

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	<ul style="list-style-type: none"> ONAPARC-350 - MultiCloud K8S plugin - Helm Charts support CLOSED ONAPARC-349 - K8S Plugin in Multi-Cloud to follow the instantiation NB API of Multi-Cloud CLOSED ONAPARC-337 - Multi-Cloud to support storing Cloud specific artifacts CLOSED ONAPARC-348 - Multi-Cloud K8S Plugin to support profiles for resource-bundle Environment and Day0 Configurations CLOSED MULTICLOUD-454 - Provider network support when OVN is used IN PROGRESS ONAPARC-354 - Multi-Cloud Network subplugin & OVN support CLOSED ONAPARC-364 - vFirewall CSARs OPEN MULTICLOUD-409 - EdgeXFoundry use case CLOSED ONAPARC-336 - SDC Client in Multi-Cloud OPEN MULTICLOUD-464 - Day 2 configuration CLOSED MULTICLOUD-502 - KRD should not instantiate K8S plugin CLOSED 	<ol style="list-style-type: none"> 1. Add Helm Charts support 2. Manage and store Cloud artifacts 3. Enable the K8s plugin in MultiCloud /Framework project 4. OVN4NFV Integration. 5. Modify plugin functional tests to support EdgeXFoundry 6. SDC Client to receive cloud specific artifacts (e.g Helm) 	
AAI	Jimmy Forsyth	<ul style="list-style-type: none"> MULTICLOUD-470 - MultiCloud K8S plugin to use information in A&AI to reach K8S Cloud regions CLOSED ONAPARC-355 - K8S Cloud region reach ability information in ESR/A&AI OPEN 	<ol style="list-style-type: none"> 1. Reach ability information 2. Plugin consume AAI information 	

SDC	Ofir Sonsino	<p>ONAPARC-335 - Supporting Cloud specific artifacts in CSARs CLOSED</p> <p>SDC-2044 - SDC supports K8S plugin to add cloud specific artifacts CLOSED</p> <p>SDC-2045 - create User and Password for Multicloud component to access secure api CLOSED</p>	<ol style="list-style-type: none"> 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 M	<p>SO-4353 - SO to be made independent of Cloud technologies CLOSED</p>	<ol style="list-style-type: none"> 1. Make it more cloud agnostic 	
Integration	Helen Chen	<p>MULTICLOUD-403 - Create CSIT for K8s plugin service CLOSED</p>	<ol style="list-style-type: none"> 1. Create CSIT 	
OOM		<p>ONAPARC-363 - OOM Helm charts for K8S Plugin service CLOSED</p>	<ol style="list-style-type: none"> 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

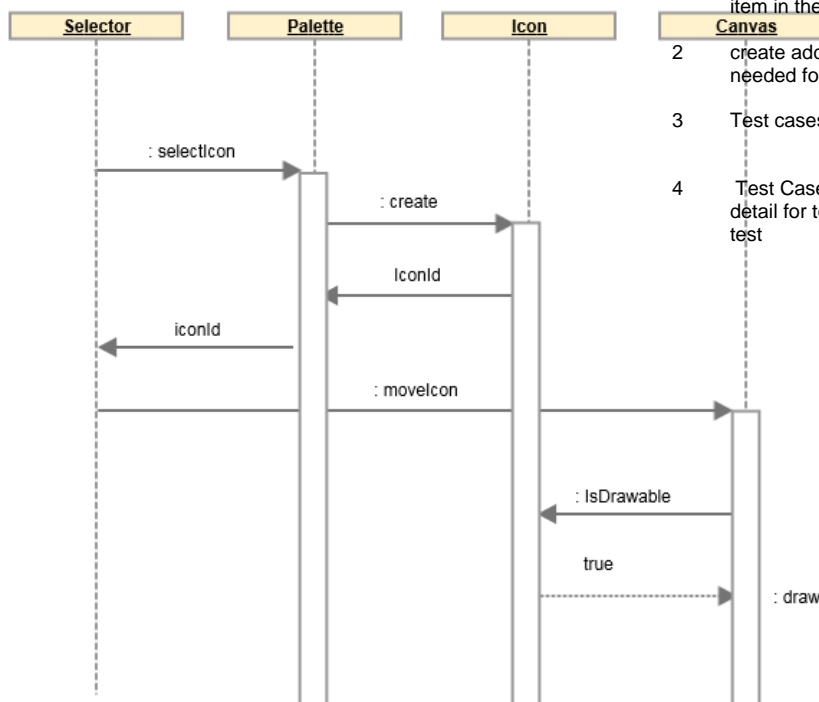
1. Testing Blockers
2. High visibility bugs
3. Other issues for testing that should be seen at a summary level
4. Where possible, always include JIRA links

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