# 1 Rancher CheatSheet

CLOUD

Updated: January 1, 2019

- PDF Link: cheatsheet-rancher-A4.pdf, Category: Cloud
- Blog URL: https://cheatsheet.dennyzhang.com/cheatsheet-rancher-A4
- $\bullet$  Related posts: OpenShift CheatSheet, PKS CheatSheet, #denny-cheatsheets

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## 1.1 Rancher Summary

Name	Command
Setup rancher in vagrant	GitHub: quickstart/vagrant, https://172.22.101.101/admin/admin
Start rancher control plane with container	docker run -d -p 80:80 -p 443:443 rancher/rancher
Reference	Rancher v2.0 Documentation, Rancher Slack, Rancher Forum
Reference	YouTube: Rancher Overview, YouTube: Setup Rancher In A Hard Way
Reference	OpenShift CheatSheet, Rancher CheatSheet, PKS CheatSheet

https://raw.githubusercontent.com/dennyzhang/cheatsheet.dennyzhang.com/master/cheatsheet-rancher-A4/rancher-architectual com/dennyzhang.com/master/cheatsheet-rancher-architectual com/dennyzhang.com/de

# 1.2 Rancher Components

Name	Command
Control plane - rancher	Complete container management platform
cli	Rancher CLI
VM distro - os	Tiny Linux distro that runs the entire OS as Docker containers
Storage - longhorn	Distributed block storage for Kubernetes

# 1.3 rancher Concepts

Name	Command
Node driver	
Node template	

### 1.4 rancher Command Line

Name	Command
Reference	Link: Rancher CLI
Login to cluster	rancher login https:// <server_url>token <bearer_token></bearer_token></server_url>
Select project	rancher context switch
Rancher ssh to vm	rancher ssh node-001
Run kubectl command	rancher kubectl get nodes

### 1.5 Rancher Source Code

Name	Command
Rancher API Layer	GitHub: rancher/norman
Rancher Kubernetes Engine	GitHub: rancher/rke, GitHub: rancher/kontainer-engine

### 1.6 Rancher Footprint

> kubectl get all --all-namespaces

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
cattle-system	<pre>pod/cattle-cluster-agent-55897c6cb-xdj96</pre>	1/1	Running	0	6m
cattle-system	<pre>pod/cattle-node-agent-89jgs</pre>	1/1	Running	0	6m
ingress-nginx	<pre>pod/default-http-backend-797c5bc547-669zf</pre>	1/1	Running	0	6m
ingress-nginx	pod/nginx-ingress-controller-4gdhf	1/1	Running	0	6m
kube-system	pod/kube-dns-7588d5b5f5-xpfmg	3/3	Running	0	6m
kube-system	pod/kube-dns-autoscaler-5db9bbb766-kdhdn	1/1	Running	0	6m
kube-system	pod/kube-flannel-x686d	2/2	Running	0	6m
kube-system	pod/metrics-server-97bc649d5-8pf7f	1/1	Running	0	6m

kube-system kube-system kube-system kube-system	<pre>pod/rke-ingress-controller-dep pod/rke-kubedns-addon-deploy-j pod/rke-metrics-addon-deploy-j pod/rke-network-plugin-deploy-</pre>	ob-2pzw6 ob-69zxc	0/ 0/ 0/	1 Co	ompleted ompleted ompleted ompleted	0 0 0	6m 6m 6m 6m	
NAMESPACE default ingress-nginx kube-system kube-system	NAME service/kubernetes service/default-http-backend service/kube-dns service/metrics-server	TYPE ClusterIP ClusterIP ClusterIP ClusterIP	10.43 10.43 10.43	ER-IP .0.1 .142.185 .0.10 .20.15	EXTERNAL <none> <none> <none> <none></none></none></none></none>	443 80/ 53/	T(S) /TCP TCP UDP,53/TCP	AGE 7m 6m 6m 6m
NAMESPACE cattle-system ingress-nginx kube-system	NAME daemonset.apps/cattle-node-age daemonset.apps/nginx-ingress-o daemonset.apps/kube-flannel		DESIRE 1 1	CURRE 1 1 1	NT READY  1  1  1	UP-T 1 1 1	O-DATE AV 1 1 1	AILABL
NAMESPACE cattle-system ingress-nginx kube-system kube-system kube-system	NAME deployment.apps/cattle-cluster deployment.apps/default-http-b deployment.apps/kube-dns deployment.apps/kube-dns-autos deployment.apps/metrics-server	r-agent 1 packend 1 1 scaler 1	ESIRED	CURRENT 1 1 1 1 1	UP-TO-DA 1 1 1 1 1	TE AVAI 1 1 1 1 1	LABLE AGE 6m 6m 6m 6m 6m	
NAMESPACE cattle-system ingress-nginx kube-system kube-system kube-system	NAME replicaset.apps/cattle-cluster replicaset.apps/default-http-t replicaset.apps/kube-dns-75886 replicaset.apps/kube-dns-autos replicaset.apps/metrics-server	-agent-5589 ackend-797c 5b5f5 caler-5db9b	:5bc547	DESIRED 1 1 1 1	CURRENT  1  1  1  1	READY 1 1 1 1	AGE 6m 6m 6m 6m	
NAMESPACE kube-system kube-system kube-system kube-system	NAME job.batch/rke-ingress-controller job.batch/rke-kubedns-addon-depl job.batch/rke-metrics-addon-depl job.batch/rke-network-plugin-dep	.oy-job .oy-job	DESI 1 1 1 1	RED SUC 1 1 1 1		AGE 6m 6m 6m 6m		

#### 1.7Rancher CLI Help

Denny > ./rancher --help

Rancher CLI, managing containers one UTF-8 character at a time

Usage: rancher [OPTIONS] COMMAND [arg...]

Version: v2.0.5

#### Options:

--debug Debug logging --help, -h show help

--version, -v print the version

#### Commands:

apps, [app] Operations with apps catalog Operations with catalogs clusters, [cluster] Operations on clusters context Operations for the context View details of resources inspect kubectl Run kubectl commands login, [1] Login to a Rancher server namespaces, [namespace] Operations on namespaces

nodes, [node]

projects, [project]

ps

Show workloads in a project

settings, [setting]

Show settings for the current server

ssh

SSH into a node

up

apply compose config

help, [h]

Shows a list of commands or help for one command

Run 'rancher COMMAND --help' for more information on a command.

#### 1.8 More Resources

https://rancher.com/docs/rancher/v2.x/en/quick-start-guide/deployment/License: Code is licensed under MIT License.

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