**Bala Sai**

**Sr Devops Engineer**

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**Career Objective:**

* Seeking a challenging position in a progressive organization that gives me scope to apply my knowledge, skills and to involve in a team that dynamically works towards growth of the organization by adding value to its customers.

**Professional Summary:**

* 10+ years of experience in IT industry: **DevOps** **Engineer**, Skilled in **Cloud**, **Openstack**, **Amazon Web Services**(**AWS**), **Ansible, Chef, Build, Deploy, Release Mgmt, Unix/Linux administration. Hands on experience working with Docker, Containers , Kubernetes.**
* Hands on Experience on Software Configuration/Build/Release Management/Continuous Integration and expertise on version control tools like **Subversion, GIT**, Managing build and multiple releases. Have hands on Build Automation tools like **Hudson** and **Continuum**. Over the course of my career, I have gained lot of experience in assessing the environment and recommending the appropriate SCM tool, recommending appropriate labeling / branching / merging / backup strategies and experience in using **CVS, Subversion, GIT** and **Rational Clear Case** on both **UNIX** and **Windows** environment
* Experience in working on source controller tools like **Subversion (SVN), GitHub (GIT), CVS**, and have experience on software build tools - **Apache Maven, Apache Ant.**
* Experienced in Administration of Production, Development and Test environment’s carrying **Ubuntu, Red Hat Linux, SUSE Linux, Centos** and **IBM AIX** servers.
* Expert in OS administration processes, complex system integration, clusters hardware and software, high

availability solutions, performance optimization, load balancing, database concepts, remote system administration and troubleshooting, solution architect, design system & storage

* Experience with both infrastructure and application development teams to support OS and Patch deployment,

develop new deployment image solutions.

* Experience on **AWS Cloud platform** and its features which includes **EC2, VPC, EBS, AMI, SNS, RDS, EBS, Cloud Watch, Cloud Trail, Cloud Formation AWS Configuration, Auto scaling, Cloud Front, IAM, S3**. Experience in **AWS using EC2, AWS Dynamo DB, AWS S3, AWS VPC, and IAM services.**
* Installed and maintained **Jenkins** for **Continuous Delivery** as well as automate **Ansible** Playbook runs against production infrastructure
* Experience with both infrastructure and application development teams to support OS and Patch deployment, develop new deployment image solutions.
* Extensively worked With **VMware ESXi 5.1/5.5/6.0, vCenter Server**, Host Clustering with HA, Replication Manager 5.x/6.0, VMotion, Physical to Virtual Migration and Managing SAN Datastores with, iSCSI, NFS & FC.
* Experience on **Hudson, Jenkins, Team City and Bamboo** for continuous integration and for End to End automation for all build and deployments.
* Worked with Engineers, QA, business and other teams to ensure automated test efforts are tightly integrated with the build system and infixing the error while doing the deployment and building.
* Hands on experience on Dockers and containers.
* Used Jenkins pipelines to drive all micro services builds out to the Docker registry and then deployed to Kubernetes, Created Pods and managed using Kubernetes
* Building/Maintaining Docker container clusters managed by Kubernetes Linux, Bash, GIT, Docker, on GCP (Google Cloud Platform). Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test deploy.
* Involved in development of test environment on Docker containers and configuring the Docker containers using Kubernetes.
* Developed microservice on boarding tools leveraging Python and Jenkins allowing for easy creation and maintenance of build jobs and Kubernetes deploy and services.
* Refactoring of monolithic applications to a Microservices and Component based architectures.
* Worked on deployment automation of all the micro services to pull image from the private docker registry and deploy to docker swarm cluster using Ansible.
* Building/Maintaining Docker container clusters managed by Kubernetes Linux, Bash, GIT, Docker, on GCP
* Experience working with **Puppet** Enterprise and Puppet Open Source. Installed, configured, upgraded and managed Puppet Master, Agents & Databases. Integration of Puppet with Apache and Passenger.
* **IBM Certified Expert for AIX and HACMP**, with experience in Architecture, planning, designing, managing and supporting Unix Infrastructure.
* Experience with Network administration tasks - adding and removing users file and share permissions, trust management, replication management, server backups, and server setups.
* Experience with configuration and maintenance of **NFS, DNS, NIS/NIS+, DHCP, SMTP**, and Networking with **TCP/IP**.
* Strong in troubleshooting, monitoring, training and 24/7 production support in mission critical environments Worked with systems support team to define, architect and maintain highly available production systems.

