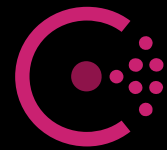




Microsoft Azure



HashiCorp



Consul on Azure

(부제: 애저 클라우드와 온라인 #콘셀 가요)

문성주, 클라우드메이트
최영락, 마이크로소프트

HashiTalks: Korea (hashi.co/hashitalkskorea)

Agenda

- Consul을 소개합니다
- 왜 Consul을 사용할까요?
- Consul 사용해보기
- HCS on Azure
 - 개요
 - 어떻게 동작할까요?
 - 일반적인 시나리오 [VM-VM, K8s-K8s, VM-K8s]
- Demo: Config management by Consul
- 관련 자료



X



HashiCorp Operation Suite



Runtime



Service Connect



Secret key management



Infrastructure
Provisioning



Consul을 소개합니다



Consul is service based networking in the cloud

핵심 기능

Service discovery

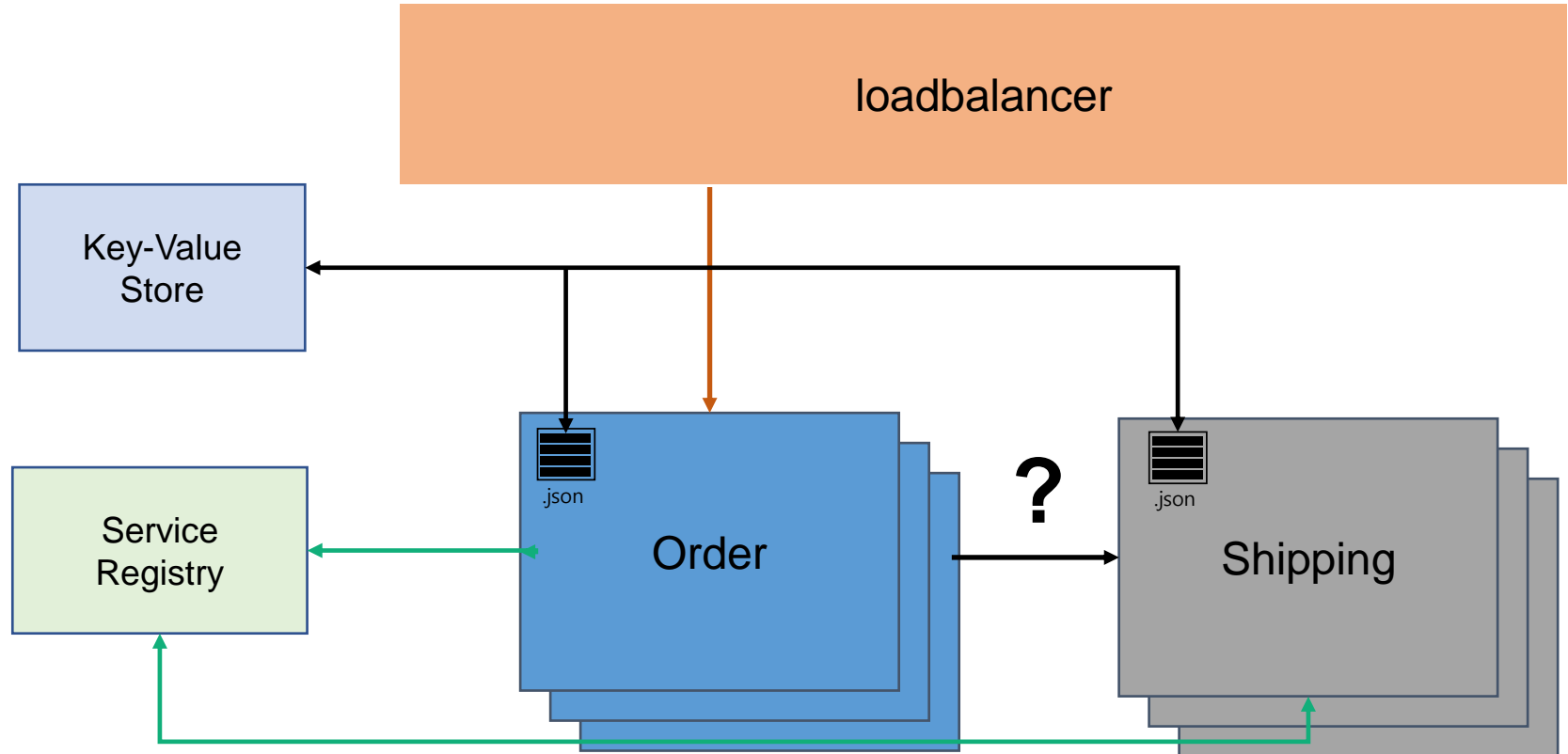
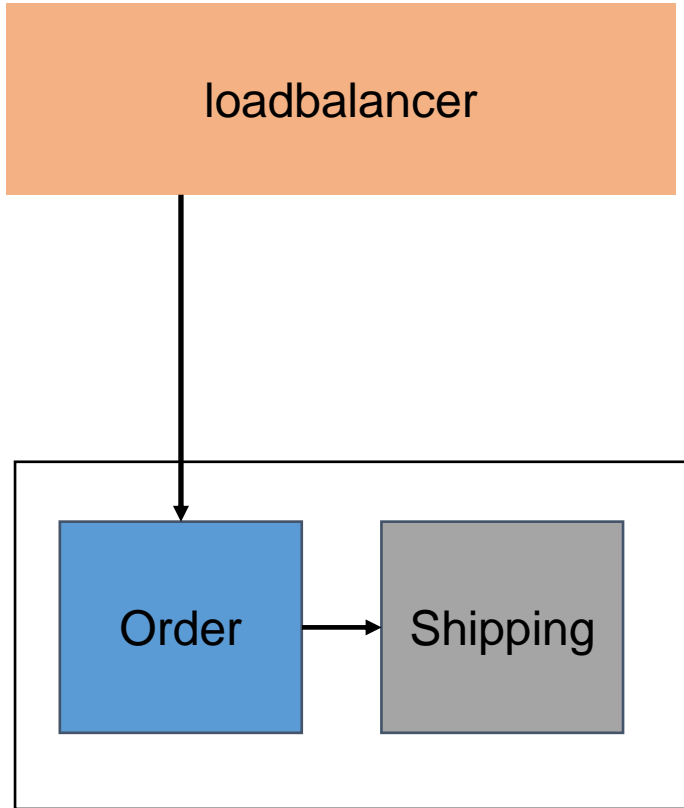
Key value store

