

SPRING CLOUD *



DISCOVERY AND CONFIG SYSTEMS COMPARISON
SPENCER GIBB

<https://github.com/spencergibb/spring-cloud-star>

<http://spencer.gibb.us>

Pivotal®

CLOUD  FOUNDRY

 **spring**
by Pivotal.

 **RabbitMQ**
Messaging that just works

 **redis**

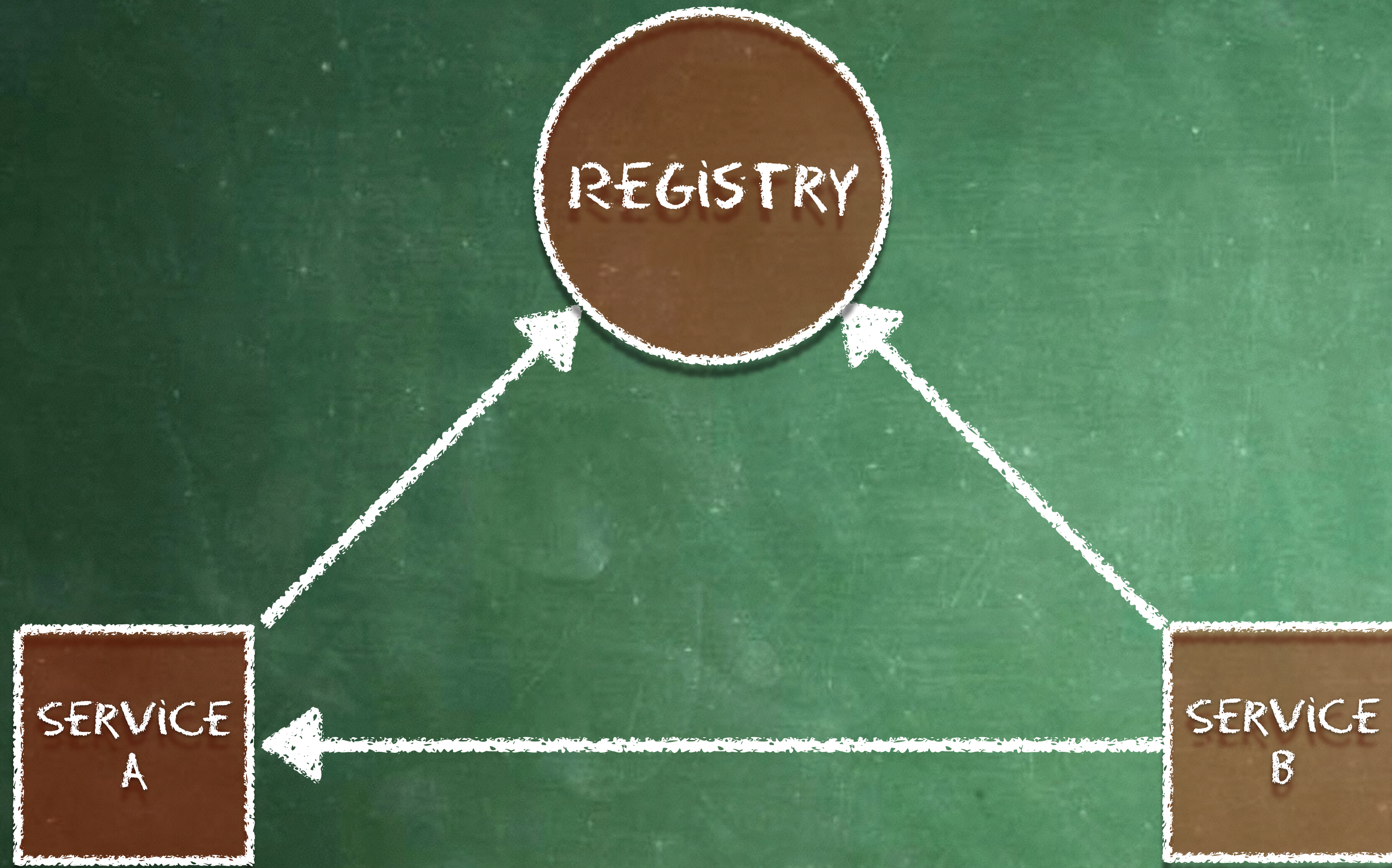


 **APACHE
GEODE**

 **GREENPLUM
DATABASE**

 **spring**
by Pivotal.

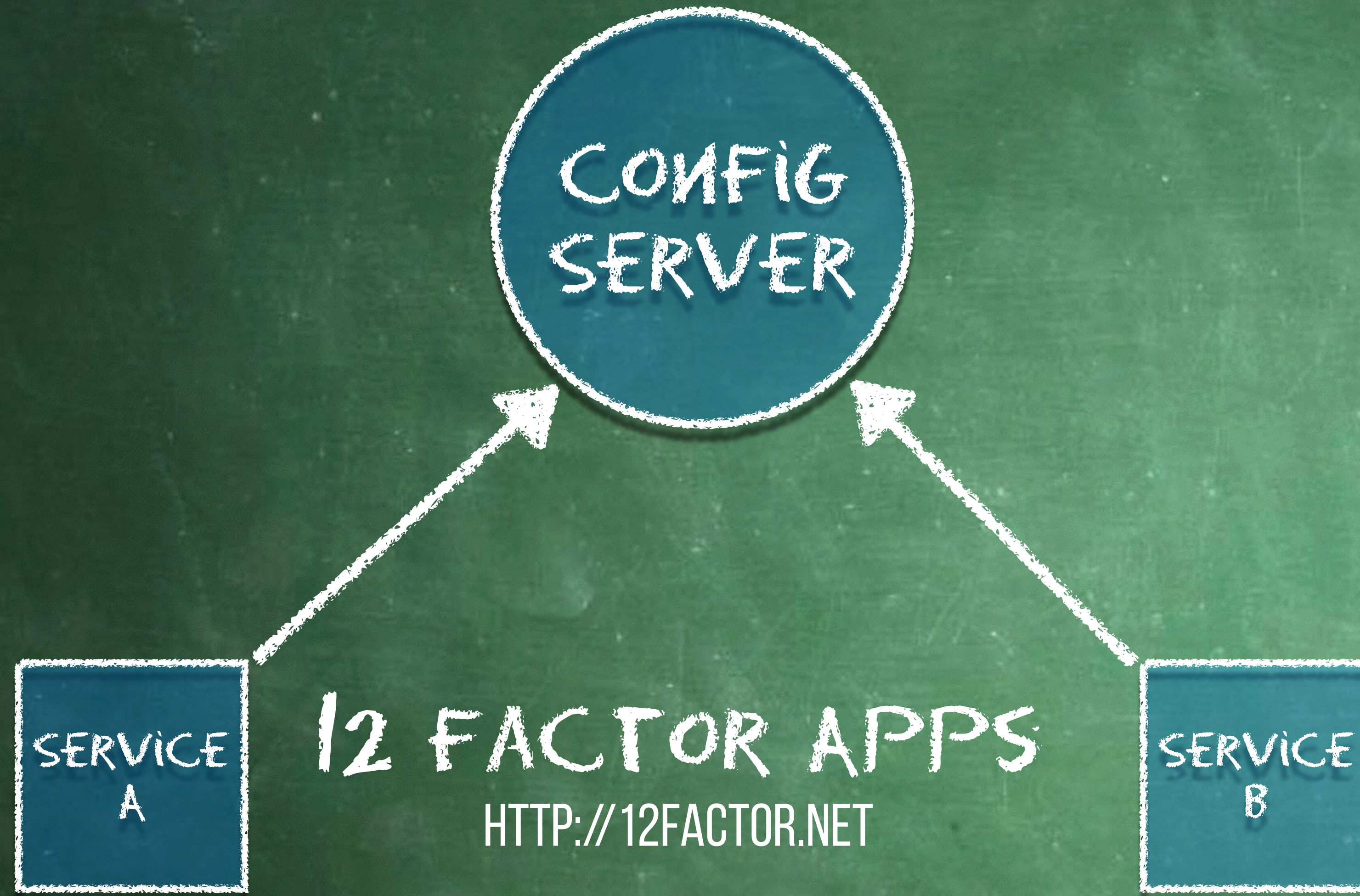
