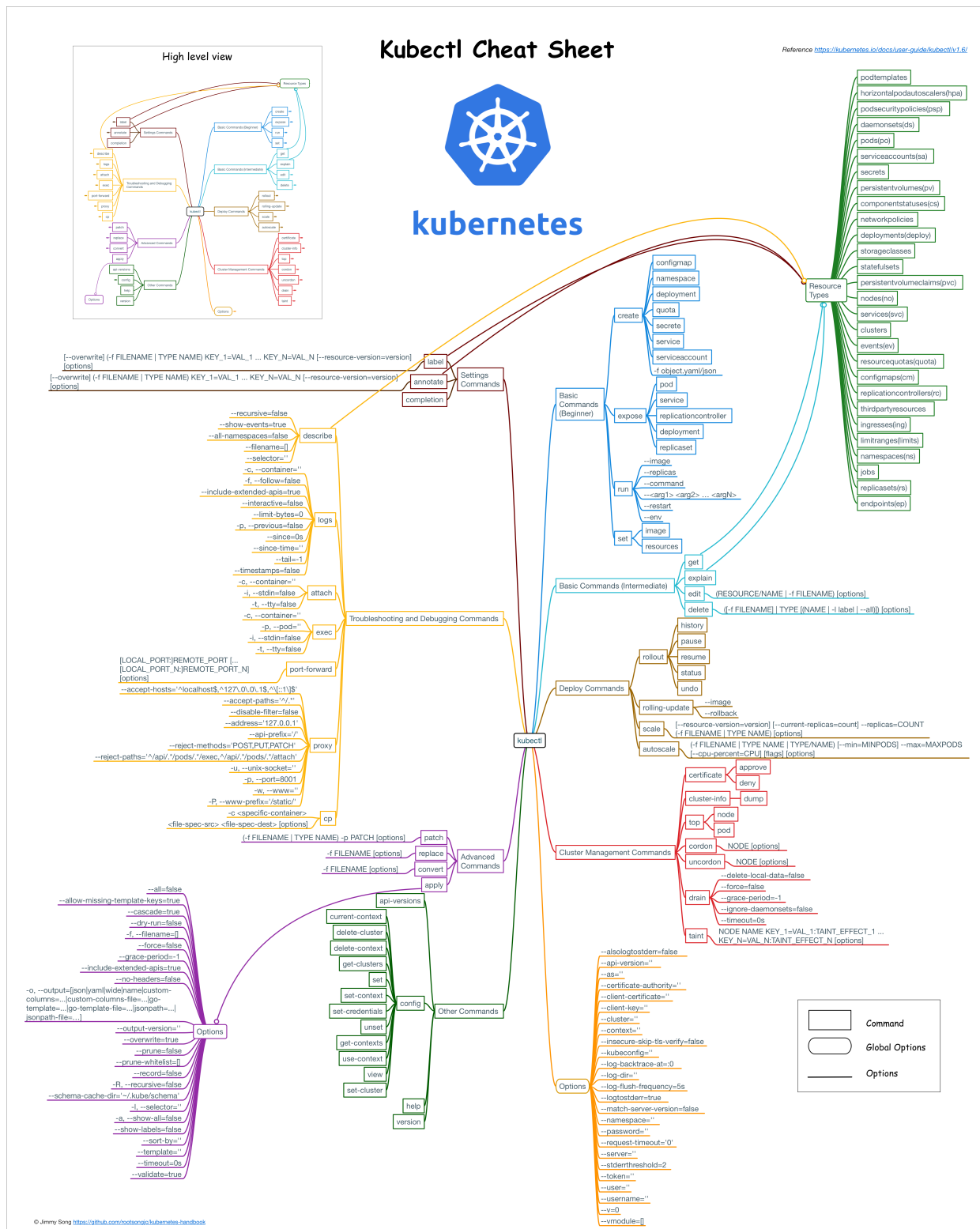


Kubectl命令概览

Kubernetes提供的kubectl命令是与集群交互最直接的方式，v1.6版本的kubectl命令参考图如下：



Kubectl的子命令主要分为8个类别：

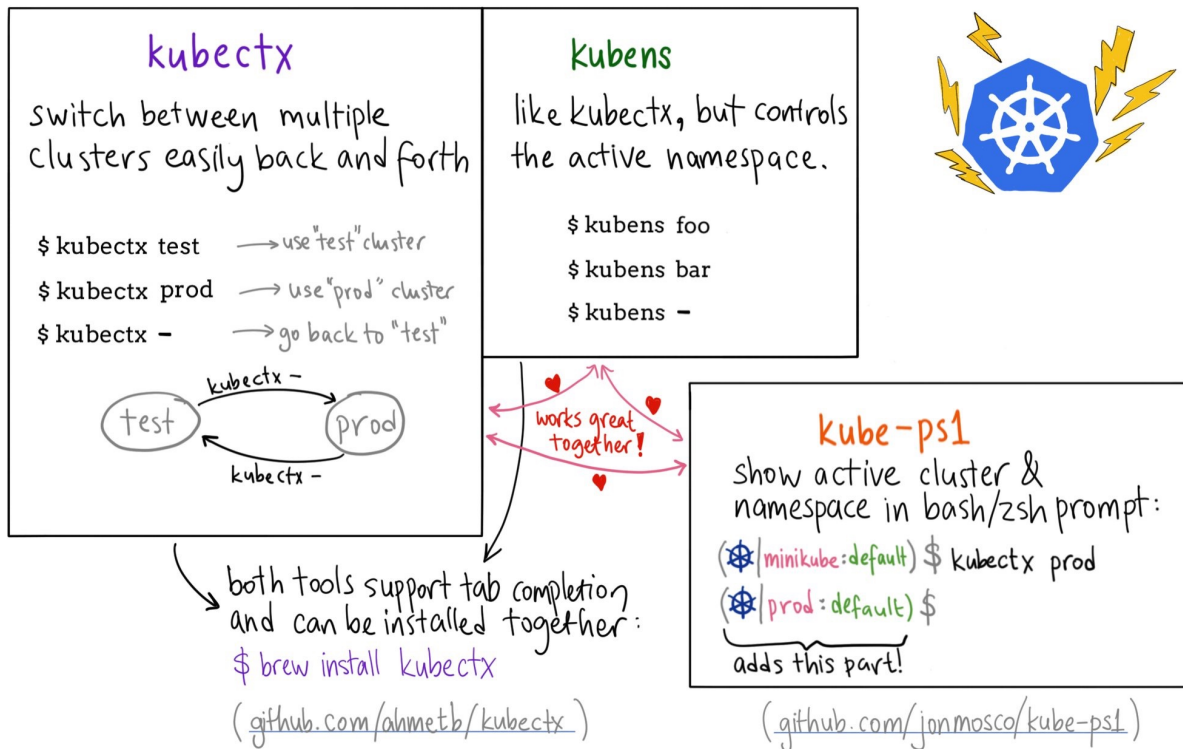
- 基础命令（初学者都会使用的）
- 基础命令（中级）
- 部署命令
- 集群管理命令
- 故障排查和调试命令
- 高级命令
- 设置命令
- 其他命令

熟悉这些命令有助于大家来操作和管理kubernetes集群。

命令行提示

为了使用kubectl命令更加高效，我们可以选择安装一下开源软件来增加操作kubectl命令的快捷方式，同时为kubectl命令增加命令提示。

a few tools to supercharge your kubectl...



图片 - 增加kubectl命令的工具 (图片来自网络)

- [kubectx](#) : 用于切换kubernetes context

Linux

Since kubectx/kubens are written in Bash, you should be able to instal them to any POSIX environment that has Bash installed.

- Download the kubectx, and kubens scripts.
- Either:
 - save them all to somewhere in your PATH,
 - or save them to a directory, then create symlinks to kubectx/kubens from somewhere in your PATH, like /usr/local/bin
- Make kubectx and kubens executable (chmod +x ...)

- Figure out how to install bash/zsh/fish [completion scripts](#).

Example installation steps:

```
sudo git clone https://github.com/ahmetb/kubectx
/opt/kubectx
sudo ln -s /opt/kubectx/kubectx /usr/local/bin/kubectx
sudo ln -s /opt/kubectx/kubens /usr/local/bin/kubens
```

This repository provides both kubectx and kubens tools.

kubectx helps you switch between clusters back and forth:



kubens helps you switch between Kubernetes namespaces smoothly:



kubectx (1)

kubectx is an utility to manage and switch between `kubectl(1)` contexts.

