Mahesh Shrestha

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**Summary:**

* 4 years of experience in IAM (Identity and Access Management) and PAM (Privileged Access Management) focusing on credential management tool like HashiCorp Vault and CyberArk.
* 9+ years of experience working in IT field with various clients such as online retail, financial instructions, mortgage and telecom as HashiCorp Vault engineer, DevOps Engineer, AWS, Linux/UNIX System Administrator in diverse, distributed and networked UNIX environments in agile based methodologies.
* Experiencing in setting up and configuring auth methods, creating roles, policies and extensive understandings on managing credential using HashiCorp Vault**.**
* Experience in registering Kubernetes/OpenShift clusters in Vault and creating roles for same with appropriate permissions.
* Expertise in using Vault CLI, UI and HTTP API.
* Excellent understanding and has worked as a DevOps engineer, setting up automations using AWS Cloud platform, using build and release CI/CD tools such as Jenkins, Bamboo, TFS/Azure DevOps, Urban Code Deploy (UCD), scm tool such as GitHub, Bitbucket/Stash, SVN, Windows and Linux Servers.
* Managed provisioning of the HashiCorp Vault instances using CloudFormation templates.
* Good Knowledge on using Terraform for IaC.
* Experienced in Project Management and issue tracking tool like JIRA.
* Experience in administering of monitoring tools such as Splunk, Kibana.
* Strong interpersonal, customer service, result oriented and team building skills.
* Strong analytical and problem-solving skills and can work either independently with little or no supervision or as a member of a team.
* Excellent communication skills – written, verbal, and presentation.
* Motivated, dedicated team players, open to educate known skills, learn from team members and colleagues.

**Certification**:

[DevOps with AWS](https://www.linkedin.com/learning/certificates/f9ec69319d5bdea4636c188f492c1057ba616b0c9d05eda7209cab5f3a26bc1c)

[HashiCorp Certified: Vault Associate (002)](https://www.credly.com/badges/89343b7a-0801-4a10-9f76-53a3623a794f/public_url)

[Cybersecurity Awareness: Cybersecurity Terminology](https://www.linkedin.com/learning/certificates/adc53ac21997c488c9933a2672ec4808212b708eb69dc2182c3450ea92521bb5)

**Skills:**

|  |  |
| --- | --- |
| Identity and Access Management |  |
| Methodologies | Agile, Agile/Scrum |
| **Scripting** | Shell, PowerShell, Bash |
| **Versioning Tools** | GIT, Bitbucket, SVN |
| Credential Management Tools | HashiCorp Vault, CyberArk |
| **Automation Tools** | Jenkins, Bamboo |
| **Monitoring Tools** | Cloud Watch, Nagios, Sensu, Splunk, Kibana |
| **Databases** | **SQL,** MYSQL, Oracle |
| **Cloud Technologies** | AWS, Azure |
| **Repository Manager** | **JFrog** Artifactory, Nexus |
| **Bug & Ticket Tracking Tools** | Atlassian JIRA, Remedy, Service Now |
| **Web Servers** | Web Sphere, Apache Tomcat |
| File Transfer | Filezilla, WinSCP, FTP, SSH, Telnet |
| Application Tools | SharePoint, Visual Studio 2012, 2017, Source Tree, Note ++, git shell, Atom. |

