

### Kubectl Autocomplete

```
# setup autocomplete in bash
```

### Kubectl Autocomplete (cont)

```
source <(kubectl completion bash)
```

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 1 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Kubectl Autocomplete (cont)

```
# setup autocomplete in zsh
```

### Kubectl Autocomplete (cont)

```
source <(kubectl completion zsh)
```

### Kubectl Context and Configuration

```
# Show Merged kubeconfig settings.
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 2 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Kubectl Context and Configuration (cont)

kubectl config view

---

### Kubectl Context and Configuration (cont)

```
# use multiple kubeconfig files at the same time  
and view merged config
```

---

### Kubectl Context and Configuration (cont)

```
KUBECONFIG=~/.kube/config:~/.kube/kubconfig  
2 kubectl config view
```

---



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 3 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Kubectl Context and Configuration (cont)

# Get the password for the e2e user

### Kubectl Context and Configuration (cont)

```
kubectl config view -o jsonpath='{.users[?(@.name == "e2e")].user.password}'
```

### Kubectl Context and Configuration (cont)

# Display the current-context

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 4 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Kubectl Context and Configuration (cont)

```
kubectl config current-context
```

### Kubectl Context and Configuration (cont)

```
# set the default context to my-cluster-name
```

### Kubectl Context and Configuration (cont)

```
kubectl config use-context my-cluster-name
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 5 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Kubectl Context and Configuration (cont)

```
# add a new cluster to your kubeconf that
supports basic auth
```

### Kubectl Context and Configuration (cont)

```
kubectl config set-credentials
kubeuser/foo.kubernetes.com --
username=kubeuser --
password=kubepassword
```

### Kubectl Context and Configuration (cont)

```
set a context utilizing a specific username and
namespace.
```

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 6 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Kubectl Context and Configuration (cont)

```
kubectl config set-context gce --  
user=cluster-admin --namespace=foo  
&& kubectl config use-context gce
```

### Updating Resources

```
# Rolling update pods of frontend-v1
```

### Updating Resources (cont)

```
kubectl rolling-update frontend-v1 -f  
frontend-v2.json
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 7 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Updating Resources (cont)

```
# Change the name of the resource and update  
the image
```

### Updating Resources (cont)

```
kubectl rolling-update frontend-v1 frontend-v2 --  
image=image:v2
```

### Updating Resources (cont)

```
# Update the pods image of frontend
```

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 8 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>



### Updating Resources (cont)

```
kubectl rolling-update frontend --  
image=image:v2
```

---

### Updating Resources (cont)

```
# Abort existing rollout in progress
```

---

### Updating Resources (cont)

```
kubectl rolling-update frontend-v1 frontend-v2 --  
rollback
```

---



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 9 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Updating Resources (cont)

```
# Replace a pod based on the JSON passed  
into stdin
```

### Updating Resources (cont)

```
cat pod.json | kubectl replace -f -
```

### Updating Resources (cont)

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 10 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Updating Resources (cont)

# Force replace, delete and then re-create the resource. Will cause a service outage.

### Updating Resources (cont)

```
$ kubectl replace --force -f ./pod.json
```

### Updating Resources (cont)



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 11 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Updating Resources (cont)

```
# Create a service for a replicated nginx, which  
serves on port 80 and connects to the  
containers on port 8000
```

### Updating Resources (cont)

```
kubectl expose rc nginx --port=80 --  
target-port=8000
```

### Updating Resources (cont)

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 12 of 100.

### Updating Resources (cont)

# Update a single-container pod's image version (tag) to v4

### Updating Resources (cont)

```
kubectl get pod mypod -o yaml | sed 's/\n(image: myimage\):.*$/1:v4/' | kubectl replace -f\n-
```

### Updating Resources (cont)



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 13 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Updating Resources (cont)

# Add a Label

### Updating Resources (cont)

```
kubectl label pods my-pod new-label=awesome
```

### Updating Resources (cont)

# Add an annotation

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 14 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Updating Resources (cont)

```
kubectl annotate pods my-pod icon-  
url=http://goo.gl/XXBTWq
```

### Updating Resources (cont)

```
# Auto scale a deployment "foo"
```

### Updating Resources (cont)

```
kubectl autoscale deployment foo --min=2 --  
max=10
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 15 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Creating Objects

```
# create resource(s)
```

### Creating Objects (cont)

```
kubectl create -f ./my-manifest.yaml
```

### Creating Objects (cont)

```
# create from multiple files
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 16 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>



### Creating Objects (cont)

```
kubectl create -f ./my1.yaml -f ./my2.yaml
```

### Creating Objects (cont)