Real time Health Monitoring

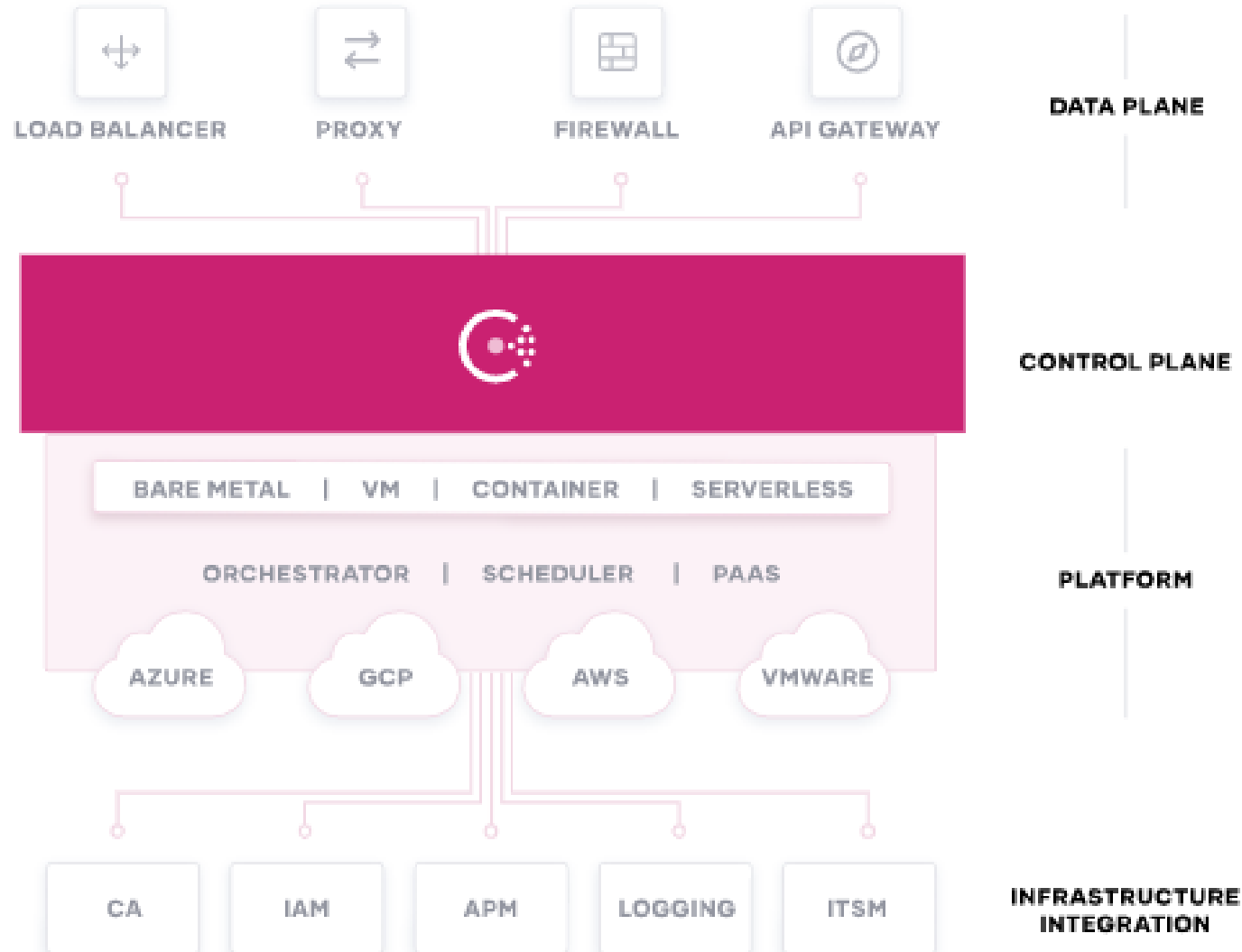
