

# 快速部署高可用的 Cloud Native 技术栈

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# Who Am I?



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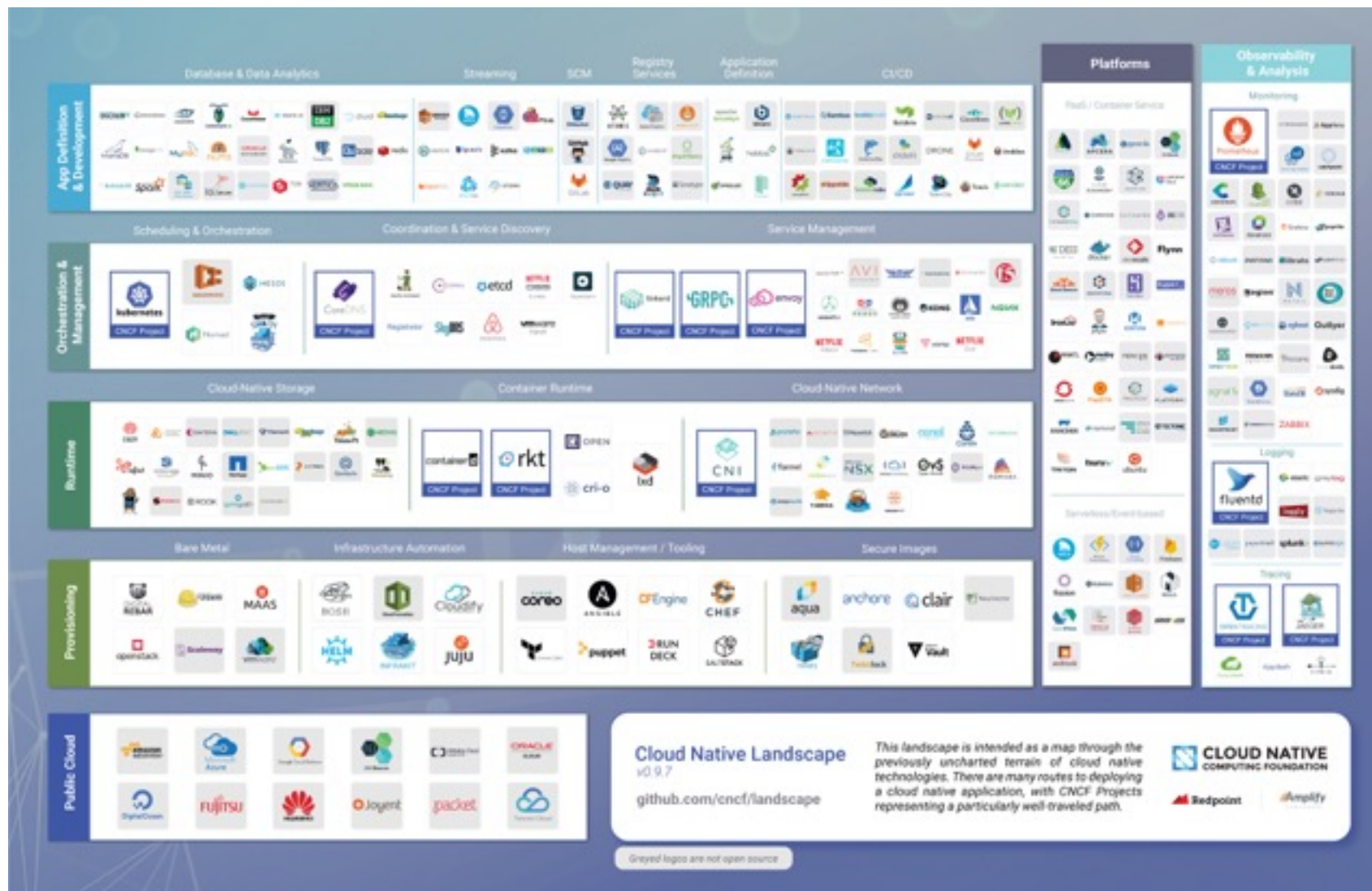
Github: <https://github.com/genedna>

主办:





