# SANKAR YADAV

DevOps Engineer

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**PROFESSIONAL SUMMARY:**

* **10+ years** of experience in the IT industry comprising Development, Systems Administration and Software Configuration Management (SCM) Extensive experience includes SCM, Build/Release Management and performing duties such as monitoring, automation, deployment, documenting, and support and troubleshooting.
* Expertise in installation, administration, configuration, performance tuning and troubleshooting of **Red Hat Linux, CentOS, SUSE, Ubuntu**, Solaris, and Windows.
* Expertise in Architecting and Implementing **Azure Service** Offering, such as Azure cloud services, Azure storage, IIS, Azure Active Directory (AD), Azure Resource Manager (ARM), Azure Storage, Azure, Blob Storage, Azure VMs, SQL Database, Azure Functions, Azure Service Fabric, Azure Monitor, and Azure Service Bus.
* DevOps experience with **Puppet, Chef, AWS**(OPS Work) and **OpenStack.**
* Configured and monitored distributed and multi - platform servers using **chef.** Defined Chef Server and workstation to manage and configure nodes.
* Extensive experience using Build and Automation tools including ANT and Maven and working knowledge other build tools like MS Build, Groovy **and Gradle.**
* Developed **Chef Cookbooks**and **Recipes**to manage systems configuration.
* Experience in branching, tagging and maintaining the version across the environments working on **Software Configuration Management (SCM)** tools like **Subversion (SVN)** and **GIT.**
* Worked on **Azure DevOps** Services like Azure **Boards**, Azure **Repo’s**, Azure **Pipelines**, Azure **test plans** and Azure Artifacts.
* Creating Linux Virtual Machines using VMware Virtual Center (ESXI), hypervisor-v, PHP Virtual Box.
* Design high availability (HA)applications on AWS across Availability Zones and Availability Regions.
* Hands-on experience in Azure Cloud Services (PaaS & IaaS), Storage, Web Apps, Active Directory, Azure Container Service, VPN Gateway, Content Delivery Management, Traffic Manager, Azure Monitoring, OMS, Key Vault, Visual Studio Online (VSO), Cognitive Services (LUIS) and SQL Azure.
* Hands on experience on Backup and restore Azure services and in Design and configure Azure Virtual Networks (VNets), subnets, Azure network settings, DHCP address blocks, DNS settings, security policies and routing, Azure cloud services, Blob storage, Active directory, Azure Service Bus, Cosmos DB.
* Experience on complete software development life cycle (SDLC) with software development models like Agile, Scrum Model, JIRA, Waterfall model.
* Expertise in Azure Scalability and Azure Availability - Build VMs availability sets using the Azure portal to provide resiliency for IaaS based solution and Virtual Machine Scale Sets (VMSS) using Azure Resource Manager (ARM) to manage network traffic.
* Good Exposure on Virtualization **and Containers (Docker) and Hypervisors ESXI, ESX.**
* Ability to build deployment, build scripts and automated solutions using scripting languages such as **Shell scripting**(kasha, Bash),**Python, Ruby, PHP PERL.**
* Extensively worked on **Jenkins**and **Hudson**by installing, configuring and maintaining for **continuous integration (CI)**and for End to End automation for all build and deployments.
* Good knowledge in **CI (Continuous Integration)**and **CD (Continuous Deployment)**methodologies.
* Installed and Managed **Jenkins and Nexus** for**CI**and Sharing Artifacts respectively within the company.
* Experience in using **Nexus** Repository Managers for Maven builds.
* High exposure to **REMEDY** and **JIRA** defect tracking tools for tracking defects and changes for Change management.
* Configuring network services such as DNS, NFS, SMTP, NTP, DHCP, LDAP, SAMBA, SQUID, postfix, send mail, ftp, remote access, security management and Security troubleshooting skills.
* Experience with **MongoDB, MSSQL, MySQL and Server DB Tasks**.
* Strong ability to troubleshoot any issues generated while building, deploying and in production support.
* Familiar with network tool **Nagios**and **cacti.**
* Experience in Installing, upgrading and configuring Red Hat Linux.
* Closely worked with Developers and Analysts to address project requirements. Able to effectively manage time and prioritize multiple projects.
* Excellent communication, team membership and relationship management skills.