SERVICE REGISTRATION & DISCOVERY



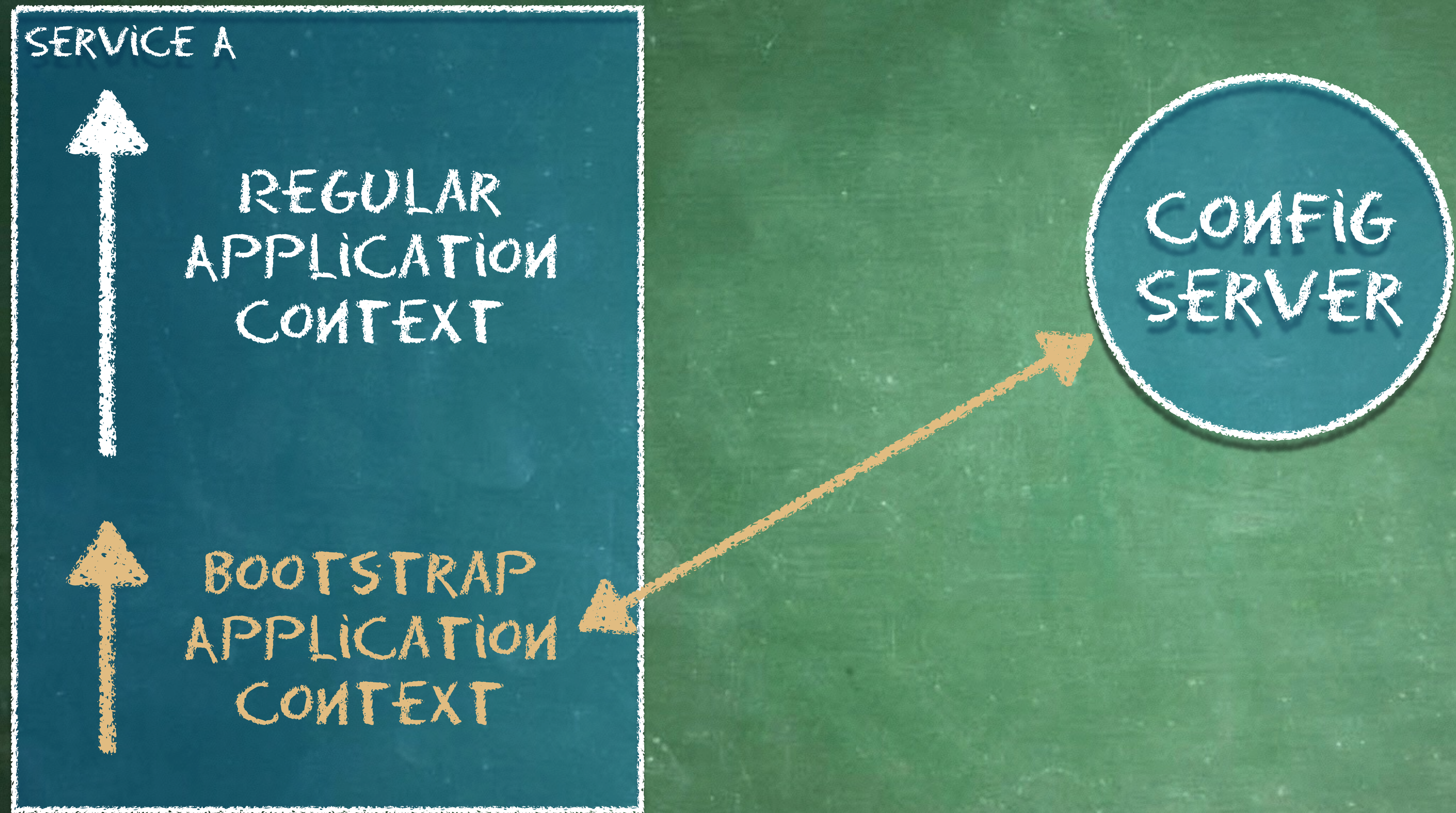
DISCOVERYCLIENT

- @EnableDiscoveryClient
- ServiceInstance si =
discoveryClient.choose("serviceId")
- RestTemplate
- @FeignClient

