1 Rancher CheatSheet

CLOUD

Updated: November 3, 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

· manager book	arr 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	pod/default-http-backend-797c5bc547-669zf	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		n 0/ 0/ 0/ 0/	'1 '1	Com Com	pleted pleted pleted pleted	0 0 0	6	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 ClusterI ClusterI ClusterI	P P	10.43 10.43 10.43	ER-IP 3.0.1 3.142.1 3.0.10 3.20.18	185	EXTERNAL <none> <none> <none> <none></none></none></none></none>	L-IP	PORT(S) 443/TCP 80/TCP 53/UDP, 443/TCP	,53/TCP	AGE 7m 6m 6m 6m
NAMESPACE cattle-system ingress-nginx	NAME daemonset.apps/cattle-node-age daemonset.apps/nginx-ingress-c		1	DESIRE L	D CU 1 1	JRRENT	READ	Y	UP-TO-DA 1 1	ATE AV 1 1	AILABL
kube-system	daemonset.apps/kube-flannel	0110101101		1	1		1		1	1	
NAMESPACE	NAME		DESI	IRED	CURRI	ENT	UP-TO-D	ATE	AVAILABI		:
cattle-system .	deployment.apps/cattle-cluster	•	1		1		1		1	6m	
ingress-nginx	deployment.apps/default-http-b		1 1		1 1		1		1	6m	
kube-system	<pre>deployment.apps/kube-dns deployment.apps/kube-dns-autos</pre>		1		1		1 1		1	6m 6m	
kube-system kube-system	deployment.apps/metrics-server	calei	1		1		1		1	6m	
NAMESPACE	NAME	FF	.007	- C - L	DES:	IRED	CURREN		EADY	AGE	
cattle-system	replicaset.apps/cattle-cluster	•			1 1		1 1	1 1		6m 6m	
<pre>ingress-nginx kube-system</pre>	replicaset.apps/default-http-b replicaset.apps/kube-dns-7588d		77 051	00547	1		1	1		6m	
kube-system kube-system	replicaset.apps/kube-dns-autos		ahhi	766	1		1	1		6m	
kube-system	replicaset.apps/metrics-server			3700	1		1	1		6m	
NAMESPACE	NAME			DESI	RED	SUCCE	SSFUL	AGE			
kube-system	${\tt job.batch/rke-ingress-controller}$		ob	1		1		6m			
kube-system	<pre>job.batch/rke-kubedns-addon-depl</pre>			1		1		6m			
kube-system	<pre>job.batch/rke-metrics-addon-depl</pre>			1		1		6m			
kube-system	job.batch/rke-network-plugin-dep	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

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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.