Multi DataCenter Support



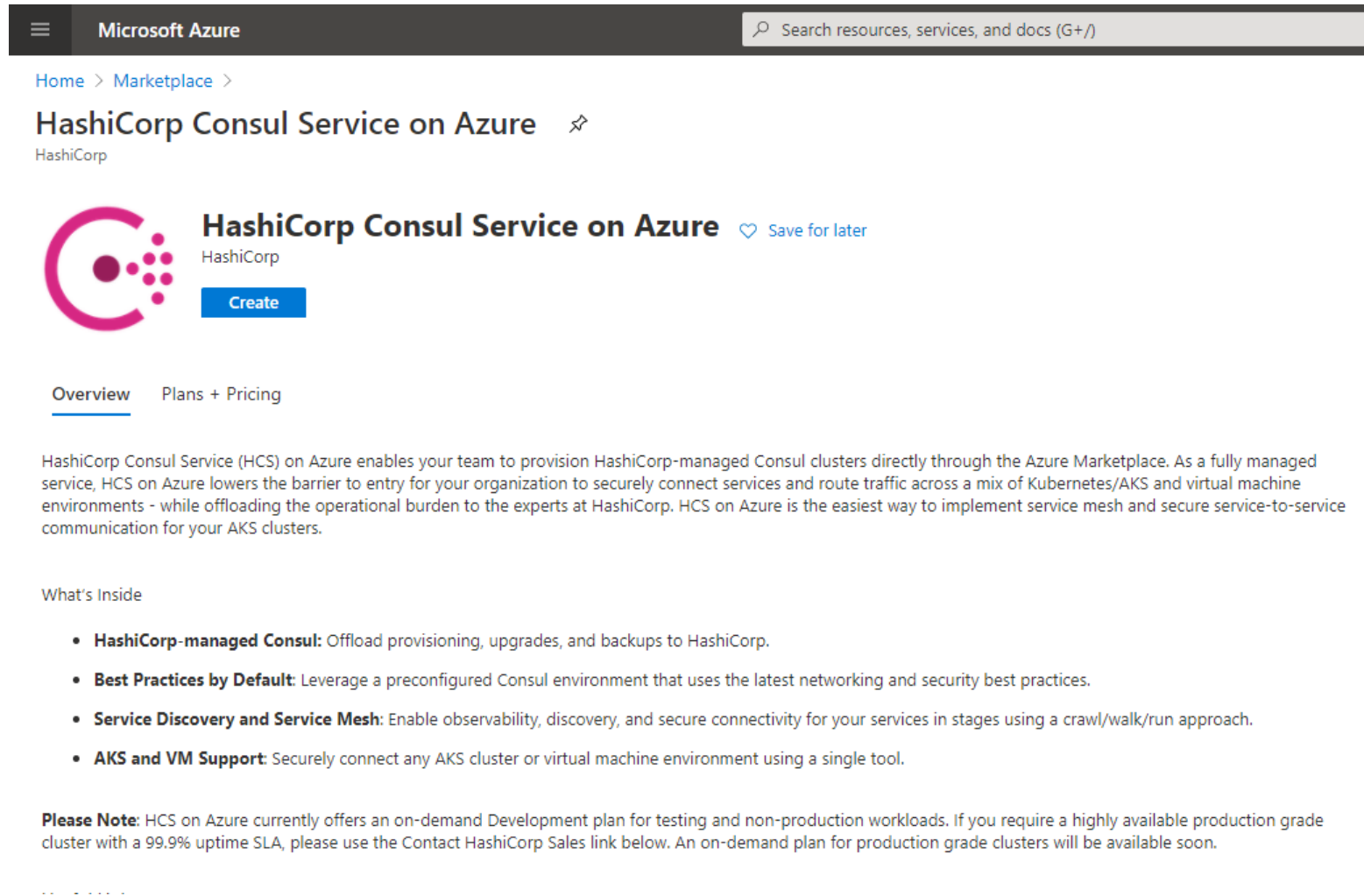
왜 Consul을 사용할까요?



