

Vault Onboarding Program Closing Thoughts

COBRA Team | HashiCorp Customer Success





Agenda

Onboarding Program Recap

Look back at what we've accomplished the last 7 weeks

Production Readiness

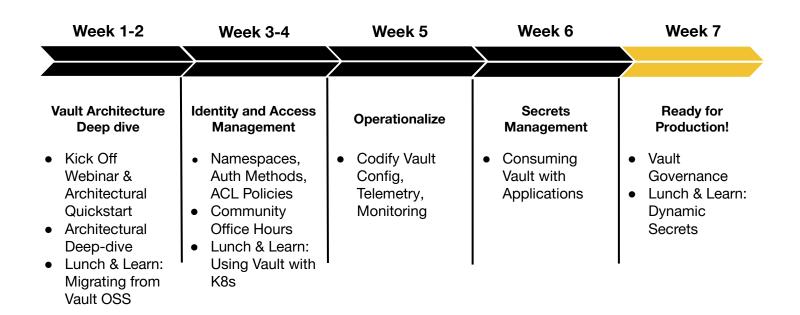
Vault Production Checkpoints

Exit Program Resources

Resources to support your post-program journey

Vault Enterprise Path to Production







Onboarding Checklist

Our objective is to make you successful with our products and see value within 90 days



Vault Installed

- Vault Enterprise installed in your environment
- Basic configuration completed
- Telemetry and Monitoring in place
- Disaster Recovery replication in place



Vault Operational

- Getting the first use case (application) onboarded and consuming secrets stored in Vault
- A roadmap created for onboarding additional use cases.



Completed within 90 days



Vault Enterprise Production Readiness



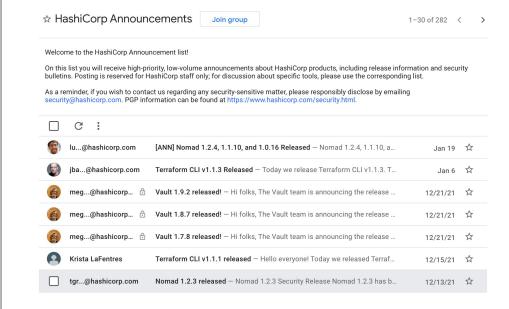


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Vault Production Readiness

Subscribe to release notifications:

https://groups.google.com/g/hashicorp-announce

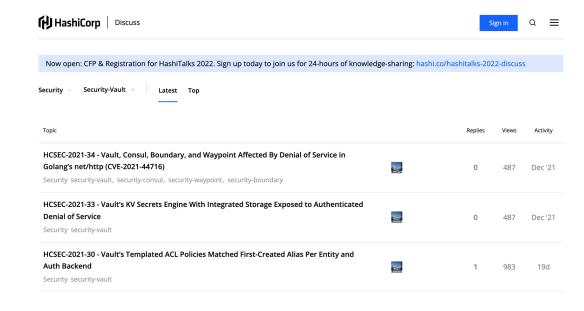




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Vault Production Readiness

Join security & vulnerability announcements list https://discuss.hashicorp.com/c/security/52







- Architecture and Infrastructure
- Vault Operations and Infrastructure Security
- Business Continuity
- Vault Policy and Configuration





Architecture and Infrastructure

- Is the cluster architecture aligned with the reference architecture?
 - o Consul Storage Reference Architecture
 - Integrated Storage Reference Architecture
 - Are the nodes configured across multiple AZs / failure zones to provide resilience in accordance with your uptime requirements?
 - Are the <u>nodes sized appropriately (RAM and CPU)?</u>
 - Does the cluster have provisioned IOPS (Integrated Storage)?
- Is there less than 8 milliseconds of latency between Vault servers?





Architecture and Infrastructure - continued

- Have high availability best practices been followed?
 - Has a process been identified and implemented to handle the lifecycle of the TLS certificates used on Vault Server listeners and load balancers?
 - How is DNS Implemented? Are appropriate TTL's configured that allow for failover that meet RTO Objectives
 - What is the validity period of TLS certificates? Is it rational?
 - Does the load balancer configuration follow <u>best practices</u>, is TLS terminated on the Vault cluster?
 - Is the renewal reminder for TLS certificates a scalable process, i.e. more than a calendar entry in a single location?





Vault Operations and Infrastructure Security

- Is root token creation restricted and monitored?
- Does the team managing Vault have runbooks and processes for all key administrative tasks?
 - Upgrading Vault
 - Executing DR failovers in Vault
 - Reissuing unseal/recovery key shares
 - Rotating Vault's master encryption key
 - Rotating any auto-unseal/seal-wrap mechanism key (if applicable)
 - Generating root tokens
- Have the <u>production hardening recommendations</u> been reviewed and implemented in the environment?
- Is the running version of Vault currently supported? N-2 window from <u>latest release</u>?



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Vault Production Readiness

Business Continuity

- Have runbooks been created and tested to validate the ability to meet the Recovery Time Objective?
 - Have <u>snapshots been enabled</u> in alignment with the desired Recovery Point Objective?
 - Has <u>recovery from a snapshot</u> been tested and the process documented?
 - Is there alerting in place if snapshots fail?
- Have alerts been created on the following parameters?
 - Disk space alerting on instance
 - Disk space alerting on audit points
 - Log monitoring/alerting for warn/errors
 - Draught/absence alerts on log outages/stoppages
 - RAM utilization alerting
 - CPU utilization alerting





Vault Policy and Configuration

- Are policies least-privilege?
- Are policies tested in a negative fashion, ie, ensure that a token with this policy can do what it allows but also prevents more access than intended?



Content & Resources



COBRA Vault Onboarding Journey



- Kickoff & Architectural Quickstart password: 8NVuDb
- Webinar Architectural Deep Dive password: fptjgznsmo
- Webinar Namespaces, Authentication, and Policies password: TbYyxt
- Webinar Operating Vault password: KX3rHv
- Webinar Consuming Vault password: 5B8rdK
- Webinar Vault Governance password: j4uTsP
- <u>Lunch and Learn Migrating from OSS</u> password: yTAK4u
- <u>Lunch and Learn Dynamic Secrets</u> password: FufQcR
- <u>Lunch and Learn Using Vault with Kubernetes</u> password: 6evnMW

All program materials





Additional Resources

- Production Readiness Checklist
- HashiCorp Vault Adoption Guide
- How to Adopt a Producer-Consumer

 Model for Vault
- Running Vault in Production (book)
- HashiCorp Academy (Training).





Additional Training Resources

Wanting to Learn More? A Topic Not Covered?

HashiCorp Developer Page

Self guided tutorials that include guidance on best practices and operating productions systems https://developer.hashicorp.com/vault/tutorials

Discuss for Vault - https://discuss.hashicorp.com/c/vault
Great place for best practices, finding similar configuration questions

HashiCorp Vault Certification

Even if you don't want the certification, the <u>Study Guide</u> is a relevant and useful curriculum to follow especially for folks new to Vault



Thank You

<u>customer.success@hashicorp.com</u> www.hashicorp.com/customer-success