USAGE:

```
kubectx                : list the contexts
kubectx <NAME>         : switch to context <NAME>
kubectx -              : switch to the previous context
kubectx <NEW_NAME>=<NAME> : rename context <NAME> to <NEW_NAME>
kubectx <NEW_NAME>=.    : rename current-context to <NEW_NAME>
kubectx -d <NAME>       : delete context <NAME> ('.' for current-
context)

                        (this command won't delete the
user/cluster entry

                        that is used by the context)
```

Usage

```
$ kubectx minikube
Switched to context "minikube".
```

```
$ kubectx -
Switched to context "oregon".
```

```
$ kubectx -
Switched to context "minikube".
```

```
$ kubectx dublin=gke_ahmetb_europe-west1-b_dublin
Context "dublin" set.
```

```
Aliased "gke_ahmetb_europe-west1-b_dublin" as "dublin".
```

kubectx supports `Tab` completion on bash/zsh/fish shells to help with long context names. You don't have to remember full context names anymore.

kubens (1)

kubens is an utility to switch between Kubernetes namespaces.

USAGE:

```
kubens                : list the namespaces
kubens <NAME>         : change the active namespace
kubens -              : switch to the previous namespace
```

Usage

```
$ kubens kube-system
```

```
Context "test" set.
```

```
Active namespace is "kube-system".
```

```
$ kubens -
```

```
Context "test" set.
```

```
Active namespace is "default".
```

```
kubens also supports Tab completion on bash/zsh/fish shells.
```

- [kube-ps1](#) : 为命令行终端增加\$PROMPT字段

kube-ps1: Kubernetes prompt for bash and zsh

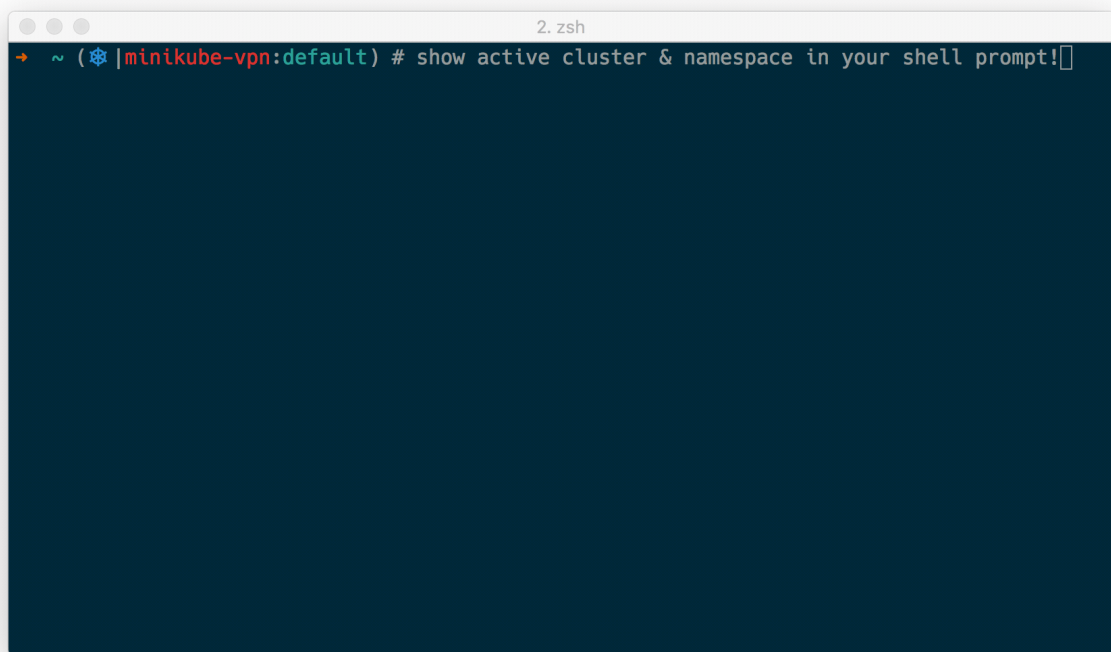
A script that lets you add the current Kubernetes context and namespace configured on kubectl to your Bash/Zsh prompt strings (i.e. the \$PS1).

