1 Rancher CheatSheet

CLOUD

Updated: August 12, 2019

- PDF Link: cheatsheet-rancher-A4.pdf, Category: Cloud
- $\bullet \ \operatorname{Blog} \ \operatorname{URL} \colon \texttt{https://cheatsheet.dennyzhang.com/cheatsheet-rancher-A4}$
- \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 pod/rke-ingress-controller-deploy-job-7wn5h 0/1 Completed 0 6m												
kube-system	pod/rke-kubedns-addon-deploy-job-2pzw6			0/	1	Completed		0		6m		
kube-system	pod/rke-metrics-addon-deploy-job-69zxc			0/	1	1 Completed		0		6m		
kube-system	pod/rke-network-plugin-deploy-	job-bv4jc	:	0/1 Compl		npleted	0		6m			
NAMESPACE	NAME	TYPE		CLUST	ER-IP		EXTERNA	L-IP	PORT (S)		AGE
default	service/kubernetes	ClusterI	P	10.43	3.0.1		<none></none>		443/T	'CP		7m
ingress-nginx	service/default-http-backend	ClusterI	P	10.43	3.142.	185	<none></none>		80/TC	P		6m
kube-system	service/kube-dns	ClusterI	P	10.43	3.0.10		<none></none>		53/UD	P,53/	ГСР	6m
kube-system	service/metrics-server	ClusterI	P	10.43	3.20.1	5	<none></none>		443/T	CP		6m
NAMESPACE	NAME			DESIRE	ED C	URRENT	Γ READ	Υ	UP-TO-	DATE	AVA	ILABL
cattle-system	daemonset.apps/cattle-node-age	nt		1	1		1		1		1	
ingress-nginx	daemonset.apps/nginx-ingress-c	ontroller		1	1		1		1		1	
kube-system	daemonset.apps/kube-flannel			1	1		1		1		1	
NAMESPACE	NAME		DES	IRED	CURR	ENT	UP-TO-D	ATE	AVAILA	BLE	AGE	
cattle-system	deployment.apps/cattle-cluster	-agent	1		1		1		1		6m	
ingress-nginx	deployment.apps/default-http-b	ackend	1		1		1		1		6m	
kube-system	deployment.apps/kube-dns		1		1		1		1		6m	
kube-system	deployment.apps/kube-dns-autos	caler	1		1		1		1		6m	
kube-system	deployment.apps/metrics-server		1		1		1		1		6m	
NAMESPACE	NAME				DES	IRED	CURREN	T	READY	AGE		
cattle-system	replicaset.apps/cattle-cluster	-agent-55	897	c6cb	1		1		1	6m		
ingress-nginx	replicaset.apps/default-http-b	ackend-79	7c5	bc547	1		1		1	6m		
kube-system	replicaset.apps/kube-dns-7588d	5b5f5			1		1		1	6m		
kube-system	replicaset.apps/kube-dns-autos	caler-5db	9bb	b766	1		1		1	6m		
kube-system	replicaset.apps/metrics-server	-97bc649d	15		1		1		1	6m		
NAMESPACE	NAME			DESI	RED	SUCCE	ESSFUL	AGE				
kube-system	<pre>job.batch/rke-ingress-controller</pre>	-deploy-j	ob	1		1		6m				
kube-system	job.batch/rke-kubedns-addon-depl	oy-job		1		1		6m				
kube-system	<pre>job.batch/rke-metrics-addon-depl</pre>	oy-job		1		1		6m				
kube-system	<pre>job.batch/rke-network-plugin-dep</pre>	loy-job		1		1		6m				

1.7 Rancher 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] Operations on nodes

projects, [project] Operations on projects

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.