Consul 사용해 보기



HCS (HashiCorp Consul Service) On Azure!



The screenshot shows the Microsoft Azure Marketplace page for the HashiCorp Consul Service on Azure. The page header includes the Microsoft Azure logo and a search bar. The main heading is "HashiCorp Consul Service on Azure" with a star icon. Below the heading is the HashiCorp logo and a "Create" button. The page is divided into two tabs: "Overview" (selected) and "Plans + Pricing". The "Overview" tab contains a paragraph describing the service, a "What's Inside" section with four bullet points, and a "Please Note" section.


Microsoft Azure

Search resources, services, and docs (G+)

Home > Marketplace >

HashiCorp Consul Service on Azure

HashiCorp



HashiCorp Consul Service on Azure

HashiCorp

Create

Save for later

Overview Plans + Pricing

HashiCorp Consul Service (HCS) on Azure enables your team to provision HashiCorp-managed Consul clusters directly through the Azure Marketplace. As a fully managed service, HCS on Azure lowers the barrier to entry for your organization to securely connect services and route traffic across a mix of Kubernetes/AKS and virtual machine environments - while offloading the operational burden to the experts at HashiCorp. HCS on Azure is the easiest way to implement service mesh and secure service-to-service communication for your AKS clusters.

What's Inside

- **HashiCorp-managed Consul:** Offload provisioning, upgrades, and backups to HashiCorp.
- **Best Practices by Default:** Leverage a preconfigured Consul environment that uses the latest networking and security best practices.
- **Service Discovery and Service Mesh:** Enable observability, discovery, and secure connectivity for your services in stages using a crawl/walk/run approach.
- **AKS and VM Support:** Securely connect any AKS cluster or virtual machine environment using a single tool.

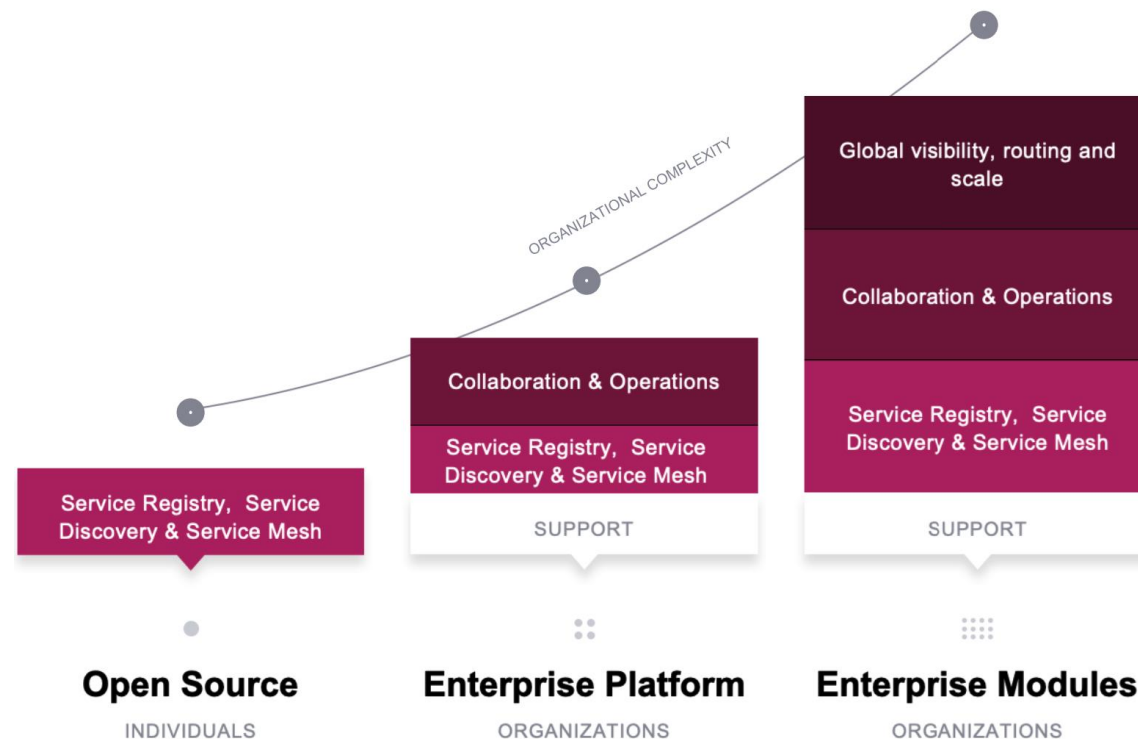
Please Note: HCS on Azure currently offers an on-demand Development plan for testing and non-production workloads. If you require a highly available production grade cluster with a 99.9% uptime SLA, please use the Contact HashiCorp Sales link below. An on-demand plan for production grade clusters will be available soon.