**Most Recent Awards/Merits:**

* Received Customer/Client satisfaction award for Q2,Q3 and Q4 -2017
* Received accolades from Senior Management for mentoring fresher/newly joined engineers in the team and helping them to work independently.

**Technical Skills:**

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| **Operating Systems** | Linux (Red Hat, SUSE, Ubuntu), AIX 4.x/5.x/6.x/7.x, Windows  |
| **Amazon Cloud:**  |  AWS (EC2, S3, CloudWatch, RDS, Elastic Cache, IAM) |
| **CM/CI tools** | Ansible, Chef, Jenkins |
| **Devops Build Tools** | Maven, ANT |
| **Scripting** | Shell Scripting |
| **Monitoring Tools** | Naigos |
| **Other Tools** | VSphere Web Client, VSphere Client, VCenter Server, Splunk, Apache, Vagrant |
| **Version Control tools** | SVN, Git |
| **Bug Tracking Tools:** | JIRA, Remedy, HP Quality Center |
| **Container Technologies** | Vagrant, Docker, Kubernetes |
| **Hardware** | HP 9000 platform, HP Proliant, x86, x86\_64 Intel & AMD platforms, PARSC IBM p-series p750,p770,p795, p520,p550,p570, p575, p595 RS6000 servers/workstations on POWER 5, POWER 6, POWER 7, & IBM Blade servers JS12 and JS22, HMC, SDMC , NAS & SAN devices, SAN switches like Brocade & Cisco |
| **SAN Administration** | EMC SAN Clarion Symmetrix DMX VMAX IBM DS4800 and other DS models IBM XIV SANVIOS, HACMP/ES 4.5, 5.X,6.x,7.x, Supporting Database Infrastructure on IBM DB2, Oracle ,Networking: TCP/IP, DNS, DHCP, HTTP |

 **Experience**

**Confidential, San Jose, CA *Aug 2018 – Till date***

**Role: Devops Engineer**

**Responsibilities:**

* Build Engineer for a team that involved different developments teams and multiple simultaneous software releases.
* Developed and maintained UNIX/Perl/ANT scripts for build and release tasks.
* Installed, configured and worked on version control using GIT and GITHub.
* Checking the code to GITHub repository and updating the status.
* Strong ability to manage project resources, track issues, report status, and mitigates risks.
* Responsible for maintenance of source control systems Subversion and GIT.
* Created repositories according the structure required with branches, tags and trunks.
* Experienced and proficient deploying and administering the version across the environments using SCM tools like GITHub on Linux and windows platforms.
* Implemented & maintained the branching and build/release strategies using GIT.
* Planned release schedules using Agile Methodology and coordinated releases with engineering and SQA for on-time delivery.
* Instrumental in design, development, implementation and testing of an SCTP like protocol in Linux kernel using C/C++.
* Strong ability to manage project resources, track issues, report status, and mitigates risks.
* Responsible for maintenance of source control systems Subversion and GIT.
* Created repositories according the structure required with branches, tags and trunks.
* Well versed in managing source code repositories like SVN, Git, GitHub, bit bucket
* Used Maven as build tool on Java projects for the development of build artifacts on the source code.
* Installed and managed the enterprise Nexus as a storage repository for artifacts. Created Proxy, Hosted, npm and nuget repositories, user management, Roles etc.
* Used Perl, Bash Scripting, Sed, Awk etc. to assist the developers in development and testing.
* Created hooks and managed permissions on the branches for GIT
* Maintained the Shell and Perl scripts for the automation purposes.
* Involved in editing the existing ANT/MAVEN files in case of errors or changes in the project requirements.
* Designed GIT branching strategy and implemented GIT environment according to the needs of the release management.
* Implemented Shell and Perl scripts for release and build automation. Manipulated and automated scripts to suit the requirements.
* Maintained all the Linux environments for deployments.
* Used Jenkins as automation tool with GIT.
* Proficient with container systems like Docker and container orchestration like EC2 Container Service, Kubernetes, worked with Terraform.
* Managed Docker orchestration and Docker containerization using Kubernetes.
* Used Kubernetes to orchestrate the deployment, scaling and management of Docker Containers

