



fabric8

Microservices workflow: continuous integration and delivery

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Red Hat
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<https://puppet.com/resources/white-paper/2015-state-of-devops-report>

High-performing IT organizations
have 60% fewer failures and
recover 168 times faster.



“Our definition of IT performance includes two throughput metrics — deployment frequency and deployment lead time — and one stability metric, mean time to recover (MTTR). ”

18 months ago...

github.com/fabric8io

4 main java repos, 1 nodejs + angularjs

ci.fabric8.io

~ 15 jenkins jobs



Today...

github.com/fabric8io

- over 80 repos in the last 6 months

github.com/fabric8-quickstarts

- 45 quickstarts repos

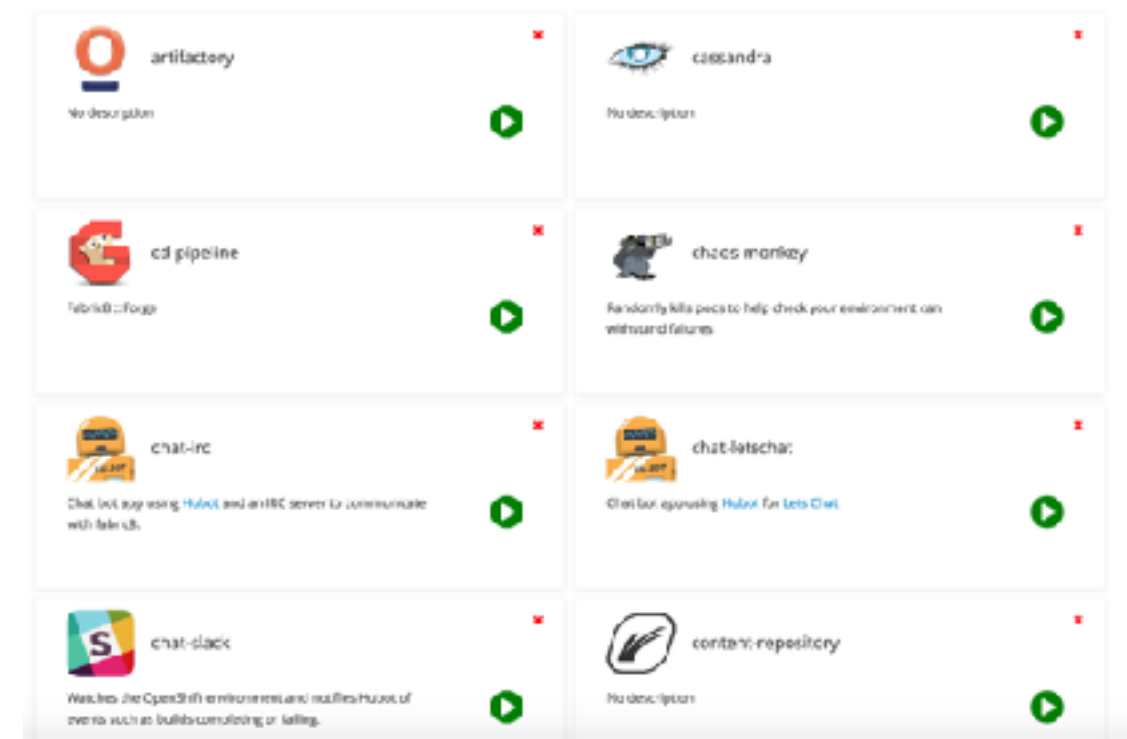
48 apps

ci.fabric8.io

- 143 jobs

cd.fabric8.io


- 38 jobs + 26 releases in 3 days



Jenkins Pipeline



Jenkins Pipeline

 fabric8io / kubeflix

Unwatch 21

Star 46

Fork 20

Code

Issues 3

Pull requests 0

Projects 0

Wiki

Pulse

Graphs

Settings

Kubernetes integration with Netflix OSS — Edit

261 commits

31 branches

22 releases

9 contributors

Apache-2.0

Branch: master ~


New pull request

Create new file

Upload files

Find file

Clone or download -

 fusesource-ci committed on GitHub Merge pull request #129 from fabric8io/versionUpdate8ca2c6f7-0bd9-474... Latest commit 1ef62a3 22 hours ago

docs/images	added a kubeflix logo	7 months ago
examples	Update docs and profiles to reflect the recent f-m-p upgrade.	a month ago
hystrix-dashboard	lets try push the docker images	27 days ago
images	Update images/dashboard-configuration.png	7 months ago
packages	#121: Fix issue with invalid project name inside kubeflix package.	23 hours ago
ribbon-discovery	Align kubeflix with latest versions of kubernetes-client, spring-clou...	a month ago
turbine-discovery	Align kubeflix with latest versions of kubernetes-client, spring-clou...	a month ago
turbine-server	lets try push the docker images	27 days ago
.gitignore	First commit	7 months ago
Jenkinsfile	run pipeline in its own workspace	6 months ago



