



Vim k8s

- k8s
- k8s

k8s.vim

Vim

k8s

- Pod List
- Pod Describe
- Attach Pods
- Service List
- Service Describe
- Events Watch
- ...

```
1 kubectl -
I0621 01:43:54.425942 1 main.go:227] handling current node
I0621 01:44:04.449364 1 main.go:223] Handling node with IPs: map[172.20.0.2:{}]
I0621 01:44:04.449398 1 main.go:227] handling current node
I0621 01:44:14.471692 1 main.go:223] Handling node with IPs: map[172.20.0.2:{}]
I0621 01:44:14.471746 1 main.go:227] handling current node
I0621 01:44:24.478048 1 main.go:223] Handling node with IPs: map[172.20.0.2:{}]
I0621 01:44:24.478075 1 main.go:227] handling current node
I0621 01:44:34.495785 1 main.go:223] Handling node with IPs: map[172.20.0.2:{}]
I0621 01:44:34.495837 1 main.go:227] handling current node
I0621 01:44:44.498678 1 main.go:223] Handling node with IPs: map[172.20.0.2:{}]
I0621 01:44:44.498702 1 main.go:227] handling current node
I0621 01:44:54.521238 1 main.go:223] Handling node with IPs: map[172.20.0.2:{}]
I0621 01:44:54.521298 1 main.go:227] handling current node
I0621 01:45:04.546868 1 main.go:223] Handling node with IPs: map[172.20.0.2:{}]
I0621 01:45:04.546929 1 main.go:227] handling current node
```

```
/ # hostname
sample-deployment-76f47c6756-b267z
/ #
```

container shell

| NAME | IMAGE | READY | STATE |
|-----------------|-----------------------------------|-------|---------|
| nginx-container | docker.io/amsy810/echo-nginx:v2.0 | true | Running |

pod containers

| NAMESPACE | NAME | STATUS | IP | NODE | START TIME |
|--------------------|--|---------|-------------|--------------------|----------------------|
| default | sample-deployment-76f47c6756-b267z | Running | 10.244.0.38 | kind-control-plane | 2022-06-19T15:39:43Z |
| default | sample-deployment-76f47c6756-nh46r | Running | 10.244.0.39 | kind-control-plane | 2022-06-19T15:39:43Z |
| default | sample-deployment-76f47c6756-zdqsk | Failed | 10.244.0.37 | kind-control-plane | 2022-06-19T15:39:43Z |
| kube-system | coredns-6d4b75cb6d-n8fhp | Running | 10.244.0.2 | kind-control-plane | 2022-06-16T12:37:38Z |
| kube-system | coredns-6d4b75cb6d-rt7xb | Running | 10.244.0.4 | kind-control-plane | 2022-06-16T12:37:38Z |
| kube-system | etcd-kind-control-plane | Running | 172.20.0.2 | kind-control-plane | 2022-06-16T12:37:18Z |
| kube-system | kindnet-v77rg | Failed | 172.20.0.2 | kind-control-plane | 2022-06-16T12:37:30Z |
| kube-system | kube-apiserver-kind-control-plane | Running | 172.20.0.2 | kind-control-plane | 2022-06-16T12:37:18Z |
| kube-system | kube-controller-manager-kind-control-plane | Running | 172.20.0.2 | kind-control-plane | 2022-06-16T12:37:18Z |
| kube-system | kube-proxy-dd9r | Running | 172.20.0.2 | kind-control-plane | 2022-06-16T12:37:30Z |
| kube-system | kube-scheduler-kind-control-plane | Running | 172.20.0.2 | kind-control-plane | 2022-06-16T12:37:18Z |
| local-path-storage | local-path-provisioner-9cd9bd544-tk676 | Running | 10.244.0.3 | kind-control-plane | 2022-06-16T12:37:38Z |
| metallb-system | controller-7476b58756-w6p78 | Running | 10.244.0.54 | kind-control-plane | 2022-06-20T07:18:32Z |
| metallb-system | speaker-fz62p | Running | 172.20.0.2 | kind-control-plane | 2022-06-19T16:40:08Z |