**TECHNICAL SKILLS:**

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| --- | --- |
| **Operating Systems** | Windows | Linux (CentOS, Ubuntu, RedHat) |
| **Cloud Platforms** | Microsoft Azure| Amazon Web Services (AWS)| OpenStack| GCP |
| **Container Tools** | Docker| Kubernetes| AWS ECS| AKS| GKE| ACR |
| **Logging and alerting** | ELK stack| Splunk| Cloud Watch| SNS |
| **Build Tools** | ANT| MAVEN |
| **Automation Tools** | Jenkins| Puppet| Chef| Ansible| TeamCity| Bamboo| Terraform |
| **Application Servers** | Apache Tomcat| JBOSS| Web Logic| Web Sphere |
| **Web Servers** | Nginx | Apache HTTP | Tomcat | JBOSS |
| **Version Control Tools** | GIT| Azure Repo| BIT Bucket| Subversion| TFS |
| **Databases** | Oracle| Mongo DB| MySQL| Cassandra| Cosmos DB |
| **Scripting** | Python| Shell| PowerShell| Ruby, JavaScript, .NET |
| **Network Protocols** | DNS| DHCP| TCP/IP| NFS |Ethernet |
| **Monitoring Tools** |  JIRA| Bugzilla| HP Quality Center| Remedy | Nagios |
| **Network Protocols** |  TCP/IP| SMTP| SOAP| HTTP/HTTPS| DNS |
| **Languages/scripts** |  C | C++ | Shell | Bash | Python | YAML |
| **Testing Tools** |  Junit| Cucumber |

**CERTIFICATIONS:**

 

**WORK EXPERIENCE:**

**Client: American Airlines. Aug 2021 – Till Now.**

**Azure DevOps Engineer**

**Responsibilities:**

* Hands-on experience Designing, planning and implementation for existing on-premise applications to AZURE Cloud (ARM), Configured and deployed Azure Automation Scripts utilizing Azure Stack Services and Utilities focusing on Automation.
* Experience in Windows Azure Services like PaaS, IaaS and worked on storages like Blob (Page and Block), Sql Azure. Well experienced in deployment & configuration management and Virtualization.
* Developed and supported the Software Release Management and procedures. Also experienced with working on Subversion, Proposed and implemented branching strategy.
* Used Docker for setting Azure Container Registry with Docker and Docker-compose and actively involved in deployments on Docker using Kubernetes.
* Implemented Continuous Delivery pipeline with Terraform, GitHub, Jenkins, Docker, Kubernetes. Whenever a new GitHub branch gets started in Jenkins, CI server automatically attempts to build a new Docker container from it and deploy those containers onto EKS.
* Created CI/CD Pipelines in Azure DevOps environments by providing their dependencies and tasks. Also have experience on implementing and managing continuous delivery systems and methodologies on AWS and created END-END Automation with CI Procedures using Jenkins & automated Maven builds by integrating them with Continuous Integration tools Jenkins
* Used Azure Kubernetes service to deploy a managed Kubernetes cluster in Azure and created an AKS cluster in the Azure portal, with the Azure CLI, also used template driven deployment options such as Resource Manager templates and Terraform.
* Configured servers to host Team Foundation Server (TFS) instance to setup and manage Continuous Integration (CI) using Team Foundation (TF) Build Service.
* Responsible for Administering and Monitoring Visual Studio Team System (VSTS), taking backups and consolidating collections at the time of migration from one version of VSTS to another.
* Automated various infrastructure activities like Continuous Deployment using Ansible playbooks and has Integrated Ansible with Jenkins on AZURE.
* Implemented a CI/CD pipeline using Azure DevOps (VSTS, TFS) in both cloud and on-premises with GIT, MS Build, Docker, Maven along with Jenkins’s plugins.
* Managed Azure Infrastructure Azure Web Roles, Worker Roles, VM Role,aws , Azure Storage, Azure AD Licenses, Virtual Machine Backup and Recover from a Recovery Services Vault using Azure PowerShell and Azure Portal.
* Designing and implementing fully automated Server build management,
* Monitoring and deployment by using technologies like Ansible.
* Automated most of the daily task using python scripting.
* Responsible for implementing containerized based applications on Azure Kubernetes by using Azure Kubernetes service (AKS), Kubernetes Cluster, which are responsible for cluster.
* Experience in managed Kubernetes services such as Elastic Kubernetes service (EKS) & Azure Kubernetes (AKS).
* Involved in Research of the project application architecture to support/resolve build, compile, and test issues/problems.

