CLOUD SERVICES IN K8s

DISCOVERING AND USING SERVICES USING THE SERVICE CATALOG

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LEADER IN APPLICATION PACKAGING

KUBERNETES CERTIFIED SERVICE PROVIDER

MAINTAINING COMMUNITY REPO CHARTS

KUBEAPPS, BKPR, SEALED SECRETS, KUBELESS

The need for managed
SERVICES

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HOW

USING THE CLOUD UIs
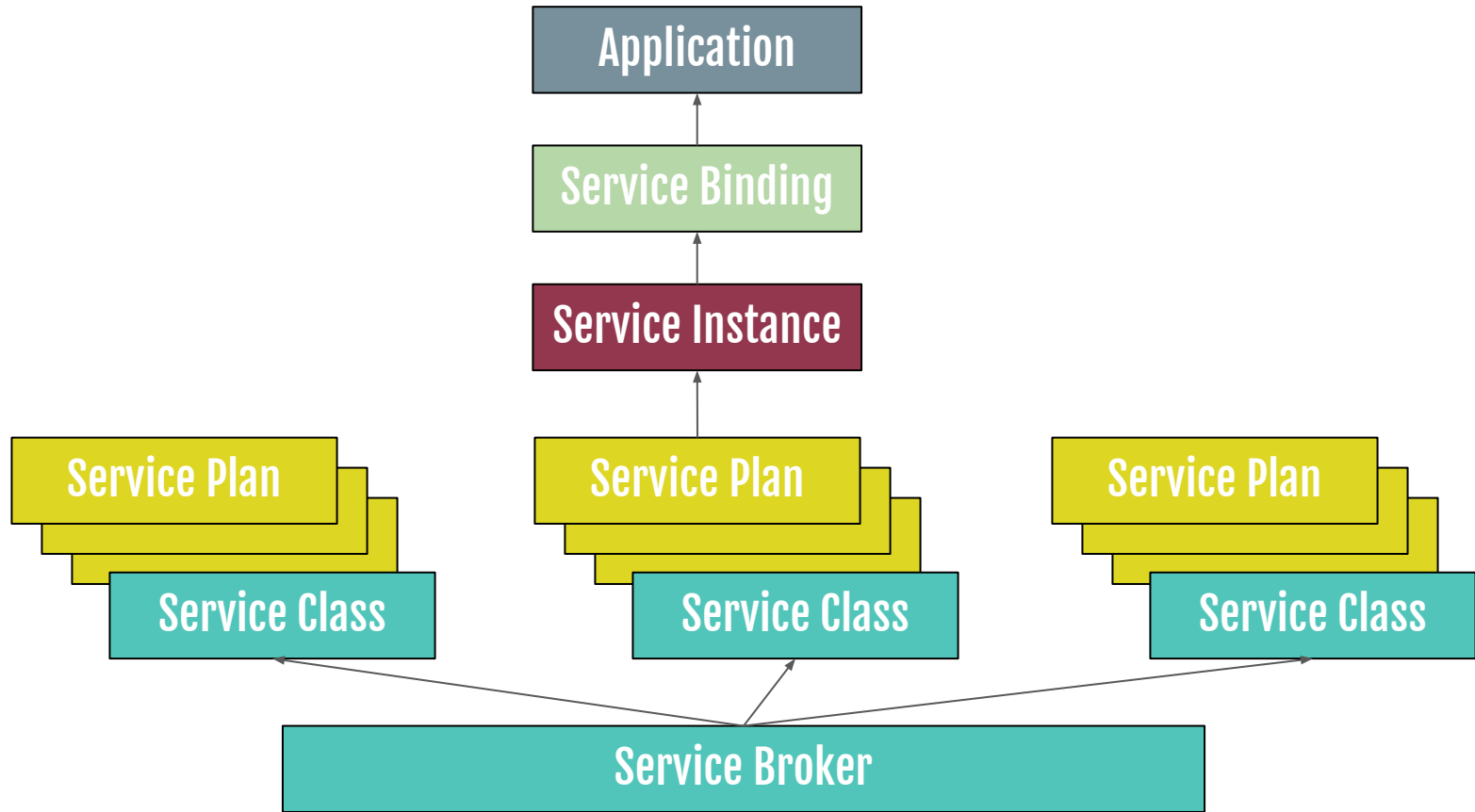
USING THE CLOUDS CLIs