Jenkinsfile

```
node{  
    echo 'hello world'  
}
```




```
node{
  checkout scm
  sh "git remote set-url origin git@github.com:fabric8io/fabric8-console.git"

  def pipeline = load 'release.groovy'

  stage 'Stage'
  def stagedProject = pipeline.stage()

  stage 'Deploy'
  def stagedProject = pipeline.deploy()

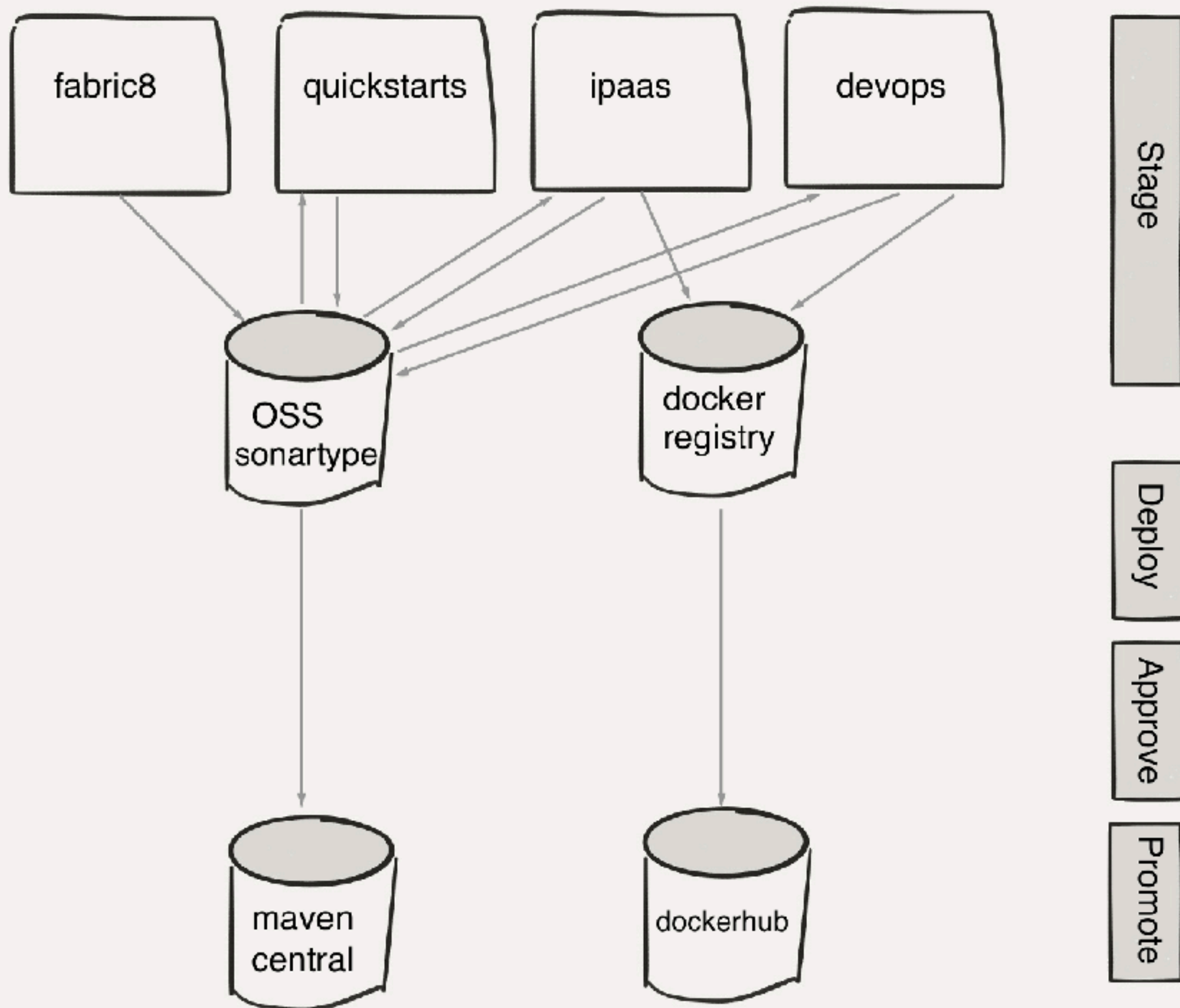
  stage 'Approve'
  pipeline.approveRelease(stagedProject)

  stage 'Promote'
  pipeline.release(stagedProject)
}
```



Single v Multi project release





Pipeline Shared Libraries

```
waitUntilPullRequestMerged{  
    name = 'fabric8io/fabric8'  
    prId = '1234'  
}
```

