**Shiva N **

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**Phone: (214) 702-1237**

**DevOps Engineer/Cloud Engineer/Linux System Administrator**

**Professional Summary:**

* Skilled professional with **7+ Years** of experience in IT industry comprising of Strong background in **Linux/Unix &Network Administration**, **VMWare**, **CI/CD (Continuous Integration / Continuous Deployment)** process**, Software Configuration Management (SCM)** and **Cloud Management** all within that suites the needs of an environment under DevOps Culture.
* Extensive experience in Installing, upgrading and configuring Linux and Windows OS such as **RHEL 5.x/6.x/7, CentOS, SUSE Linux, Ubuntu, Windows Server 2003/2008/2012/2016-R2/2012-R2.**
* Good understanding of the principles and best practices of **Software Configuration Management (SCM)** in **Agile, scrum**, and **Waterfall methodologies**.
* Expertise in creating **DevOps** strategy in a mix environment of **Linux** (RHEL, CENTOS, UBUNTU) servers along with Amazon Web Services(**AWS**) and in working experience of **Linux/Unix administration** and internals.
* Experience with Subversion control, Build, Configuration Management tools like **Git**, **Ant, Maven**, **Chef**, **Puppet**, **Docker**, **Ansible** and Integration & Monitoring tools like **Jenkins** and **Nginx, Unix, Linux** and **Windows** environment.
* Hands-on experience in deployment automation using **PowerShell** Scripting and **Shell/Python Scripting** with concentration on DevOps.
* Proficiently experienced in **Amazon Web Services(AWS)** cloud platform and its services like **EC2, S3, RDS, Lambda, VPC, VPN, Dynamo, EBS, ELB, SNS, Glacier, Auto-Scaling, IAM, Route53, AMI, Security-Groups, CloudFront, CloudWatch, OpsWork**, and **CloudFormation** through **AWS** management console and **AWS CLI (**Command Line Interface).
* Supported **AWS** Cloud environment with 200+ **AWS** instances and configured **Elastic IP & Elastic Storage** and experience working on implemented security groups.
* Deployed microservices, including provisioning **AWS** environments using **Ansible** Playbooks and Provisioned **load balancer**, **auto-scaling group** and launch configuration for micro services using **Ansible**.
* Experience is using **Tomcat, JBOSS, Web logic**, **WebSphere, MariaDB, Oracle, MSSQL** Application servers for deployment.
* Designed and created multiple deployment strategies using **CI/CD** Pipeline and configuration management tools with remote execution to ensure zero downtime and shortened automated deployments.
* Implemented a **GIT** mirror for **SVN** repository, which enables clients to utilize both **GIT** and **SVN** and Implemented Continuous Integration using **Jenkins** and **GIT**.
* Troubleshoot the build issue during the **Jenkins** build process and Developed build and deployment scripts using **ANT** and **MAVEN** as build tools in **Jenkins** to move from one environment to other environments.
* Deployed the artifacts in **Nexus** central repository for internal deployments and Managed **Nexus** repository for the current project created a new repository and provisioned it. Have hands on experience with **Bitbucket server.**
* Implemented a Continuous Delivery pipeline with **Docker**, **Jenkins** and **Git**. Whenever a new **Git** branch gets started, **Jenkins** automatically builds a new **Docker** container from it.
* Worked to setup **Jenkins** as a service inside the **Docker** swarm cluster to reduce the failover downtime to minutes and to automate the **Docker** containers deployment without using configuration management tool.
* Used **Kubernetes** to provide a platform for automating deployment, scaling, and operations of application containers across clusters of hosts. Experience in working with **Kubernetes**, running/managing containers, container snapshots and managing images.
* Strong knowledge of **DNS, DHCP and IP Addressing**. Installation and configuration of various services like **DNS, DHCP, NFS**, **LDAP** and **Send mail, Apache Web Server, Samba, SSH, HTTP, RPM package management**. Experience in administering Active Directory and group policies.
* Good working experience on scripting languages like **Shell, Perl, Python, PowerShell, Ruby, Bash**. Ability in development and execution of **XML, Shell Scripts** and **Perl Scripts**.
* Ability to quickly understand, learn and implement the new system design, new technologies, data models and functional components of software system in a professional work environment.
* Able to build solid relationships within as well as consensus across multiple teams on environment strategies of build and release process.