**Environment**: Ant, Java, Maven, Jenkins, Spring1.3.0, Linux, Solaris, SonarQube, WebLogic, Subversion, Shell scripting, WLST, Python scripting Nexus, CI/CD Chef, AWS, Docker, Openshift, Openstack, 2 Oracle, BMC Remedy, SharePoint, Kubernetes.

**Experience:**

**JP Morgan Chase, Houston TX *Nov 2015 – Aug 2018***

**Role: Devops Engineer with Linux**

**Responsibilities:**

* Provided 24x7 on call server support for UNIX environment including AIX and Linux
* Involved in all Planning, Architecture, System Admin aspects of Linux Administration
* Installation, Configuration, Maintenance and Administration of RedHat Enterprise Linux 5/6.
* Applied patches on all Linux Boxes from common repository using RPM.
* Administrated DHCP, DNS, NFS, NIS and Samba services in Linux.
* File system Administration, Setting up Disk Quota, configuring backup solutions.
* Managed Disks and File systems using LVM on Linux.
* Troubleshooting Day–to-Day issues with various Servers on different platforms.
* Troubleshooting logon problems, boot process and printing.
* Worked with Linux, Oracle Database, and Network teams to ensure the smooth relocation of the servers.
* Installation, configuration and implementation of Samba service on LINUX based systems.
* Mirrors and RAID 0, 1 and 5 levels. Experience with configuring and managing Virtual disks, Disk
* SENDMAIL configuration and administration, testing the mail server.
* Monitor Linux Server for CPU utilization, Memory Utilization and Disk Utilization for performance monitoring.
* Setup NFS file systems and shared them to clients.
* Responsible for providing the desktop system administration include monitor and Performed system startups and shutdowns
* SKILLS:
* Installation of RHEL Operating System Software, RHEL 4.0-5.x and multiboot systems, system initialization and services, user administration, network configuration, installing printers, firewall(SELINUX).
* Knowledge of Shell scripting (Bash).
* RAID(0,1,5), Linux LVM, Apache, Squid, Samba.
* TCP/IP Configuration Assigning IP's, Gateways, Name servers, net masks, host names, domain Names etc for individual machines and setting up the network
* Installing configuring and troubleshooting different servers as DNS, NIS, FTP and NFS.
* Installing configuring and troubleshooting web servers Apache (http/https) And Proxy server Squid.
* Setting up SAMBA servers, to enable Windows clients to communicate with Linux

**Devops Experience:-**

* Experience in Implementing Continuous Delivery pipeline with Docker, Maven, Ant, Jenkins,and AWS.
* Participated in weekly release meetings with Technology stake holders identify and mitigate potential risks associated with the releases.
* Enabling customers to better manage software development, deployments and infrastructure with tools such as Chef, Jenkins and GITHub.
* Defined dependencies and plugins in Maven pom.xml for various activities and integrated Maven with GIT to manage and deploy project related tags.
* Configured local Maven repositories and multi-component Ant projects with Nexus repositories and scheduled projects in Jenkins for continuous integration.
* Integrated Subversion (SVN) into Jenkins to automate the code check-out process
* Automation Engineer for Developing Build and deploy tool (like Jenkins).
* Installed Jenkins on a Linux machine and created a master and slave configuration to implement multiple parallel builds through a build farm.
* Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain as a CI/CD process, SVN/GIT with Devel/Test/Prod Branching Model for weekly releases.
* Installed, Deployed Red Hat Enterprise Linux 6.x/7.x, CentOS and installation of packages and patches for Red Hat Linux Servers.
* Experience in Openstack core products (Nova, Glance, Swift, Neutron, Cinder, Heat, Ceilometer, Key Stone, Horizon.) Strong knowledge of virtualization technologies – KVM,ESX, Docker
* Experience on managing floating IP and also has hands on transferring Volume from one owner to other owner in Openstack and also created User and assigned users to Projects/Tenants
* Worked on Fuel automation for deploying OpenStack environment
* Experience working on several Docker components like Docker Engine, Hub, Machine, creating Docker images, Compose, Docker Registry and handling multiple images primarily for middleware installations and domain configurations.