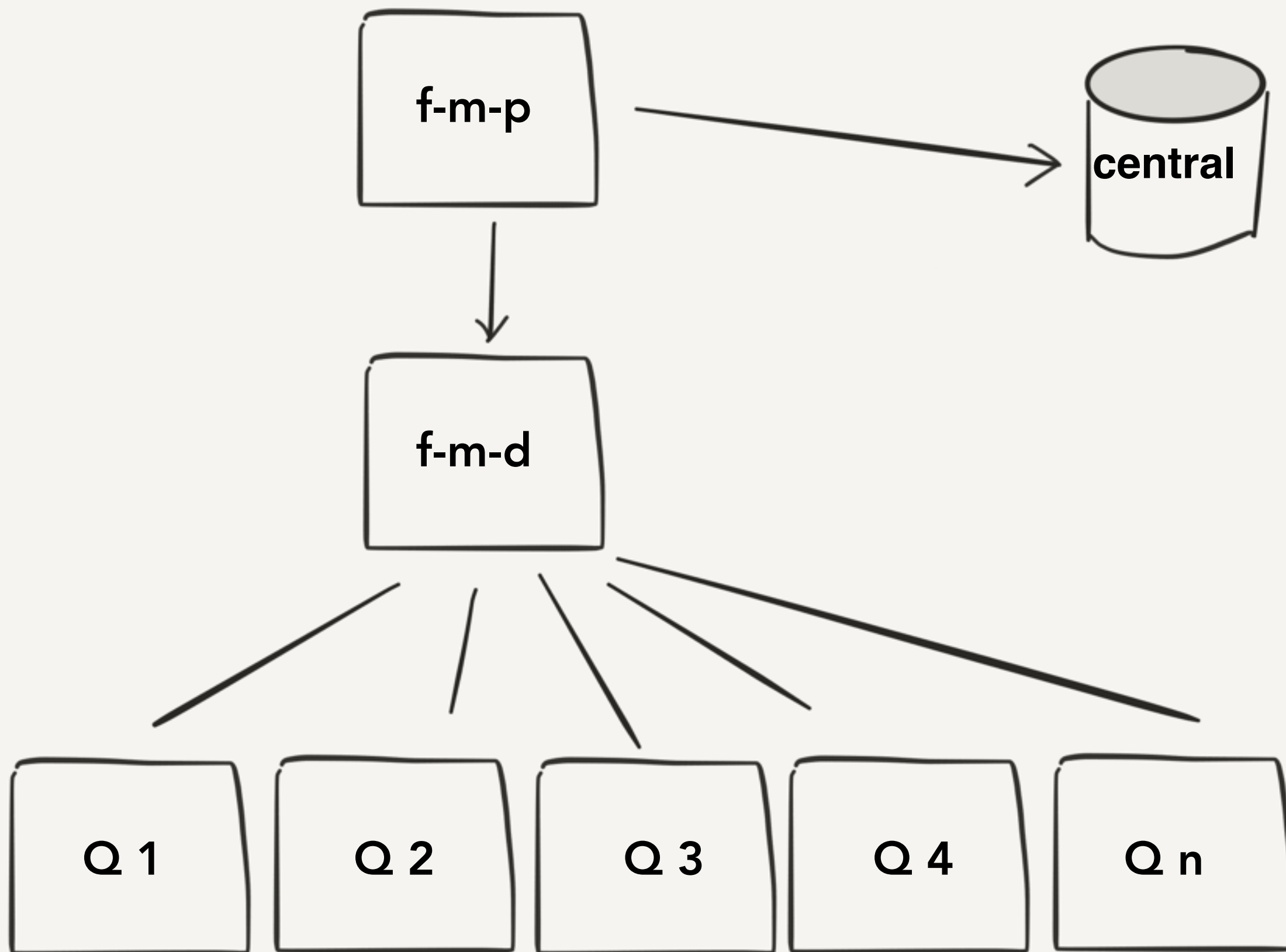
```
waitUntilArtifactSyncedWithCentral {  
    repo = 'http://central.maven.org/maven2/'  
    groupId = 'io.fabric8.archetypes'  
    artifactId = 'archetypes-catalog'  
    version = '0.0.1'  
    ext = 'jar'  
}
```

github.com/jenkinsci/workflow-cps-global-lib-plugin
github.com/fabric8io/jenkins-pipeline-library



pipeline

pipeline



Stage View

fabric8-maven-dependencies - Stage View

		Updating fabric8-quickstarts/funktion-java-example	Updating fabric8-quickstarts/funktion-groovy-example	Updating fabric8-quickstarts/funktion-kotlin-example	Updating fabric8-quickstarts/funktion-nodejs-example	Updating fabric8-quickstarts/spring-boot-camel	Updating fabric8-quickstarts/spring-boot-camel-xml	Updating fabric8-quickstarts/spring-boot-ribbon	Updating fabric8-quickstarts/cdi-camel
Average stage times: (Average full run time: ~5min 40s)		4s	3s	2s	2s	7s	7s	6s	8s
#13	Sep 30 12:10 No Changes	7s	2s	2s	2s	2s	2s	2s	2s
#12	Sep 30 10:15 No Changes	3s	2s	2s	2s	2s	2s	2s	2s
#11	Sep 30 09:21 2 commits	3s	2s	2s	2s	27s	24s	20s	17s
#10	Sep 30 08:49 No Changes	4s	3s	2s	2s	2s	2s	3s	2s
#9	Sep 29 22:21 No Changes	3s	2s	2s	2s	2s	2s	2s	2s
#8	Sep 28 23:21 2 commits	3s	10s	3s	2s	2s	3s	2s	17s