**Education**

* **Bachelor of Technology** from **GITAM University, Visakhapatnam, INDIA.**

**Technical Skills**

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| **DevOps Tools** | Chef, Puppet, Ansible, Jenkins, Maven, Gradle. |
| **Operating Systems** | Red Hat Linux 6.x/7/8, Ubuntu, CentOS, Windows Server 2003/2008/2012. |
| **Cloud Platforms** | AWS, Microsoft Azure, Rackspace, Openstack. |
| **Virtualization/Containerization Technologies** | VMWare ESXi 6, vSphere ESXi 5.5, VMWare ESX 3.x, VM Ware Vsphere 4.x, Virtual Center, VI Client, Docker, pivotal cloud foundry, vagrant. |
| **Versioning Tools** | GIT, SVN, Subversion, Perforce, Clear Case, CVS, and Bit Bucket. |
| **Languages** | Shell Scripting, power Shell, Perl, Python, Ruby. |
| **Web/Application Servers** | Tomcat, Apache, WebSphere, JBoss, MariaDB, Oracle, MSSQL. |
| **Monitoring** | Nagios, ZABBIX, Splunk, AppDynamics. |
| **Database** | Oracle, DB2, MySql, Cassandra, MongoDB 7 SQL Server 2008/2012/2014. |

**Professional Experience**

**Vanguard, Malvern, PA February 2019 – Till Date**

**DevOps Engineer**

* Configured infrastructure in On-premises and setting up the environment for around 70 applications, automating the configuration of servers using Ansible configuration, automating the release lifecycle, setting up the monitoring and alerting, setup the high availability and disaster recovery of the environment and working with the application product and business teams to test the application flows.
* Working on automating the patching process the of RHEL **Based Golden Docker image** on every new release.
* Sole responsibility for End-to-End automation to create **RHEL 7.7 Kubernetes AMI** (application specific) using **Packer** with Jenkins pipeline with all security hardening standards implemented.
* Working with security/development teams on remediating **Qualys** and **CASB** scan vulnerabilities based on severity.
* Working with AWS SSM parameter store to push and pull AMI ids to and from **AWS SSM parameter store** through **Packer** Jenkins pipeline.
* Experience working with **Hashicorp** Vendor per SLAs to create or troubleshoot consul and Vault clusters.
* Experience writing application specific **Docker files** and building through Jenkins’s pipeline for upgrading application specific images.
* Providing new **Kubernetes AMIs** to the developers whenever the version is bumped and supporting the teams on deploying Kubernetes pods on all the environments using **Hashicorp Packer** and **Jenkins**.
* Close working with developers, deploying, troubleshooting of Docker Images, containers, pods, **Kubernetes** clusters etc. of all environments.
* Participating in periodic rehydration sessions with team of environments to reduce vulnerabilities to be compliant to Vanguard policies.
* Responsible for documenting and hardening **Docker** and **Kubernetes** tools on different levels to make sure we are following Industry standard CIS Benchmarks.
* Migrating the deployment scripts from BladeLogic to **Ansible** Yaml scripts and deploying the Linux packages on to the different environments of Linux based instances using Ansible tower.
* Working on Linux packaging using Ansible and deploying those packages on to WebSphere application servers and Tomcat Application servers.
* Responsible for the whole enterprise security and fraud activities across Vanguard and part of a team of production center of excellence where I support for around 70 applications and resolve productions issues based on SLA and find out the Root cause Analysis for the issues.
* Implement agile management ideals by facilitating exercises such as sprint planning and team leading standups and manage project timelines and communicate with management staff and clients to ensure project progress satisfactorily.
* Installation and configuration of different **Splunk** Components like Indexers, Search Heads, and Forwarders. Also worked on creating dashboards for Our Store Deployments with enhancing the UI and also granular details of the events that are registered for the Deployments were displayed on the Dashboard and Monitored and tracked **SPLUNK** performance problems, administrations and open tickets with **SPLUNK**.
* Respond to production incidents, working with Availability teams to ensure the application is meeting it’s SLA and providing complete analysis of re-occurring production incidents by monitoring server processes, working with the engineering SME, engaging the vendor and doing the log analysis.
* Providing short- and long-term solutions to address the outage of the production issues and working on packaging the applications (automating elevations through Run Time Environments)

