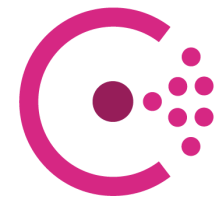




Getting Started with HashiCorp Consul

Created by Bryan Krausen



HashiCorp

Consul

Objective 5: Back up and Restore



Objective 5a: Describe the contents of a snapshot

what are snapshots?

atomic, point in time snapshots

includes

- key/value entries
- service catalog
- prepared queries
- sessions
- ACLs

snapshots by leader vs. follower (stale)

consistent state = leader = normal cluster state

stale = if cluster has no leader

gzipped tar archives

includes raft metadata

includes a binary serialized version of Consul state



Objective 5b: Back up and restore the datacenter

perform snapshots using the CLI

consul snapshot

agent(ENT)

inspect

restore

save

perform snapshots using the API

restore operations

not designed to handle server failures during restore

"all or nothing" disruptive command

recover from DR

restoring to fresh set of Consul servers

backup frequency

automated

manual

before upgrades

bootstrap a new datacenter w/ same name



Objective 5c: [Enterprise] Describe the benefits of snapshot agent features

long-running daemon (automated snapshots)

customizable interval

performs leader election

highly available

automatic failover

registers itself with Consul

benefits of health checks

snapshots are reported in agent log

ID = unix timestamp with nanosecond resolution

snapshot storage

local

remote

S3-compatible

GCP Cloud Storage

Azure Blob Storage