
1. Testing Blockers
2. High visibility bugs
3. Other issues for testing that should be seen at a summary level
4. Where possible, always include JIRA links

End to End flow to be Tested

Test Cases and Status

This should be a summary level Sequence diagram done in Gliffy

Summary Sequence Diagram



#	Test Case	Status
1	There should be a test case for each item in the sequence diagram	NOT YET TESTED
2	create additional requirements as needed for each discreet step	COMPLETE
3	Test cases should cover entire Use Case	PARTIALLY COMPLETE
4	Test Cases should include enough detail for testing team to implement the test	FAILED