**Environment:** AWS (EC2, S3, RDS, EBS, and Elastic Load Balancer, Auto scaling groups and optimized volumes, EC2 instances), VPC, subnets, NAT, EC2 instances, ELB, Security Groups, Ansible, Ansible Tower, Tomcat Apache, Tomcat Application Server, docker, Kubernetes, WebSphere Application Server, Bitbucket, Jenkins, RHEL 6/7, Linux, Python, Shell, Splunk, YAML.

**Prudential Life Insurance September 2017 – December 2018**

**DevOps Engineer / Cloud Engineer**

* Experience in Server infrastructure development on AWS Cloud, extensive usage of Virtual Private Cloud (**VPC**), **Cloud Formation, Lambda, Cloud Front, Cloud Watch, IAM, EBS, Security Group, Auto Scaling, Dynamo DB, Route53, and Cloud Trail.**
* Responsible for creating the Infrastructure in **AWS**, Automating the Configuration of the servers, Automating the Release lifecycle, set up the Monitoring and Alerting, Setup the High Availability and the Disaster Recovery, working with the Application, Product and Business teams to test the application flows.
* Configuring and deploying instances on **AWS** environment and Data centers, also familiar **with EC2, Cloud watch, Elastic Search** and managing **security groups** on **AWS**.
* Designed **AWS** Cloud Formation templates to create custom sized **VPC**, **subnets**, **NAT** to ensure successful deployment of Web applications and database templates.
* Maintained the user accounts **(IAM), RDS, Route 53, VPC, RDB, Dynamo DB, SES, SQS** and **SNS** services in **AWS** cloud.
* Worked on creation and managing IT infrastructure and application stack using **AWS** **Cloud Formation** and writing the template file using **JSON**.
* Implemented the **Jenkins** files to automate the SDLC process.
* Responsible for provisioning for environments across deployment pipeline and Automating deployment pipelines in a scalable, secure and reliable manner.
* Responsible for establishing continuous integration and delivery and moving configuration and infrastructure as code vision into action by executing and delivering cloud strategies
* Working with **WebSphere Portal Servers, WebSphere Content Management** and maintaining the Portal Stack and **F5** caching mechanism
* Wrote **Ansible** playbooks and securing a server with **Ansible** and Provisioning, deployment with **Ansible** and Worked on developing **Ansible** Go Scripts for automating regular tasks and Worked on playbooks for Ansible in YAML scripting
* Working closely with development and test teams to understand requirements and applying industry knowledge to recommend build/buy solutions
* Implementing a **CI/CD (Continuous Integration /Continuous Delivery)** framework using **Jenkins**, **Maven** & Artifactory in Linux environment and Integration of **Maven/Nexus, Jenkins, Git, Confluence, Jira and Cloud Foundry**
* Installed packages on remote Agent less nodes through **Ansible** playbooks with **Ansible** roles.
* Deploy and configure **Git** repositories with branching, forks, tagging, and notifications. Experience and proficient in deploying and administering **GitHub**
* Installed, Deployed **Red Hat Enterprise Linux 7.x, CentOS** and installation of packages and patches for **Red Hat Linux Servers.**
* On-board new applications into Dynatrace, profile configuration, agent setup, instrumentation and Diagnose, troubleshoot, and resolve Dynatrace issues.
* Assists with review and recommendations for system acquisitions, planning and selection of operating systems software and hardware. Motivated self-starter; able to spark an interest and take an initiative.

