

Managing Configuration Secrets from Ansible using Hashicorp Vault

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Abstract

Within High Performance Computing (HPC) At Los Alamos National Laboratory, the management of secrets is of utmost importance. Currently, HPC uses Ansible Vault for storage and management of secrets, but there are deficiencies with Ansible Vault's design that are not suitable for HPC's evolving needs. The best solution to this issue is replacing Ansible Vault with Hashicorp Vault to increase security and storage ability of configuration management and secrets. Due to the constraints of the physical hardware, it was important to be able to containerize any solution, thus the deployment of Vault was integrated with Docker. We were successfully able to recreate Ansible Vault's capabilities, while adding additional layers of security and flexibility provided by Hashicorp Vault.