



Inspecting Resources with Get

- List our common resources (in the default namespace)
 - > `kubectl get all`
- (if missing my-apache, then recreate)
 - > `kubectl create deployment my-apache --image httpd --replicas 2`
- Show more with a "wide" output
 - > `kubectl get all -o wide`
- Display everything about a resource in YAML
 - > `kubectl get deploy/my-apache -o yaml`

Resource Label Selectors



Inspecting Resources with Describe



- `kubectl get` has a weakness
 - It can only show one resource at a time
- We need a command that combines related resources
 - Parent/child resources
 - Events of that resource

Inspecting Resources with Describe



> `kubectl describe deploy/my-apache`

{
Deployment summary
ReplicaSet status
Pod template
Old/New ReplicaSet names
Deployment Events

Inspecting Resources with Describe



- Show formatted details about the deployment, including events
 - > `kubectl describe deploy/my-apache`
- Show details about a pod, including events
 - > `kubectl describe pod/my-apache-xxxx-yyyy`



Inspecting Nodes

- A typical workflow of "high level" to "low level" details
- List all our clusters nodes
 - > `kubectl get nodes`
- List just our node, with more details
 - > `kubectl get node/docker-desktop -o wide`
- Describe the node
 - > `kubectl describe node/docker-desktop`

Watching Resources



- Current commands give us a point-in-time status
- On Linux, we might use a `watch kubectl get pods` command
- But kubectl has `-w` (`--watch`) built-in!



Watching Resources

- Watch a command (without needing `watch`)
 - > `kubectl get pods -w`
- In a separate tab/window
 - > `kubectl delete pod/my-apache-xxxx-yyyy`
 - Watch the pod get re-created
- See all recent events
 - > `kubectl get events`
- Watch for only future events
 - > `kubectl get events --watch-only`

Container Logs in Kubernetes



- Get a container's logs (picks a random replica, first container only)
 - > `kubectl logs deploy/my-apache`
- Follow new log entries, and start with the latest log line
 - > `kubectl logs deploy/my-apache --follow --tail 1`
- Get a specific container's logs in a pod
 - > `kubectl logs pod/my-apache-xx-yy -c httpd`
- Get logs of all containers in a pod
 - > `kubectl logs pod/my-apache-xx-yy --all-containers=true`
- Get multiple pods logs
 - > `kubectl logs -l app=my-apache`
- Checkout github.com/stern/stern

