

# Kubernetes 101 Notes

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## 1 kubectl Commands

**kubectl** is the command-line tool used to interact with Kubernetes clusters.

### 1.1 kubectl Resources

- **kubectl api-resources** - List all available resource types in the cluster.
- **kubectl get pods** - List all pods in the current namespace.
- **kubectl get services** - List all services in the current namespace.
- **kubectl get deployments** - List all deployments in the current namespace.

### 1.2 kubectl Documentation

- **kubectl explain <resource>** - Show documentation for a specific resource type.
- **kubectl explain <resource>.<field>** - Show documentation for a specific field of a resource.
- **kubectl explain --recursive <resource>** - Show documentation for a resource and all its fields recursively.

### 1.3 kubectl apply

- `kubectl apply -f <file.yaml>` - Apply a configuration file to create or update resources in the cluster.
- `kubectl apply -k <directory>` - Apply a directory of configuration files using Kustomize.