CREATE SECRETS IN K8S, EXTERNAL SERVICES

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SERVICE CATALOG

A declarative Kubernetes API extension for the discovery and usage of managed services using OSB

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GCP

```
apiVersion: servicecatalog.k8s.io/v1beta1
kind: ClusterServiceBroker
metadata:
  name: gcp-broker
spec:
  url:
https://servicebroker.googleapis.com/v1beta1
/projects/my-project/brokers/default
  # Describes the secret which contains the
short-lived bearer token
  authInfo:
    bearer:
    secretRef:
    name: gcp-svc-account-secret
    namespace: google-oauth
```
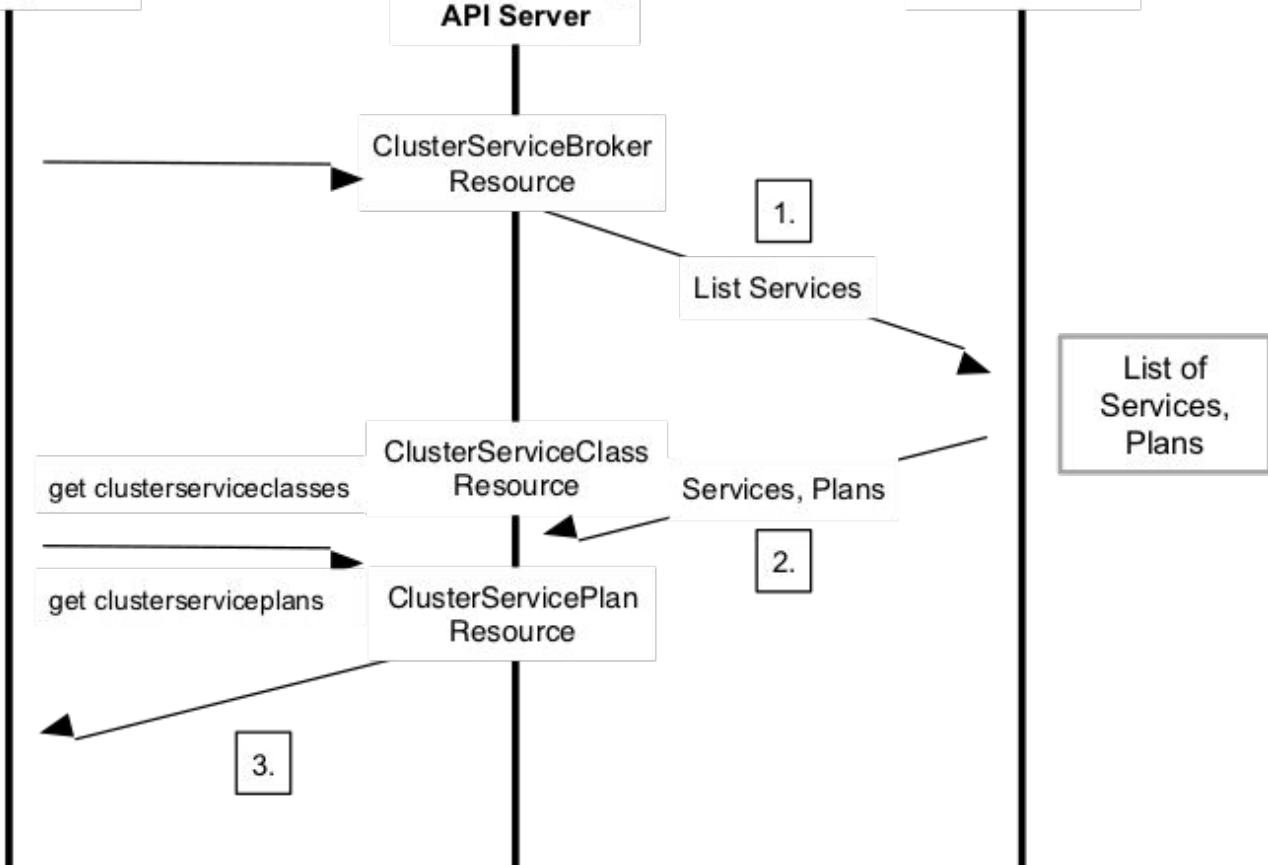
AZURE

```
apiVersion: servicecatalog.k8s.io/v1beta1
kind: ClusterServiceBroker
metadata:
  name: osba
spec:
  authInfo:
    basic:
    secretRef:
    name:
osba-open-service-broker-azure-auth
    namespace: default
  url:
http://osba-open-service-broker-azure.defaul
t.svc.cluster.local
```

