Rajesh Surapaneni



Ph: +1-217-971-7363

Email- [rsurapaneni01@gmail.com](mailto:rsurapaneni01@gmail.com)

* 8 Years of IT Industry as DevOps Engineer/AWS Cloud Engineer, Build & Release Engineer and system administrator and very good experience with Configuration Management tools, Build, Deploy, Release Management, and other tools.
* Experience with an in-depth level of understanding in the strategy and practical implementation of AWS Cloud-Specific technologies including EC2, EBS, S3, VPC, RDS, SES, ELB, CloudFront,CloudFormation, Terraform, ElasticCache, Cloud Watch, Cloud Trail, RedShift, Lambda, SNS, Dynamo DB, AWS Import/Export.
* Experience with hands on experience in Build Release management, shell scripting, Unix System administration, Linux Administration.
* Knowledge on Docker Installation, Configuration, and expert in setting up Jenkins integration with AWS and Python/Shell scripts.
* Designed and implemented Software configuration management (SCM) and change management (CM) solution using TFS, Rational Clear Case, Jira, Clear Quest (Change Control tool).
* Experience on Jenkins, Electric commander, Subversion(SVN), Git, Github, VSS, Clear Case, Eclipse, Build Forge, Team Build, Perl, Red Hat(RHEL), Shell script, Power Shell, Install Shield, Install Anywhere, SQL Server, Unix, Linux, Windows Server, Citrix Server.
* Expertise in TCP/IP, RIP/OSPF, Cisco routers with virtualization in ESXi VMware and Virtual Box and Docker.
* Experience in integrating the infrastructure automation using Ansible. Creating and configuring Jenkins jobs, build and delivery pipelines.
* Expertise on object oriented programming languages C, C++, Java, Python, YAML and Ruby.
* AWS Cloud platform and its features which includes EC2, VPC, EBS, dynamo DB(DDB), Aws Lambda, Elastic Beanstalk, AMI, Elasticsearch, SNS, ElasticCache, RDS, Cloud Watch, Route53, Cloud Front(CDN), Auto scaling, Security Groups, Redshift, and Cloud Formation.
* Experience in installing, maintaining, and troubleshooting JBOSS in Linux/Unix, WebLogic, Apache Tomcat, Nagios and security software's.
* Expertise in Configuration Management Tools Chef, Ansible and Puppet.
* Designed and developed integration methodologies between client web portals and softwareinfrastructure using python.
* Expertise in Docker using mesos frame work along with marathon orchestrate.
* Expertise in terraform for building, changing and versioning infrastructure.
* Involved in the functional usage and deployment of applications in Web Logic, Web Sphere and Apache Tomcat Server.
* Good Experience with Python web frameworks such as Django, Flask and Pyramid Framework.
* Experience in managing the artifacts using Nexus repository and Virtual Machines using VMware, AWS.
* Expertise in handling Django ORM and SQLACHEMY.
* Have a good knowledge and experience with Configuration management tools like Chef, Puppet, Ansible and expertise in developing Recipes/Manifests, Ruby and Python scripts to automate the provisioning of environment.
* Experience in managing and setting up Continuous Integration using tools like Jenkins, Build Forge, Build Bot, Docker, Bamboo and Electric Commander, Sonar, Subversion(SVN), Selenium, Cucumber, Team foundation server, Accrue and Nexus &artifactory.
* Ability in development and execution of XML, Shell Scripts and Perl Scripts.
* Used terraform in managing resource scheduling, disposable environments and multitier applications.
* Good experience in automated deployment tool Nolio and conversion of buils.xml into pom.xml in building the applications using ANT & MAVEN.
* Exposed to all aspects of Software Development Life Cycle (SDLC) such as Analysis, Planning, Developing, Testing and Implementing and Post-production analysis of the projects.
* Extensive knowledge in JBOSS installation and configuration. Worked on Hibernate framework in Hadoop for mapping Java classes to database tables using xml file.
* Performed Server health monitoring and system tuning as per vendor recommendations.
* Quick analyzing and identifying ability of operational issues including good understanding of backups, deployment and load balancing techniques.
* Extensive knowledge in job scheduling tools like Nagios.

**TECHNICAL SKILLS**

|  |  |
| --- | --- |
| **Operating Systems** | **Windows, Mac OS, Ubuntu, REDHAT, Linux, Unix, Core OS** |
| **Build Tool** | **Ant, Maven, Jenkins, Docker, MS Build** |
| **Scripts & Languages** | **Shell/Perl Script, C, C++, C#.Net, VB.Net,Python,Node.js, Java, J2EE, Ruby, SQL, PL/SQL, JQuery, Javascript, Groovy.** |
| **Version Control Tools** | **CVS, GIT, Tortoise SVN, Perforce and Clear case.** |
| **CI Tools** | **Jenkins, Hudson, Cruise control Anthill pro, Bamboo, Ansible, RunDeck, Chef and Puppet.** |
| **Cloud** | **AWS, AWS-CLI and Microsoft Azure** |
| **Databases** | **Oracle 11g/10g, MySQL, SQL Server, TSQL, Mongo DB, MS Access, DB2, PostgresSQL, RDBMS** |
| **Virtualization / Containers** | **Amazon AWS, Oracle Virtual Box, Docker, Openstack, VMware.** |
| **Applications & Configuration Management** | **Apache, RabbitMQ, Nagios, Informatica, Power Center, Business Objects and SonarQube.** |
| **Web/AppServers** | **Apache Tomcat, Oracle web logic, IBM web sphere and Demandware** |
| **Monitoring & Logging Tools** | **Nagios, Splunk, Loggly, Zabbix** |
| **Web Technologies** | **HTML, XML, SOAP, WSDL, UDDI, XSD, XSL, XPATH** |
| **Bug Tracker & Testing** | **JIRA, Redmine, Junit, Test Rail, Bugzilla, HP Quality Center** |
| **SDLC** | **Agile, Scrum, Waterfall** |

