CASE STUDY

PARTNER OVERVIEW

CDW partnered with a servicer that delivers specialized financial solutions to consumers across the full credit spectrum. They have over 5,000 associates located throughout Texas, Florida, Arizona, and nationwide as part of their sales and dealer relationship network.

Background

The customer had 29 environments containing approximately 800 VMs they wanted to stand-up and migrate to a new environment by the end of the year. With this initiative's scope and complexity, the best solution within the required timeline was to embrace Infrastructure as Code (IaC) to templatize the infrastructure and resources, along with automated secrets management, to deliver and manage each respective environment.

Goals

The initial agreed upon goals included:

- Complete a significant amount of environment migration effort and infrastructure changes over six months
- Reduce overall time to deploy environments and deliver infrastructure and application stacks
- Maintain confidence in future infrastructure changes
- Establish the ability to repeat and replicate environments
- Eliminate troubleshooting (who and when) environment changes
- Simplify environment auditability and security
- Establish visibility and documentation of environment and resources
- Enable GitOps delivered environment deployments and changes
- Enable scale – easy to add additional instances (if application built for scale)

The engagement was segregated into two primary functions:

- Standup and integrate Hashicorp Enterprise Terraform for IaC
- Standup and integrate Hashicorp Enterprise Vault for secrets management

Plan

The engagement was designed to help the customer envision and design modern best practices for IaC operating concepts and begin to adopt DevOps practices. The plan for the engagement was a collaborative effort that provided opinionated recommendations for requirements and best-practice architecture guidance. This included a different build process than typical engagements, using VMs that were previously built instead of ones that were built in-house.

Additionally, Vault was to be installed and Ansible automation was to be integrated into their pipeline process. The plan was to get customer access to the Vault cluster to test use cases, to then eventually use Vault for certifications for their KPI structure.

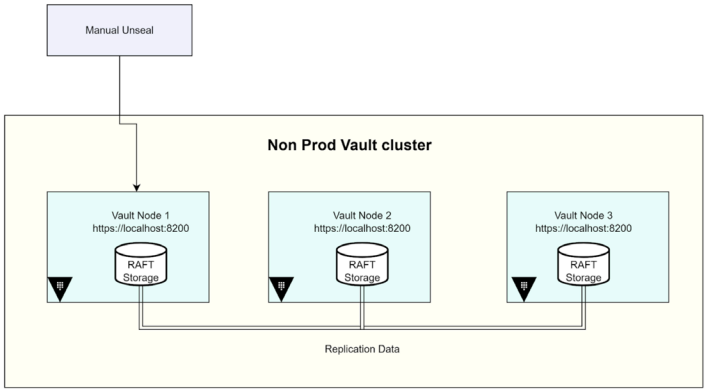

Figure 1: Non-Production Cluster with 3 node configuration using Raft storage and manual unseal process

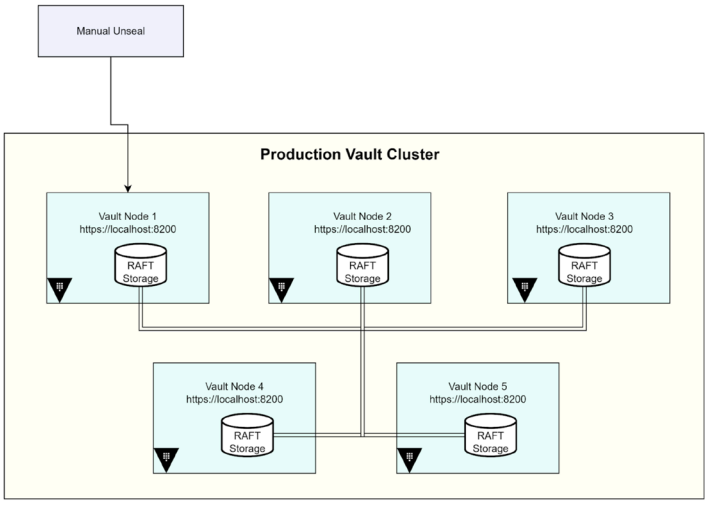

Figure 2: Production vault cluster with 5 node configuration using Raft storage and manual unseal process

Conclusion & Impact

As a result of the engagement, the customer can now develop IaC, use AppRole with Vault for application connectivity and secrets, and integrate and authenticate secrets with Azure DevOps. This engagement was an entry point for CDW to additional DevOps and automation process work with the customer and the beginning of a long-term relationship.

Additionally, the CDW team received positive feedback, with the customer stating that it was one of the best vendor experiences they've had to date, and they would recommend CDW to anyone that asks.