

Docker Commands

Build an Image

```
docker build -t <docker user id>/<image name>:<version> .
```

Don't forget!

Push an Image to Docker Hub

```
docker push <docker user id>/<image name>:<version>
```

List Running Docker Containers

```
docker ps
```

Run a Docker Image

```
docker run -p <external port>:<internal port> -d <docker user id>/<image name>
```

Stop A Running Container

```
docker stop <container Id>
```

Re-start a Container

```
docker start <container Id>
```

Kubernetes Commands

Apply a "File" (E.g. a Deployment.yaml)

```
Kubectl apply -f <name of yaml file>
```

Restart Deployment

```
Kubectl rollout restart deployment <name of deployment>
```

Get All Namespaces

```
Kubectl get namespace
```

Get Pods in a Namespaces

```
Kubectl get pods --namespace=<name of namespace>
```

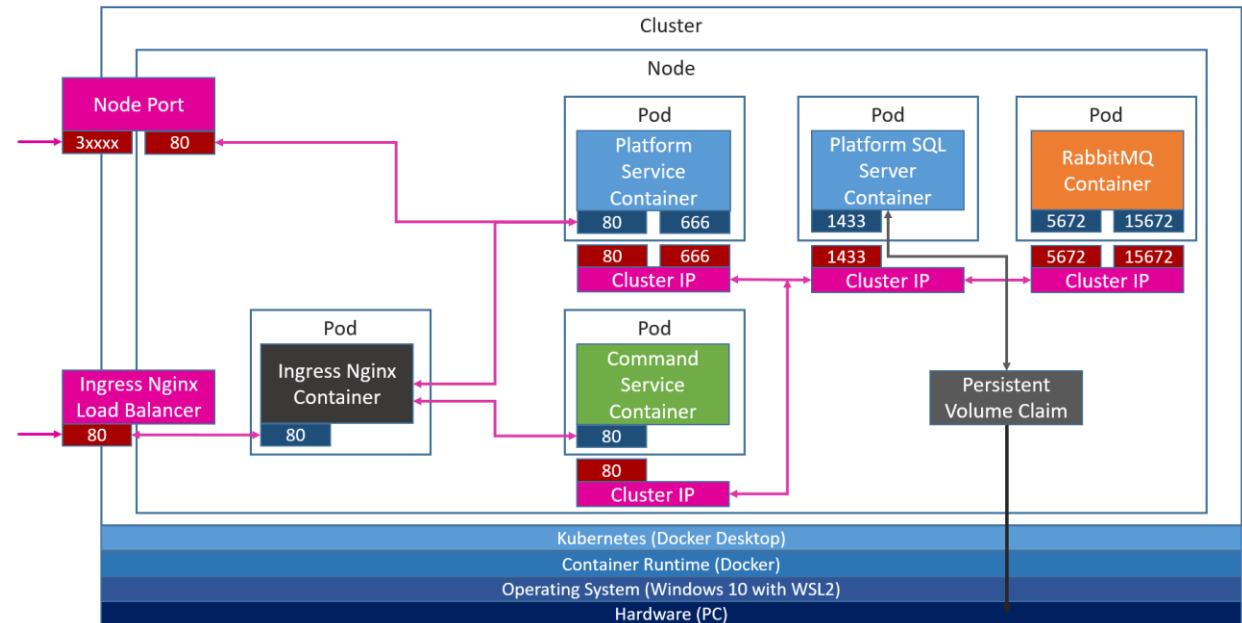
Get All "Objects" (E.g. Get All Pods)

```
Kubectl get <object type>
```

Delete an "Object" (E.g. Delete a Deployment)

```
Kubectl delete <object type> <object name>
```

Kubernetes Architecture



Glossary

Cluster: Contains a set of "worker machines" called Nodes. Every cluster has at least 1 node.

Cluster IP: A **Service** that exposes the container "internally" within the Cluster.

Container: An image that has been executed, containing the app and its dependencies.

Image: The result of **building** an app and its dependencies. Images are transferable units.

Load Balancer: A **Service** that exposes a container externally.

Node: A Node is "worker machine" that runs containerized applications.

Node Port: A **Service** used for development purposes to expose containers externally.

Pod: Smallest K8S object. Represents a set of running containers.