**Environment:** AWS (EC2, S3, RDS, EBS, and Elastic Load Balancer, Auto scaling groups and optimized volumes, EC2 instances), VPC, subnets, NAT, EC2 instances, ELB, Security Groups. VMware ESXi 5.1/5.5 & 6.0, Jenkins, Docker, Docker containers, Ansible, YAML scripting, Chef, Ruby Scripts, Python Scripts, Perl Scripts, Shell Scripts, GIT Repositories, JIRA, RPM/YUM , Apache and MySQL, JBoss, Apache, WebLogic, Tomcat and WebSphere, SSL enabled, SMTP, netapp storage LUNs to the Red Hat Linux servers.

**Oncor, Dallas, TX July 2016 – August 2017**

**DevOps Engineer**

* Designed **AWS** **Cloud Formation templates** to create custom sized **VPC**, **subnets**, **NAT** to ensure successful deployment of Web applications and database templates.
* Provide highly durable and available data by using **S3** data store, **versioning**, lifecycle policies, and create Amis for mission critical production servers for backup.
* Maintained the user accounts **(IAM), RDS, Route 53, VPC, RDB, Dynamo DB, SES, SQS** and **SNS** services in **AWS** cloud.
* Worked on creation and managing IT infrastructure and application stack using **AWS** **Cloud Formation** and writing the template file using **JSON**. Created scripts in **Python** which integrated with **Amazon API** to control instance operation.
* Working with the Performance team to test the stability of the servers and Address the Production issues based on the SLA and work with the Development teams to address the day to day activities like new server configurations, deployment pipeline creations for new projects and infra issues faced.
* Implementing a **CI/CD (Continuous Integration /Continuous Delivery)** framework using **Jenkins**, **Maven** & Artifactory in Linux environment and Integration of **Maven/Nexus, Jenkins, Git, Confluence, Jira and Cloud Foundry.**
* Installed and configured **Jenkins** for Automating Deployments and providing a complete automation solution. Implementing new projects builds framework using **Jenkins** & **maven** as build framework tools
* Created scripts for Backup and restoring **GITHUB** repositories.
* Implemented automated local user provisioning in instances created in **AWS** cloud through **Chef** Recipes.
* Installed packages on remote Agent less nodes through **Ansible** playbooks with **Ansible** roles and wrote **Ansible** playbooks and securing a server with **Ansible** and Provisioning, deployment with **Ansible** and Worked on developing **Ansible** Go Scripts for automating regular tasks and Worked on playbooks for **Ansible** in **YAML** scripting.
* Worked on installing of **Docker** using **Docker** toolbox and worked on creation of **Docker** containers and **Docker** consoles for managing the application life cycle.
* Container management using **Docker** by writing **Docker** files and set up the automated build on **Docker** HUB and installed and configured **Kubernetes**.
* Scheduled, deployed and managed container replicas onto a node cluster using **Kubernetes** and managed local deployments in **Kubernetes**, creating local cluster and deploying application containers.
* Managed containers with **Kubernetes** to provide a platform for automating deployment, **scaling**, and operations of application containers across **clusters** of hosts.
* Worked with **AWS**, **Kubernetes** inworkingwith **containers**, **pods**, **build config**, **deployment configs**, **replication controllers**, **Routes**, **Services** and managed **images** and **Image Streams**.
* Implemented a **Continuous Delivery (CD)** pipeline with **Docker**, **Jenkins** and **BitBucket**. Worked to setup Jenkins as a service inside the **Docker Swarm** cluster to reduce the failover downtime to minutes and to automate the Docker containers deployment without using configuration management tool.
* Worked with **Terraform** key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation and also worked on terraform Windows servers.
* Working knowledge of Container Management and Orchestration Software like Dockers, Kubernetes, Mesos and Terraform
* Implemented several **Tomcat** Instances within clusters by using the **Docker** engine for running several Containerized AppServers.
* Deploy and configure **Git** repositories with branching, forks, tagging, and notifications. Experience and proficient in deploying and administering **GitHub.**
* Created and maintained **Python** scripts for Automating Build and Deployment Process and Creating Web Based Application by Using **Django Framework.**
* Utilize **Nagios** based Open Source monitoring tools to monitor **Linux Cluster nodes** configured using Red Hat Cluster Suite.
* Installed, Deployed **Red Hat Enterprise Linux 6.x/7.x, CentOS** and installation of packages and patches for **Red Hat Linux Servers.**
* Assists with review and recommendations for system acquisitions, planning and selection of operating systems software and hardware. Motivated self-starter; able to spark an interest and take an initiative