**Environment:** Azure, ANT, MAVEN, Subversion (SVN), Docker, EKS Kubernetes, Ansible, JIRA, LINUX, SNS, SQS, Kubernetes, Shell/Perl Scripts, Bit bucket, Python, GIT, Jenkins, Tomcat, Java, Azure, Azure VSTS, Visual Studio Code, GitBash, Python.

**Client: Children Mercy General Hospital. Oct 2019 – July 2021**

**Title: Azure DevOps Engineer**

**Responsibilities:**

* As an Azure DevOps Engineer, implemented Azure pipelines using YAML and shared templates, driving microservices builds to the Docker registry and deploying them to Azure Kubernetes Service (AKS). Managed and created pods for effective containerization.
* Implemented Network policies/RBAC in AKS to enforce best practices and enhance security by controlling pod scheduling and preventing potential vulnerabilities or privilege escalations.
* Developed continuous integration and deployment pipelines for web applications, UI, Database, and infrastructure as code using Azure DevOps, automating builds and deployments to various environments.
* Utilized Docker and Kubernetes for managing microservices, enabling seamless continuous integration and continuous delivery.
* Integrated ServiceNow ITSM processes into DevOps workflows as part of Azure DevOps Engineering responsibilities.
* Provided guidance and education to developers on utilizing CI/CD pipelines and best practices for version control and continuous integration.
* Configured and maintained secure Azure Storage Firewalls and Virtual Networks, implementing virtual Network Service Endpoints/Private endpoints to control network access.
* Implemented Single Sign-On (SSO) access using Azure Active Directory (AAD) for Software as a Service (SaaS) applications/web applications.
* Created custom dashboards and alerts in Datadog to monitor key metrics and proactively identify and resolve issues.
* Utilized Terraform templates and modules to automate Azure infrastructure, including VM provisioning, Virtual Machine Scale Sets (VMSS), app service, AKS, and deployment into various environments.
* Implemented full CI/CD pipelines using Azure DevOps pipelines, ensuring thorough testing and standard software lifecycle processes before production deployment.
* Demonstrated SQL programming expertise with various databases, including MySQL, Postgres, Cassandra, Redis, Oracle DB, and MongoDB.
* Installed and configured Jenkins plugins, enabling seamless integration with GIT repositories, Maven for build automation, and Azure deployments using Terraform.
* Created Jenkins pipelines for building microservices, storing Docker images, deploying to Kubernetes (AKS), and executing deployments using HELM charts, Azure DevOps (repos), and Bitbucket.
* Integrated JIRA with Bitbucket repositories and utilized Azure Boards to track software development lifecycle issues.
* Managed container-based technologies like Docker, Kubernetes, and OpenShift, assisting teams with repository setup and CI/CD environment configuration.
* Migrated SQL database from on-premises to AZURE SQL using Azure Data Factory and setting-up with self-hosted integration runtime.
* Created ETL data pipeline infrastructure of Azure Data Factory with DataBricks activity to ingest data into Snowflake warehouse using Terraform.
* Implemented REST APIs automation using Python Flask framework and pandas.
* Utilized Docker and Azure Kubernetes Service (AKS) to deploy and manage containerized services, establishing a self-hosted Kubernetes cluster through Jenkins CI/CD pipeline.
* Integrated Docker container-based test infrastructure into the Jenkins CI test flow, leveraging BitBucket and JIRA integration with webhooks and slave machines.
* Demonstrated proficiency in SQL queries across multiple database platforms, including MySQL, Oracle, and Microsoft SQL Server.
* Contributed to the development of Azure-specific best practices and standards for using Datadog in Azure environments. Collaborate with teams to establish effective monitoring and alerting strategies, leveraging the capabilities of Datadog.
* Developed scripts in Python, Bash, Groovy, and PowerShell to automate various tasks and enhance efficiency.