<https://www.hashicorp.com/blog/consul-service-on-azure-general-availability>

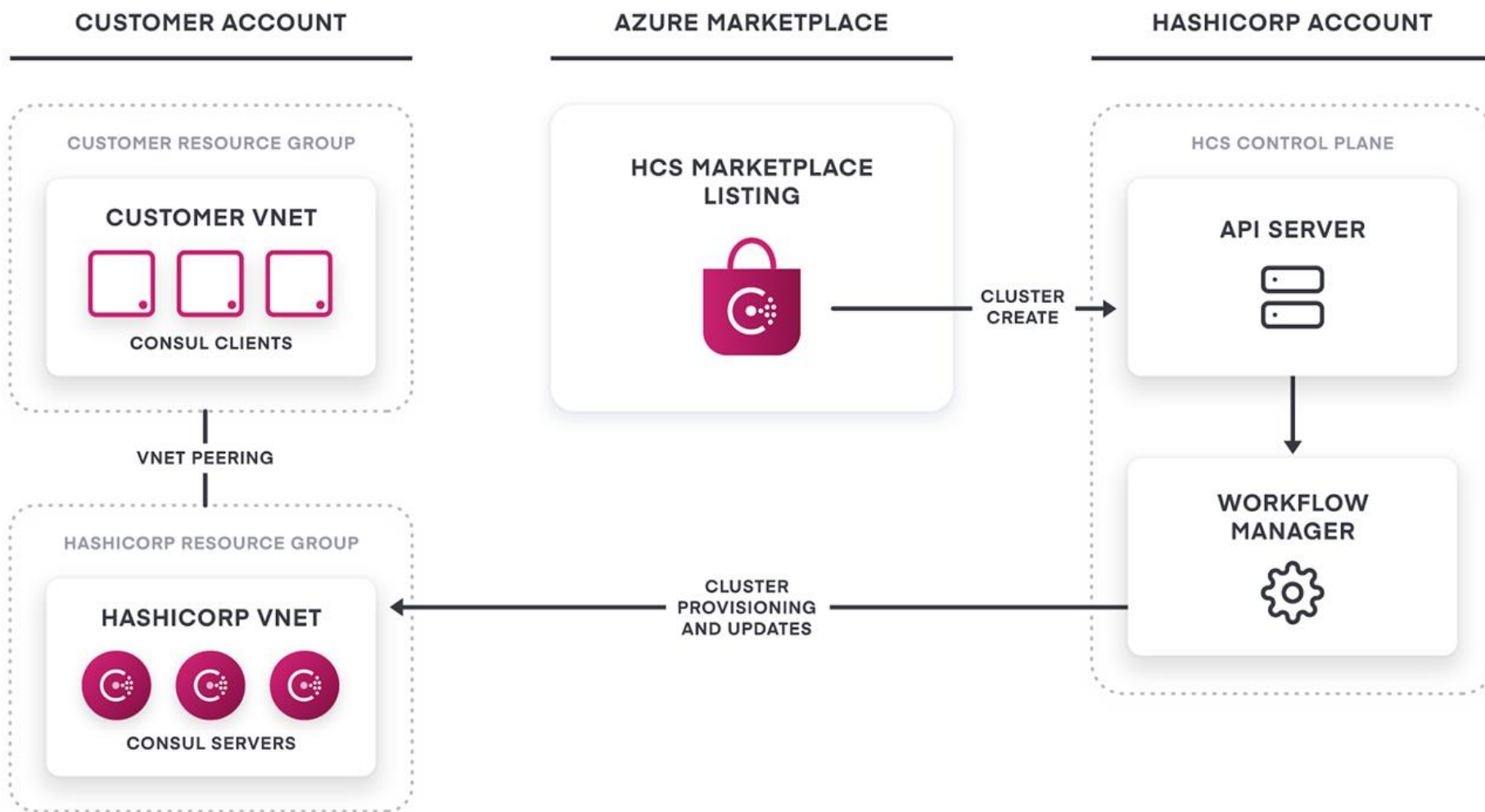
HCS on Azure - 개요



- HashiCorp에서 관리하는 서비스 (Managed Service) – HashiCorp에서 직접 프로비저닝 오프로드, 관리, 업그레이드 진행
- 자연스러운 Azure에서의 경험 제공 – Azure 마켓플레이스에서 직접 클러스터 프로비저닝 수행
- (Consul 구성) 모범 사례를 디폴트로 – 최신 보안 모범 사례를 자동으로 구성하여 사용 가능
- AKS (Azure Kubernetes Service) 및 Azure Compute 환경 연동 – 여러 AKS 또는 Azure Compute (VM) 환경에서 Service Discovery 및 트래픽 라우팅을 안전하게
- Azure와 온프레미스 환경 연동을 염두하고 설계 (Coming soon!)

