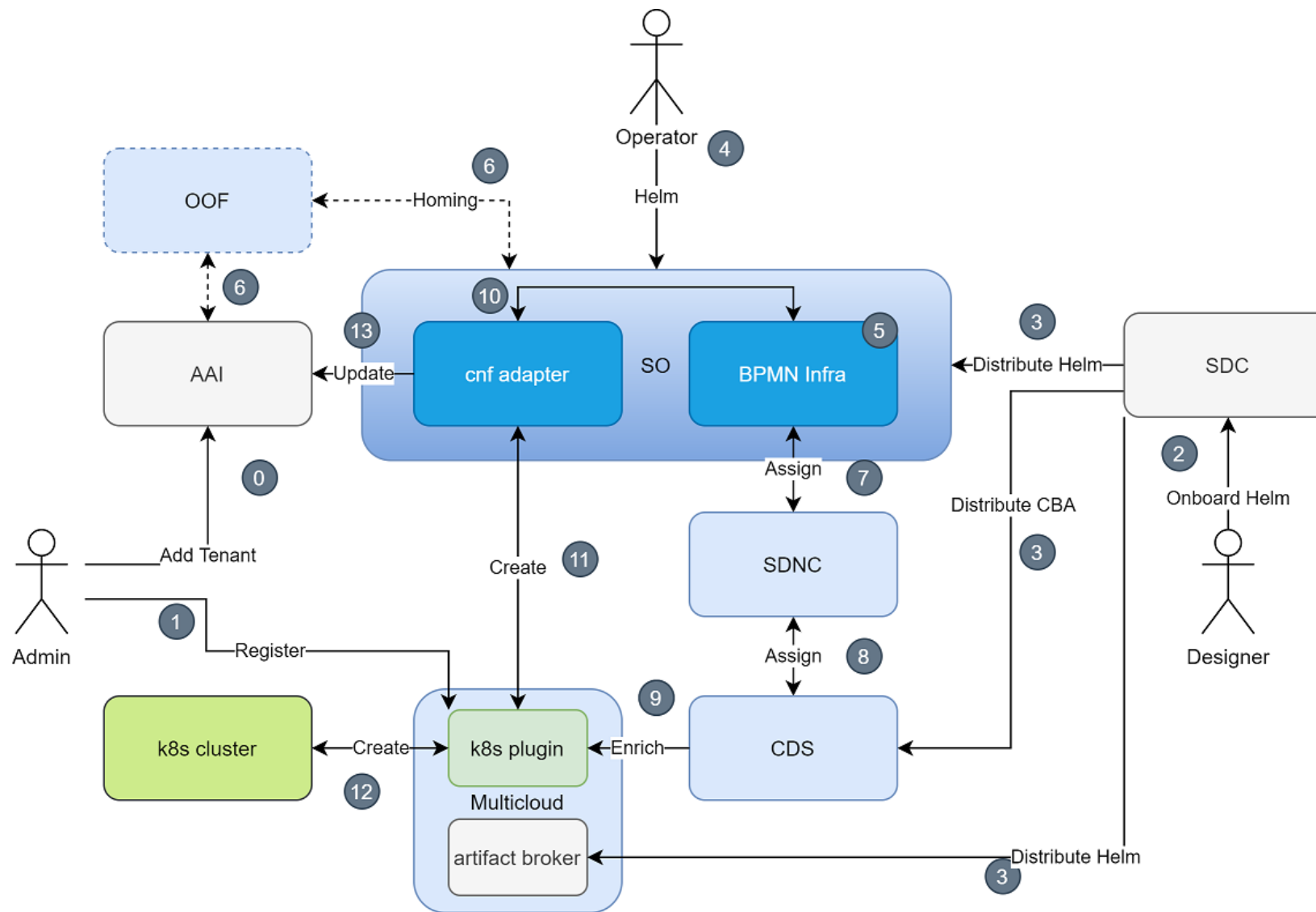


# K8sPlugin – Available Features and status of integration with ONAP

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# K8sPlugin – Architecture for CNFO



# Available API (1)

- Definition API
  - Upload of Helm Package definition (Helm  $\leq$  3.5 )
  - Integrated with SDC Artifact Distribution Mechanism
- Profile API
  - Enrichment of Helm Package
  - Overrides values, Namespace, Release Name
  - Modification of Helm package content
  - Integrated with CDS and Resource Assignment procedure
- Connectivity Info API
  - Upload of kube-config file for connectivity with k8s cluster
  - No Integration with ONAP
  - Automated with onap-sdk for ONAP k8s cluster configuration

# Available API (2)

- Instance API
  - CRUD for Helm package Instance
  - Equivalent of Helm install/delete
  - Creation for specified Definition + Profile
  - We are allowed to pass extra overrides for creation
  - **Used by SO Service Create/Delete (macro and a'la carte)**
- Healthcheck API
  - Performs tests embedded into helm package
  - Can be used to validate if CNF works like it should
  - **Integrated with CDS (for custom use)**
  - **Used by SO Healthcheck Workflow**

# Available API (3)

- Status API

- Provides status of any resource created from Helm package
- Equivalent data to `kubectl describe <type> <name> -o yaml`
- „Ready” flag provides information if Instance resources are in a desired state
- Used by SO Healthcheck Workflow
- Used for CNF AAI synchronization to create k8s-resource objects

- Query API

- Read status of selected resources of k8s resources belonging to the instance or to any k8s resource available in the cluster
- Format similar to the Status API but for selected resources
- Link to specific Query API request present in AAI k8s-resource object

# Available API (4)

- Config Template API
  - Creation of Configuration Template
  - Template is a Helm package for new or updated resources
  - Integrated with CDS for config-assign/deploy use
- Config API
  - CRUD for Config Instance base on the specified template
  - We can specify values to parametrize helm package behind configuration template
  - Can be used i.e. to modify existing deployment and to enforce scaling
  - Integrated with CDS for config-deploy use

# K8sPlugin - Summary

- Proxy for Helm 3.5
- One Proxy for many K8s Clusters
- No Helm Upgrade capability
- No CNF migration support
- Additional functionality for CNF Status Retrieval and Configuration management
- Each Helm package is managed separately – no view for composite application -> ONAP responsibility
- No support for HPA, cluster configuration management, networking setup etc.