# Cloud Native Landscape

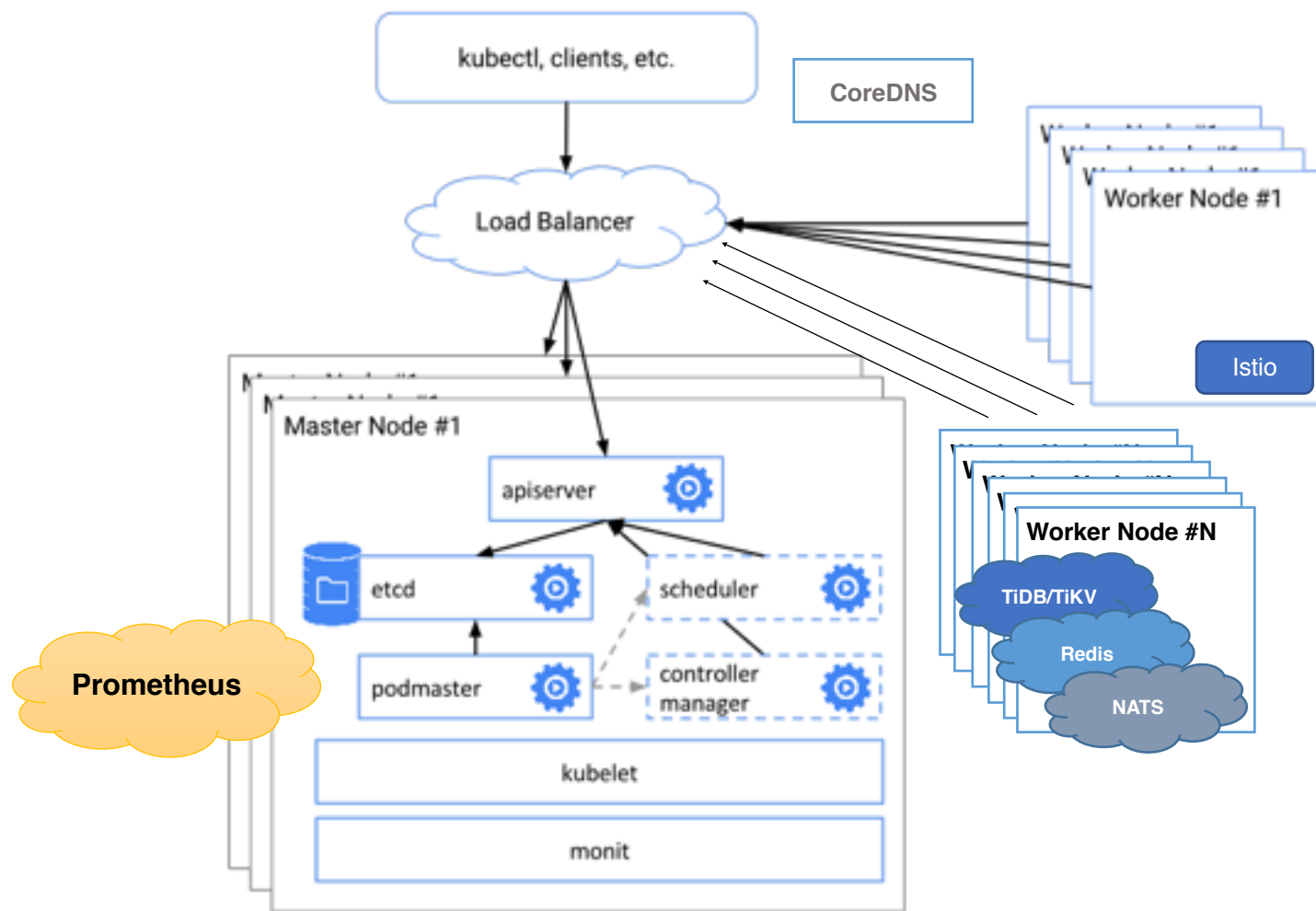


1. Why don't have any definition about Cloud Native Application?
2. What's Cloud Native Application?

The [CNCF](#) Cloud Native Landscape Project is intended as a map through the previously uncharted terrain of cloud native technologies. This attempts to categorize many of the most popular projects and product offerings in the cloud native space. It is under development by [CNCF](#) with assistance from [Redpoint](#) and [Amplify](#). **There are many routes to deploying a cloud native application, with CNCF Projects representing a particularly well-traveled path.**

主办:





*Kubernetes* 是 *Cloud Native* 技术栈的基石，所以 *Kubernetes* 与其它组件的兼容性测试应该是 *Cloud Native Foundation CI* 的重点。