DISTRIBUTED CONFIGURATION



CONTEXT LIFECYCLE



ENVIRONMENT

- @ConfigurationProperties
- @Value
- Environment

SPRING CLOUD CONFIG SERVER

- GREENFIELD

- HTTP API SIMILAR TO
NETFLIX CONFIG SERVER

- BACKED BY VCS: GIT,
SVN

- STATELESS

- @RefreshScope

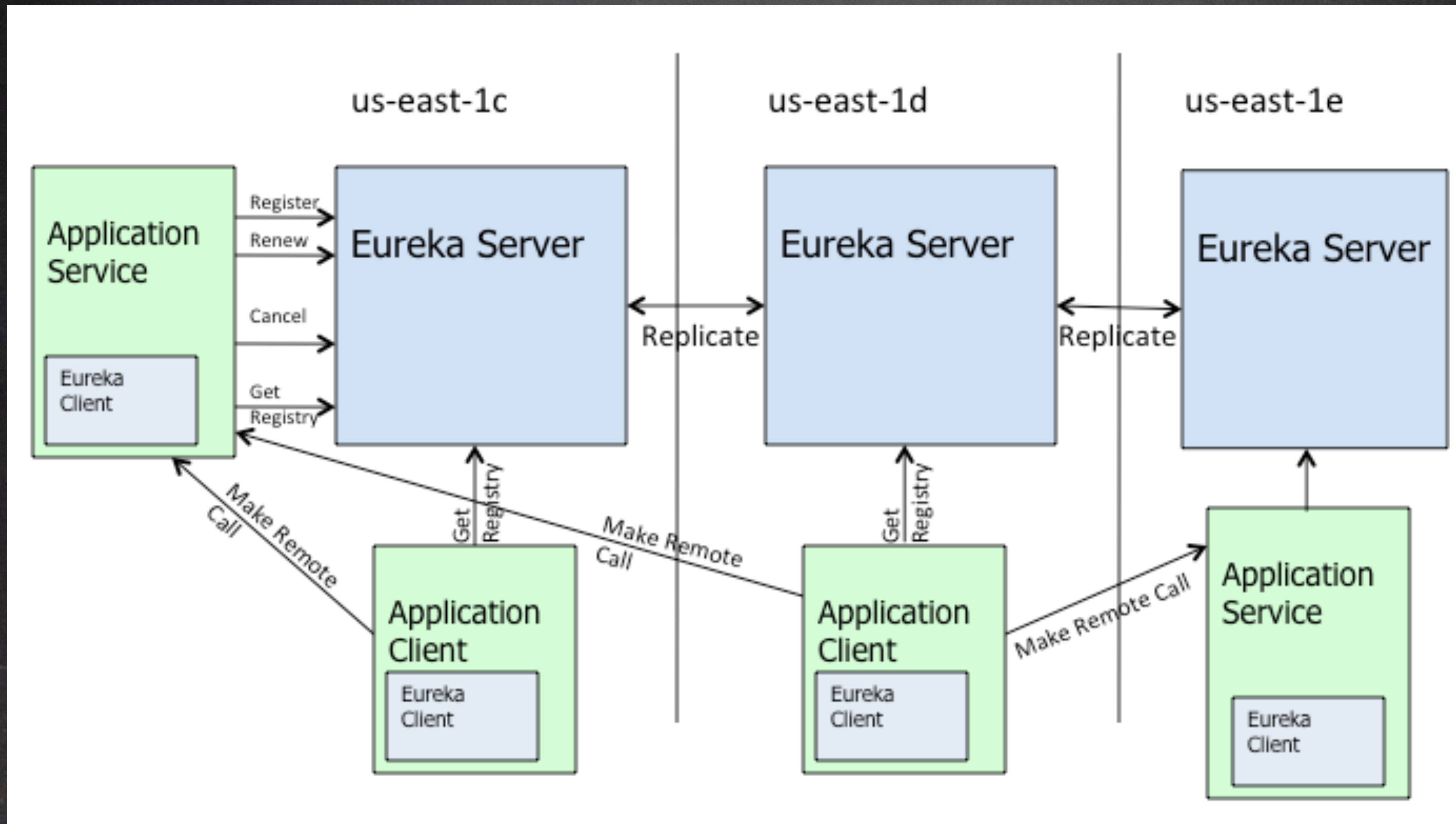
- USES SPRING-BOOT
CONFIGURATION FILES &
SEMANTICSAUTO-
CONFIGURED CLIENT