**Experience:**

**Information Security/HashiCorp Vault Engineer**

**Freddie Mac, McLean, Virginia |** June 2020-Present

**Responsibilities:**

* Experienced HashiCorp Vault SME with helping applications teams and end users to onboard/enable new services/secrets/SVCs, authentication methods, policies, roles etc. to use HashiCorp Vault as credential management tool.
* Created SOPs/documentations for HashiCorp Vault admin teams and end users to use for onboarding secrets, roles, policies etc. and SOPs for performing HashiCorp Vault upgrade, AMI Refresh, Performance and DR replication documents etc.
* Assisted application team(s)/stakeholders with onboarding service accounts to HashiCorp Vault to include; revising environment for authentication method, secrets engine to on boarded secrets, assist in developing compliance reporting, policy review/enforcement, and end to end lifecycle management activities.
* Worked with CyberArk (PAM tool) team to onboard service accounts to store as secondary tool and used CyberArk safe.
* Worked on migrating the different types of secrets, service accounts from PAM tool - CyberArk safe to HashiCorp Vault for the end users within Cloud (AWS) space.
* Experience with helping end users and applications teams to rotate the service accounts on a schedule basis.
* Help setup an auto rotation for the AD accounts using Openldap and AD secrets engine in HashiCorp Vault.
* Help enable and setup a Postgres and MongoAtlas database secrets engine for DB teams.
* Worked on and responsible for the infrastructure supporting a global deployment of HashiCorp Vault Enterprise hosted in AWS.
* Worked on HashiCorp Vault Storage Backend migration form Consul to Integrated Storage (RAFT).
* Performed frequent HashiCorp Vault upgrades in HashiCorp Vault clusters in AWS to latest or (n-1), HashiCorp Vault versions that include bug fixes, security enhancements and new features. (Used Versions : v1.1.2, v1.4.3, v1.5.3, v1.6.0, v1.7.3, v1.8.0, v1.10.4, v1.14.0)
* Performed and responsible for monthly AMI (Amazon Machine Image) Refresh in HashiCorp Vault clusters in AWS to apply latest AMI ID which is configured to deploy new EC2 instances in an ASG.
* Setup monitoring for HashiCorp Vault environment health including audit and system logs via Kibana and Dynatrace.
* Worked on HashiCorp Vault migration from AWS Legacy account to individual account as a part of minimizing/limiting blast radius.
* Trained team on how to handle standard git-flow i.e. clone, commit and push code to VCS such as bitbucket using CLI and Atlassian tool Sourcetree.
* Develop and administer data security policies and safe guarded secrets/credentials management.
* HashiCorp Vault operations responsibilities, POC testing of requested services such as gathering requirements from teams, provide documentation, research existing documentations; create/grant permissions of accounts for testing.
* Application support for secrets/credentials management and troubleshooting including on-call support on scheduled basis.
* Coordinate-collaborate with teams on their requirement and provide them with approved pattern solutions for HashiCorp Vaulting/storing credentials as well as provide the approved authentication documentations.
* Knowledge on different types of accounts such as AD, Sybase, TAM, Oracle, Ping, Postgres DB, Mongo atlas DB etc.

**Environments**: HashiCorp Vault (Used Versions : v1.1.2, v1.4.3, v1.5.3, v1.6.0, v1.7.3, v1.8.0, v1.10.4, v1.14.0), CyberArk| Atlassian Tools: Bitbucket, JIRA, Confluence | JFrog Artifactory Enterprise | VS Code | Ticketing: Service Now

**DevOps Engineer**

**Regions Bank, Hoover, AL |** August 2018 - May 2020

**Responsibilities:**

* Worked as a DevOps engineer to automate the manual deployments of .Net website, Web API and SQL Databases projects using available tools such as Bitbucket, Bamboo and Urban Code Deploy (UCD).
* Designed and created fully automated CI/CD pipelines for code deployment of Web API, Web UI, Java based IVR applications and SQL Databases projects for several teams across entire organization.
* Collaborated with different teams on different occasions to gather the requirement, do the technical deep dives and gather the essential information to set the required CI/CD pipelines for all the manual deployments.
* Responsible for migrating existing codes to newly created repositories and managed branches and permissions for applicable developers for assigned teams.
* Implemented Smart Commit in the CI pipeline so that developers can automatically append the Jira issue/story number in the commit message locally.
* Trained several teams on many occasions about DevOps Transformation, branching and merging strategy upon completion of creation of repository, code migration, creating needed branches i.e. master branch and develop branch.
* Created build plans and deployment projects respectively for CI and CD purpose for multiple teams in different environments such as for .Net Website, Web API, SQL Database projects, SSIS Projects.
* Reduced the deployment time for Web API, Web UI, IVR (Java based application), and SQL database deployments from several hours to less than 10 minutes.
* Coordinated with SQL DBA team to create multiple dummy databases for SQL database projects for different teams, setup automated deployment and tested same in dummy databases before moving to actual environment database in Dev, Test, QA and Production environments.
* Performed technical deep dives for several teams for various projects such as Digital Banking which included Mobile Banking, Online Banking, Digital Account Opening, and Enterprise Alerts.
* Created dashboard in Splunk enterprise for Bamboo Build Metrics to monitor the build logs for specific projects.
* Instructed/assigned the offshore team members on their tasks and guided them to fulfill the any blockers related to the assigned work/task.
* Hosted collaboration meetings and transitions meetings with several teams to hand over the automated deployment process and trained them multiple times to make sure the team members are comfortable with it.