**Environment:** AWS (EC2, S3, RDS, EBS, and Elastic Load Balancer, Auto scaling groups and optimized volumes, EC2 instances), VPC, subnets, EC2 instances, ELB, Security Groups, Jenkins, Ansible, YAML scripting, Python Scripts, Shell Scripts, GIT Repositories, JIRA, RPM/YUM, Apache and MySQL database. Apache and WebSphere, SSL enabled, SMTP, netapp storage LUNs to the Red Hat Linux servers.

**Clarivate Analytics – Charlottesville, VA Aug 2015 – June 2016**

**Linux System Administrator / DevOps Engineer**

* Design and Implementation of virtualization solutions based on **VMware** **vSphere ESXi 5.5 and 6, Vcenter** and **Vblock** series and Design, Implement & troubleshoot issues related to VMware Distributed Resource Scheduling (DRS), High Availability (HA), Enhanced VMotion (EVC), ESX Host Profiles, vNetwork Distributed Switch (vDS) and VMware Fault Tolerance (FT).
* Migrated **VMware** VMs from on premise to **AWS** cloud and migrated applications using **AWS** services like **EC2, S3 Bucket, Route53, ELB, EBS** and monitored scalable infrastructure on Amazon web services (**AWS**) & configuration management.
* Experienced in Amazon **EC2** setting up instances, **virtual private cloud (VPC)** and **security groups** and Created monitors, alarms and notifications for **EC2** hosts using **Cloud Watch**.
* Setup **Elastic Load Balancer (ELB)** for distributing traffic among multiple **Web Logic servers** and Involved in deploying the content cloud platform on **Amazon Web Services** (**AWS**) using **EC2, S3 and EBS.**
* Implemented and maintained the monitoring and alerting of production and corporate servers/storage using **AWS** **CloudWatch** / **Splunk**. Regularly monitoring application server instances using **Nagios, Dynatrace** and **Blue stripe.**
* Knowledge of application deployment and data migration on **AWS** (Cloud formation, Cloud Front).
* Created **Python Scripts** to Automate **AWS** services which include **web servers**, **ELB**, **Cloudfront Distribution**, **database**, **EC2** and **database security groups, S3 bucket** and application configuration.
* Worked on converting existing AWS infrastructure to Server-less architecture (AWS Lambda, Kinesis) deployed via AWS **CloudFormation template** and **terraform**
* Understanding of developing and testing enterprise products, with current focus on cloud-based application and giving solution to challenges imposed by multi data center deployed **SaaS** products and their needs for DevOps tools and automation.
* Automated the weekly deployments utilizing **CI** tool **Jenkins**. Integrated **GIT** into **Jenkins** to automate the code check-out process. Branching and merging code lines in the **GIT** and resolved all the conflicts raised during the merge.
* Used **ANT**, **Puppet** and **Docker** scripts with Ivy to build the application and deploy **Puppet**, **puppet** dashboard and **Puppet** DB for configuration management to existing infrastructure.
* Managed Ubuntu Linux and Windows virtual servers on **AWS** **EC2** using **Puppet** and wrote **puppet** manifests for apache installation and configuration as well as for various deployments.
* Hands on experience with the **AWS** **CLI** and **SDKs/API** tools like **AWS** **API** for **Ansible**.
* Implemented a Continuous Delivery pipeline **with Docker, Jenkins and GitHub** and **AWS AMI’s** and further maintained **Nexus** artifact repository and moving builds to it using **Jenkins** interface.
* Implemented **Docker** -**maven**-plugin in and **maven** pom to build **Docker** images for all microservices and later used **Docker** file to build the **Docker** images from the java jar files.
* Familiarity with **Kubernetes, Mesos, Docker Swarm**. Worked on creation of custom **Docker** container images, tagging and pushing the images.
* Created users, manage user permissions, maintain User & File System quota on Redhat Linux, wrote scripts using **Shell (Korn& BASH)** and knowledge skills in **ANT** and **Perl**.
* Create, maintain and customize complex **JIRA** project configurations including workflows, custom fields, permissions and notifications.
* Team activities other than work related, in the process of Initiation and encouragement were done.