- REFRESH VIA BUS

- WEBHOOK SUPPORT FOR
GITHUB, GITLAB AND
BITBUCKET

DEMO

NETFLIX EUREKA



EUREKA PRO'S

- HIGHLY-AVAILABLE
- MATURE / PROVEN BY NETFLIX
- TIGHT RIBBON INTEGRATION

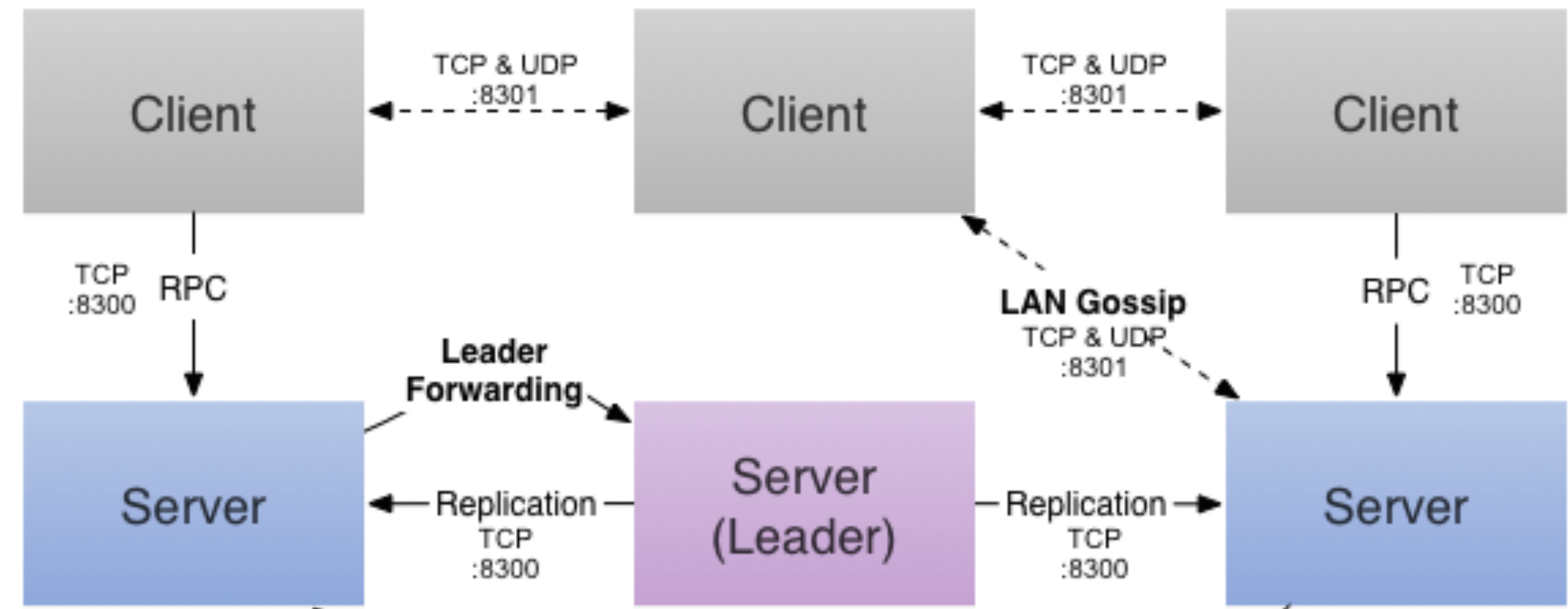
EUREKA COM'S

- JVM BASED
- THICK JAVA CLIENT
- POLYGLOT BY SIDECAR
- BUILT FOR AWS INITIALLY
- LONG THRESHOLDS FOR REGISTRATION AND CACHE REFRESH (30S)