Kubernetes Plugin

Multi container build pod (coming in 0.9)

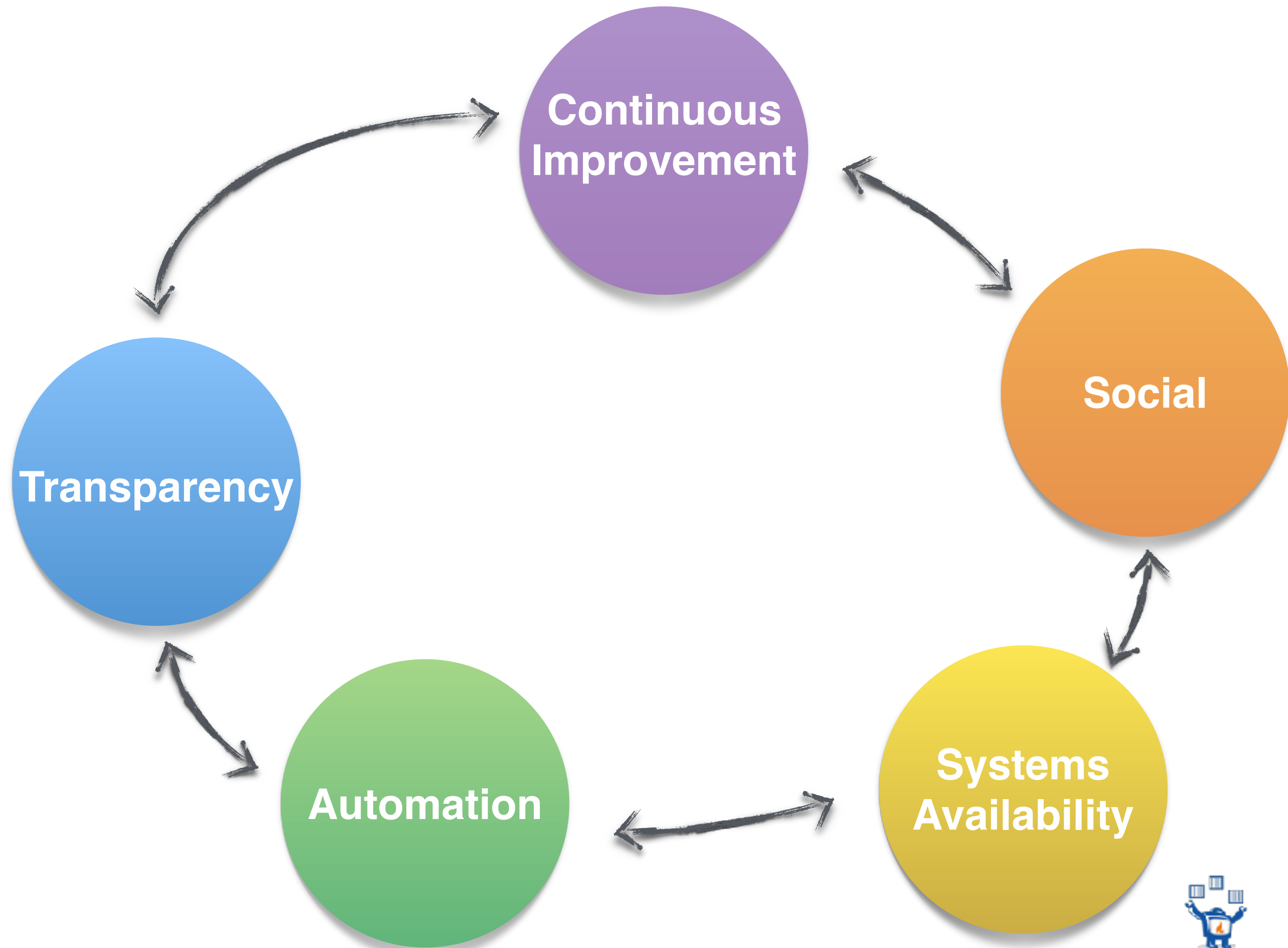
```
podTemplate(label: 'mypod', containers: [  
    containerTemplate(name: 'jnlp', image: 'jenkinsci/jnlp-slave:2.62-alpine', args: '${computer.jnlpmac}  
    containerTemplate(name: 'maven', image: 'maven:3.3.9-jdk-8-alpine', ttyEnabled: true, command: 'cat')  
]) {  
  
    node ('mypod') {  
        checkout scm  
        container(name: 'maven') {  
            sh 'mvn clean install'  
        }  
    }  
}
```