⌚ Last updated: 15 minutes ago

Project	Build	Release	Deployments					
			AWS	Azure	Bluemix	GCE	GKE	Packet
 <b>Kubernetes</b> Orchestration	Stable Head							
	STATUS	v1.87	SUCCESS	SUCCESS	SUCCESS	SUCCESS	FAILED	SUCCESS
	97hgb2		FAILED	SUCCESS	SUCCESS	RUNNING	SUCCESS	SUCCESS
 <b>Prometheus</b> Monitoring	STATUS	v3.0.1	RUNNING	FAILED	SUCCESS	SUCCESS	SUCCESS	SUCCESS
	12eeef9		SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
 <b>OpenTracing</b> Tracing	STATUS	v1.41	SUCCESS	SUCCESS	RUNNING	SUCCESS	RUNNING	SUCCESS
	wor24x		RUNNING	SUCCESS	SUCCESS	FAILED	FAILED	SUCCESS
 <b>Fluentd</b> Logging	STATUS	v4.8.1	RUNNING	RUNNING	SUCCESS	SUCCESS	SUCCESS	SUCCESS
	90df1d		SUCCESS	SUCCESS	RUNNING	RUNNING	SUCCESS	RUNNING
 <b>Linkerd</b> Service Mesh	STATUS	v4.99	SUCCESS	SUCCESS	SUCCESS	SUCCESS	RUNNING	RUNNING
	uio02d		RUNNING	SUCCESS	SUCCESS	FAILED	SUCCESS	SUCCESS
 <b>gRPC</b> Remote Procedure Call	STATUS	v2.9	RUNNING	RUNNING	SUCCESS	SUCCESS	SUCCESS	SUCCESS
	14eeef9		SUCCESS	SUCCESS	FAILED	FAILED	SUCCESS	SUCCESS
 <b>CoreDNS</b> Service Discovery	STATUS	v9.12	RUNNING	SUCCESS	RUNNING	SUCCESS	SUCCESS	SUCCESS
	3jhoef3		SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
 <b>containerd</b> Container Runtime	STATUS	v2.99	SUCCESS	SUCCESS	SUCCESS	SUCCESS	FAILED	SUCCESS
	53jw3m		SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
 <b>rkt</b> Container Runtime	STATUS	2.99	FAILED	FAILED	FAILED	FAILED	FAILED	FAILED
	12eeef9		SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
 <b>CNI</b> Networking	STATUS	2.99	RUNNING	RUNNING	FAILED	FAILED	SUCCESS	FAILED
	12eeef9		SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS

cncf/cross-project 和 cncf/cross-cloud

# cncf.build

The screenshot shows the cncf.build website, which provides integration status for various open-source projects. The page features a header with the site's name and a brief description of its purpose. Below the header is a table with 16 columns representing different projects and 8 rows representing different integration scenarios. Each cell in the table contains a version number or a status indicator (N/A or a green checkmark).

Kubernetes	etcd	Flannel	Docker	Prometheus	OpenTracing	Fluentd	Inkarn	gRPC	CoreDNS	contaimd	istio	Ch	Envoy	Jaeger	
1.6.6	3.2.5	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓
1.6.7	3.2.4	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓
1.6.6	3.2.4	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓
1.6.7	3.2.3	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓
1.6.6	3.2.3	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓
1.6.7	3.2.2	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓
1.6.6	3.2.2	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓
1.6.7	3.2.8	0.7.1	17.04.0-ce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓