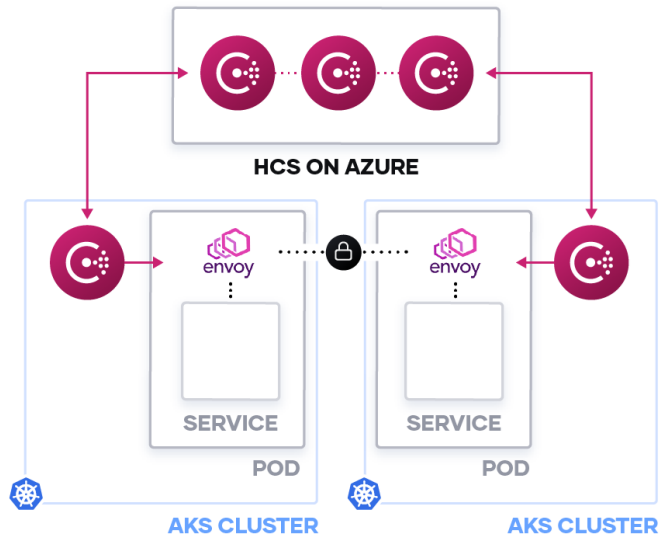


HCS on Azure - 어떻게 동작할까요?



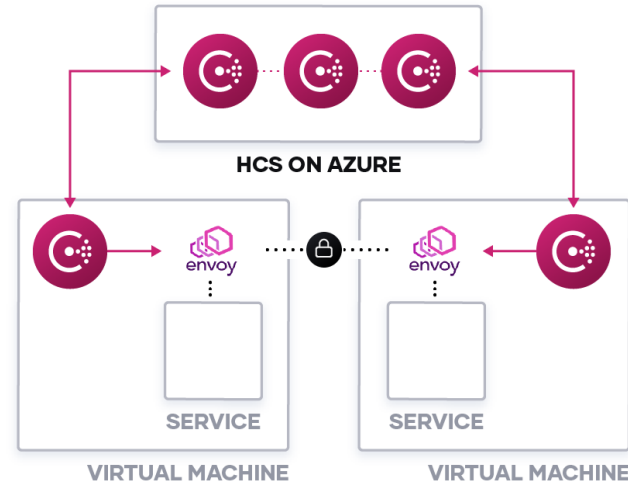
HashiCorp Consul Services

Service Mesh Deployment Scenarios



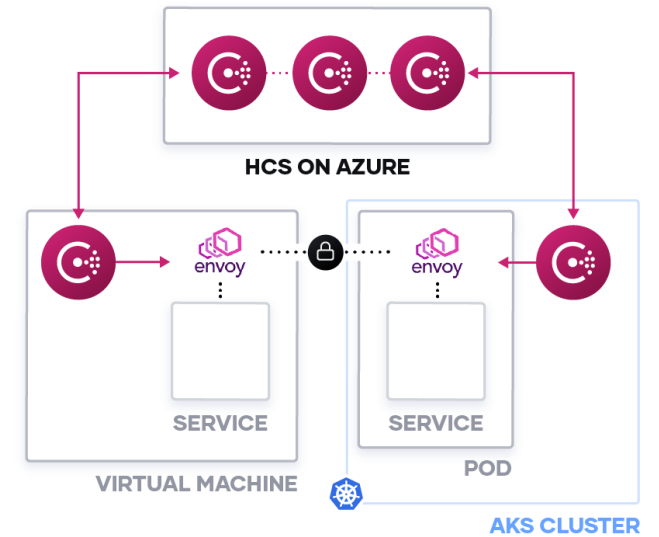
Kubernetes

Enable secure traffic routing across Kubernetes services running in one or more clusters.