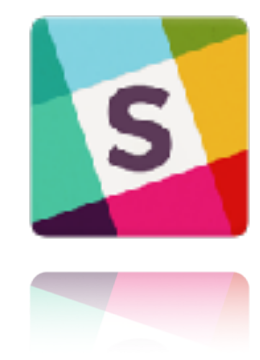
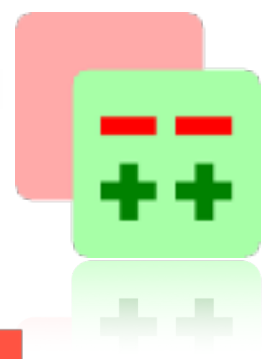
github.com/jenkinsci/kubernetes-plugin



Continuous Delivery is more than just one tool







let's Chat





Jolokia



Grafana



Prometheus



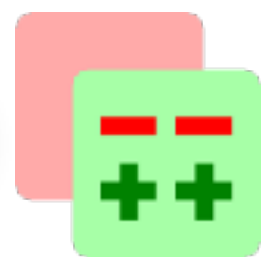
Kibana



Elasticsearch



Taiga



Gerrit



Gogs



Slack



Lets Chat



Ansible



Jenkins



Forge



Hubot



Arquillian



docker



Kubernetes



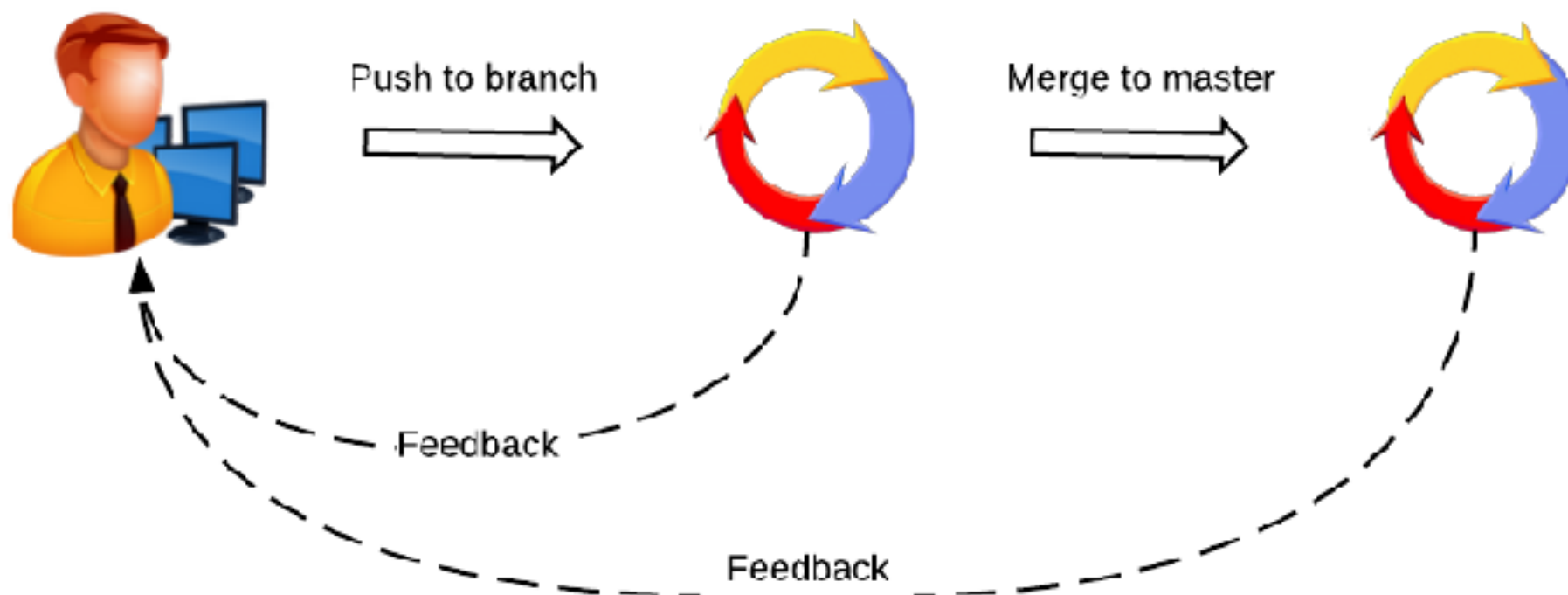
