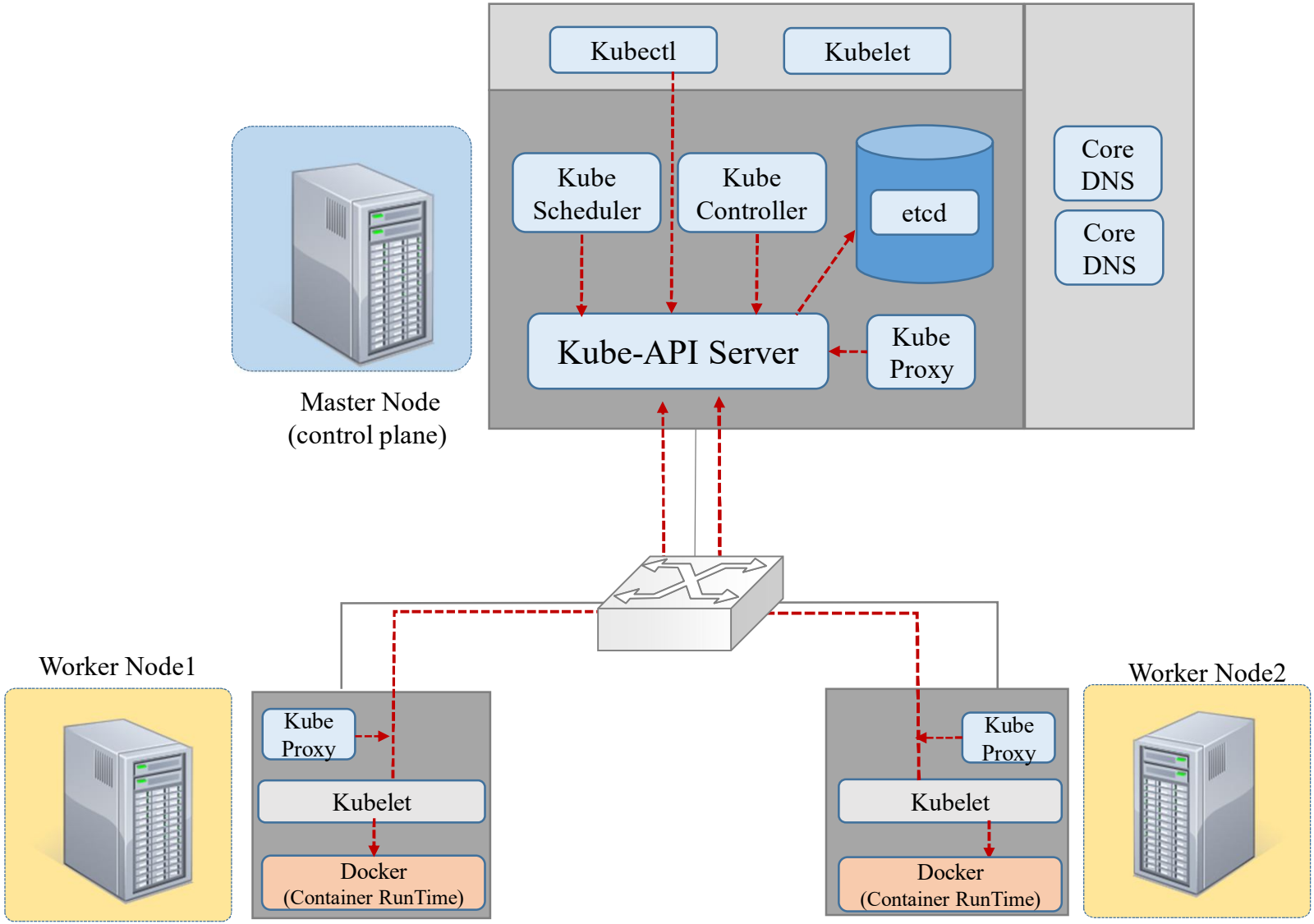
# 명령어 kubectl

**#kubectl create deploy web --image=hub.test.com/nginx**



# kubectl

- k8s에게 원하는 작업을 요청 시 사용하는 명령어
- k8s cluster를 관리하는 동작은 kubectl이라는 Command line interface로 실행
  - K8s 자원들의 생성, 업데이트, 삭제 (create, update, delete)
  - 디버그, 모니터링, 장애처리(log, exec, cp, top, attach..)
  - 클러스터 관리(cordon, top, drain, traint…)

kubectl --help

```
root@masternode:~# kubectl --help
kubectl controls the Kubernetes cluster manager.

 Find more information at: https://kubernetes.io/docs/reference/kubectl/ove

Basic Commands (Beginner):
  create        Create a resource from a file or from stdin
  expose        Take a replication controller, service, deployment or pod a
  run           Run a particular image on the cluster
  set           Set specific features on objects

Basic Commands (Intermediate):
  explain       Get documentation for a resource
  get           Display one or many resources
  edit          Edit a resource on the server
  delete        Delete resources by file names, stdin, resources and names,
```

# kubectl 명령어 형식

kubectl [command] [TYPE] [NAME] [flags]

| | | |
|---|---|---|
| **Command** | 자원에 실행되는 동작 | create, get, delete |
| **TYPE** | 자원타입 | pod, service, ingress |
| **NAME** | 자원이름 | |
| **Flags** | 부가적으로 설정할 옵션 | --help, -o wide |

(ex) kubectrl get pod WEBServer –o wide

➔ WEBServer 이름을 가진 Pod 자원정보를 자세히 확인

kubectl --help

kubuctl run --help

```
root@masternode:~# kubectl run --help
Create and run a particular image in a pod.

Examples:
  # Start a nginx pod
  kubectl run nginx --image=nginx

  # Start a hazelcast pod and let the container expose port 5701
  kubectl run hazelcast --image=hazelcast/hazelcast --port=5701

  # Start a hazelcast pod and set environment variables "DNS_DOMAIN=clus
container
  kubectl run hazelcast --image=hazelcast/hazelcast --env="DNS_DOMAIN=cl

  # Start a hazelcast pod and set labels "app=hazelcast" and "env=prod"
  kubectl run hazelcast --image=hazelcast/hazelcast --labels="app=hazelc

  # Dry run; print the corresponding API objects without creating them
  kubectl run nginx --image=nginx --dry-run=client
```

# 실습 1.

- kubectl get nodes
- kubectl get nodes -o wide
- kubectl describe node master

- watch kubectl get pod –o wide

# 실습 2.

- kubectl run web --image=nginx:1.14 --port 80
- kubectl get pods
- kubectl describe pod web
- kubectl get pods -o wide
- kubectl get pods web -o wide
- curl 10.42.0.1

# 실습 3.

- kubectl create deployment mainserver --image=httpd --replicas=3
- kubectl get deployments.apps
- kubectl describe deployments.apps mainserver
- kubectl get pods
- kubectl get pods -o wide
- kubectl get pod mainserver-6c9cbf6cb7-nrxl7
- kubectl get pod mainserver-6c9cbf6cb7-nrxl7 -o wide
- curl 10.40.0.1

# 실습 4.

[ Home 페이지 수정 ]

- kubectl exec web -it -- /bin/bash/
  cd /usr/share/nginx/html
  cat index.html
  echo "HEllo~~"" > index.html
- exit

- curl 10.42.0.1
- kubectl logs web

ufw disable

# 실습 5.

- kubectl delete pod web
- kubectl get pods
- kubectl delete deployment.apps mainserver