Virtual Machines

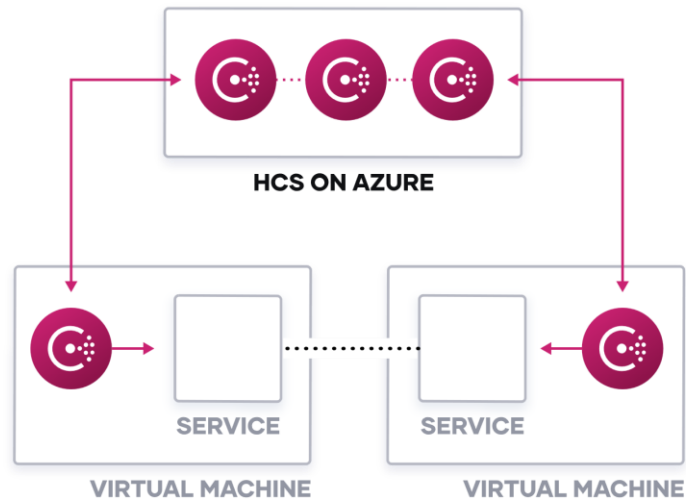
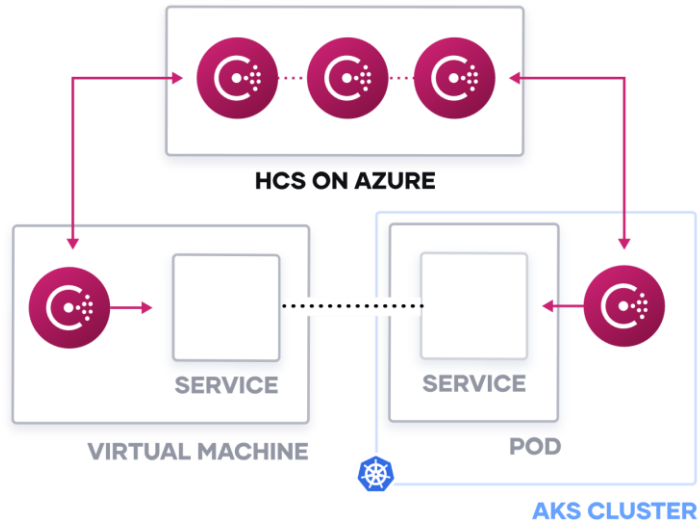
Enable secure traffic routing across VM-based services running in one or more environments



Hybrid Environments

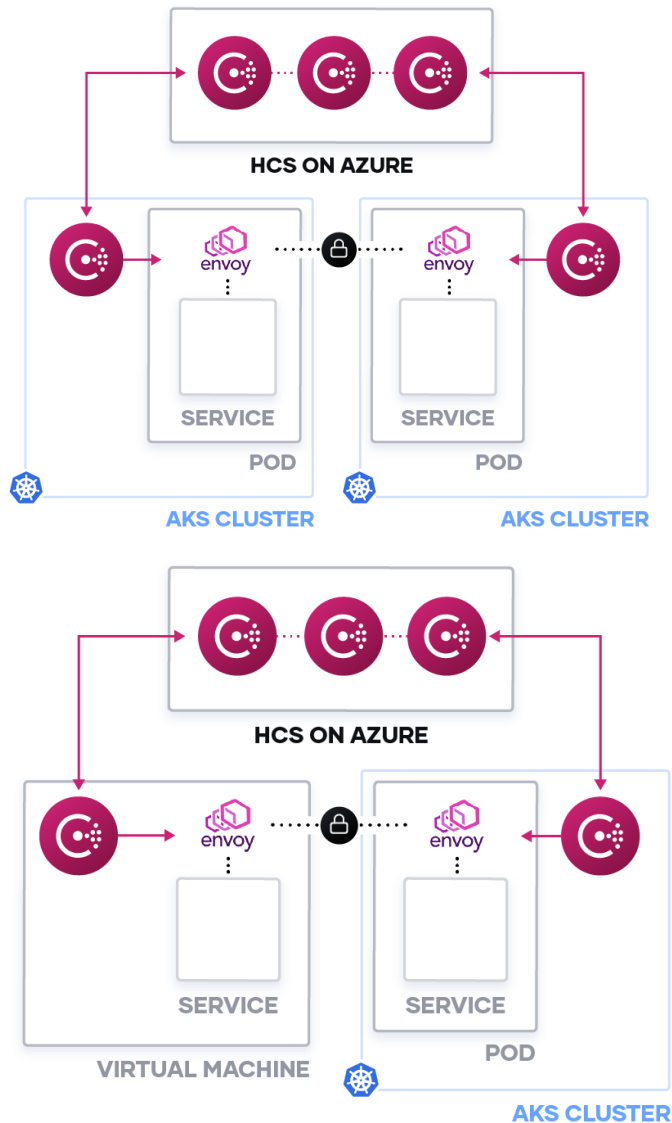
Enable secure traffic routing across Kubernetes and VM-based services.