OpenShift

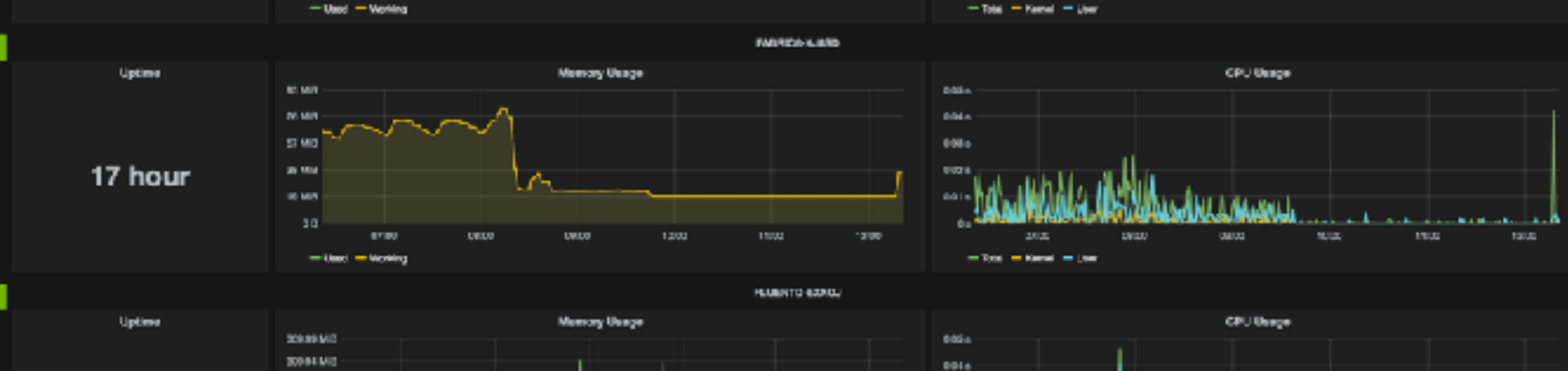


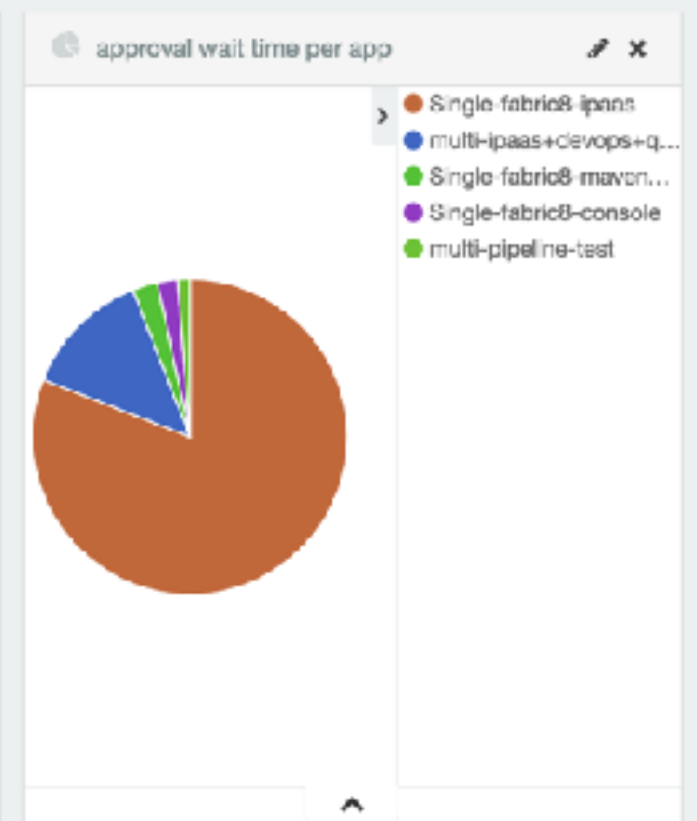
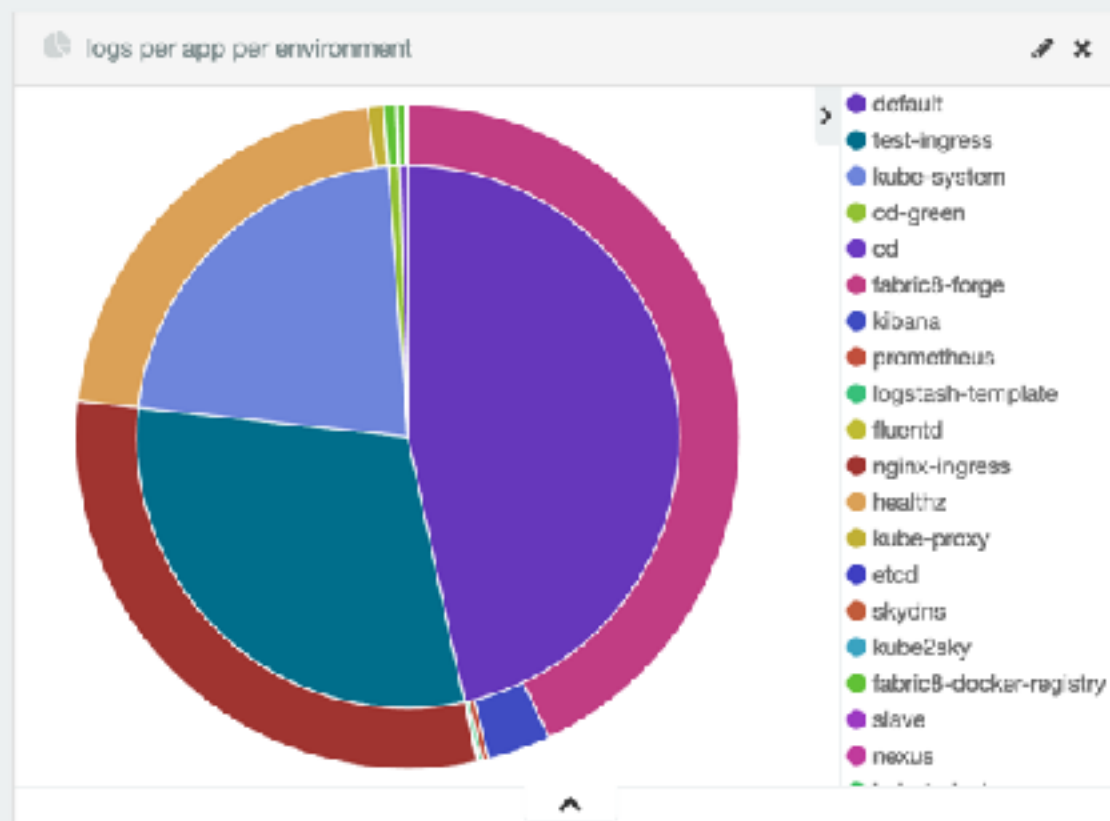
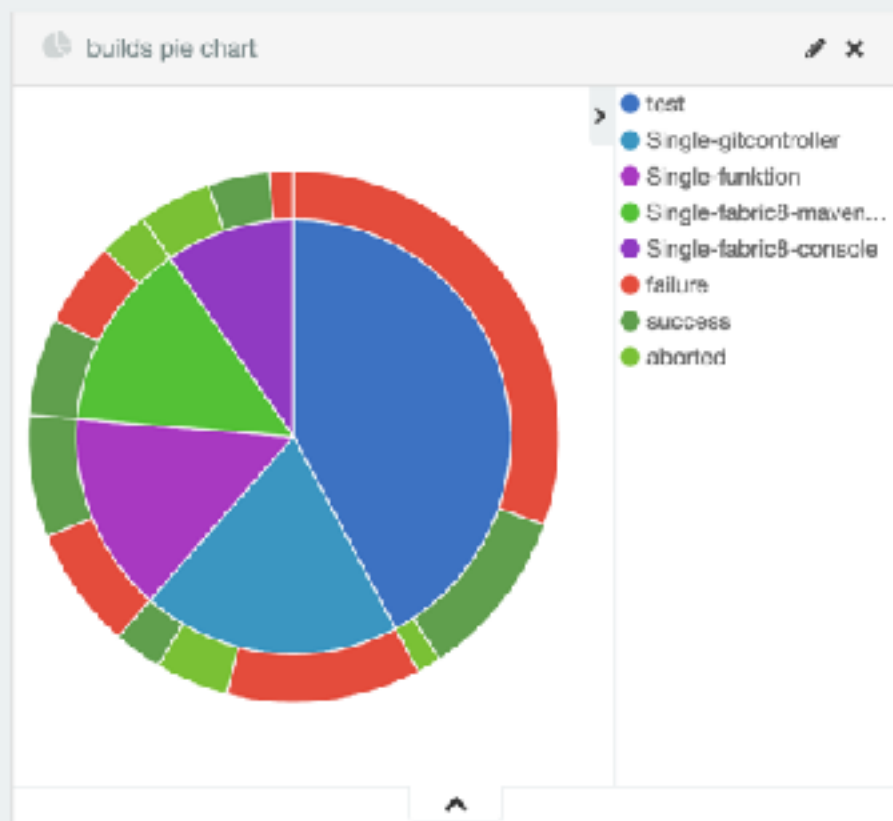
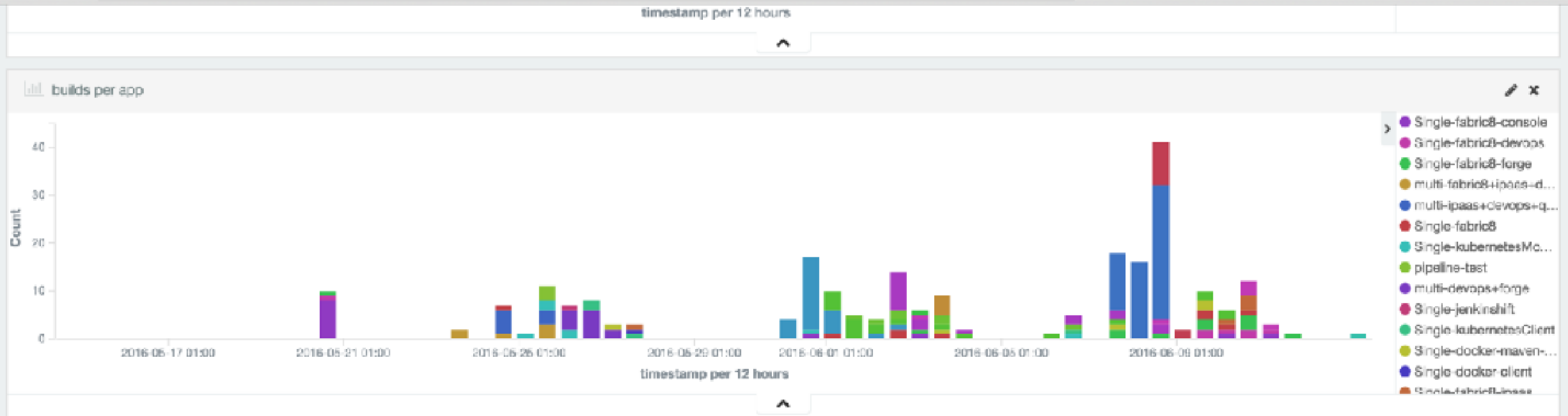
Local Dev