```
# create resource(s) in all manifest files in dir
```

### Creating Objects (cont)

```
kubectl create -f ./dir
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 17 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Creating Objects (cont)

```
# create resource(s) from url
```

### Creating Objects (cont)

```
kubectl create -f https://git.io/vPieo
```

### Creating Objects (cont)

```
# start a single instance of nginx
```



By **richardellisjr**

[cheatography.com/richardellisjr/](https://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 18 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Creating Objects (cont)

```
kubectl run nginx --image=nginx
```

### Creating Objects (cont)

```
# get the documentation for pod and svc manifests
```

### Creating Objects (cont)

```
kubectl explain pods,svc
```

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 19 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Creating Objects (cont)

# Create multiple YAML objects from stdin

### Creating Objects (cont)

```
cat <<EOF | kubectl create -f -
apiVersion: v1
kind: Pod
metadata:
  name: busybox-sleep
spec:
  containers:
  - name: busybox
    image: busybox
    args:
    - sleep
    - "1000000"
---
apiVersion: v1
kind: Pod
metadata:
  name: busybox-sleep-less
spec:
  containers:
  - name: busybox
    image: busybox
    args:
    - sleep
    - "1000"
EOF
```

### Creating Objects (cont)

# Create a secret with several keys



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 20 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Creating Objects (cont)

```
cat <<EOF | kubectl create -f -
apiVersion: v1
kind: Secret
metadata:
  name: mysecret
type: Opaque
data:
  password: $(echo "s33msi4" | base64)
  username: $(echo "jane" | base64)
EOF
```

### Viewing, Finding Resources

```
# List all services in the namespace
```

### Viewing, Finding Resources (cont)

```
kubectl get services
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 21 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Viewing, Finding Resources (cont)

# List all pods in all namespaces

### Viewing, Finding Resources (cont)

```
kubectl get pods --all-namespaces
```

### Viewing, Finding Resources (cont)

# List all pods in the namespace, with more details

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 22 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Viewing, Finding Resources (cont)

kubectl get pods -o wide

### Viewing, Finding Resources (cont)

# List a particular deployment

### Viewing, Finding Resources (cont)

kubectl get deployment my-dep

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 23 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Viewing, Finding Resources (cont)

# Describe commands with verbose output

### Viewing, Finding Resources (cont)

kubectl describe nodes my-node  
kubectl describe pods my-pod

### Viewing, Finding Resources (cont)

# List Services Sorted by Name

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 24 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>



### Viewing, Finding Resources (cont)

```
kubectl get services --sort-by=.metadata.name
```

### Viewing, Finding Resources (cont)

```
# List pods Sorted by Restart Count
```

### Viewing, Finding Resources (cont)

```
kubectl get pods --sort-by='.status.containerStatuses[0].restartCount'
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 25 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Viewing, Finding Resources (cont)

```
# Get the version label of all pods with label  
app=cassandra
```

### Viewing, Finding Resources (cont)

```
kubectl get pods --selector=app=cassandra rc -  
o \'  
jsonpath='{.items[*].metadata.labels.version}'
```

### Viewing, Finding Resources (cont)

```
# Get ExternalIPs of all nodes
```

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 26 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Viewing, Finding Resources (cont)

```
kubectl get nodes -o
jsonpath='{.items[*].status.addresses[?(@.type=="ExternalIP")].address}'
```

### Viewing, Finding Resources (cont)

```
# List Names of Pods that belong to Particular
RC
```

### Viewing, Finding Resources (cont)

```
# "jq" command useful for transformations that
are too complex for jsonpath
```



By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 27 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>

### Viewing, Finding Resources (cont)

```
sel=${$(kubectl get rc my-rc --output=json | jq -j
'.spec.selector | to_entries | .[] | "\(.key)=\
(.value),")%?}
echo $(kubectl get pods --selector=$sel --
output=jsonpath={.items..metadata.name})
```

### Viewing, Finding Resources (cont)

Check which nodes are ready

### Viewing, Finding Resources (cont)

```
JSONPATH='{range .items[]}
{@.metadata.name}:{range
@.status.conditions[]}{@.type}={@.status};
{end}{end}' \
&& kubectl get nodes -o
jsonpath=$JSONPATH | grep "Ready=True"
```

C

By **richardellisjr**

[cheatography.com/richardellisjr/](http://cheatography.com/richardellisjr/)

Not published yet.

Last updated 23rd March, 2017.

Page 28 of 100.

Sponsored by **CrosswordCheats.com**

Learn to solve cryptic crosswords!

<http://crosswordcheats.com>