Inspired by several tools used to simplify usage of kubectl.

```
→ ~ (🌀 | minikube:default)
```

```
→ ~ (🌀 | minikube:default)
```

```
→ ~ (🌀 | minikube:default)
```



Bash:

```
wget https://github.com/jonmosco/kube-  
ps1/archive/0.6.0.tar.gz
```

```
source /path/to/kube-ps1.sh
```

```
PS1='[\u@\h \W $(kube_ps1)]\$ '
```

- [kube-shell](#) : 交互式带命令提示的kubectl终端

kube-shell

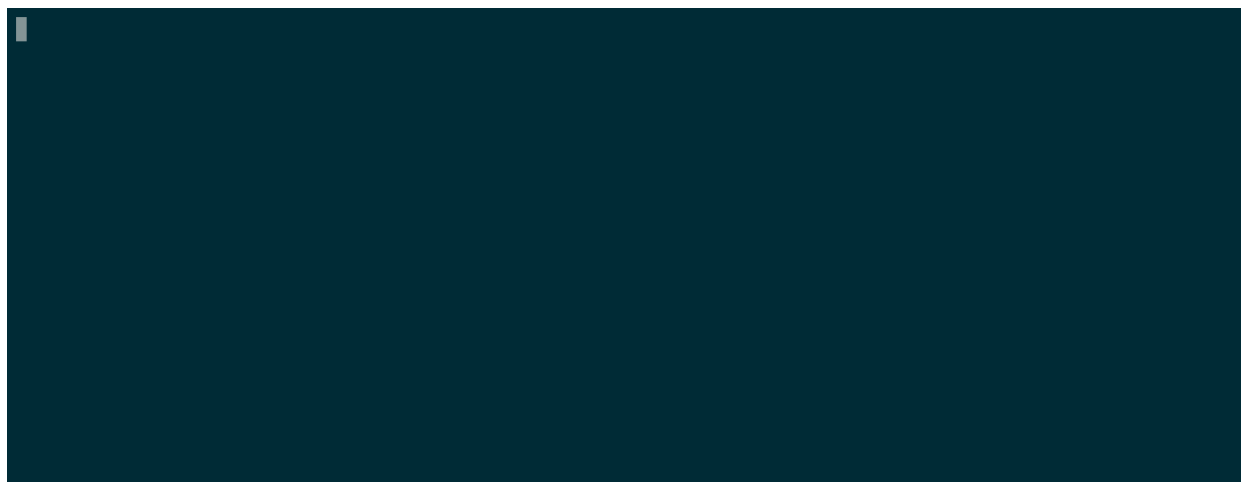
开源项目[kube-shell](#)可以为kubectl提供自动的命令提示和补全，使用起来特别方便，推荐给大家。

Kube-shell有以下特性：

- 命令提示，给出命令的使用说明
- 自动补全，列出可选命令并可以通过tab键自动补全，支持模糊搜索
- 高亮
- 使用tab键可以列出可选的对象
- vim模式

kube-shell features

Auto Completion of Commands and Options with
in-line documentation



Fish-Style Auto Suggestions

```
kube-shell>  
kube-shell>  
kube-shell>  
kube-shell>  
kube-shell>  
kube-shell> kubectl --namespace prod create service nodeport --tcp=8080:80 prodsvc
```

Cluster: kube-master Namespace: default User: [F4] In-line help: ON [F10] Exit

Command History

You can use up-arrow and down-arrow to walk through the history of commands executed. Also up-arrow partial string matching is possible. For e.g. enter 'kubectl get' and use up-arrow and down-arrow to browse through all kubectl get commands. You could also use CTRL+r to search from the history of commands.

