

SpringOne Platform

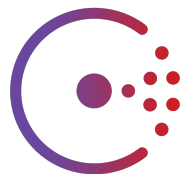
Spring Cloud with Consul & Vault

@spencerbgibb

<http://spencer.gibb.us>

Pivotal

Agenda



Consul



Vault

First, some history...

NETFLIX

Eureka



Eureka!

```
XmlStream.getInstance()
```

```
ReflectionUtils.findField()
```

```
JsonStream.getInstance()
```

```
DiscoveryManager.getInstance()
```

```
ApplicationInfoManager.getInstance()
```

STATIC SINGLETON



ALL THE THINGS?



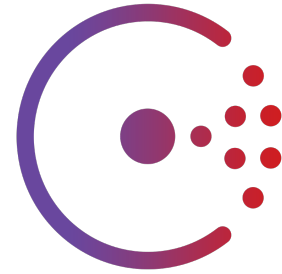
Angel

Static Singletons  **Auto Registration**





Brixton

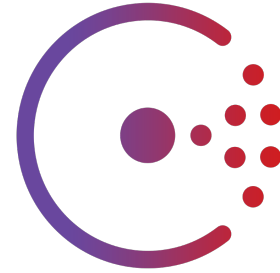


Static Singletons  **Auto Registration**





Camden

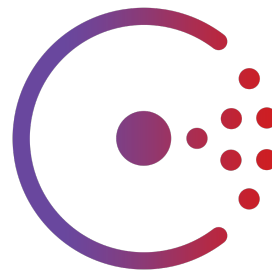


Auto Registration





Dalston

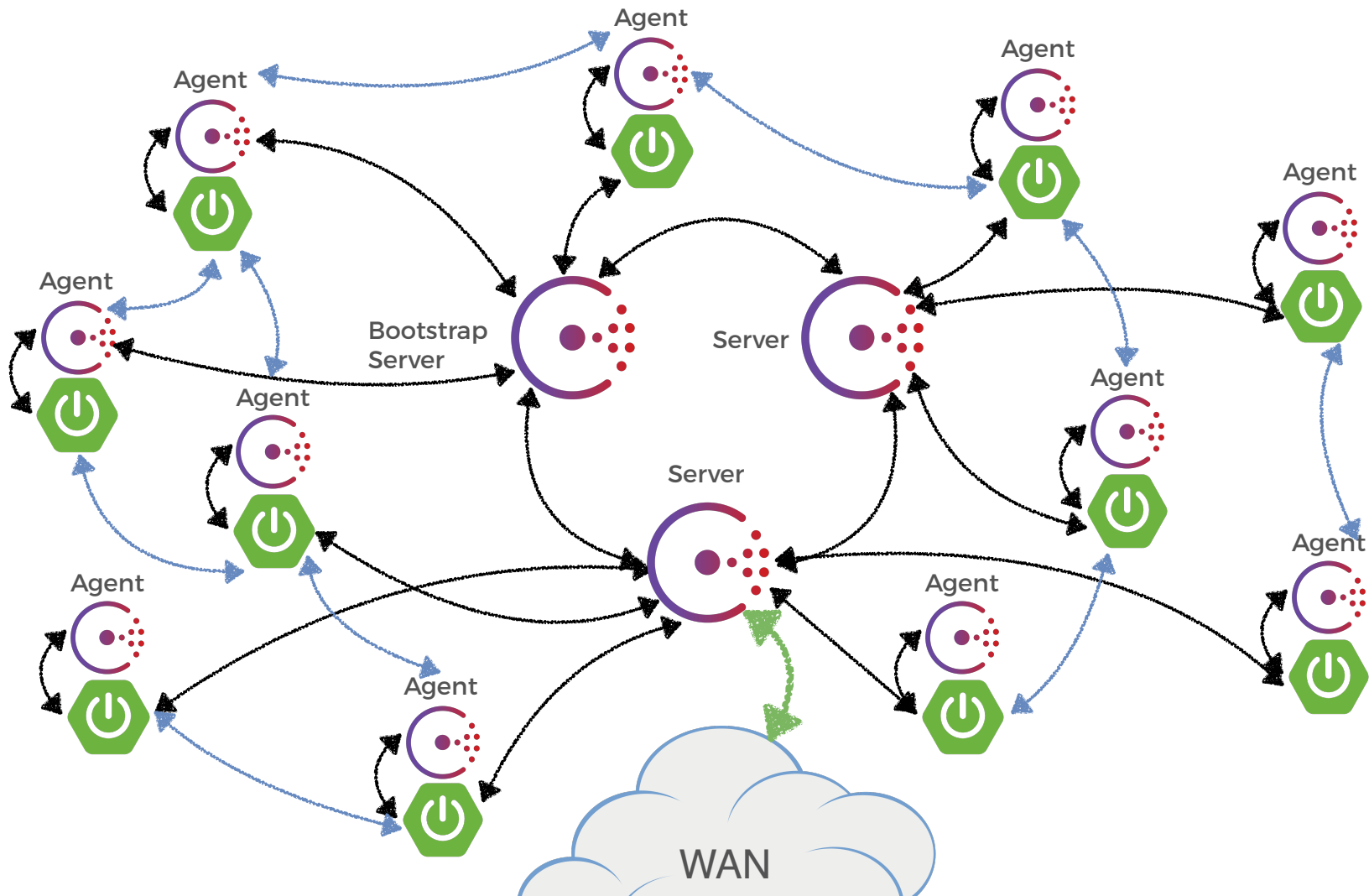


Auto Registration

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`

