



LFN Developer & Testing Forum

ONAP multcloud-k8s plugin enhancement for CNF deployment

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- **Helm hook support motivation**
- **ONAP Frankfurt multicloud-k8s plugin**
 - Update to Guilin
 - Current workflow and limitation
- **Enhancement**
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Helm hook support motivation



Helm hook support motivation

Definition

- Helm provides a hook mechanism to allow chart developers to intervene at certain points in a release's life cycle

Hook type	Example
pre-install	<pre>--- apiVersion: batch/v1 kind: Job metadata: name: {{ template "config-crdb-rediso.fullname" . }}-pre-install labels: {{- include "config-crdb-rediso.common_labels" . indent 4 }} annotations: "helm.sh/hook": pre-install "helm.sh/hook-weight": "0" "helm.sh/hook-delete-policy": hook-succeeded</pre>
post-install	
pre-delete	
post-delete	
pre-upgrade	
post-upgrade	
pre-rollback	
post-rollback	

Helm hook support motivation

- Helm hook to perform CNF-scope configurations such as:
 - Database configuration
 - User configuration
 - Backup data before deletion or clean data after deletion
 - ...
- Some CNFs can not be “up and ready” without these hooks.
- We can convert some hooks to CDS workflow node but not all can be done(e.g., at current implementation, no workflow at deletion phase) and vendor must maintain hooks in the helm chart and CDS workflow node at a same time.

ONAP Frankfurt multcloud-k8s plugin

1. Update to Guilin
2. Current workflow and limitation



ONAP Frankfurt multcloud-k8s plugin

Update to Guilin

Some enhancements of in code base from Frankfurt (6.0.x) to Guilin (7.0.0)

- Add status API
- Can declare release name when we instantiate CNF
- Minor bug fixes, e.g., when the parsed template is empty (e.g., due to conditions)
- More testing cases

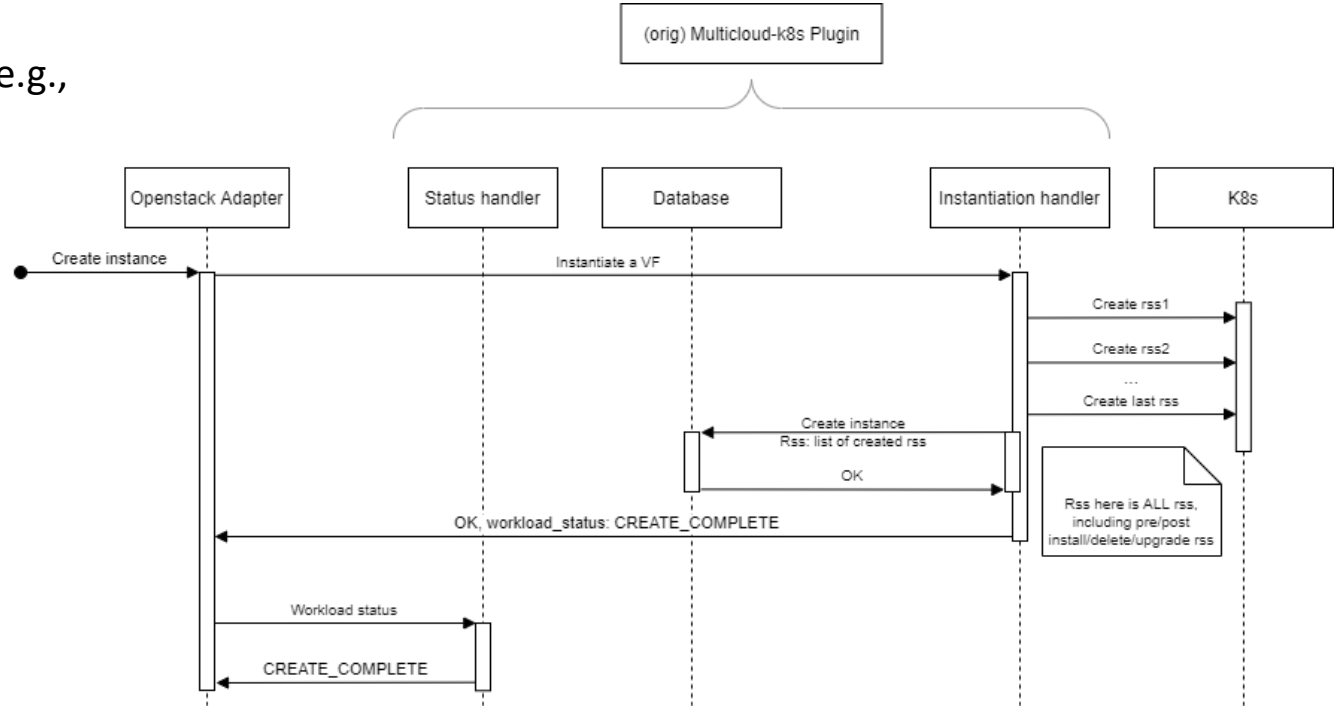
There is no improvement to support major features such as helm hook mechanism and k8s resource readiness check from status return from k8s..

