KUBERNETES CHEATSHEET

Cluster Management

1. Display endpoint details for the cluster’s master and services.

```
$ kubectl cluster-info
```

2. Show the Kubernetes version that is active on the server and client

```
$ kubectl version
```

3. Get the cluster’s configuration

```
$ kubectl config view
```

Cluster Management

4. List the available API resources

```
$ kubectl api-resources
```

5. List everything

```
$ kubectl get all --all-namespaces
```

Node Management

1. List the nodes

```
$ kubectl get node
```

2. Update the taints on nodes

```
$ kubectl taint node <node_name>
```

3. Delete a node

```
$ kubectl delete node <node_name>
```

Pod Management

1. List pods

```
$ kubectl get pod
```

2. Delete a pod

```
$ kubectl delete pod <pod_name>
```

3. See detailed state of a pods

```
$ kubectl describe pod <pod_name>
```

4. Create a pod

```
$ kubectl create pod <pod_name>
```

Pod Management

5. Run a command for a container inside a pod

```
$ kubectl exec <pod_name> -c <container_name>
<command>
```

6. Get interactive shell on a pod

```
$ kubectl exec -it <pod_name> /bin/sh
```

7. See resource usage (CPU/Memory/Storage) for pods

```
$ kubectl top pod
```

Pod Management

8. Add/update the annotations of a pod

```
$ kubectl annotate pod <pod_name> <annotation>
```

9. Add/update the label of a pod

```
$ kubectl label pod <pod_name>
```

Replication Controllers

1. View the list of replication controllers

```
$ kubectl get rc
```

2. View the list of replication controllers by namespace

```
$ kubectl get rc --namespace=”<namespace_name>”
```

3. Scale a ReplicaSet

```
$ kubectl scale --replicas=<expected_replica_num> replicaset <name>
```

Deployment Management

1. List the deployments

```
$ kubectl get deployment
```

2. Show the precise status of single or multiple deployments.

```
$ kubectl describe deployment <deployment_name>
```

3. Edit and update the deployment.

```
$ kubectl edit deployment <deployment_name>
```

4. Create a new deployment

```
$ kubectl create deployment <deployment_name>
```

Deployment Management

5. Delete a deployment

```
$ kubectl delete deployment <deployment_name>
```

6.Check the rollout status of a deployment

```
$ kubectl rollout status deployment
<deployment_name>
```

7. Display Resource usage (CPU/Memory/Storage) for nodes

```
$ kubectl top node
```

8. See resource allocation per node

```
$ kubectl describe nodes | grep Allocated -A 5
```

Deployment Management

9.List the pods running on a node

```
$ kubectl get pods -o wide | grep <node_name>
```

10. To annotate a node

```
$ kubectl annotate node <node_name>
```

11. Add or update the labels of a node

```
$ kubectl label nodes <your-node-name> <label>
```

12. Scale a Deployment

```
$ kubectl scale deployment <deployment-name> --
replicas=<number-of-replicas>
```

Secrets

1. Create a secret

```
$ kubectl create secret <name>
```

2. List secrets

```
$ kubectl get secrets
```

3. View details about secrets

```
$ kubectl describe secrets <name>
```

4. Delete a secret

```
$ kubectl delete secret <secret_name>
```

Services

1. List the services

```
$ kubectl get services
```

2. View the detailed state of a service

```
$ kubectl describe services <name>
```

3. Expose a replication controller, deployment or pod as a new Kubernetes service

```
$ kubectl expose deployment [deployment_name]
```

4. Edit/update the definition of a service

```
$ kubectl edit service <name>
```

Common Options

Commands in Kubectl can include optional flags. Here are a few examples of the most popular and helpful ones.

1. -o Format of output. (Suppose you wanted to list all of the pods in ps output format with additional information.)

```
$ kubectl get pods -o wide
```

2. Create any resource(pod/replicaset/deployment, etc) using a yaml/json file.

```
$ kubectl apply -f <xyz.yaml>
```