

Hashicorp Cloud Platform

- A Technical View on Vault and Consul as-a-Service

Lucas Albuquerque | 13-04-2021

Agenda

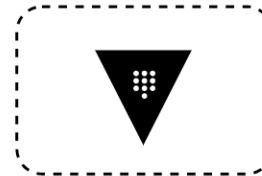
- HCP in a Nutshell
- Goals of HCP
- HashiCorp Virtual Networks
- Consul and Vault as-a-Service
- Hands-on
- Pricing
- Final Remarks

HCP: In a Nutshell

- Hashicorp Cloud Platform was announced in June/2020
- A **fully-managed** platform to **automate** infra on **any cloud** with HashiCorp products
- On **GA** this year



February/2021



April/2021

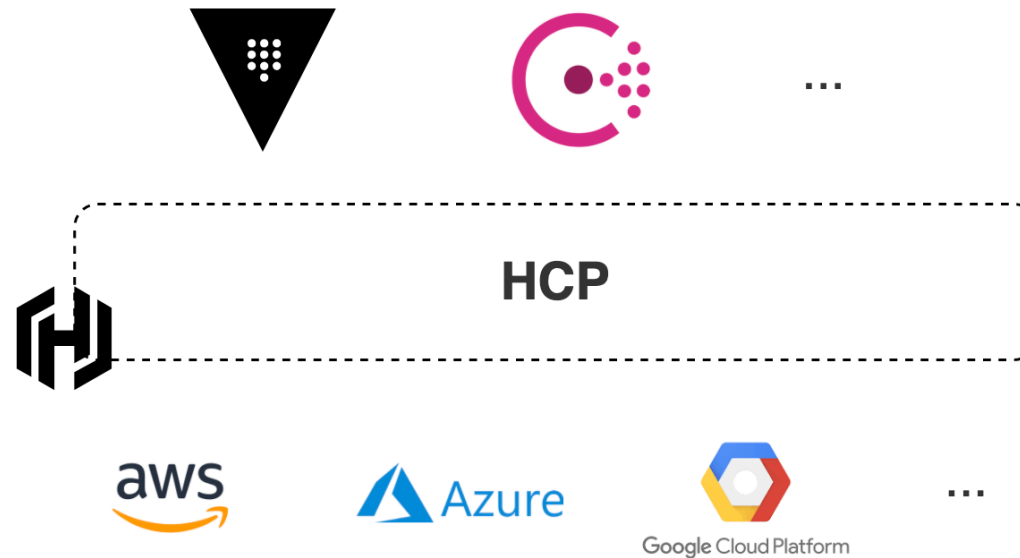
Goals of HCP



- Self-Managed vs HCP Model (Deploy > Operate > Use)
- HCP as a managed-service
- Lower the operation overhead
- Reduce the admin burden
- Shared Responsibility Model (Patching, Security, health, snapshots, monitoring, etc)