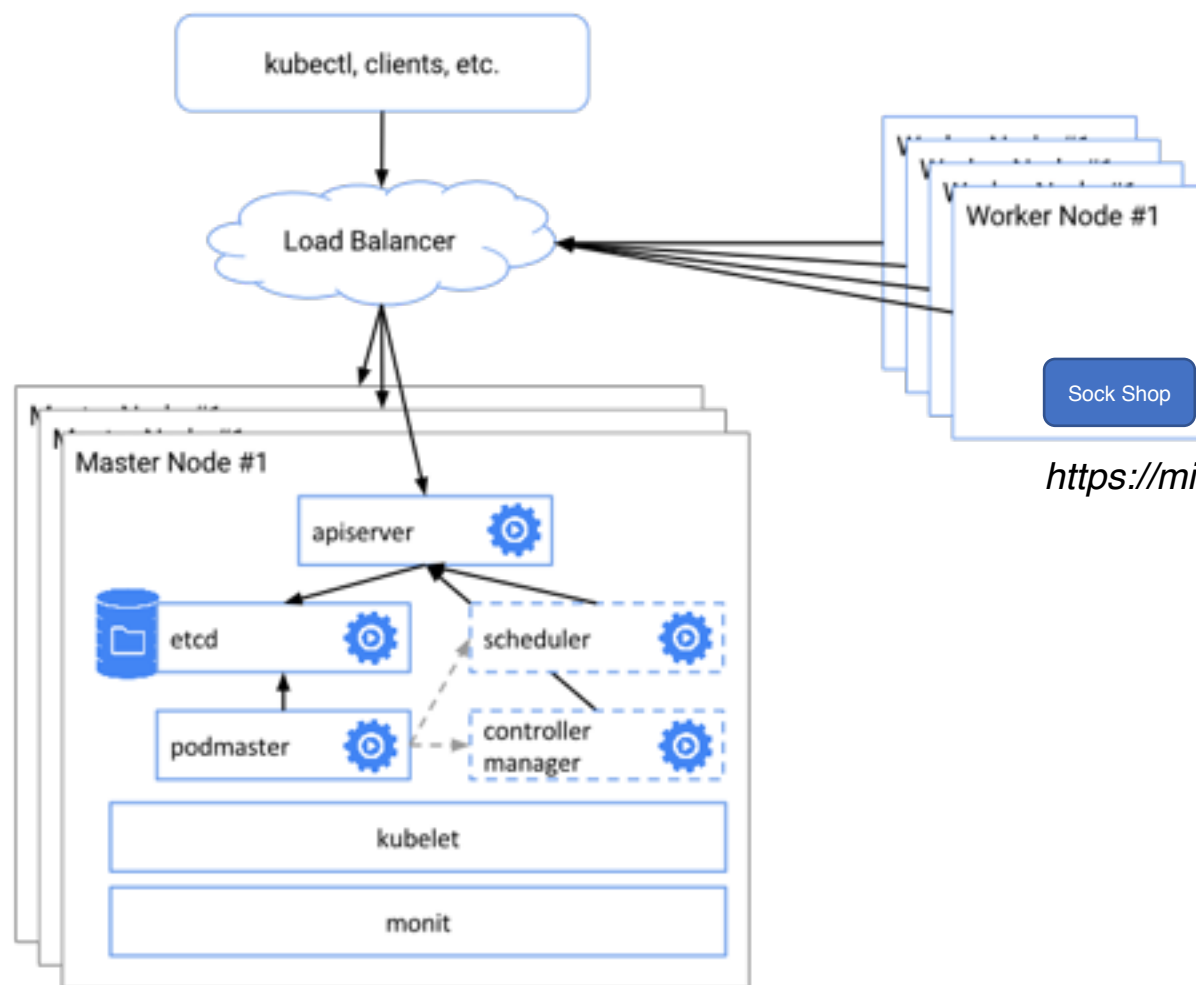


# Demo

主办：



# Kubernetes HA





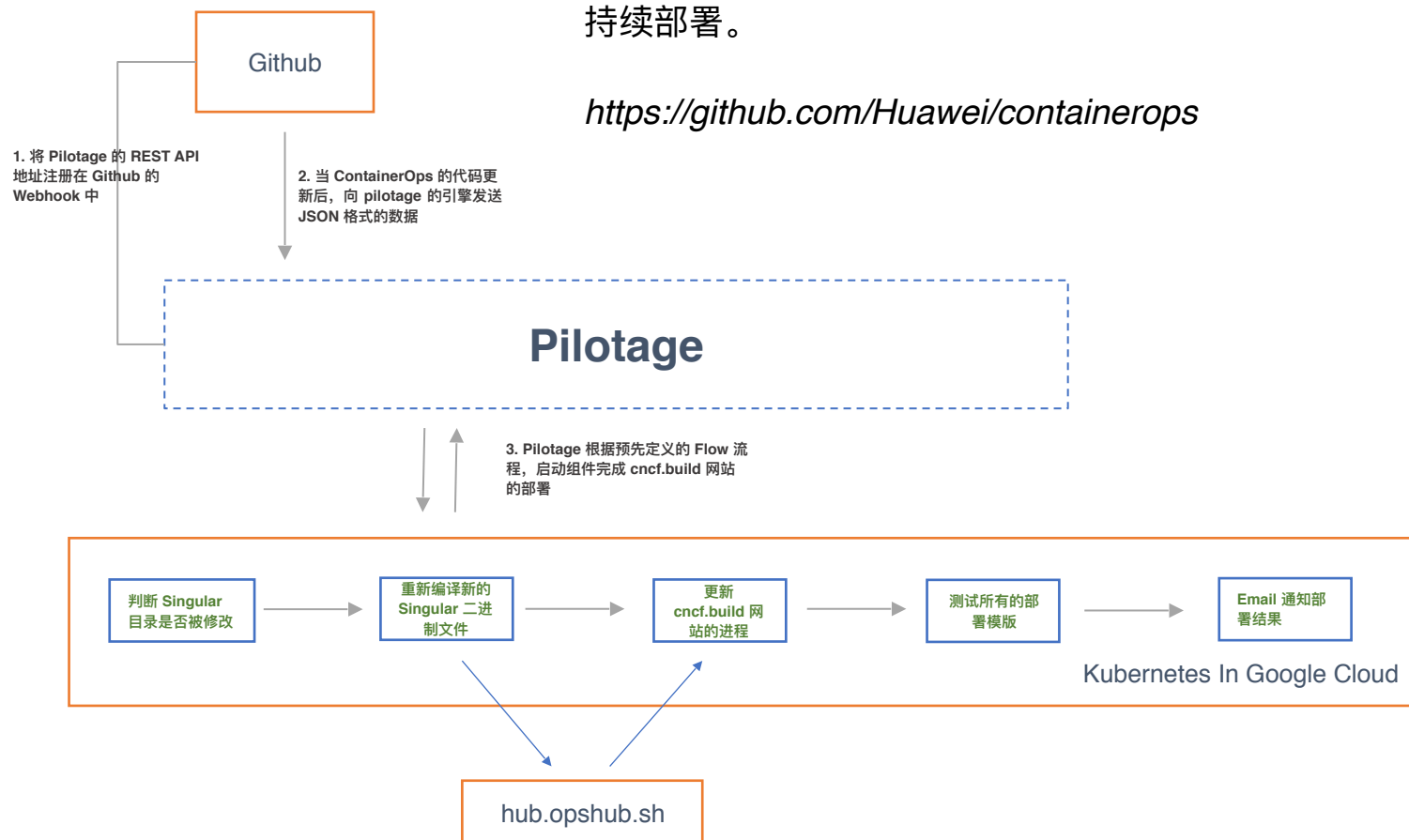
使用 *YAML* 格式文件描述  
*Cloud Native* 技术栈架构,  
使用 *Singular* 命令一键部署  
测试。

```
11     name: etcd
12     version: etcd-3.2.8
13     master: 3
14     minion: 0
15     components:
16     -
17         binary: etcd
18         url: https://binary.nyc3.digitaloceanspaces.com/etcd/3.2.8/etcd
19         package: false
20         systemd: etcd-3.2.8
21         ca: etcd-3.2.8
22     -
23         binary: etcdctl
24         url: https://binary.nyc3.digitaloceanspaces.com/etcd/3.2.8/etcdctl
25         package: false
26 -
27     name: flannel
28     version: flannel-0.7.1
29     master: 3
30     minion: 0
31     dependencies:
32     - etcd
33     components:
34     -
35         binary: flanneld
36         url: https://hub.opshub.sh/binary/v1/containerops/binary/binary/0.7.1/flanneld
37         package: false
38         systemd: flannel-0.7.1
```

***Singular deploy template cloud-native-stack.yml --verbose --timestamp --delete***

使用 *ContainerOps* 多个组件配合实现 *cncf.build* 持续部署。

<https://github.com/Huawei/containerops>



```
98 lines (98 sloc) | 4.03 KB
1 # Copyright 2018 - 2019 Huawei Technologies Co., Ltd. All rights reserved.
2 #
3 # Licensed under the Apache license, Version 2.0 (the "license");
4 # you may not use this file except in compliance with the license.
5 # You may obtain a copy of the license at
6 #