**Environment**: : Azure DevOps, Docker, Kubernetes, Terraform, ServiceNow ITSM, CI/CD pipelines, Azure Active Directory (AAD), Datadog, Jenkins, Maven, GIT, PostgreSQL, HELM charts, Azure Repos, Bitbucket, OpenShift, Azure Boards, Azure Data Factory, Azure Kubernetes Service (AKS), BitBucket, JIRA, Python, Bash, Groovy, PowerShell.

**Client: FedEx, Memphis TN. April 2018 – Sep 2019**

**Title: Cloud Engineer**

**Responsibilities:**

* Tasks performed on performance tuning, capacity planning for AWS environments, monitoring, resource utilization and alerts using CloudWatch; implement hybrid architectures, routing private connections, peering and infrastructure zoning by VPC; CloudFormation templates to deploy infrastructure for environment creation, Code Pipeline to design and implement a CI/CD pipeline
* Experience with Infrastructure (Cloud), Continuous Integration, arrangement of the executive’s instruments, Docker with Kubernetes.
* Good comprehension of the standards and best practices of Software Configuration Management (SCM) in SDLC procedures like Agile, Scrum and Waterfall.
* Involved in sending and provisioning of different programming setups crosswise over different IaaS providers like AWS cloud.
* Collaborate in the computerization of AWS foundation by means of terraform and Jenkins - programming and administrations arrangement by means of Ansible.
* Extensively engaged with foundation as code, execution plans, asset diagram and change mechanization utilizing Terraform, Managed AWS framework as code utilizing Terraform, Expertise recorded as a hard copy new module to help new usefulness in Terraform.
* Worked with Terraform key highlights, for example, Infrastructure as code, Execution plans, Resource Graphs, Change Automation and broadly utilized Auto scaling dispatch.
* Experience recorded as a hard copy Ansible playbooks, made inventories, custom playbooks written in YAML language, encoded the information utilizing Ansible Vault and kept up job-based access control by utilizing Ansible Tower and Implemented IT coordination utilizing Ansible to run assignments in a succession which can chip away at various servers.
* Experience with holder-based organizations utilizing Docker, working with Docker pictures and Docker-center.

**Environment**: AWS, Terraform, Ansible, Docker, Kubernetes, CI/CD with Automation on JUNIT Testing with Jenkins, SonarQube, git, vagrant, bash/python.