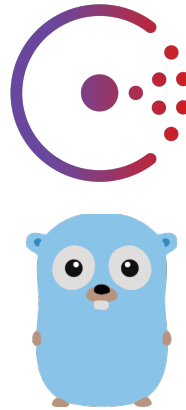
`ServiceRegistry.register(<R>)`

Coming to Dalston



/v1/acl/create

`spring.cloud.consul.config.aclToken`





Demo

“Cryptography Is Harder Than It Looks”

Bruce Schneier



“a tool for securely accessing secrets”

Vault Features

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

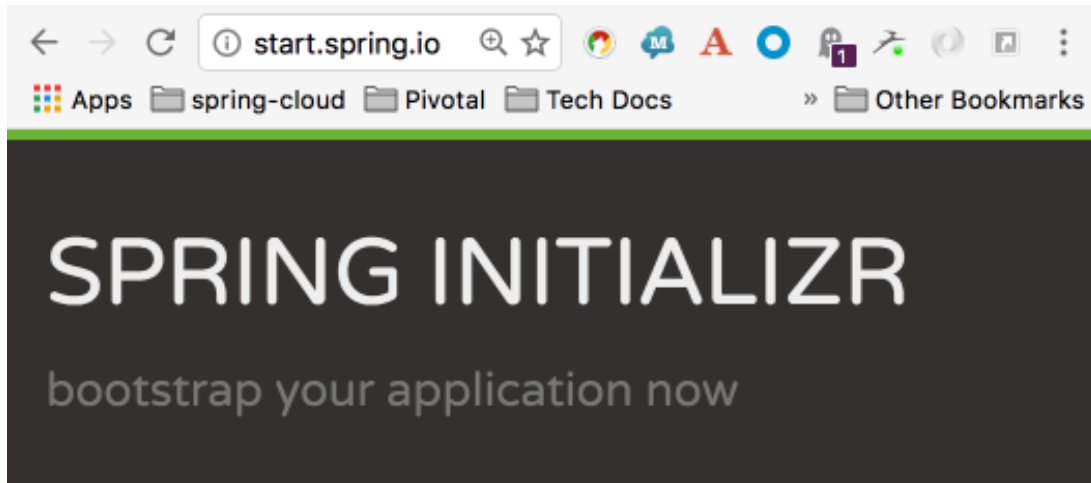
Demo

Go See This Talk

Mark Paluch
Managing Secrets at Scale

Wed, 4:20pm Starvine 10

What happens if I...?



Selected Dependencies

Config Client ×

Consul Configuration ×

Zookeeper Configuration ×

/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"
}
}
```

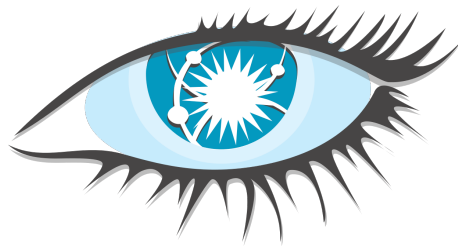
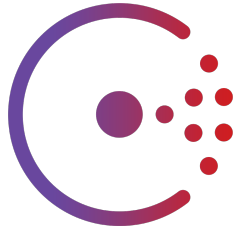
Spring Cloud Vault Config

`/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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