

Keyfactor + HashiCorp Vault

Enable DevOps to move fast, while security stays in control of PKI operations

HashiCorp Vault makes it easy for developers to store and securely access secrets — such as passwords, tokens, encryption keys and X.509 certificates — to authenticate and secure connections. While this allows developers to move fast, security teams increasingly demand more visibility and control to ensure that every certificate is issued from a trusted public or private CA and compliant with enterprise security requirements.

While HashiCorp Vault meets developers' need for speed, it's often deployed outside the oversight of the security team, creating risk of untracked or self-signed certificates. Even if the security team is involved, public key infrastructure (PKI) can be complex and costly to deploy in a way that meets security best practices.

WHAT INFOSEC NEEDS

PKI and security teams lack visibility and control that the enterprise requires. To ensure that every certificate is trusted and compliant, they need to:

- Gain visibility into X.509 certificates issued across all Vault instances in their environment
- Enforce governance and compliance while allowing DevOps to use native Vault APIs and commands
- Ensure that certificates are issued from a secure root of trust, not an untrusted self-signed CA

WHAT DEVOPS NEEDS

DevOps teams are unable to take full advantage of Vault for all of their certificate needs. To leverage Vault for PKI, DevOps teams need to:

- Easily obtain X.509 certificates that comply with enterprise policy, without inhibiting workflows or delivery timelines
- Automate access to publicly-trusted certificates required for production environments directly from Vault
- Enable high-volume issuance of certificates at scale without latency or downtime

Unlock the Power of HashiCorp Vault with the Keyfactor Platform

Keyfactor Command enables enterprises teams to discover, manage and automate the lifecycle of keys and digital certificates across the organization. It's the most complete and scalable solution that combines end-to-end certificate management with a dedicated, cloud-hosted PKI platform. Tested and proven in environments with 500M+ certificates, the platform is purpose-built for high-volume, complex PKI environments.

HashiCorp Vault's PKI backend can integrate with the Keyfactor Command platform to enable issuance of X.509 certificates from trusted and authorized certificate authorities (CAs). Together, HashiCorp and Keyfactor bridge the gap between DevOps and InfoSec teams to ensure that every certificate is tracked and protected.

WHY KEYFACTOR + VAULT

COMPLETE VISIBILITY

Discover certificates across all Vault instances and bring them into a single enterprise-wide inventory.

MONITORING & REPORTING

Actively monitor certificates, generate reports, and set automated alerts for certificate-related events.

POLICY ENFORCEMENT

Define and configure tighter controls over certificate content and private keys requirements.

DEVOPS AGILITY

Enable high-volume issuance via native Vault APIs from any public or private CAs configured in Keyfactor Command.

SECURE ROOT OF TRUST

Integrate Vault with a dedicated, cloud-hosted PKI as-a-Service built and operated on your behalf to industry best practice.

How We Integrate

Organizations that use the Keyfactor platform can leverage HashiCorp Vault to simplify and automate certificate requests for development teams and at the same time, provide InfoSec with the ability to define and enforce policies. Keyfactor offers two different ways to integrate with HashiCorp Vault: the Keyfactor AnyGateway and the Keyfactor Secrets Engine.

KEYFACTOR ORCHESTRATOR

Use the built-in PKI Secrets Engine with Keyfactor Command to monitor and report on all certificates generated by Vault.

- Provides real-time visibility of every certificate issued across all Vault instances
- Simplifies inventory by grouping certificates and tagging them with custom metadata
- Makes it easy to search and revoke rogue or non-complaint certificates in seconds
- Ensures that security teams can stay ahead of potential audit failures or outages

KEYFACTOR SECRETS ENGINE

Use the Keyfactor Secrets Engine to issue all certificates via Vault from a security-operated PKI.

- Integrates Vault with an enterprise-trusted PKI or a dedicated, cloud-hosted PKI as-a-Service
- Enables consistent policy enforcement and visibility without disrupting DevOps teams
- Delivers trusted certificates via Vault from any public or private CA configured in Keyfactor Command
- Eliminates manual processes with end-to-end automation of certificate lifecycles

Why Keyfactor

TECHNOLOGY POWERED BY DEEP PKI EXPERTISE

✓ PROVEN SCALABILITY

The only platform tested and proven to process thousands of operations per second in environments with 500M+ certificates.

✓ CLOUD-FIRST APPROACH

Keyfactor offers an integrated PKI as-a-Service platform for certificate lifecycle automation and IoT device security – delivered from the cloud.

✓ FLEXIBLE DESIGN

Our modular design enables enterprises to enable automation without the need to re-engineer workflows or re-issue certificates.

✓ EXTENSIBLE ECOSYSTEM

Our API-first approach allows customers to integrate with a growing number of enterprise infrastructure, tools, and applications.

✓ UNMATCHED SERVICE

Keyfactor customers benefit from world-class PKI experts and service – backed by 99% customer satisfaction and 98.5% customer retention.

✓ IN-DEPTH EXPERTISE

Our platform and services are built upon 20+ years of hands-on experience working with leading companies to build and run their PKI.

Using HashiCorp Vault? Get Started with Keyfactor Today.

[CONTACT US](#)

KEYFACTOR

Keyfactor empowers enterprises of all sizes to escape the exposure epidemic – when breaches, outages and failed audits from digital certificates and keys impact brand loyalty and the bottom line. Powered by the industry's only PKI as-a-service platform, IT and infosec teams can easily manage digital certificates and keys. And product teams can build IoT devices with crypto-agility and at massive scale.

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