Continuous Integration

Continuous Delivery







fabric8 team ▾

● jrawlings



CHANNELS (9) 

fabric8-cd

fabric8-users

🔒 random

release

🔒 release-old

🔒 test-notifications

twitter

DIRECT MESSAGES (18) 

♥ slackbot

○ davsclaus

○ fabric8

🔗 gashcrumb

○ iocanel

○ jdyson

○ jstrachan

○ jstrachan_s_hubot_thingy

○ kurtstam



#release

11 members | [Add a topic](#)



June 10th



fabric8 BOT 6:29 PM

Release failed when building and deploying to Nexus hudson.AbortException: script returned exit code 1



fabric8 BOT 8:07 PM

distro 2.2.199 released and available in maven central



fabric8 BOT 11:30 PM

kubernetes-api 2.2.131 released and available in maven central



fabric8 BOT 11:57 PM

jenkins 2.2.201 released and available in maven central

June 11th



fabric8 BOT 12:28 AM

distro 2.2.200 released and available in maven central



fabric8 BOT 2:03 AM

fabric8-console 2.2.151 released and available in maven central



fabric8 BOT 2:08 AM

distro 2.2.136 released and available in maven central



fabric8 BOT 11:25 AM

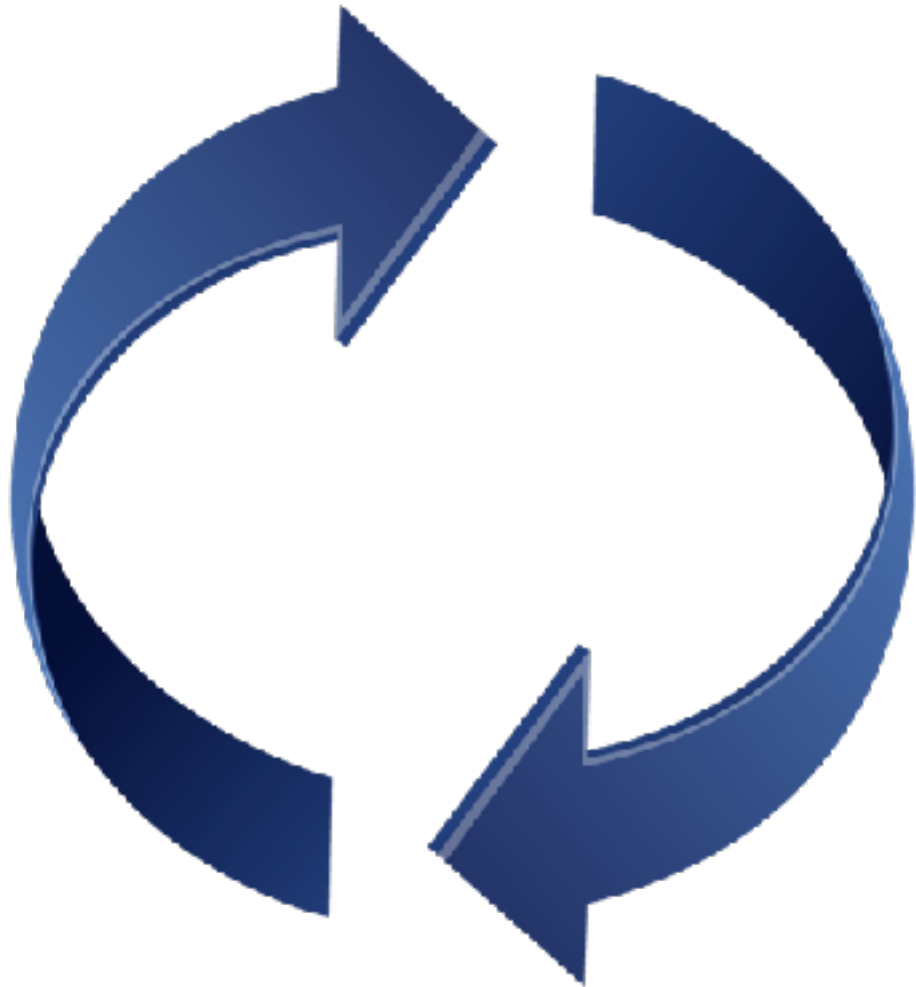
archetypes-catalog 2.2.131 released and available in maven central



|



Automation



app creation
build
test
import
CI
CD
improve



Demo



let's deliver value faster



fabric8.io



github.com/fabric8io/fabric8



blog.fabric8.io



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