7 # http://www.apache.org/licenses/LICENSE-2.0
8 #
9 # Unless required by applicable law or agreed to in writing, software
10 # distributed under the license is distributed on an "AS IS" BASIS,
11 # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
12 # See the license for the specific language governing permissions and
13 # limitations under the license.
14
15 url: containerops/singular/sd-singular-demon
16 title: Demo For ContainerOps Pilotage Web Hook(Singular Auto Upgrade)
17 version: 1
18 tag: latest
19 timeout: 0
20 stages:
21   -
22     type: start
23     name: start
24     title: Start
25   -
26     type: normal
27     name: detect-singular-code-change
28     title: Detect if there is any changes on singular's code in the last merge.
29     sequencing: sequence
30     actions:
31       -
32         name: detect-singular-code-change
33         title: Tell code changes from the last git merge.
34         jobs:
35           -
36             name: detect-singular-code-change
37             type: component
38             subject: prometheus/prometheus-build.yaml
39             endpoint: hub.opshub.sh/containerops/webhook-code-changed:demo5
40             resources:
41               cpu: 2
42               memory: 40
43             timeout: 0
44             environments:
45               - CO_DATA: "Vargate@singular"
46             outputs: ["CO_DATA_CHANGED"]
47       -
```

# Q&A

<https://cncf.build>

<https://github.com/Huawei/containerops>

主办：