**Environment**: Atlassian Bitbucket v6.5.1, Atlassian Bamboo v6.9.2, Atlassian JIRA v8.3.1, Atlassian Confluence 6.10.1, Urban Code Deploy 6.2.7.1, JFrog Artifactory Enterprise 6.12.2, Visual Studio 2012, 2017, Splunk Enterprise 7.3.2, Kofax Kapow, Ivanti Ticketing System, CARS, Cisco Unified Call Studio 11.0(1), RHEL 6.x, .NET Framework 4.7.03062, Microsoft SQL Server 2012, 2016, Microsoft SQL Server Management Studio, Windows Server 2012, Application Server: IIS Server Farm.

**DevOps/AWS Engineer**

**Neiman Marcus - Irving, TX |** April 2018 - July 2018

**Responsibilities:**

* Experience with AWS Cloud platform and its services such as EC2, ECR, ECS, IAM, AMI, EBS, ELB, VPC, RDS, S3, Route 53.
* Worked with Ops, architecture team to design and create a standard AWS infrastructure as per the client requirement.
* Created and configured EC2 instances (Linux RHEL, Ubuntu machines) as per the client requirement.
* Helped Ops team to setup Jenkins machines, Jenkins Master and Jenkins Slave instances in AWS.
* Setup and configure all the necessary configurations and helped Ops in setting up the required Jenkins plugins as required and setting all the required permissions and creating user for DevOps team.
* Created Docker file to create the Docker images as per the client requirement and build and deployed successfully in sandbox and made it ready to deploy to DEV and QA environments.
* Created Jenkins file with all the task/stage defined in it and successfully setup Jenkins job, Jenkins pipeline to build and successfully deploy created Docker images to ECR repository in AWS. Used AWS CLI as well to test the entire task manually in sandbox.
* Participated in daily standup, daily huddle and meetings with scrum master to update on the assigned task and meeting the deadline for all assigned task.

**Environment**: AWS (EC2, ECR, ECS, S3, Route53, ALB, ELB, IAM, AMI, EBS, Security Groups) Jenkins, Bamboo, Docker, Stash/Bitbucket, Jira, Confluence, Atlassian tools, Hip chat, Apache Tomcat.

**DevOps Engineer**

**BBVA Compass - Birmingham, AL |** September 2016 - March 2018

**Responsibilities:**

* Worked on NetCash project to automate the manual build using tools such as Bitbucket for SCM, Bamboo for build and deploy.
* Designed and developed CI/CD pipeline across hosted application using tools such as Bitbucket and Bamboo.
* Responsible for creating new repositories in source code repository, Bitbucket for API and SPA applications and maintained an appropriate read write access to preferred developers and team members.
* Worked with Sr. Java developers and shadowed them while developing Web API and SPA applications with JavaScript, HTML, CSS and Angular JS.
* Liable to resolve the merge conflicts in several occasions to keep the feature, Develop and Master branch clean and up to date.
* Deployed WAR files to environments using in WebSphere for several API applications in Dev, QA, Pre-Production and Production
* Deploying the codes in Dev, QA, Pre-Production and Production environment in sequence.
* Responsible for monitoring all the build activities for all the applications and making sure the builds are successful.
* Applied patches in many occasions in build configurations in Bamboo for related dependencies.
* Troubleshoot the failed builds, identify the root cause for failure and assign it to responsible team or developer.
* Responsible for monitoring and making sure there are no existing bugs and vulnerability using tool such as SonarQube for the security audit purpose.
* Migrated all the manual deployment process for Java based application in WebSphere to auto deploy in all environments i.e. Dev, QA, Pre-Production and Production.
* Documented all the steps to create build plans and deployment projects for all the API and SPA applications for code auto deploy process.
* Created document for Continuous Integration process flow and worked with developers and other team members to ensure that correct process is followed throughout the project.
* Motivated team player with ability to work under minimal supervision possessing strong analytical, problem solving and communication skills.

