

SpringOne Platform

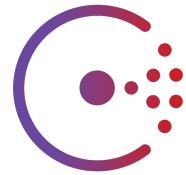
Spring Cloud with Consul & Vault

@spencerbgibb

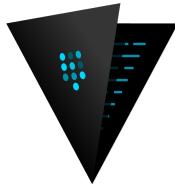
<http://spencer.gibb.us>

Pivotal[®]

Agenda



Consul



Vault

First, some history...

NETFLIX

Eureka



Eureka!

`XmlXStream.getInstance()`

`ReflectionUtils.findField()`

`JsonXStream.getInstance()`

`DiscoveryManager.getInstance()`

`ApplicationInfoManager.getInstance()`

STATIC SINGLETION



ALL THE THINGS?



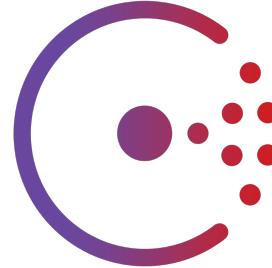
Angel

Static Singletons —→ **Auto Registration**





Brixton

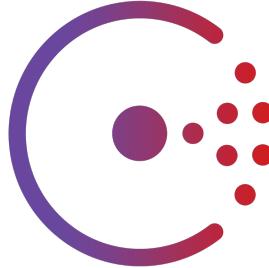


Static Singletons —→ **Auto Registration**





Camden

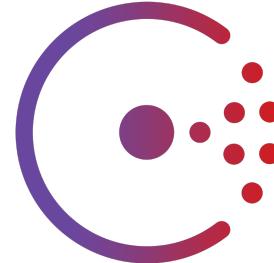


Auto Registration





Dalston

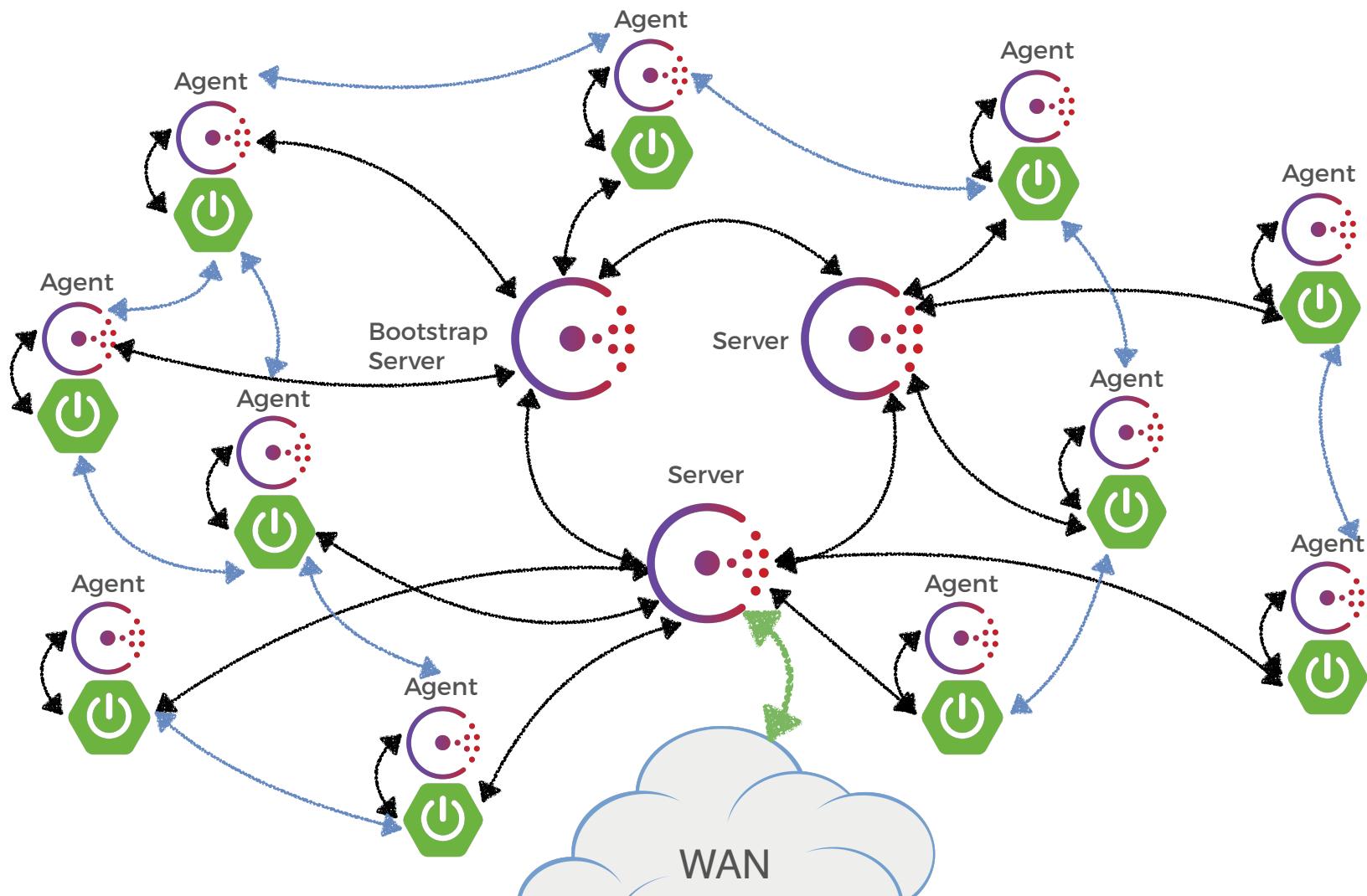


Auto Registration

ServiceRegistry









/v1/agent/service/register

@DiscoveryClient



~~/v1/agent/service/register~~

~~@DiscoveryClient~~

```
$ dig @localhost -p 8600 testConsulApp.service.consul.  
;  
; <>> DiG 9.8.3-P1 <>> @localhost -p 8600  
testConsulApp.service.consul.  
; (3 servers found)  
;; global options: +cmd  
;; Got answer:  
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 14202  
;; flags: qr aa rd; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0  
;; WARNING: recursion requested but not available  
  
;; QUESTION SECTION:  
;testConsulApp.service.consul. IN A  
  
;; ANSWER SECTION:  
testConsulApp.service.consul. 0 IN A 192.168.2.158
```



