Working with Secrets



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Summary



Secret lifecycle

Key value secrets

Secrets engines

Dynamic secrets



Secrets Lifecycle

Create

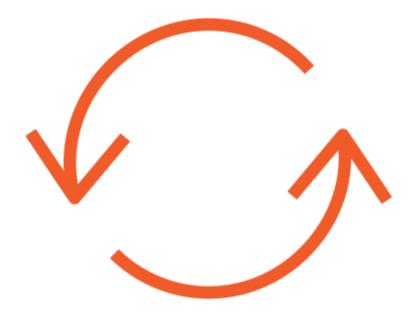
Read

Update

Delete

Destroy

Metadata Destroy





Key Value Secrets

Version 1

No versioning, last key wins

Faster with fewer storage calls

Deleted items are gone

Can be upgraded to version 2

Default version on creation

Version 2

Versioning of past secrets

Possibly less performant

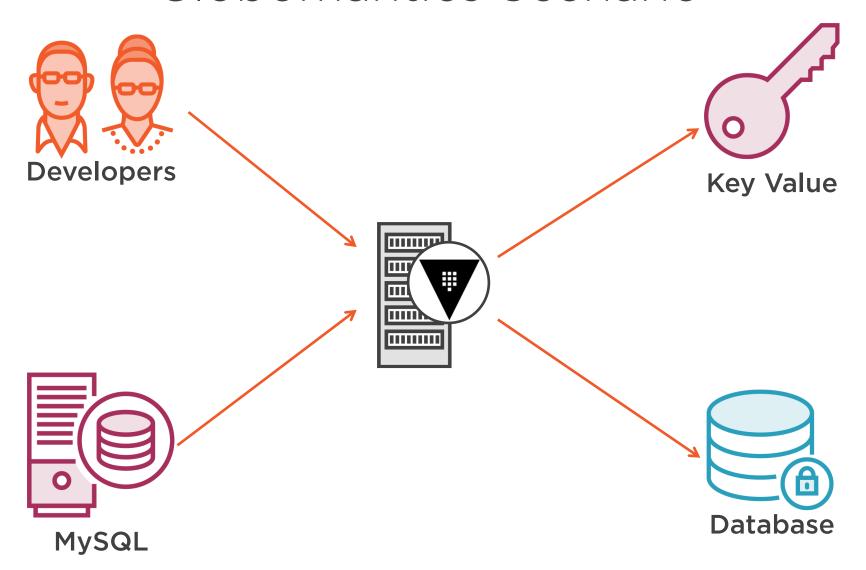
Delete items and metadate retained

Cannot be downgraded

Can be specified at creation



Globomantics Scenario



Secrets Engines



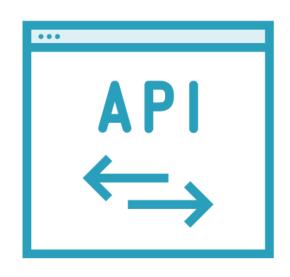
Store, generate, encrypt data

AWS, Database, Active Directory, PKI, SSH

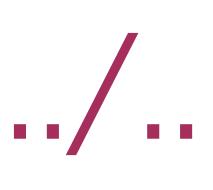
Lifecycle: Enable, Disable, Move, Tune



Vault Paths



API rules everything



Everything is a path



Enables path-help



API docs or bust



Working with Secrets Engines

#Enable a secrets engine

vault secrets enable [options] TYPE

#Disable a secrets engine

vault secrets disable [options] PATH

#Move a secrets engine

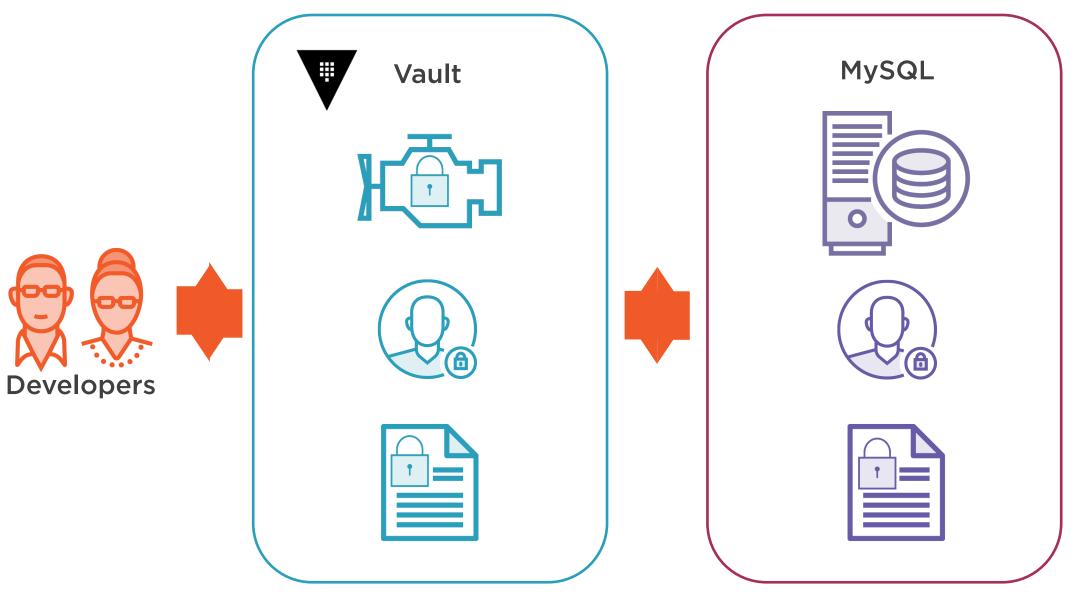
vault secrets move [options] SOURCE DESTINATION

#Tune a secrets engine

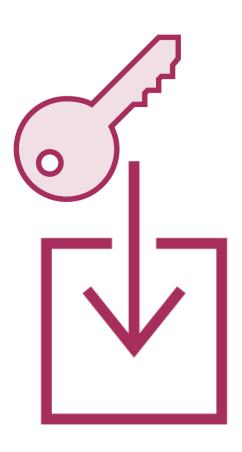
vault secrets tune [option] PATH



Database Secrets Engine



Dynamic Secrets



Create secrets on demand

Lease issued for each secret

Lease sets validity period

Control renewal and revocation



Conclusion



Secrets are more than key/value pairs
Secrets engines make Vault extensible
Dynamic secrets are kinda awesome
Coming up:

- Controlling Access in Vault