**Client: Freddie Mac, VA. Sep 2016 – Mar 2018**

**Role: Azure DevOps Engineer**

**Responsibilities:**

* Creating and maintaining containerized **micro services and configuring/maintaining** private container registry on Microsoft Azure for Hosting Images and using Azure Active Directory. I am one of the lead DevOps Engineer.
* Deployed and Maintained Web applications on **Azure cloud technologies**. Converted **.Net** Legacy to Core application and deployed into Microsoft **Azure Cloud** Service Project as part of cloud deployment.
* Managed servers on the Microsoft **Azure** Platform **Azure** Virtual Machines instances using Ansible Configuration Management and created **Ansible Playbooks**, tasks, and roles to automate system operations.
* Worked on **AZURE** (IaaS) migrating like creating AZURE VMs, storage accounts, VHDs, storage pools, migrating on premise servers to AZURE and creating availability sets in AZURE and performed Hardening of the VM's and disk encryption using the **KEK key** in **MS Azure**.
* Setup Self Hosted Build Agent into our own Virtual Network and Integrated Agent Pool into Azure DevOps Pipelines
* Worked on setting up AKS Cluster, App Service, Azure VM using Terraform Modules from end-to-end and maintained modules into GitHub Repos
* Responsible for providing RBAC Policies and Setting up Network Policies and Deployments to AKS using HELM Charts by Integrating with GITHUB Repos with Azure DevOps Pipelines as CI/CD
* Upgrading Kubernetes Cluster taking up Control Plane etcd Backup and Upgrading NodePools and Nodes by cordaning, draining them
* Setting up Namespaces, Resource Quotas, Admission Controllers, Labels and Taints on Nodes for Distribution of workloads into Kubernetes Cluster among Multiple Projects
* Hands on experience on **using Terraform along with packer** to create custom machine images and automation tool using Ansible to install software's after the infrastructure is provisioned.
* Created playbooks in **YAML Script** to install and configured Infrastructure across environments and automated the process using **Python Script.**
* Automated the **cloud deployment** using Ansible and **ARM templates** for unattended bootstrapping in Azure.
* Created **Ansible roles** in **YAML** and defined tasks, variables, files, handlers, and templates. configured the Ansible files for parallel deployment in Ansible for automating the Continuous delivery process and used Ansible for configuring and managing multi-node configuration management over **SSH and PowerShell**.
* Experience **using Ansible Tower dashboard**, role base access control, access to Ansible for deployments and worked with Ansible Playbooks to automate various deployment tasks and working knowledge on Ansible Roles, Ansible inventory files and Ansible Galaxy.
* Worked on active integration effort for building out **PaaS** with **RedHat OpenShift**, Dockers and working with developers on application containerization effort.
* Migrating Containers from OpenShift which is On-Prem Private Cloud Cluster to Public AKS Cluster.
* Worked with **Docker and Kubernetes**, from helping developers build and containerize their application **(CI/CD)** to deploying either on public or private cloud using Azure DevOps Pipelines
* Responsible for Setting up Self Hosted Build Agents into our own Virtual Network to be used as Agent Pools in ADO
* Created, managed, and performed **container-based deployments** using Docker images containing Middleware and Applications together and Evaluated Kubernetes for Docker container orchestration.
* Utilized **Kubernetes and Docker** for the runtime environment for the Continuous Integration/Continuous Deployment system to build, test, and deploy. Created Jenkins jobs to deploy applications to **Kubernetes Cluster**.
* Worked on creating the Docker containers, Docker images, tagging and pushing the images and Docker consoles for managing the application life cycle and Deployed Docker Engines in Virtualized Platforms for containerization of **multiple applications**.
* Used **Jenkins and pipelines** to drive all microservices builds out to the Docker registry and then deployed to Kubernetes.
* Integrated **GIT into Jenkins** to automate the code check-out process used Jenkins for automating Builds and Automating Deployments. Excellent hands-on Experience in several areas of **Jenkins** like master/slave administrations, access controls, report generations, parameterized/triggered build setups etc.
* **Tested Splunk** search strings & operational strings and used it as resource monitoring tool. Worked with administrators to ensure Splunk is actively and accurately running and monitoring on the current infrastructure implementation.
* Managing Puppet modules and manifests, ensuring they are version controlled and follow best practices for efficient configuration management.
* Establishing and maintaining multiple environments within Puppet for seamless deployment and testing of configurations.
* Configuring and optimizing the Puppet master server for high availability, scalability, and performance
* Deploying Puppet agents on target systems and ensuring proper communication with the Puppet master.
* integrating Puppet Enterprise into continuous integration and continuous deployment (CI/CD) pipelines for automated configuration updates
* Developed **PowerShell script** to fetch necessary information from webpages according to the requirement and to automate routine tasks when applicable.
* Setup Prometheus, Alert Manager and Grafana Dashboards into multiple AKS Cluster Workloads

**Environment**: Azure, Terraform, Ansible, OpenShift, Docker, Kubernetes, Jenkins, Git, Maven, Splunk, Python Scripts, Kickstart, Java/J2EE, Linux.

**Client: Varian, Palo Alto, CA. Aug 2015 - Aug 2016**

**Build and Release Engineer**

**Responsibilities:**

* Worked on a RESTful application developed with Perl, Dancer2 using Moo (Perl Object Oriented), Bash and storing data in MongoDB.