ONAP Frankfurt multicloud-k8s plugin

Current workflow and limitation

No real CNF components (e.g., k8s pod) readiness check

No helm hook support



Enhancement



Enhancement

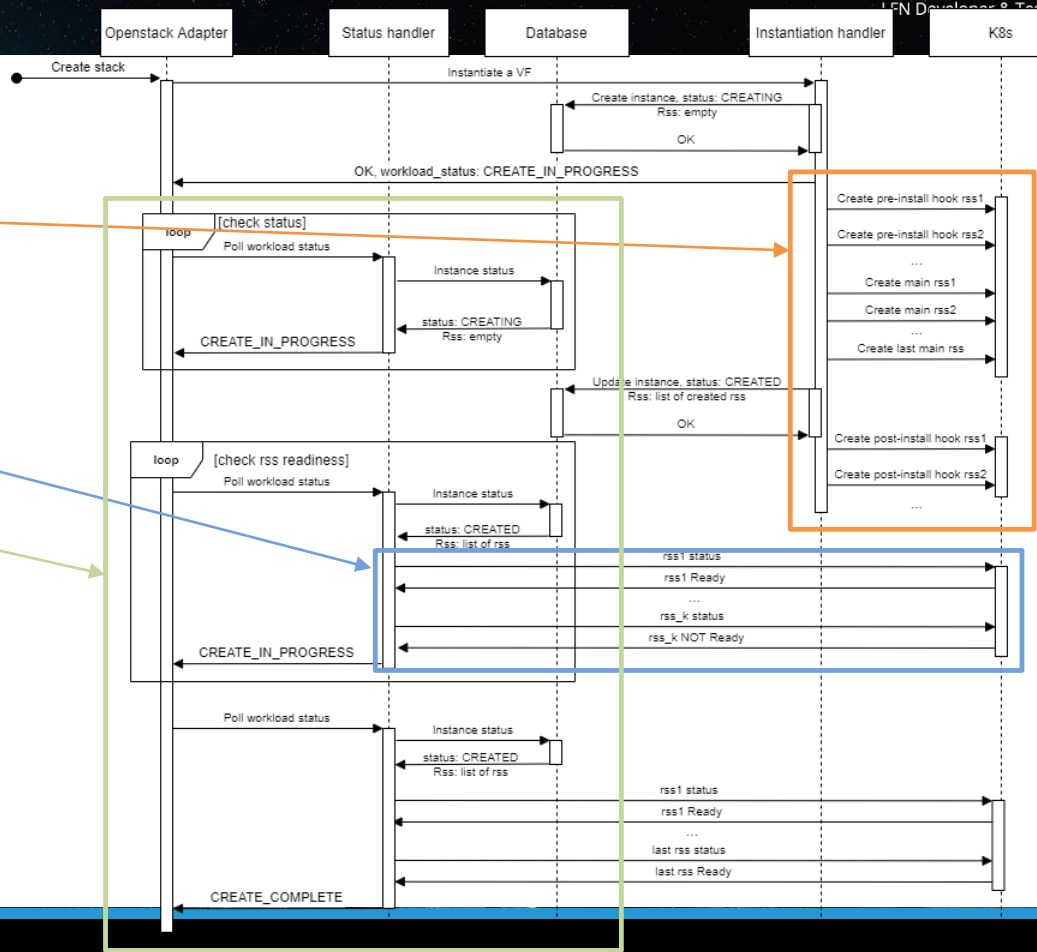
(new) Multicloud-k8s Plugin

Helm hook support

K8s resources (e.g., k8s pod) readiness check

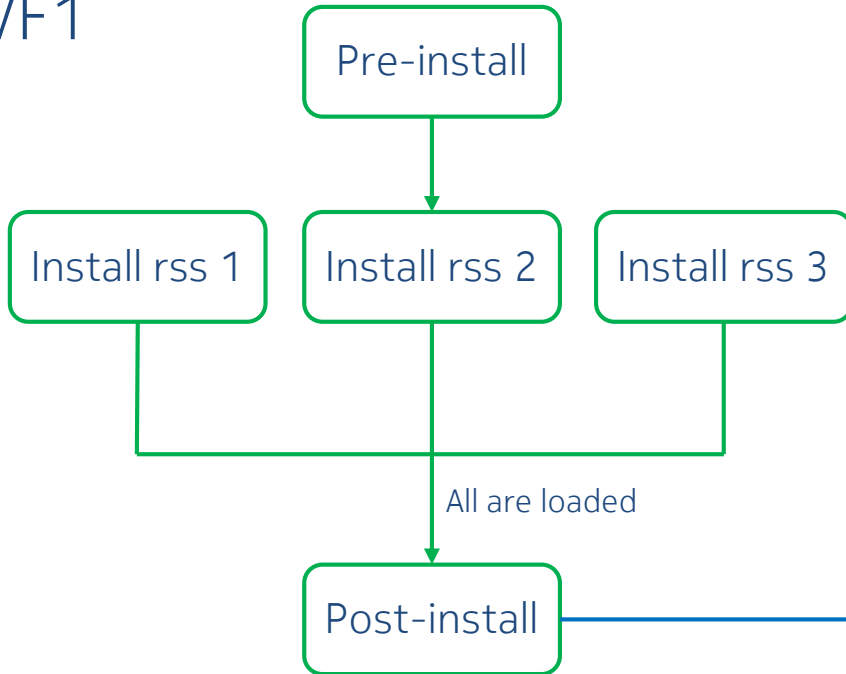
Proper status report to caller (in Frankfurt version, it's openstack adapter)