**Environment**: Atlassian Bitbucket v4.4.1, Atlassian Bamboo v5.11.3, Atlassian JIRA 7.0.0, SonarQube 5.6.6, Red Hat Enterprise Linux 7.x, SunOS 5.10, WebSphere 8.0.0.10, 8.5.5.9, Remedy ticketing, Serena Dimensions tool.

**System Admin**

**YDesign Group - Walnut Creek, CA |** Jan 2016 – August 2016

**Responsibilities:**

* Applied the new patches, upgrades and integrity check on existing test servers (Ubuntu, Redhat) and Applied the same change in production servers upon successful output.
* Used Amazon Web Services (AWS) to create new instances, checking the security group settings, adding and deleting the elastic IPs for the needed servers, applying the inbound IP addressed as needed.
* Used AWS’s Route53, S3 in several occasions such as checking the DNS issues for the related internal and external sites.
* Monitoring daily activities on test and production machines such as disk space usage, memory, apache check, file systems and several others using Nagios and Sensu monitoring tool.
* Troubleshoot network issues using ‘ndd’, 'traceroute', 'net stat', 'ifconfig' and 'snoop' etc.
* Cleaned the disk space in daily basis of test and production machines as applicable (<85%)
* Dealt with the PCI compliance (using Nessus Scan) for a client website and fixed, applied patches and upgrades on all the test and production servers for the security vulnerabilities.
* Upgraded the PHP to the latest version on most of the servers, configured and applied the patch as needed.
* Applied the hotfix as needed in the test and production servers for the deployment process.
* Installed the SSL certificates in the several test and production machines as per the security protocol.

**Environment:** Ubuntu 14.04.4, RHEL 5.x, 6.x, Run deck Publish manager, Sensu monitoring tool, Jira ticketing tool, RT (Request Tracker), Puppet, AWS, MySQL, DNS, Ovirt VM Platform.

**Linux Administrator**

**MobileComm Professionals, Inc, Garland, TX |** February 2013 - January 2014

**Responsibilities:**

* Installed, configured and Administered Linux and UNIX servers.
* Handled System tuning, log maintenance, disk space management etc.
* Performance monitoring with SAR, Iostat, VMstat, MPstat, Top and Other Tools.
* Network Monitoring Using Nagios tool
* Network troubleshooting using ‘ndd’, 'traceroute', 'netstat', 'ifconfig' etc.
* Installed and configured sudo for users to access the root privileges.
* Experienced in Troubleshooting critical hardware and software issues and other day-to-day user trouble tickets under senior supervision.
* Maintained maximum uptime and maximum performance capacity for Enterprise Production, QA, UAT /Staging.
* Monitoring CPU, memory, SCSI disks, disk controllers, physical disk, Hardware and Software RAID, multipath, file systems, network using the tools NAGIOS Tools.
* Use of Korn shell and Bash for scripting.
* Expertise in Red Hat Linux backup/restore with tar including disk partitioning and formatting.
* Worked with other IT teams, customers (users), and other managers in helping build and implement systems and standards.

**Environment:** Red Hat Linux (RHEL 4/5), Logical Volume Manager, Red Hat Cluster Servers*,* Ksh/Perl, DNS, NIS, NFS, Apache, Tomcat, windows server 2000, 2003, 2008, VMware.

**Education:**

MBA - 2015 | Amberton University | Garland, TX