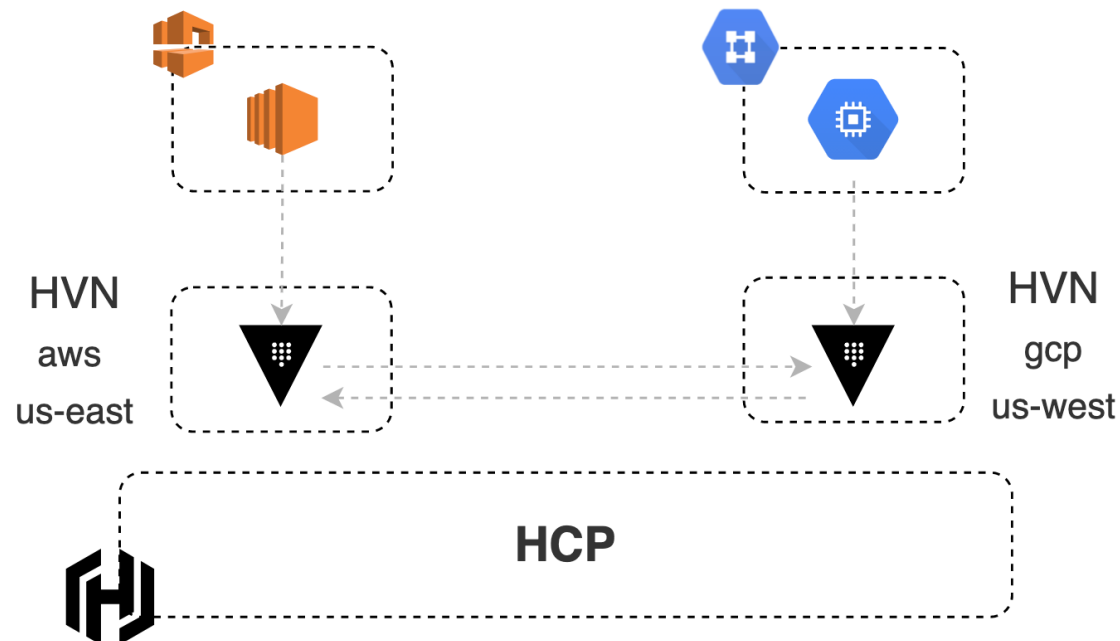
Goals of HCP

- Private Network Experience (HVN)
- Running on major Cloud-Vendors (AWS, Azure, GCP,...)



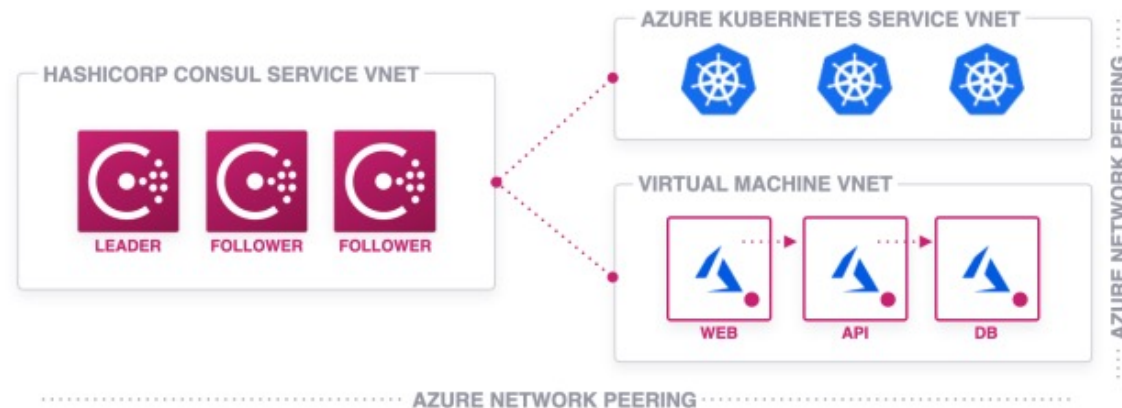
HashiCorp Virtual Network

- Single tenant VPC for each HashiCorp Virtual Network (HVN)
- One HVN per **Vendor** and **Region**
- All HCP resources are deployed into that **HVN**, which ensures tenant **isolation**