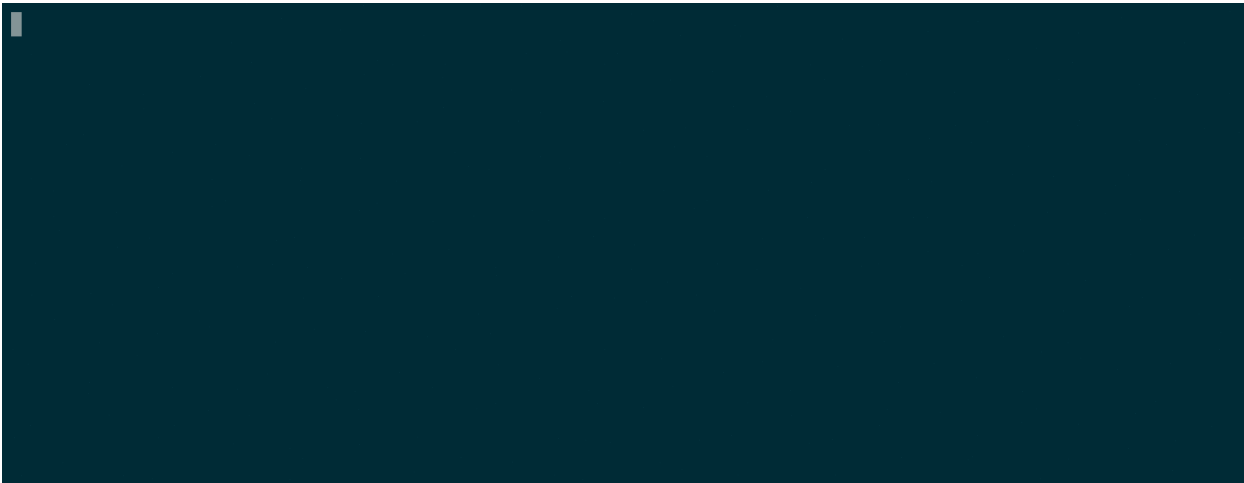
```
kube-shell> !tail ~/.kube/shell/history  
  
# 2017-07-01 13:30:28.393904  
+kubectl --namespace prod create service nodeport --tcp=8080:80 prodsvc  
  
# 2017-07-01 13:30:38.737325  
+kubectl --namespace prod get service  
  
# 2017-07-01 14:54:40.742770  
+!tail ~/.kube/shell/history  
kube-shell>
```

Cluster: kube-master Namespace: default User: [F4] In-line help: ON [F10] Exit

Fuzzy Searching

```
kube-shell>
kube-shell>
kube-shell>
kube-shell>
kube-shell>
kube-shell> kubectl delete dplomn
                        deployment
Cluster: kube-master Namespace: default User: [F4] In-line help: ON [F10] Exit
```

Server Side Auto Completion



Context information

Details of current context from kubeconfig is always readily displayed on the bottom toolbar. By pressing F4 button you can switch between the clusters and using F5 can switch between namespaces.

```
kube-shell>
kube-shell>
kube-shell>
kube-shell>
kube-shell> kubectl config get-contexts
CURRENT   NAME      CLUSTER   AUTHINFO   NAMESPACE
          test      cluster-test  admin-test
          kube-master  kube-master  default
*          minikube   minikube    minikube
kube-shell>

[F4] Cluster: minikube [F5] Namespace: default User: minikube [F9] In-line help: ON [F10] Exit
```

vi editing mode

Press ESC you have all key bindings (w: next word, b: prev word) to move across the words.

Installation

```
[root@vlnx251101 ~ (* |kubernetes:default)]# yum install
python34 python34-pip
```

```
[root@vlnx251101 ~ (* |kubernetes:default)]# pip3.4
install kube-shell
```

```
[root@vlnx251101 ~ (* |kubernetes:default)]# kube-shell
```

```
kube-shell> kubens kube-system
```

Context "kubernetes" modified.

Active namespace is "kube-system".

```
kube-shell> kubectl get pod
```

NAME	READY	STATUS
RESTARTS	AGE	

heapster-55884f49b6-zm2jv	1/1	Running
0	1d	
kube-dns-8498694664-7rbm6	3/3	Running
0	1d	
kubernetes-dashboard-6948bdb78-g4xlw	1/1	Running
0	1d	
monitoring-grafana-84fd47f8c9-ghg7k	1/1	Running
0	1d	
monitoring-influxdb-64b7644788-ggp49	1/1	Running
0	1d	