Shashank Srivastava

DevOps Engineer

I have worked on challenging assignments leveraging my technical expertise in various IT Technologies. Open Source technology enthusiast with consistently learning and improvising my skills in various domains. Devops enthusiast, passionately learning and working on Devops tool/ technologies like Docker, Cloud, Linux , Ansible, Automation, Application Deployment and Configuration Management. A self-motivated with good interpersonal skills and problem-solver with ability to learn new technologies within short time.

Overview

- ❏ Ability to work, learn & develop my skills and ultimately helping the businesses to achieve their goals.
- ❏ Developed and deployed my own private cloud
- ❏ Proficient in IT Automation, Infrastructure Management, Red Hat Ansible and Ansible Tower.
- ❏ Experience of working on Ansible & Ansible Tower, Private Cloud development and deployment, Cloud automation.
- ❏ Decision making, problem solving and management skills with ability to organize activities.
- ❏ Technical Blog: https://argsolution.blogspot.in

Technical Expertise

- ❏ **Ansible Automation, Provisioning, Orchestration, Application Deployment, Infrastructure Management, Configuration Management.**
- ❏ **Ansible Tower Administration**
- ❏ Red Hat Gluster Storage, GlusterFS
- ❏ KVM Virtualization, Migration
- ❏ AWS Cloud – EC2, ELB, S3, EBS, VPC
- ❏ Dockers
- ❏ Red Hat Enterprise Linux Administration
- ❏ Server Configuration Management
- ❏ Apache Hadoop (HDFS, MapReduce, YARN)
- ❏ Private Cloud Development and Deployment
- ❏ Python, YAML

Educational Qualifications

- ❏ **Bachelor of Technology (Computer Science)** from SHUATS (Sam Higginbottom University of Agriculture, Technology and Sciences) in 2017 with 8.53CGPA.

Few Projects Worked On

- ❏ **Ansible Tower**

  Challenge: Red Hat Ansible Tower Deployment and Administration for Infrastructure Automation

- • Configured Tower-cli and created an RBAC structure in Tower by creating organization, teams, users and assigned roles & permissions via the CLI commands. Created provisioning callback template for an instance to configure itself on AWS. Created a workflow template to chain instance provisioning, web app. deployment inventory update/sync, provisioning callback & server configuration tasks together. Created surveys to populate extra variables in playbooks to allow validation for user input.

- Ansible Tower 3.2 features: Isolated node installation, Importing inventory directly from GIT, Smart inventory using built-in fact cache & Diff mode. Ansible Tower Authentication: Integrated an openLDAP server with Tower, Integrated Tower with oneLogin for SAML authentication, Set up Google OAuth & Set up GitHub OAuth.

- Notification template: Created a slack notification and associate with job template and run job. Job template: Set up a job template and run a job using inventories, projects & credentials. Inventories: Importing static inventory with tower-manage & Importing AWS inventory. Credentials: Created SCM credential for GitHub, Created cloud credential for AWS. Created machine credentials to connect to AWS machines/instances. Projects: Set up a manual project & Sync from GitHub.

- Installations: Standalone with internal database & Standalone with external database. Back-up and restore: Back up Tower machine and then restore to a separate instance. Upgrade: Install 2.4.5 and upgrade to latest from 2.4.5 to 3.0.0 to 3.1.5 to 3.2.1. Clustered installation with external database.

  Technology: Ansible, Ansible Tower, AWS, RHEL 7

❏ **Ansible Engine**

  Challenge: Infrastructure Automation, Server Configuration Management, Provisioning

- Server deployment: install, configure & deploy Nginx server on Ubuntu & RHEL, being run against both hosts at the same time using mixed inventory & conditionals.

- AWS Provisioning: used different cloud modules from AWS to provision new VMs. Used roles, loops, registers, jinja templating.

- VMware hosts Provisioning: used different cloud modules from VMware to provision new VMs. Used roles, loops, registers, jinja templating.

- Used windows modules to manage windows machines/hosts demonstrating timezone change, installing windows updates with a reboot, installing packages with win_chocolatey, and adding users and groups.

- Used yum, template, group_vars/, host_vars/, variables, handlers, privilege escalation, to configure NTP server. Used vault to encrypt vars files & demonstrated successful run.

  Technology: AWS, Ansible, Vmware Vsphere Vcenter, Nginx, RHEL 7, Windows

❏ **CLOUD PROVISIONING, IT INFRASTRUCTURE MANAGEMENT, ORCHESTRATION & AUTOMATION USING ANSIBLE**

  Challenge: To provision Cloud Environment, Orchestration of Linux Servers, Configuration Management and Automation, High Availability Storage Automation

- Orchestration of Linux servers deployment with configuration management and monitoring on physical resources like - Apache Web Server(HTTP) with the application deployment, MariaDB Database Server, NFS

  Server, SAMBA Server, SMTP Mail Server, FTP Server on RedHat Enterprise Linux platform using Ansible & Python.

- Setup complete automated Amazon Web Services cloud provisioning of Services like EC2, S3, EBS, ELB, VPC using Ansible and Python.

- Setup complete orchestration of Linux servers deployment with configuration management like -Apache Web Server(HTTP) with the application deployment, MariaDB Database Server, NFS Server, SAMBA Server, SMTP Mail Server, FTP Server on Amazon Elastic Compute Cloud Instances using Ansible.

- Setup complete automation using Ansible to create large distributed replicated, high availability scalable storage using GlusterFS storage technology

  Technology: Ansible, AWS, Gluster Storage, RHEL 7, Python, Python CGI, Linux Servers

❏ **High Performance Automated Distributed System using Apache Hadoop**

Challenge: To develop automated high performance distributed system using hadoop multinode cluster

- Setup Complete Big Data Hadoop Technology of Multi Node Cluster. Manage Component of big data for distributed storage HDFS, distributed computing MapReduce , Distributed Scheduling YARN

Technology: RHEL 6, Python, Apache Hadoop

❏ **Private Cloud Development and Deployment**

Challenge: To develop own private cloud – SAAS , STAAS , IAAS services

- Developed a web application software to automatically provide the facility of cloud services such as software as a Service(SaaS), Storage as a Service(StaaS), Infrastructure as a Service (IaaS) and performing live migration for high availibilty.

Technology: Python, RHEL 6, SAAS, STAAS, IAAS, NFS, SAMBA, ISCSI, KVM Virtualization