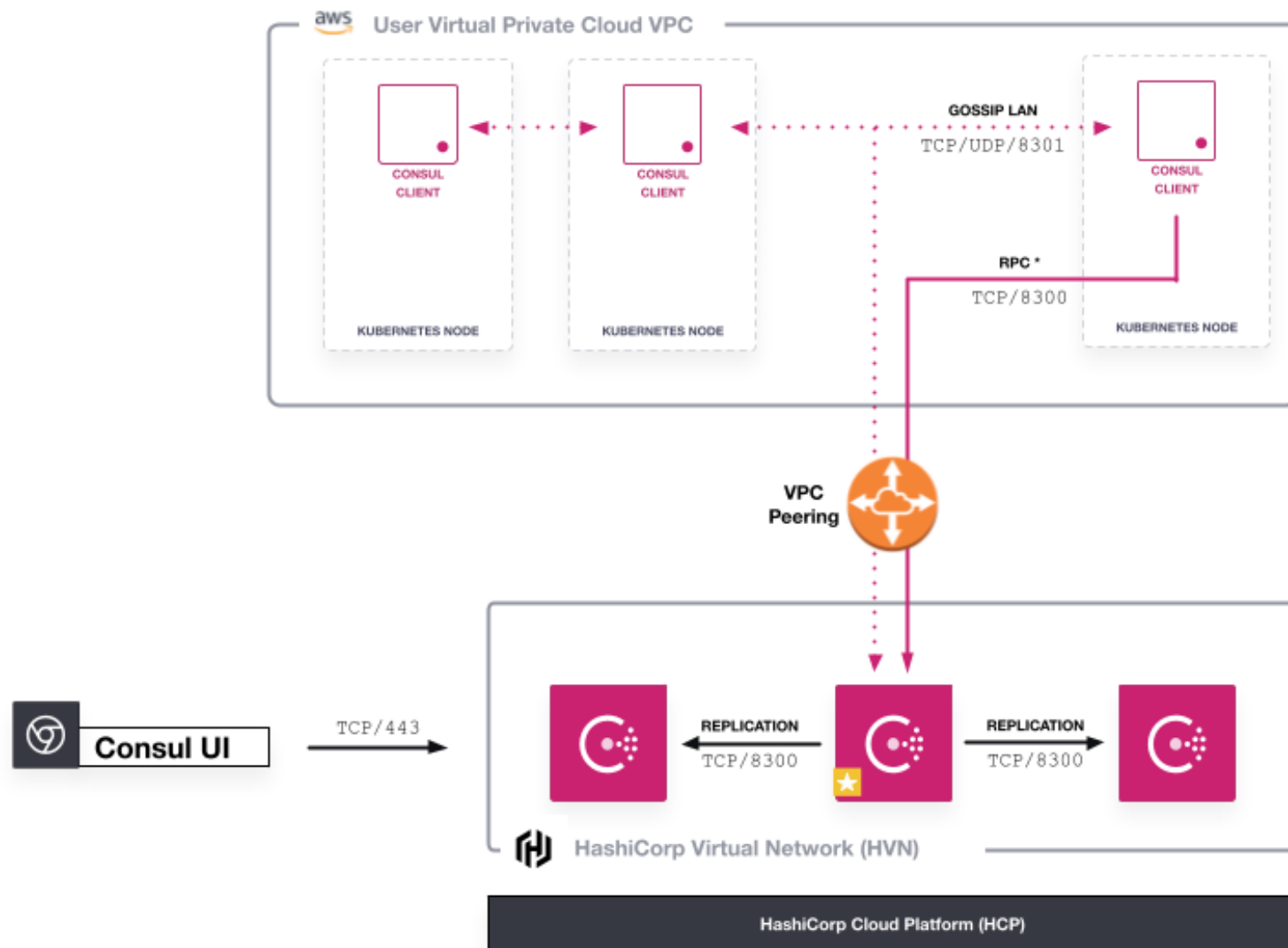


Consul-as-a-Service

- Fully managed **service mesh** to discover and **securely connect any service**
- All HCP **resources** are deployed into that **HVN**, which ensures tenant **isolation**
- **OSS** and **Enterprise** features
- Comparable to **HCS on Azure**