/v1/health/checks/<service>

/health

Ribbon ServerList & IPing



/v1/kv/<key>

spring-cloud-consul-starter-config

Supports git2consul



/v1/event/fire/<name>

spring-cloud-consul-starter-bus

Coming to Dalston



/v1/agent/service/register

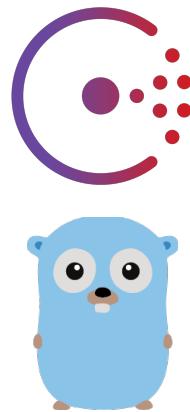
ServiceRegistry.register(<R>)

Coming to Dalston



/v1/acl/create

spring.cloud.consul.config.aclToken





Demo

“Cryptography Is Harder Than It Looks”

Bruce Schneier



VAULT



“a tool for securely accessing secrets”

Vault Features

- Secure Secret Storage
- Detailed Audit Log
- Dynamic Secrets
- Leasing and Renewal
- Revocation
- Encryption as a Service

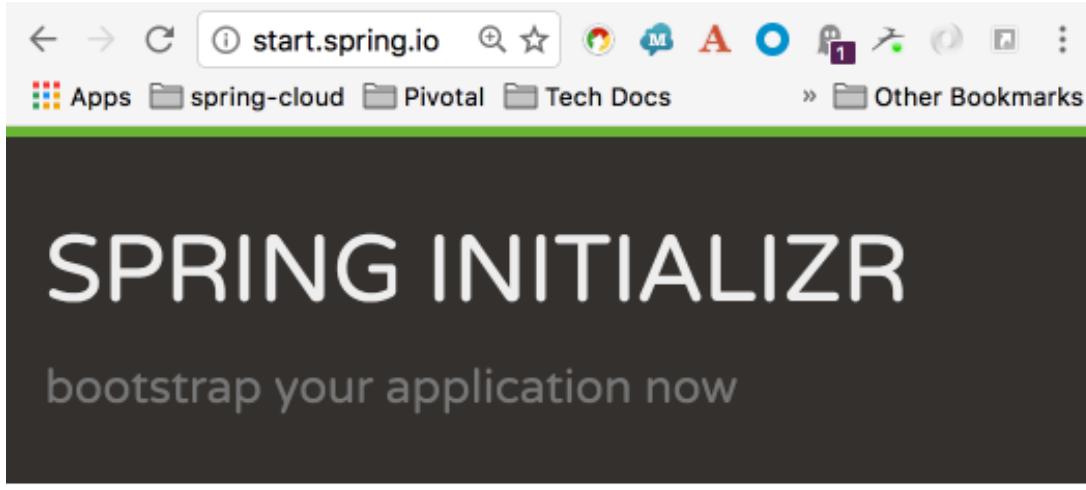
Demo

Go See This Talk

Mark Paluch Managing Secrets at Scale

Wed, 4:20pm Starvine 10

What happens if I...?



Selected Dependencies

Config Client X

Consul Configuration X

Zookeeper Configuration X

/env

```
"configService:https://github.com/spring-cloud-samples/config-repo/foo.properties": {  
    "democonfigclient.message": "hello spring one platform",  
    "foo": "las vegas"  
},  
"configService:https://github.com/spring-cloud-samples/config-repo/application.yml": {  
    "info.description": "Spring Cloud Samples",  
},  
"consul:config/foo/": {  
    "foo": "consulbar"  
},  
"consul:config/application/": {  
    "baz": "consulbaz"  
},  
"zookeeper:config/foo": {  
    "bar": "zkbar"  
},  
"zookeeper:config/application": {  
    "baz": "zkbaz"  
}
```

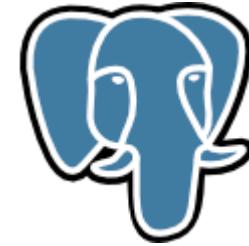
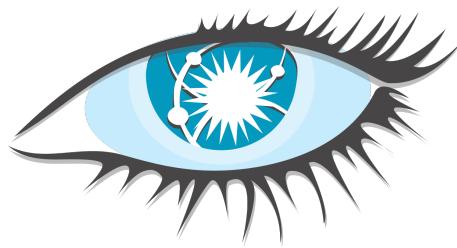
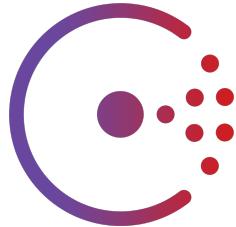
Spring Cloud Vault Config

/v1/<backend>/<key>

spring-cloud-vault-starter-config

Incubator Project

Credential Creation for...



Demo

Go See This Talk

Nivesh Gopathi Secure + Dynamic App Config at GapTech

Thurs, 11:45am Bristlecone 4

Questions?

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