pod list

pod log

Name: sample-deployment-76f47c6756-b267z
Namespace: default
Priority: 0
Node: kind-control-plane/172.20.0.2
Start Time: Mon, 20 Jun 2022 00:39:43 +0900
Labels: app=sample-app, pod-template-hash=76f47c6756
Annotations: <none>
Status: Running
IP: 10.244.0.38
IPs: IP: 10.244.0.38
Controlled By: ReplicaSet/sample-deployment-76f47c6756
Containers:
 nginx-container:
 Container ID: containerd://78b9f9e9d79df45e16015be7ad3
 Image: amsy810/echo-nginx:v2.0
 Image ID: docker.io/amsy810/echo-nginx@sha256:1be6
 Port: <none>
 Host Port: <none>
 State: Running
 Started: Mon, 20 Jun 2022 00:39:52 +0900
 Ready: True
 Restart Count: 0
 Environment: <none>
 Mounts: /var/run/secrets/kubernetes.io/serviceaccount from kub
Conditions:
 Type Status
 Initialized True
 Ready True
 ContainersReady True
 PodScheduled True
Volumes:
 kube-api-access-lxsn9:
 Type: Projected (a volume that contain
 TokenExpirationSeconds: 3607
 ConfigMapName: kube-root-ca.crt
 ConfigMapOptional: <nil>
 DownwardAPI: true
QoS Class: BestEffort
Node-Selectors: <none>
Tolerations: node.kubernetes.io/not-ready:No
 node.kubernetes.io/unreachable:No
Events: <none>

describe pod

- k8s
- CLI (k9s)
- Vim Vim Pod

`kubectl` JSON

```
export async function getResourceAsText(  
  resource: Resource,  
) : Promise<string> {  
  const cmd = [  
    "kubectl",  
    "get",  
    resource.type,  
  ];  
  
  if (resource.opts?.name) {  
    cmd.push(resource.opts.name);  
  }  
  ...  
  if (resource.opts?.format) {  
    cmd.push("-o", resource.opts.format);  
  }  
  if (resource.opts?.fields) {  
    cmd.push("--field-selector", resource.opts.fields);  
  }  
  ...  
  const output = await run(cmd);  
  return output;  
}
```

```
const opt = {
  type: "pods",
  opts: {
    namespace: "all",
    format: "json"
  }
};
await getResourceAsText(opt);
```

```
$ kubectl get pods -A -o json
```

```
const opt = {
  type: "rs",
  opts: {
    namespace: "default",
    format: "yaml",
    fields: "metadata.name=nginx"
  },
};
await getResourceAsText(opt);
```

```
$ kubectl get rs -n default -o yaml \
  --field-selector metadata.name=nginx
```

- ``k8s`` JSON Vim

- Vim script

-

```
function! K8sDebugPod() abort
    let pod = b:k8s_pods[line(".")-2]
    call k8s#util#terminal#kubectl('debug', pod.metadata.name, '-it', '--image=busybox', '--', 'sh')
endfunction
command! K8sDebugPod :call K8sDebugPod()<CR>
```

- ``kubectl``
 - ``describe`` ``kubectl get event -A -w``
 - ``kubectl edit``
 - ``k8s`` `openapi`

```
kubectl get --raw /openapi/v2
```

- Worker ``namespace``

```
$ nerdctl ps
CONTAINER ID    IMAGE          COMMAND          CREATED        STATUS        PORTS        NAMES

$ nerdctl --namespace k8s.io ps
CONTAINER ID    IMAGE          COMMAND          ...    NAMES
4754ffd642d0    k8s.gcr.io/pause:3.6    "nginx -g daemon off;"    ...    k8s://default/sample-deployment-847b7dfb49-dvd8j
```

