

# Kubernetes

## Kubernetes Component

Available as of Camel 2.17

The **Kubernetes** component is a component for integrating your application with Kubernetes standalone or on top of Openshift.

Maven users will need to add the following dependency to their `pom.xml` for this component:

```
<dependency>
  <groupId>org.apache.camel</groupId>
  <artifactId>camel-kubernetes</artifactId>
  <version>x.x.x</version>
  <!-- use the same version as your Camel core version -->
</dependency>
```

## URI format

```
kubernetes:masterUrl[?options]
```

You can append query options to the URI in the following format, `?option=value&option=value&...`

From **Camel 2.18**: The secrets consumer doesn't exist anymore.

## Options

Name	Default Value	Description
masterUrl	null	<b>Mandatory:</b> The Kubernetes master URL
category		<b>Mandatory:</b> The category of producer/consumer. Possible values: namespaces, services, replicationControllers, pods, persistentVolumes, persistentVolumesClaims, secrets, resourcesQuota, serviceAccounts, nodes, configMaps, builds, buildConfigs
username		The username for login to Kubernetes cluster
password		The password for login to Kubernetes cluster
operation		<b>Producer only:</b> The operation that producer will do. Possible values: listNamespaces, listNamespacesByLabels, getNamespace, createNamespace, deleteNamespace, listServices, listServicesByLabels, getService, createService, deleteService, listReplicationControllers, listReplicationControllersByLabels, getReplicationController, createReplicationController, deleteReplicationController, scaleReplicationController, listPods, listPodsByLabels, getPod, createPod, deletePod, listPersistentVolumes, listPersistentVolumesByLabels, getPersistentVolume, listPersistentVolumesClaims, listPersistentVolumesClaimsByLabels, getPersistentVolumeClaim, createPersistentVolumeClaim, deletePersistentVolumeClaim, listSecrets, listSecretsByLabels, getSecret, createSecret, deleteSecret, listResourcesQuota, listResourcesQuotaByLabels, getResourceQuota, createResourceQuota, deleteResourceQuota, listServiceAccounts, listServiceAccountsByLabels, getServiceAccount, createServiceAccount, deleteServiceAccount, listNodes, listNodesByLabels, getNode, listConfigMaps, listConfigMapsByLabels, getConfigMap, createConfigMap, deleteConfigMap, listBuilds, listBuildsByLabels, getBuild, listBuildConfigs, listBuildConfigsByLabels, getBuildConfig
apiVersion		The api Version to use
caCertFile		Path to CA cert file
caCertData		Path to CA cert data
clientCertFile		Path to client cert file

clientCertData		Path to client cert data
clientKeyAlgo		Key algorithm used by client
clientKeyFile		Path to client key file
clientKeyData		Path to client key data
clientKeyPassphrase		Client key passphrase
oauthToken		Authorization token
trustCertificates		Define if the certs are trusted by default
namespaceName		<b>Consumer only:</b> The namespace the consumer will watch
poolSize		<b>Consumer only:</b> The Threadpool size for the Kubernetes consumer
namespace		<b>Consumer only:</b> The Namespace to watch for the consumer
labelKey		<b>Consumer only:</b> The label key to watch for the consumer
labelValue		<b>Consumer only:</b> The label value to watch for the consumer
resourceName		<b>Consumer only:</b> The resource name to watch for the consumer

## Headers

Name	Type	Description
CamelKubernetesOperation	String	The Producer operation
CamelKubernetesNamespaceName	String	The Namespace name
CamelKubernetesNamespaceLabels	Map	The Namespace Labels
CamelKubernetesServiceLabels	Map	The Service labels
CamelKubernetesServiceName	String	The Service name
CamelKubernetesServiceSpec	io.fabric8.kubernetes.api.model.ServiceSpec	The Spec for a Service
CamelKubernetesReplicationControllerLabels	Map	Replication controller labels
CamelKubernetesReplicationControllerName	String	Replication controller name
CamelKubernetesReplicationControllerSpec	io.fabric8.kubernetes.api.model.ReplicationControllerSpec	The Spec for a Replication Controller
CamelKubernetesReplicationControllerReplicas	Integer	The number of replicas for a Replication Controller during the Scale operation
CamelKubernetesPodsLabels	Map	Pod labels
CamelKubernetesPodName	String	Pod name
CamelKubernetesPodSpec	io.fabric8.kubernetes.api.model.PodSpec	The Spec for a Pod
CamelKubernetesPersistentVolumesLabels	Map	Persistent Volume labels

CamelKubernetesPersistentVolumesName	String	Persistent Volume name
CamelKubernetesPersistentVolumesClaimsLabels	Map	Persistent Volume Claim labels
CamelKubernetesPersistentVolumesClaimsName	String	Persistent Volume Claim name
CamelKubernetesPersistentVolumesClaimsSpec	io.fabric8.kubernetes.api.model.PersistentVolumeClaimSpec	The Spec for a Persistent Volume claim
CamelKubernetesSecretsLabels	Map	Secret labels
CamelKubernetesSecretsName	String	Secret name
CamelKubernetesSecret	io.fabric8.kubernetes.api.model.Secret	A Secret Object
CamelKubernetesResourcesQuotaLabels	Map	Resource Quota labels
CamelKubernetesResourcesQuotaName	String	Resource Quota name
CamelKubernetesResourceQuotaSpec	io.fabric8.kubernetes.api.model.ResourceQuotaSpec	The Spec for a Resource Quota
CamelKubernetesServiceAccountsLabels	Map	Service Account labels
CamelKubernetesServiceAccountName	String	Service Account name
CamelKubernetesServiceAccount	io.fabric8.kubernetes.api.model.ServiceAccount	A Service Account object
CamelKubernetesNodesLabels	Map	Node labels
CamelKubernetesNodeName	String	Node name
CamelKubernetesBuildsLabels	Map	Openshift Build labels
CamelKubernetesBuildName	String	Openshift Build name
CamelKubernetesBuildConfigsLabels	Map	Openshift Build Config labels
CamelKubernetesBuildConfigName	String	Openshift Build Config name
CamelKubernetesEventAction	io.fabric8.kubernetes.client.Watcher.Action	Action watched by the consumer
CamelKubernetesEventTimestamp	String	Timestamp of the action watched by the consumer
CamelKubernetesConfigMapName	String	ConfigMap name
CamelKubernetesConfigMapsLabels	Map	ConfigMap labels
CamelKubernetesConfigData	Map	ConfigMap Data