Configuring Vault Server for High Availability



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Overview



High availability components

Vault cluster behavior

Configuring HA for Vault



High Availability Components







Storage

HashiCorp Supported

- Consul

Community Supported

- DynamoDB
- Etcd
- FoundationDB
- Google Cloud Spanner
- Google Cloud Storage
- MySQL
- Zookeeper



Server



Lock based in datastore

Active and standby

No performance benefit

Forward or redirect

Different storage for HA



Network Components

Listener cluster_address

Node cluster_addr

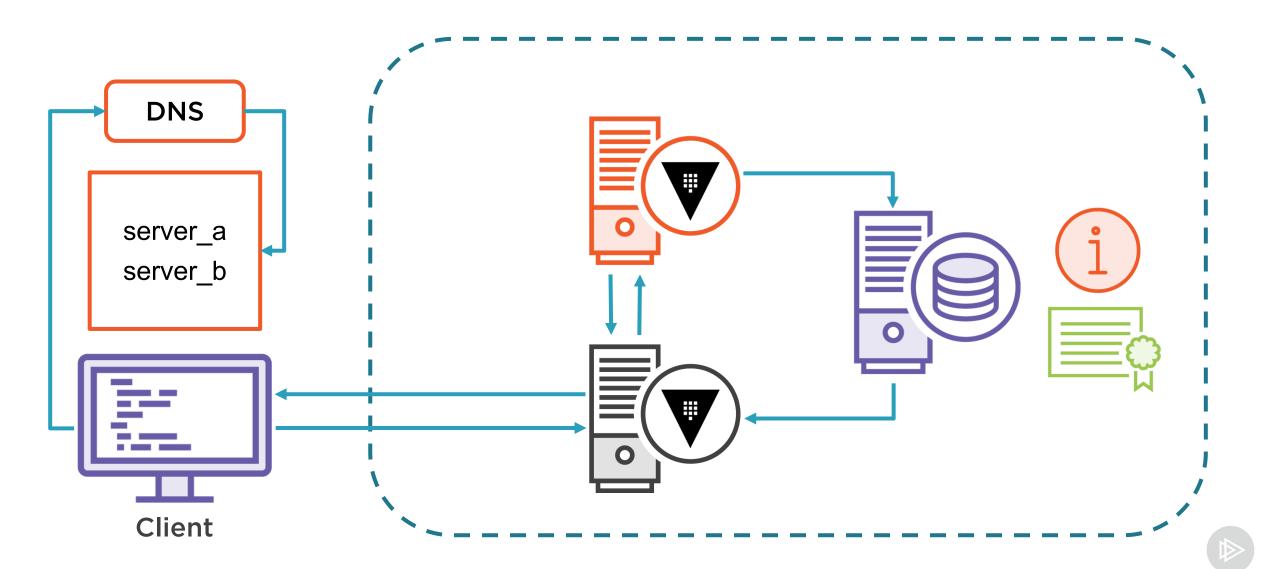
Node api_addr

Direct access

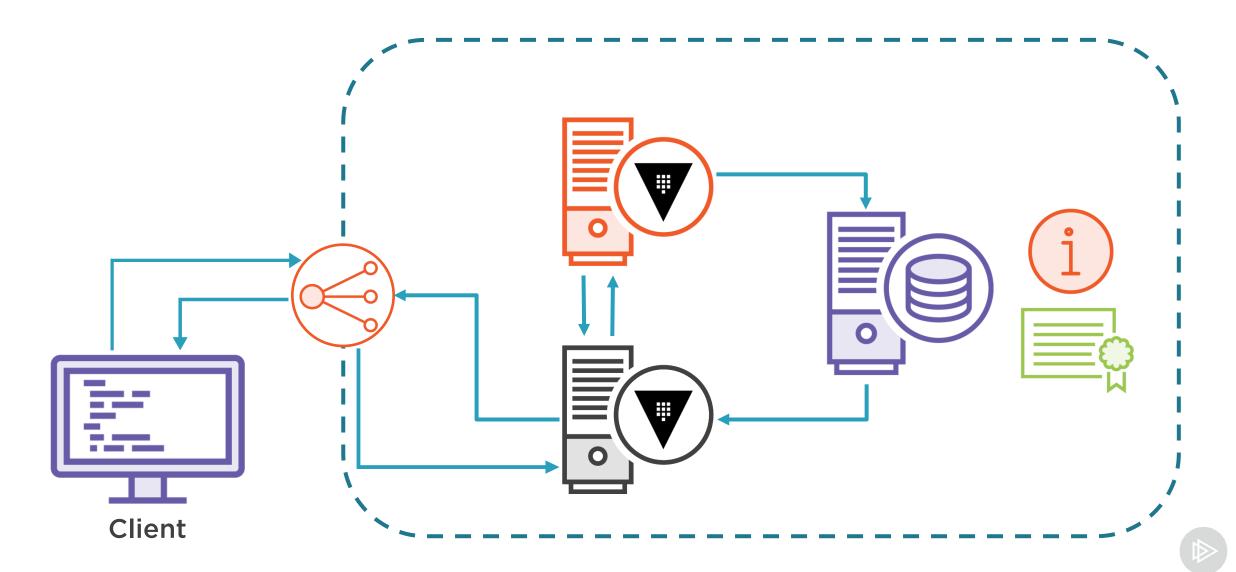
Load balancer



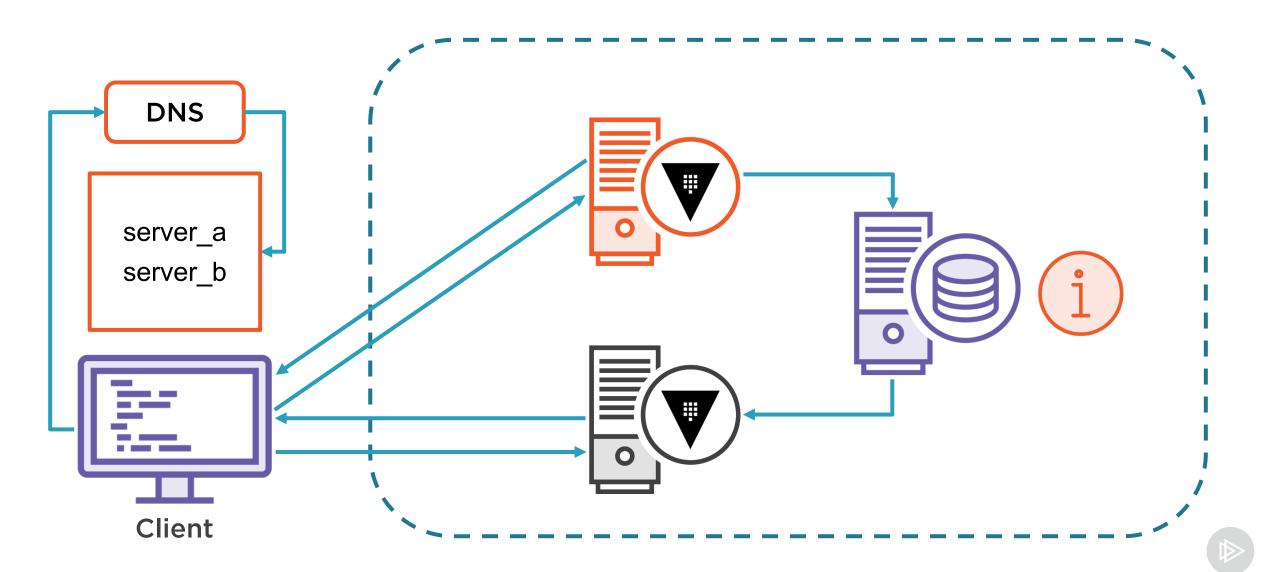
Network Traffic - Request Forwarding



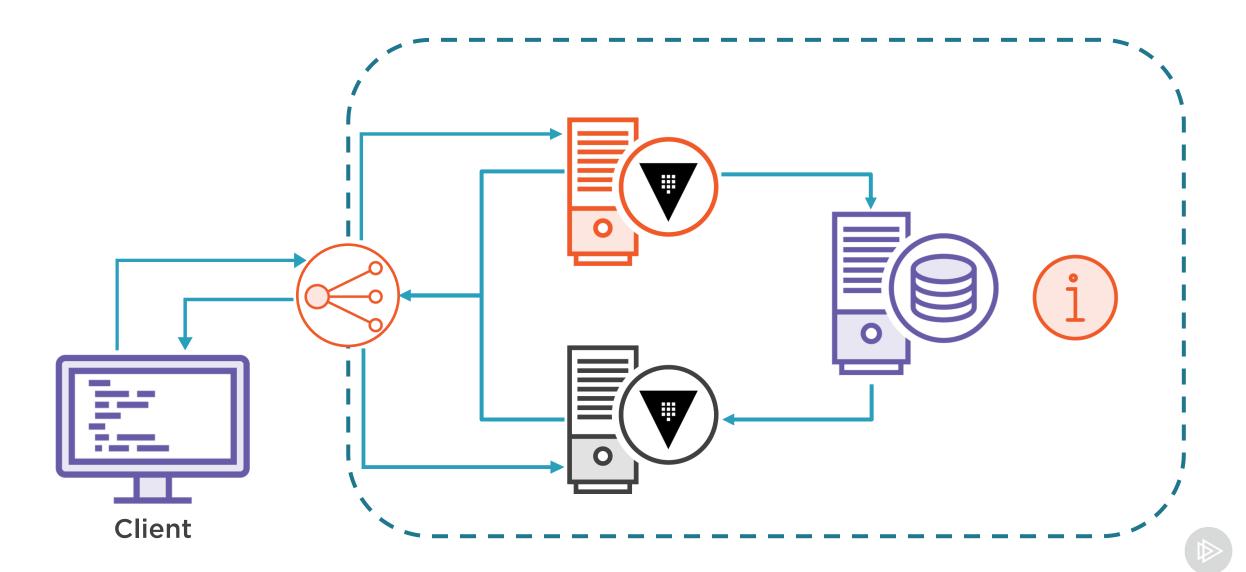
Network Traffic - Request Forwarding



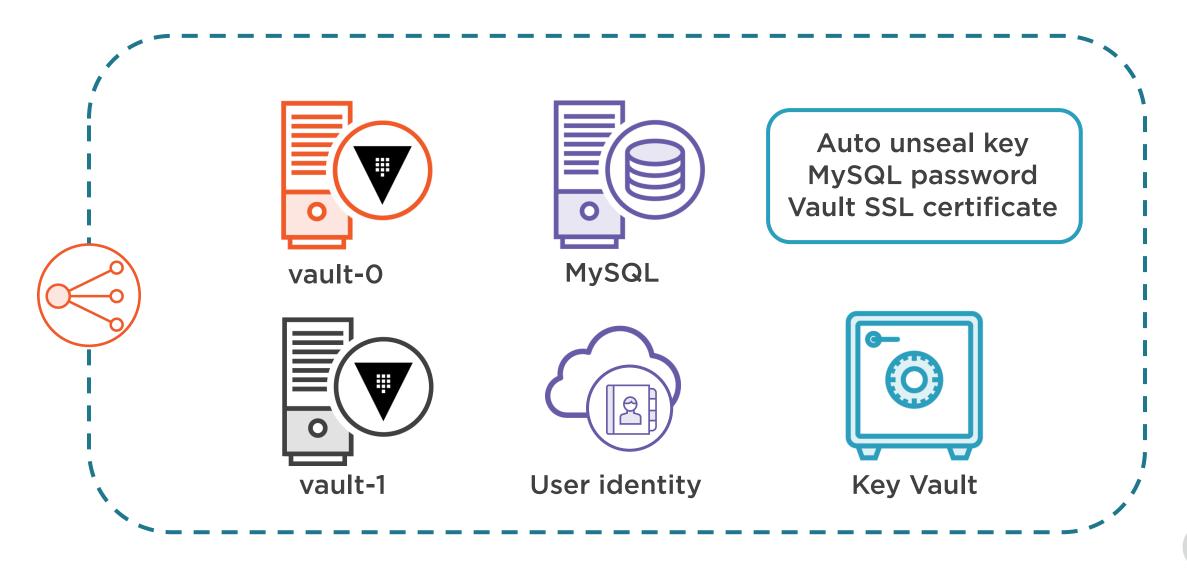
Network Traffic - Client Redirection



Network Traffic - Client Redirection



Vault HA Setup



Vault Server Configuration

```
listener "tcp" {
 address = "0.0.0.0:8200"
 cluster address = "X.X.X.X:8201"
storage "mysql" {
 ha enabled = "true"
api addr = "https://vault.globomantics.xyz:8200"
cluster addr = "https://X.X.X.X:8201"
```



Summary



Storage matters in HA

Be mindful of your network

HA doesn't improve performance

Coming up:

 Performing Vault Server Backup and Restore