No API modification

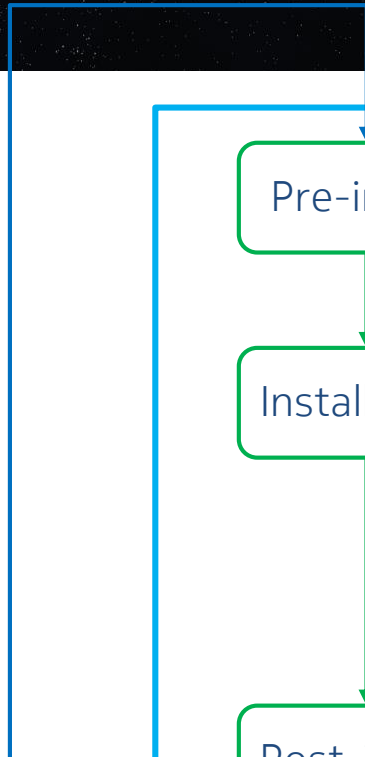
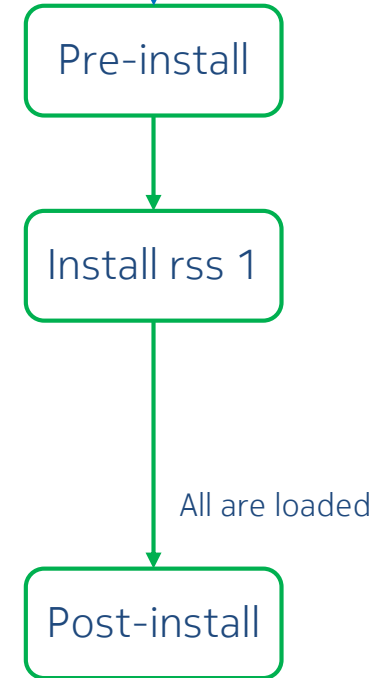


Enhancement

VF1



VF2

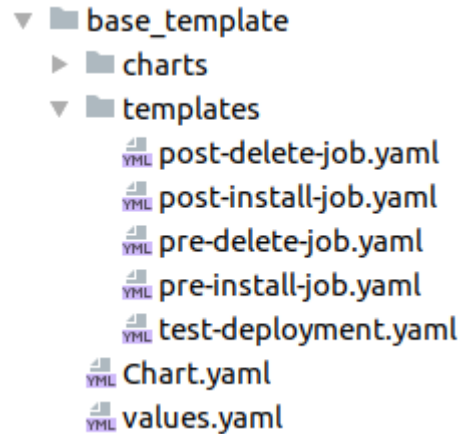


Demo



Demo environment:

- ONAP Guilin
- Multicloud k8s plugin enhanced based on Guilin version 7.0.0
- Use dummy HEAT to describe helm package.
- VSP-VF-service-k8scloud are already added to ONAP





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