**IBM AIX Experience**

* Provided 24x7 supports on shift rotation basis. Configured IBM p5, B80, RS 6000, for production, staging and test environments. Installation and configuration of LPAR’s with AIX 5.3 on p5 servers.
* Experience in LPAR planning and virtualization Installed and configured VIO server via HMC
* Extensively used LVM, created VGs, LVs, and disk mirroring.
* Responsible for Installing Security fixes and APAR’s in Servers.
* Installation and configuration of NIM master server and clients.
* Creating lppsource and SPOT for client on NIM server. Installing OS on NIM clients using NIM Server.
* Setup and configured network TCP/IP on AIX including RPC connectivity for NFS.
* Created mount points for Server directories, and mounted these directories on AIX Servers.
* Setup of full networking services and protocols on AIX, including NIS/NFS, DNS, SSH, DHCP, NIDS, TCP/IP, ARP, applications, and print servers to insure optimal networking, application, and printing functionality.
* Worked on TCP/IP configuration, IP address assigning, network interface configuration, static route creation, assigning gateway for two different networks, host name resolution, changing IP address.
* Maintenance and trouble shooting of NFS (Network File System)
* Experience in Upgrading, downloading Patches and installing to keep system in current maintenance level
* Working with paging spaces – creation, increase, decrease paging spaces as per the requirement.
* Troubleshooting of the system boot errors, installation errors and related to the TCP/IP problems Faulty disk replacements incase of any disaster. Working with mirrored logical volumes. Device management, including adding, changing, and configuring physical and logical devices.
* Designed and configured Ethernet VLAN’s with RS/6000 IBM Servers, Cisco Routers (2500/2600 series) and Cisco Switches (Catalyst 2912) utilizing RJ45 CAT5 cables for the internal LAN, and a T1 fiber uplink across a Cisco backbone for connection on the WAN.
* Configured Work Load Management (WLM) for IBM Websphere Application Server.
* Clustered multiple RS/6000 machines on AIX 5.1/5.2 using HACMP, configured HACMP cluster to keep applications running.
* Configured cascading, mutual takeover and rotating modes of operation of the HACMP and HACMP/ES products.
* Performing Failovers in HACMP / cluster environment, monitoring servers.

**Environment**: Red Hat Linux, AWS, Openstack, Puppet, Jira, Jenkins, SVN, GIT, Chef, Docker, Ansible, Shell Scripting, Windows Server 2008 R2, Python, SVN, ANT, Maven

**CVS Caremark Scottsdale AZ 04/2015 – 10/2015**

**Role: Unix/AIX Engineer**

**Responsibilities:**

* Used migratepv for data migration.
* Configuring network interfaces, aliases, interface speed, diagnose network issues by looking at their statistics. Configuring new devices, working with configuration manager.
* Has hands on experience on EMC commands for AIX which we use in our environment
* Installing, configuring and upgrading EMC Power-path for AIX servers.
* Experience working on EMC Power reset tool.
* Fault devices replacements, and replacing faulty hard disk for rootvg as well as user defined volume groups.
* Installing any third party tools as and when required.
* Working on inetd.conf file configurations, enable or disabling services using this method.
* AIX Logical Volume Manager – creating volume groups, logical volumes, file systems, etc., resizing file systems, working with mount points such as changing mount point for file system.
* Migrating logical volumes, mirroring vgs and lvs, copying logical volumes, export and importing volume groups.
* Configuring NIM Master, creating resources on NIM to have network installation on clients such as Standalone servers or LPARs
* Worked with the Application and Network teams to analyze and solve performance related problems
* Remotely access of the File Systems on the NFS Client through NFS Server
* NFS Administration, exporting filestems, mounting exported file systems, working with nfs daemons and fixing any mounting issues.
* Virtual networkings in VIO – Vlan, SEA, NIB configuration, perform tests for redundancy

