Cloud Foundry





What is it?



- Open Source cloud computing platform (PaaS)
- can be deployed on many infrastructure platforms:
 - AWS
 - Azure
 - OpenStack
 - VMware
 - local (vagrant)

Language support



- supports multiple languages:
 - Java
 - Ruby
 - Node.js
 - Go
 - PHP
 - Python
 - static files
- support is provided by <u>buildpacks</u>

Platform components



| Router | | ROUTING |
|--------------------------------------|--------------------|----------------------------|
| OAuth2 Server (UAA) | Login Server | AUTHENTICATION |
| Cloud Controller | Health Manager | APP LIFECYCLE |
| Application Execution (DEA Warden | Blob Store | APP STORAGE & EXECUTION |
| Service Brokers | | SERVICES |
| Message Bus (NATS) | | MESSAGING |
| Metrics Collector | App Log Aggregator | METRICS & LOGGING |

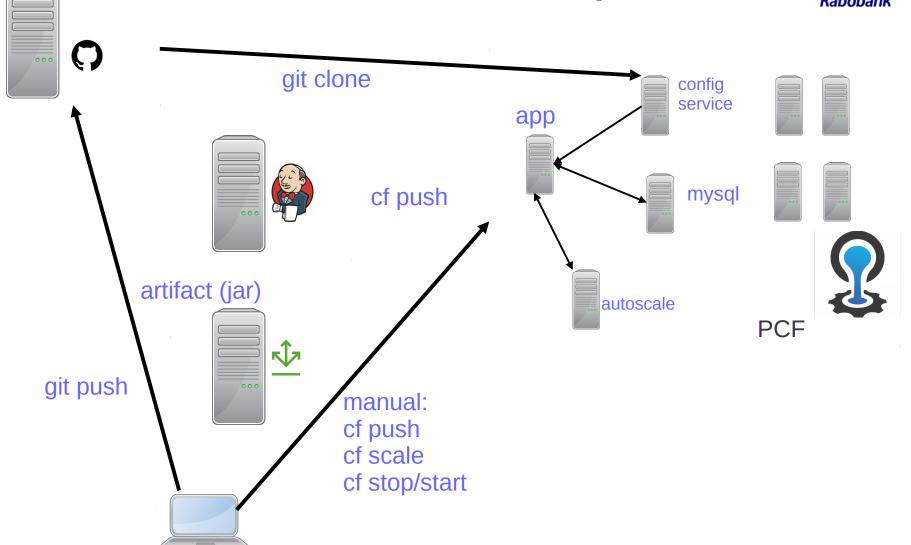
PoC Cloud providers



- Pivotal
 - PCF (Pivotal Cloud Foundry) running on AWS
- •IBM
 - Bluemix public cloud (large shared public env)

Demo setup







demo

demo



```
#prepare:
cf delete -f testapp1
cf delete-route -f apps.pcfnl.examples.cf --hostname testapp1-4712
sudo /etc/init.d/mysql start
#demo:
cd ~/workspace/testapp1
git pull
mvn clean spring-boot:run
# test on http://localhost:8080
mvn -Dmaven.test.skip package
ls -lh target
export CF_HOME=~/.cf_pcf && cf login -a https://api.system.pcfnl.examples.cf -u harry -p `cat ~/cf/pcf.pw` -o rabobank-org -s
cf push testapp1 --no-manifest --no-start -m 768M -k 512M -i 1 -b java_buildpack_offline -p target/testapp1-0.1.1.jar --hostname
testapp1-4712
cf marketplace
cf service testapp1-db
cf bind-service testapp1 testapp1-db
cf bind-service testapp1 cfg-server
cf bind-service testapp1 srv-reg
                  (in another terminal)
cf logs testapp1
cf start testapp1
cf routes
# ==> show URL
cf scale testapp1 -i 4
cf app testapp1
#cleanup
cf delete -f testapp1 && \
cf delete-route -f apps.pcfnl.examples.cf --hostname testapp1-4712 && \
cf logout
```

Questions?