First Container in a Pod Spec

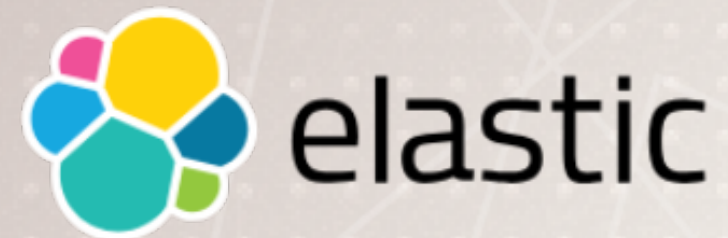
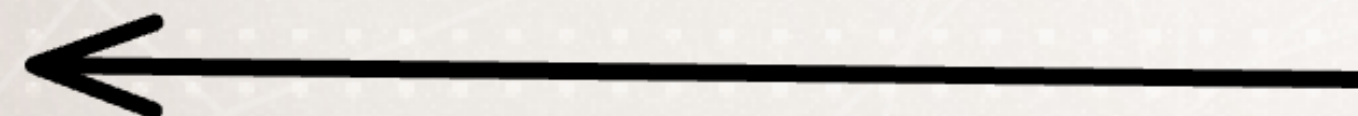
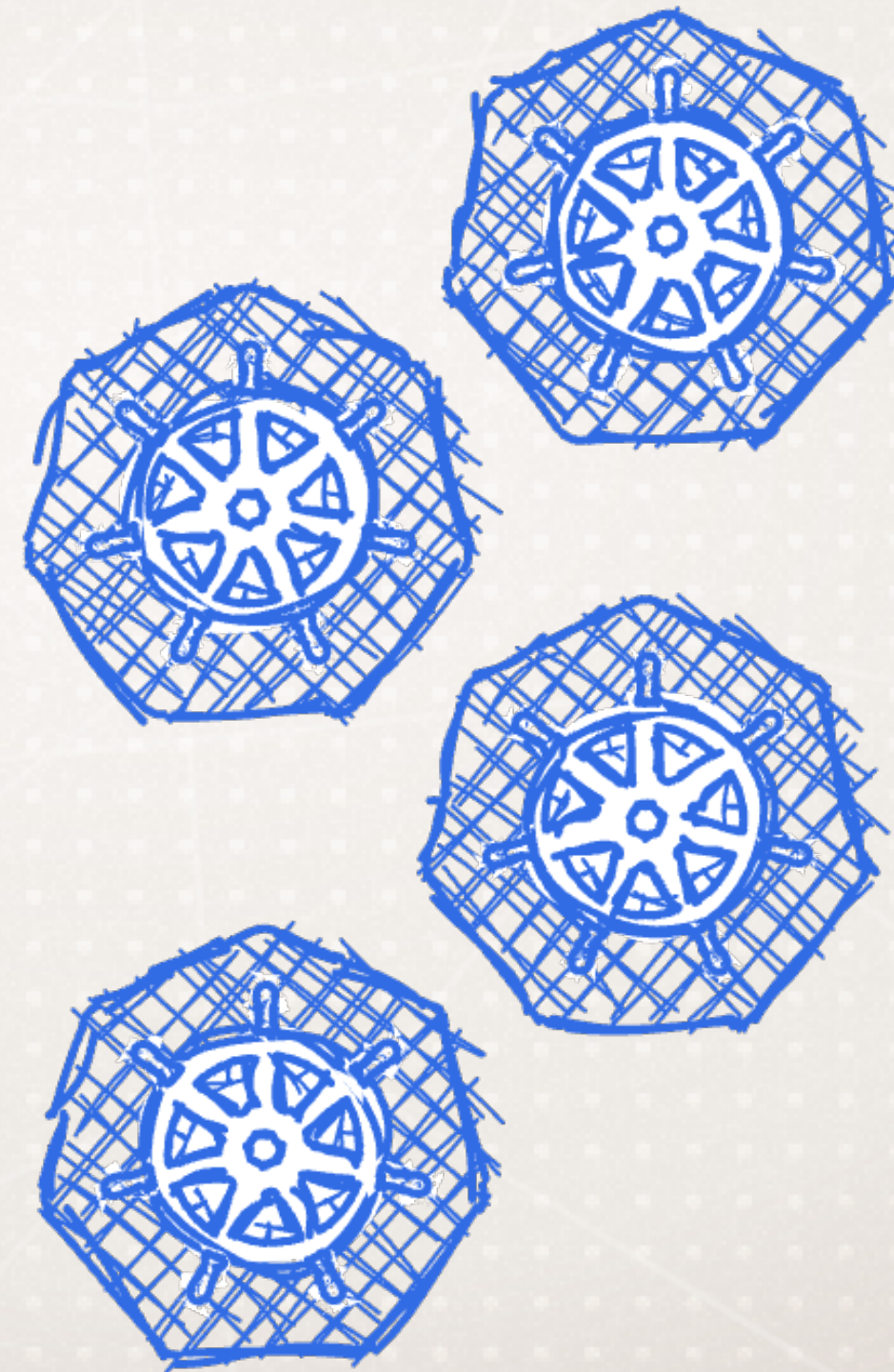


```
apiVersion: v1
kind: Pod
metadata:
  labels:
    app: my-apache
    pod-template-hash: 55878d86f4
  name: my-apache-55878d86f4-89rcf
  namespace: default
spec:
  containers:
    - image: httpd
      imagePullPolicy: Always
      name: httpd
```


Cluster-wide Logging Solutions



Kubernetes
Clusters



splunk>



Cleanup



- Let's remove the Deployment
 - > `kubectl delete deployment my-apache`