CONSUL



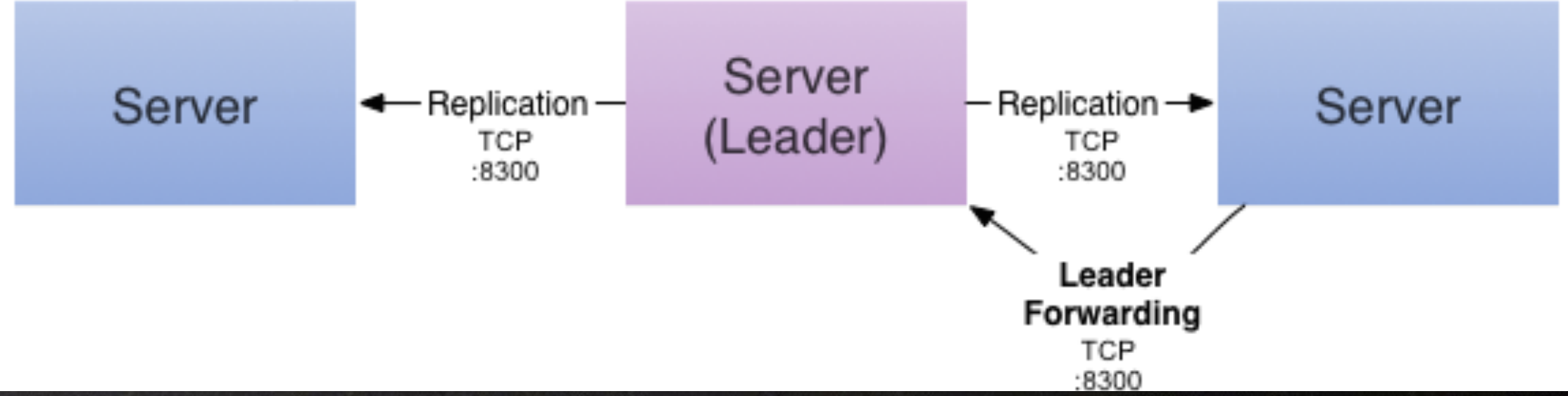
Datacenter 1



Internet



Datacenter 2



CONSUL PRO'S

OPOLYGLOT

OHTTP API AND DNS
INTERFACE

OACL'S

OHEALTH CHECKS

OMULTI-DATACENTER

OVault INTEGRATION

OYAML AND
PROPERTIES BLOBS
SUPPORTED

OPEER-TO-PEER
GOSSIP SYSTEM

ONICE UI

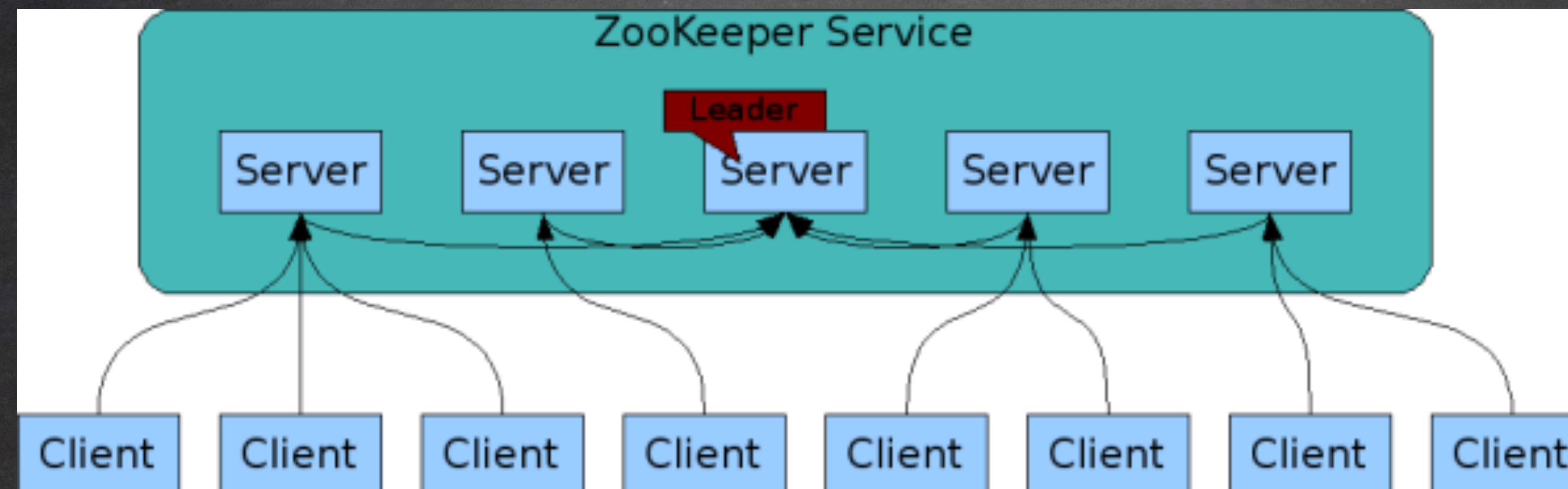
CONSUL COM'S

○ YOUNG

○ AGENT ON EVERY HOST

DEMO

ZOOKEEPER



Apache
Zookeeper

ZOOKEEPER PRO'S

- CONSISTENT STORE

- STARTED LIFE AS A HADOOP SUB-PROJECT (2007?)

- MATURE, USED IN MANY COMPANIES

- USEFUL IF ZK IS ALREADY PART OF YOUR INFRASTRUCTURE

- EPHEMERAL NODES / PERSISTENT CONNECTIONS

- USES APACHE CURATOR AND ITS SERVICE DISCOVERY RECIPE

ZOOKEEPER COM'S

- SCALE ISSUES

- OPS HEADACHES

- NEEDS MANAGEMENT PROCESS LIKE
NETFLIX EXHIBITOR

- PERSISTENT CONNECTIONS

HONORABLE MENTION

○ SPRING CLOUD CLOUDFOUNDRY

○ SPRING CLOUD LATTICE (DEPRECATED)

○ SPRING CLOUD ETCD (EXPERIMENTAL)

QUESTIONS?

The Pivotal logo is displayed on a teal rectangular background. The word "Pivotal" is written in a white, sans-serif font, with a registered trademark symbol (®) at the end.

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IN ATLANTA

[HTTP://PIVOTAL.IO/CAREERS](http://pivotal.io/careers)

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