Cluster Operator   Service Catalog API Server   Service Broker

ClusterServiceBroker Resource

1.

List Services

List of Services, Plans

ClusterServiceClass Resource

get clusterserviceclasses

Services, Plans

2.

get clusterserviceplans

ClusterServicePlan Resource

3.

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GCP

```
apiVersion: servicecatalog.k8s.io/v1beta1
kind: ClusterServiceClass
metadata:
  name: e9776b6c-4022-41ec-8b83-7c368ed9c270
spec:
  bindable: true
  bindingRetrievable: false
  clusterServiceBrokerName: gcp-broker
  description: Google Cloud Storage is
unified object storage for developers and
enterprises
  externalID:
e9776b6c-4022-41ec-8b83-7c368ed9c270
  externalMetadata:
    displayName: Google Cloud Storage
...
```

AZURE

```
apiVersion: servicecatalog.k8s.io/v1beta1
kind: ClusterServiceClass
metadata:
  name: 25434f16-d762-41c7-bbdd-8045d7f74ca6
spec:
  bindable: true
  bindingRetrievable: false
  clusterServiceBrokerName: osba
  description: Azure Database for PostgreSQL
9.6-- database only
  externalID:
25434f16-d762-41c7-bbdd-8045d7f74ca6
  externalMetadata:
    displayName: Azure Database for
PostgreSQL 9.6-- Database Only
...
```

svcat

```
$ svcat get brokers

        NAME                                        URL                                         STATUS
+------------------------+----------------------------------------------------------------------+---------+
 ansible-service-broker   https://automation-broker.automation-broker.svc:1338/automation-broker/   Ready
 gcp-broker               https://servicebroker.googleapis.com/v1beta1/projects/bitnamigcetest2/brokers/default   Ready
 osba                     http://osba-open-service-broker-azure.default.svc.cluster.local           Ready

$ svcat get classes

        NAME                            DESCRIPTION
+------------------------------+------------------------------------------------------------------+
 dh-pyzip-demo-apb              Python Zip Demo APB
                                Implementation
 dh-openshift-logging-apb       This APB will deploy openshift-logging. Please see
                                https://github.com/ansibleplaybookbundles/openshift-logging-apb
                                before attempting to run it as it has special pre-requisites.
 dh-nginx-apb                   An open source reverse proxy web server
…

$ svcat provision mysql-instance --class mysqldb --plan free
```

Kubeapps

An application dashboard for your Kubernetes cluster using Helm charts and with Service Catalog integration

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DEMO

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Summary

OSB IS A STANDARD SPECIFICATION TO DELIVER SERVICES

SERVICE CATALOG IS AN API EXTENSION COMPATIBLE WITH OSB

DECLARATIVE IS BETTER

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THANK YOU

bitnami.com
github.com/kubeapps
github.com/kubernetes-incubator/service-catalog

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