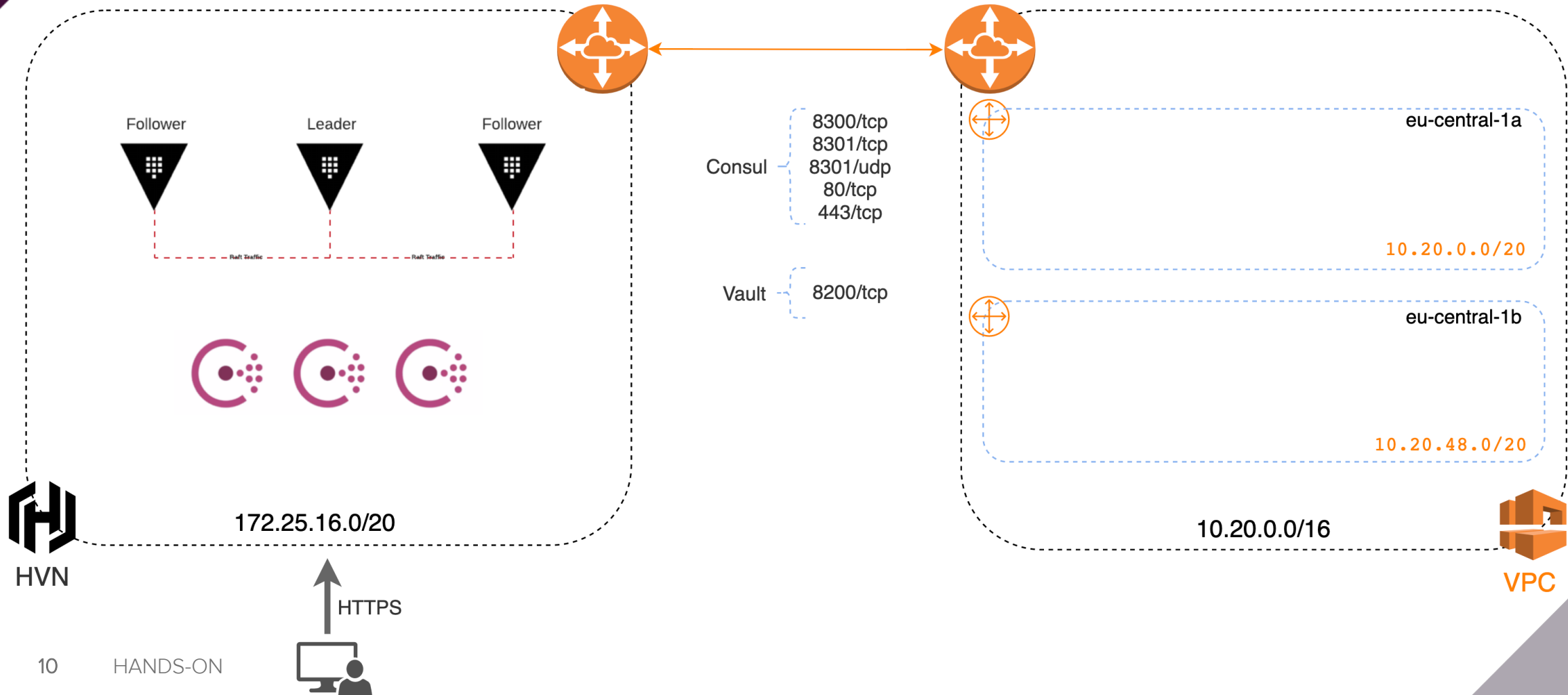
Consul-as-a-Service



Vault-as-a-Service

- HCP Vault is the easiest way to **secure**, **store**, and tightly **control access** to tokens, passwords, certificates, encryption keys, and other sensitive data
- **OSS** and **Enterprise** features
- No multi-tenancy
- Data stored **encrypted** on mounted **EBS** volumes in the account
- Snapshots and logs on **S3 encrypted** in a central control-plane
- **Sealing/Unsealing** performed by **KMS** key created in the data plane account for each Vault cluster

Hands-On



Pricing

- **Development cluster:** non-production, single-node billed/hour. USD 20 free –
 - Consul: \$0.027/hr
 - Vault: \$0.03/hr
- **Standard cluster - hourly:** For production, 3-node Consul deployment
 - Consul: 0.069/hr (Based on active services)
 - Vault: \$1.57/hr* (Based on active clients)
- **Standard cluster - annual:** Large production on HCP Consul with annual agreement.

Final Remarks...

- Can be fully managed using **Terraform**
- **Peering** across cloud providers and **cross-provider** clustering in the roadmap
- Only **AWS** for now (EKS, EC2, AWS Lambda)... more to come.
- AWS regions in the **U.S. (Oregon and Virginia)** and **Europe (Frankfurt, Ireland, and London)**



Thanks for Joining Questions?

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