**HCL Technologies INDIA Aug 2012 – Mar 2015**

**Role: Build & Release Engineer**

**Responsibilities:**

* Redefined processes and implemented tools for software builds, patch creation, source control, and release tracking and reporting, on UNIX platform.
* Responsible for Development -Testing, Staging, Pre-Production and Production Builds and Releases.
* Configuring and maintaining the code in **Subversion and ClearCase.**
* Developed build and deployment scripts using **ANT and MAVEN** as build tools in Jenkins to move from one environment to other environments.
* Maintained two Jenkins servers and one **Bamboo** server to deploy into production and nonproduction environments.
* Integrated **Maven with Subversion** to manage and deploy project related tags.
* Created analytical matrices reports, dash boards for release services based on **JIRA** tickets.
* Finally reach continuous delivery and Build clouds with **Open stack and AWS.**
* Managing Virtual machine using **VMware, AWS.**
* Responsibilities include designing and developing new back-end services, maintaining and expanding our AWS infrastructure, and providing mentorship to others on my team.
* Supported **1500+ AWS Cloud instance’s and used AWS command line Interface** to manage and configure various AWS products. Wrote automation scripts in Ruby and bash.
* Working closely with the setting up of the Configuration Management Tools **Puppet** and automation of the infrastructure with **Chef** that included migrating from the current infrastructure workflow to the new workflow.
* Established continuous integration(CI) practices and standards with **JIRA, Jenkins and Continuous Delivery**(CD) through **Chef**.
* Fisheye used to extract the information from repository and Crucible used to code review.
* Integration of Build Forge with Blade Logic and raising a build request through ClearQuest.
* Deployed **Enterprise Application Archive (EAR), Web Application Archive (WAR), JSP's, and Servlets** in staging and production.
* Designed roles and groups for users and resources using **AWS** **Identity Access Management (IAM)** and also managed network security using Security Groups.
* Builds and deploys **J2EE** application in **WebSphere 6.1and 7.1** using python scripts.
* Documentation of detailed build configuration, Build procedures and change history for releases.
* Coordinated application release with developer, DBA, QA and project management teams.
* Prepared Migration logs for every release and maintained the data accuracy and identifying the testing Environment and confirmed the Current Code Level and Planned Release schedules.

**Mphasis, HP Company** *May 2010 – July 2012*

**Role:AIX System Administrator**

**Responsibilities:**

* Building of new **VIOServers** and clients from p-series **p550, p560, p570, p590 using HMC**
* Creating Logical Partitions of **VIOServers** and VIOClients on pSeries frame and assigning processor, memory and Ethernet adapters to VIOS and assigning memory and processor to **VIOC (LPARS).**
* Installation of **VIOS 2.1**, VIOS Fixpack 11.1 Service Pack via **NIM Server.**
* Installation of **AIX 5.3** on all VIOC/LPAR Clients, installation via **NIM Sever**
* Installation and configuration of VIO servers and updating system firmware by using HMC along with Logical Partition technology (LPARs).
* Performance tuning of applications servers and DB servers
* Performed Security on users, groups administration and daily backup and restore operations, networking service, performance, and resource monitoring.
* Installing, upgrading and configuring **Redhat Linux ES 4.x/5.x** using kickstart installation
* Capacity planning
* Responsibility for installation, Configuration and Troubleshooting of TSM as secondary admin.
* Single point of contact for **HACMP** Cluster issues & support
* Creating and applied a cluster snapshot during cluster failure because of configuration changes in HACMP cluster environment.

**Environment: IBM pSeries 550, 570,590, 595, AIX v5.2/5.3/6.1, VIOS, LPAR, HACMP V5.2/5.3, Windows 2000, Oracle 9i,Oracle 10g, VeritasNetbackup Java, DB2r, LVM, SSH,IBM BladeCenter JS22, , FAS3100 ,FAS2000 storage devices, Tivoli, TSM, Web Sphere Application Server. REDHAT LINUX , ZLINUX**

**Educational Details:-**

* Master of Science in Software Engineering, Coventry University, U.K