Rapid Consul





A presentation
By
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Agenda

- Baselining about HashiCorp and Consul
- The Challenge
- Solution Overview
- Demo
- Wrap up & Next Steps

Baselining



HashiCorp

HashiCorp is

An innovative, privately held, San Francisco based software company

Making open source tools and commercial products

Enabling our customers to provision, secure, run and connect cloud-computing infrastructure

Consul is

On of the most popular open source tools produced by HashiCorp

It is a service networking solution that allows our customers to manage service configuration (the what), service discovery (the where) and service segmentation (the layout) of their applications and services.

It is user friendly, datacenter-aware and can be used without the expensive retrofitting of your applications, today.

The Challenge



Acme Today desires

"An easy to manage, secure application that can be deployed, visualized and managed across multiple clouds/datacenters with as little overhead as possible"

- Has a web application and supporting database (Apache Derby)
- The communication between the two services is insecure (unencrypted)
- Acme would like to eliminate the use of expensive load balancers used in front of the web application
- Acme would like to improve the experience of managing these services and reduce the brittleness of the links between the services

The Solution



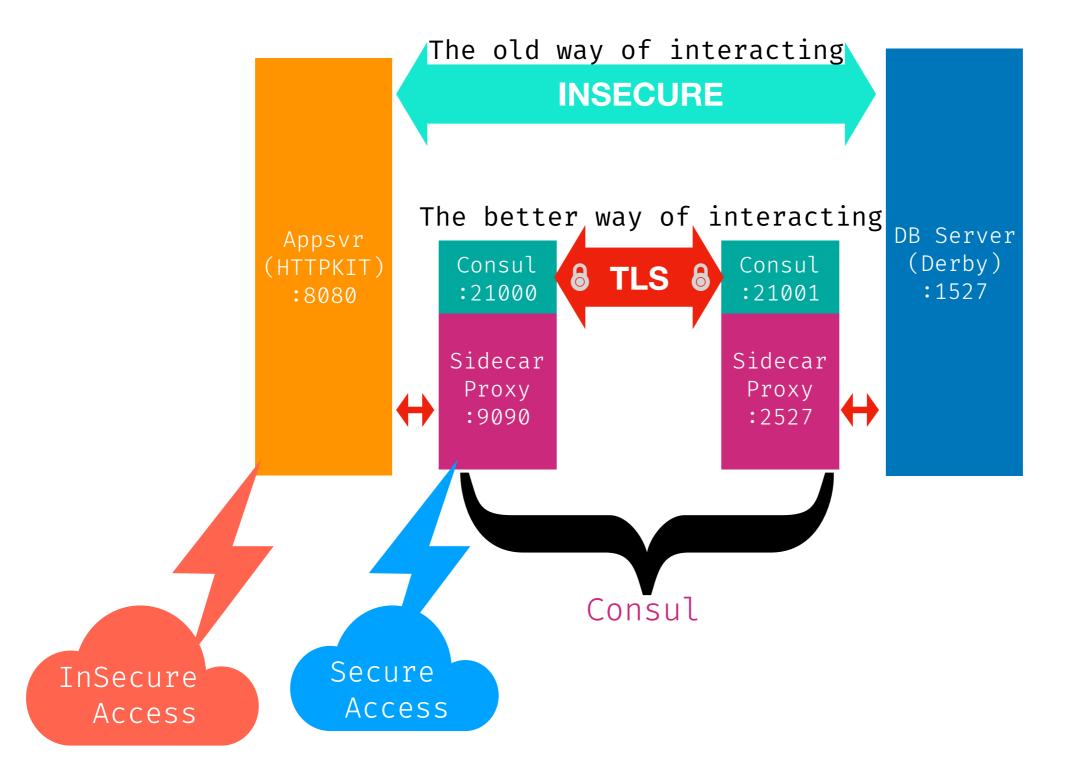
Use HashiCorp **Consul** to build a **service mesh** tying the application and its database together over a **secure manageable** connection that can be visualized and modified in real time.

What's the Value?

- Consul will ensure secure communications through encryption between the two services without re-writing the services saving you time and money
- Consul is free and your engineers can configure the basic framework of the solution in minutes reducing your time to value to hours
- Your team will be able to visualize and control access to these services in the Consul Web Interface in minutes and have a great experience doing so
- Your will be easily able to scale these benefits to other applications and services with even less effort once the baseline is established

The Solution 2







Demo time



Available for download at

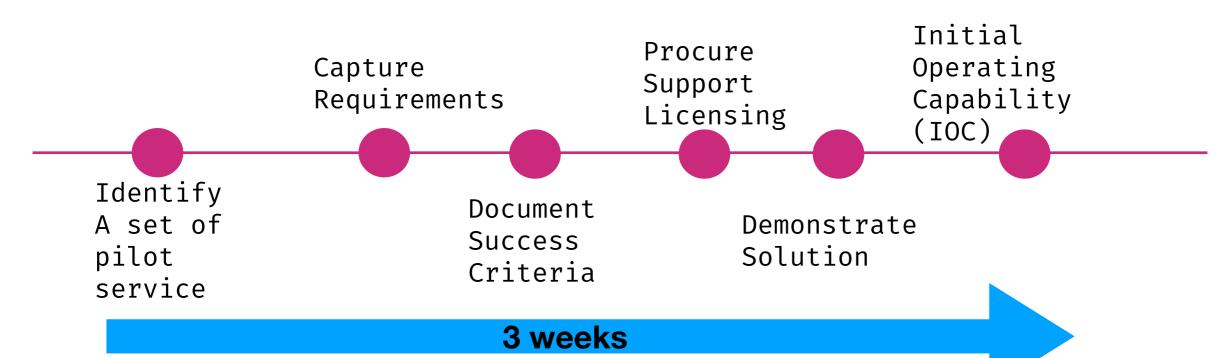
https://github.com/jamesnyika/hashi

Wrapup & Next Steps

In the demo we saw



- Consul securing two services without a re-write
 - Benefit: solving the challenge while saving you time an re-implementation costs
- Consul's rapid configuration approach
 - Benefit: reducing your time to value to hours
- Consul's clean and easy management interface
 - Benefit: ability to visualize and control access while having a great experience doing so
- Consul's flexibility and configurability
 - Benefit: scale these benefits to other applications and services with even less effort once the baseline is established





Thank You



What It took - Anatomy of An Exercise

Consul configuration is fast .. really is...

Wow! And it only took **22** hours ?

Performed Tasks



App Design 3 Hrs



Learning Consul 4 Hrs



Implementation & Verification



Experimentation

Skills

Presentation 8 Hrs



App Dev Skills

Requirements Gathering **Prior Experience** Attention to Detail Confidence Software Lifecycle **Programming**

Patience Repetition **Note Taking** Exploration of Subject

Learning Skills

Ideation **Documentation** Comfort with failure Web Research Familiarity with lots of tech tools

Communication **Skills**

Understanding Business Value Summarization Messaging and Marketing



Required Skills

Appendix



All code/artifacts are at

https://github.com/jamesnyika/hashi