Involved in DevOps migration/automation processes for build and deploy systems.

* Consulted and recommended client in Build and Release Management Implementation.
* Used SCM/Build tools for Developers. Helping to resolve all SCM/Builds issues like merge conflicts, compilation errors, missing dependencies, Branching/Merging/Tagging.
* Setup and build AWS infrastructure using various resources, VPC EC2, RDB, S3, IAM, EBS, Security Group, Auto Scaling, SES, SNS and RDS in Cloud Formation JSON templates, Lambda.
* Established database connectivity with DB2, Oracle, MS SQL on IBM WebSphere.
* Hands-on Experience in Installing MongoDB on physical machines, virtual machines as well as on AWS.
* Installation and Upgradation of IBM WebSphere Application Servers ND 6.X and 7.0
* Developed Linux/MongoDB backup systems for disaster recovery procedures.
* Implemented internal process improvements such as automated manual processes using python scripts and Airflow for incremental loads, optimized data storage and delivery for greater scalability.
* Responsible for designing data pipelines and managing workflows in Apache Airflow

**Environment**: AWS, SVN, Jenkins, WebLogic, JIRA, Oracle, SQL, Shell, Python, Apache Tomcat, Linux, Centos

**Client: Onlife Health, Brentwood TN. Oct 2013 – July 2015**

**Linux System Administrator.**

**Responsibilities:**

* Created and maintained user accounts in RedHat Enterprise Linux (RHEL)and other operating systems
* Troubleshooting and maintaining of TCP/IP, Apache HTTP/HTTPS, SMTP and DNS applications.
* Configuration of NIS, DNS, NFS, SAMBA, SENDMAIL, LDAP, TCP/IP, Send Mail, FTP, Remote access Apache Services on Linux &Unix Environment.
* Migrated different projects from Perforce to SVN
* Performing NIC bonding on Linux Systems for redundancy.
* Diagnosed and resolved problems associated with DNS, DHCP, VPN, NFS, and Apache.
* Created Bash/shell scripts to monitor system resources and system maintenance.
* Create and Update Documentation for current Patching process. Coordinate with Lines of Business to schedule patching. Create Change request for Patching in Production environment.
* Booted systems into different run levels for troubleshooting and system maintenance.
* Expertise in Logical Volume Manager (LVM), Configured volume groups and logical volumes, extended logical volumes for file system growth needs using LVM commands.
* Creation of Logical volumes (LVM) for Linux operating systems.

**Environment**: RHEL, Windows, Shell Script, VMware servers, XEN, WebSphere, Perforce, Splunk Enterprise Server 5.x, SVN, Windows 2003 server, Kick Start, Solaris.

**Linux System Administrator.**

**Savi Technologies Inc., Hyderabad. Aug 2012 – Sep 2013**

**Responsibilities:**

* Day to day duties involved Linux server maintenance and support to developer's team for their issue’s application, tuning, troubleshooting, and software running.
* Installed the latest patches for, Oracle on Red hat Linux servers, Configured and administered Send mail, Samba, Squid servers in Linux environment
* Set up the Linux Croon jobs for automating various build related jobs and application data synchronization jobs.
* Responsible for building of Linux OS servers using Kick-start automation application
* Updated previous LDAP tools to work with version of Ruby Rails.
* Involved in Installing, Configuring and Upgrading of red hat Linux AS 4/5, Solaris 9/10 operating systems.
* Administered and supported distributions of Linux, including Linux Enterprise Desktop, SUSE Linux Enterprise Server, Red hat and Solaris.
* Install, maintain and upgrade Drupal and Word press on LAMP stack and Configured LAMP Stack on Unix/Linux servers.
* **Environment**: Oracle on Red hat Linux, Samba, Squid, Red hat Linux AS 4/5, Solaris 9/10, Linux Enterprise Desktop, SUSE Linux Enterprise Server, Red hat and Solaris, LDAP.

**EDUCATION**

* Bachelors of Computer Science form JNTU, Hyderabad, India.