**Environment:** EC2, EBS, IAM, S3, ELB, Puppet, Nagios, Docker, of DNS, LDAP, NFS, MySQL, Mongo DB and PostgreSQL, LVM, Apache Web Server and SSL, Apache Web Server, Jenkins, GIT, MAVEN, Bash and Perl scripting, VMware and ESX servers, Nagios, Python, JIRA, JBoss 4.2.x, 5.x, Oracle DB.

**Genesis Technologies – Visakhapatnam, India July 2013 – June 2015**

**Linux/VMware Administrator**

* Installing, configuring and updating **Red Hat Linux 3/4/5** and **CentOS** on **HP ProLiant /Dell servers** using **kickstart** & support for various applications run on Linux environment, configuration, performance tuning, patching and maintenance. Monitoring, analyzing, and responding to security events utilizing security event management and reporting tools.
* Worked with outside vendors on implementation of **network switches, load balancers** and traffic generators within the existing configuration, the setup and implementation of new configurations and integration of new technology on **HP ProLiant /Dell servers.**
* Developed automated processes that run daily to check disk usage and perform cleanup of file systems on UNIX environments using **shell scripting** and **CRON**.
* Performed tasks on F5 load balancer like installing and renewing **SSL certificates** and bouncing servers with performance issues after taking them out of the server pools.
* Configured **LDAP** clients on server test and troubleshoot for maintaining network and data security.
* Scanning the newly assigned **LUNs** to the serves and assigning them to volume group and increasing the file system using **Red Hat volume manager.**
* Implemented **Vcenter** Operations supervisor and configured the infrastructure and integrated into the environment. Installation, Configuration, Maintenance and Administration of **Red Hat Enterprise Linux 4/5/6** and **SUSE Enterprise Linux**.
* Build, configure Virtual Machines and templates and building, deploying the Virtual Machines from those **templates** in **Vcenter** and Configured the machines accordingly
* Configured, maintained, applied changes and fail-over schedules of **HA** servers running **Veritas Cluster Server** and **Redhat Cluster Server.**
* Performance tuning for **VMware ESXi** hosts and Virtual Machine, setting up their CPU affinity rules, allocating resources and fine-tuning storage
* Connecting and configuring **SAN** and **NAS** storage into the **ESXi** and **Hyper-V servers,** created **NTFS** shares on Windows Servers and provide permissions to users.
* Installation and configuration of **MySQL** which includes creating database tables, updating table entries.
* Installed **WebLogic, JBoss, Tomcat** and **Apache Web server** binaries for different versions and related components across all environments.
* Worked on upgrading the environment from **WebLogic 8.1/9.2 to 10.0MP2 to 10.3, JBoss 4.x to 5.x and Tomcat 4.x to 5x/6x.**

**Environment:** Redhat Enterprise Linux 4.x, SUSE Enterprise Linux, YUM, NIS, DHCP and DNS, VERITAS, VMWARE ESX/ESXi 3.5/4.x/5.x, VMware vSphere, Vcenter 4/5, VMotion, HA, templates, snapshots, Hyper-V servers, SAN, NAS, MySQL, apache, ftp, ssh, Apache, Tomcat, Web sphere.