HCS on Azure - Service Discovery



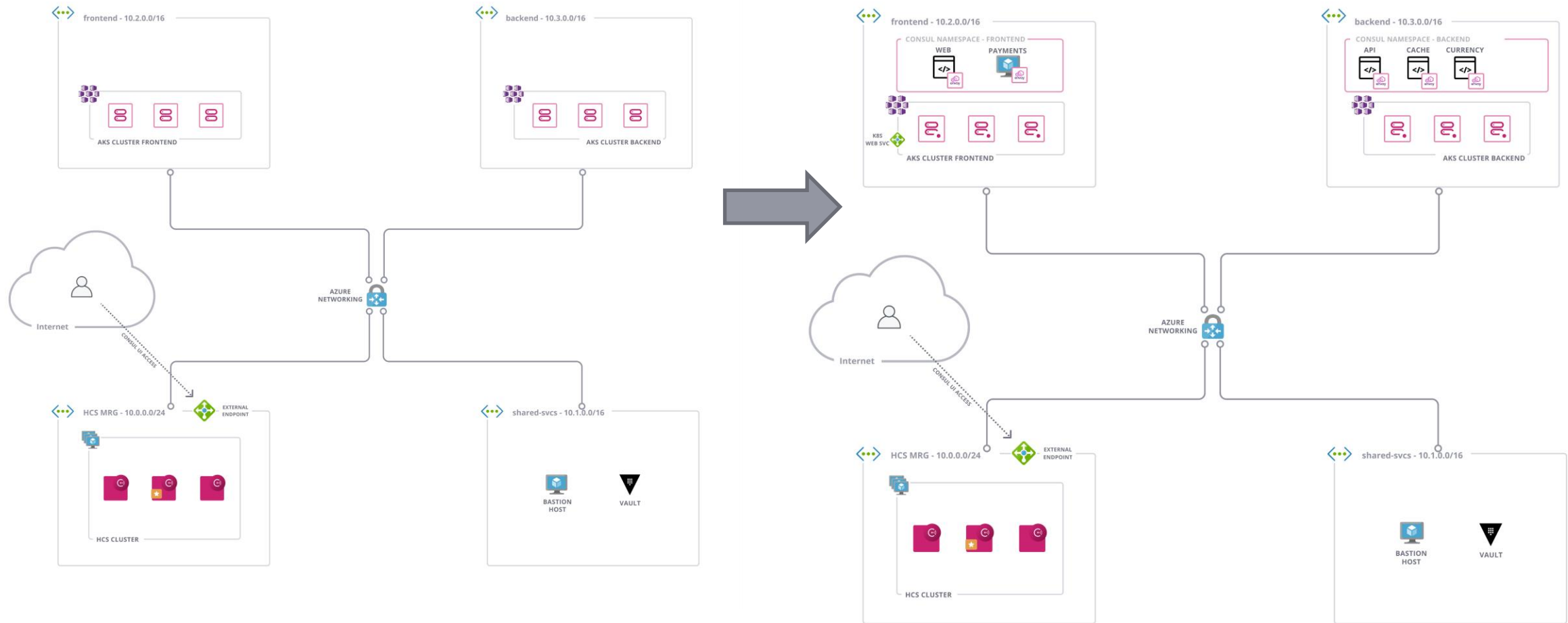
- **Kubernetes** - 다른 클러스터에서 실행 중인 쿠버네티스 서비스에 대한 Discovery
- **Virtual Machines** - 동일한/다른 환경에서 실행되고 있는 가상 머신 기반 서비스에 대한 Discovery
- **하이브리드 환경** - 쿠버네티스와 가상 머신 전반에 걸친 서비스에 대한 Discovery

HCS on Azure - Service Mesh



- **Kubernetes** – 단일/여러 클러스터에서 실행 중인 쿠버네티스 서비스에 걸치는 secure traffic routing
- **Virtual Machines** – 단일/여러 환경에서 실행되고 있는 가상 머신 기반 서비스에 걸치는 secure traffic routing
- **하이브리드 환경** – 쿠버네티스와 가상 머신 전반에 대한 secure traffic routing 지원

HCS on Azure - 클라우드 아키텍처



A large, solid orange circle is positioned on the left side of the slide, partially cut off by the edge.

Demo: config management by Consul

A yellow dashed line is located in the bottom right corner of the slide, consisting of several short, curved segments.

관련 자료

<https://learn.hashicorp.com/consul/hcs-azure/deploy>

<https://smi-spec.io/>

[Migrating from VMs to Kubernetes using HashiCorp Consul Service on Azure](#)

[Connecting Services in an Azure Hub and Spoke topology with HashiCorp Consul Service on Azure](#)

Thank You!