**Professional Experience**

**Client: British Petroleum, Chicago, IL Jan 2017 – Present**

**Role: Sr. AWS Cloud Developer**

* Created the automated build and deployment process for application, re-engineering setup for better user experience, and leading up to building a continuous integration system for all our products.
* Implemented AWS solutions using EC2, S3, RDS, EBS, Elastic Load Balancer, and Auto-scaling groups, Optimized volumes and EC2 instances.
* Optimized volumes and EC2 instances.
* Utilized Node.js, AWS and Watson Cognitive Services for building customized Alexa Skill Set for our web app
* Created multi Availability Zone VPC instances.
* Used IAM to create new accounts, roles and groups and polices.
* Configured S3 versioning and lifecycle policies to and backup files and archive files in Glacier.
* Configured Elastic Load Balancers (ELB) with EC2 Auto-scaling groups.
* Created monitors, alarms and notifications for EC2 hosts using CloudWatch.
* Installed, Configured and Administered Jenkins Continuous Integration Tool.
* Using Jenkins AWS CodeDeploy plugin to deploy to AWS.
* Worked with web-based application development using frameworks like Django and Flask. Actively participated in all phases of Software Development Life Cycle.
* Responsible for code build, release and configuration on Amazon EC2.
* Perform Deployment of Release to various QA & UAT in Linux environments.
* Troubleshoot the build issue during the Jenkins build process.
* Orchestration of application processes on different environments using Ansible, Chef and Puppet in cloud (AWS) for deployment on multiple platforms
* Implemented web-based collaborative code editor which supports multiple user editing simultaneously (ACE, Socket.io, Redis).
* Responsible for the development of Docker images on internal suite of hardware platforms.
* Converted legacy production virtual machine to Docker environment.
* Developed build and deployment scripts using ANT and MAVEN as build tools in Jenkins to move from one environment to other environments.
* Performed Branching, Tagging, Release Activities on Version Control Tools: SVN, GIT.
* Worked on Managing the Private Cloud Environment using Chef.
* Managed Chef Cookbooks to automate system operations.
* For reading the data faster integrated Redis-Cache with the Django-rest-framework.
* AWS Cloud management using Chef Automation.
* Automated the cloud deployments using chef, python and AWS Cloud Formation Templates.
* Developed Perl and shell scripts for automation of the build and release process, developed Custom Scripts to monitor repositories, Server storage.
* Automated the cloud deployments using chef, python (boto& fabric) and AWS Cloud Formation Templates.
* Analysing in working with Ansible, wrote many playbooks to manage Web applications, Environments configuration Files, Users, Mount points and Packages.
* Worked on Ansible and Ansible Tower to automate repetitive tasks, to deploy critical applications quickly, and proactively manage the changes
* Implemented a web-based collaborative code editor using Socket.io and Redis which supports multiple user editing
* Ran application stress workloads to test customer applications on Docker Swarm and Kubernetes using Cassandra and MySQL.
* Used Chef and python fabric to install docker containers on different clusters and used Grafana and Promethues to monitor.
* Used Maven as build tool on Java projects for the development of build artifacts on the source code.
* Developed a portal to manage entities in a content management system using Python and Django.
* Worked on Django for web application development.
* The Azure performance dashboard is built with Node.js, Express.js on the server side, and React.js/Redux/Relay on the client side, with a GraphQL API connected to a MSSQL database. The app is hosted and deployed to Azure App Service via IIS &IISNode
* Implemented rapid provisioning and life cycle management for Ubuntu Linux using Amazon EC2, Chef, and custom Ruby/Bash scripts.
* Deployed the Java applications into web application servers like JBoss.
* Performed and deployed Builds for various Environments like QA, Integration, UAT and Productions Environments.
* Configuration Management Chef, Puppet, Ansible,
* Worked on the cloud-based diagramming software called Gliffy for creating different types of design documents required for the continuous integration process.
* Worked on configuring the Jenkins to use MetaCase Software to build Java code and also to do the whole C.I process on the java code generated by MetaCase.
* Extensively worked on Hudson and Jenkins for continuous integration and for End-to-End automation for all Build and deployments.
* Experience in Implementation and administration of Continuous Integration process using Jenkins.
* Implemented a data pipeline which monitors, scrapes and dedupes medical news using MongoDB and Redis
* Administrated Linux and Windows environments using Ansible, Chef and Puppet based on the needs.
* Deployment: Debug Deployments. ADT and Puppet. DevOps support. Responsible for Build Jobs, Security Scanning, Release Pipeline.
* Streamlined Build and Deployment Jobs. Chef, Ruby, Grafana, Sensu alerts, Elasticsearch, Logstash, Kibana
* Integration of user-facing elements developed by front-end developers with server side logic using Node.js.
* Modified and tweaked various software products such as varnish, nginx, solr, and Redis
* Designed and wrote http router/proxy written in JavaScript and CoffeeScript using Node.js and Redis
* Troubleshoot and resolved Build failures due to infrastructure issues reduced by 95% stabilizing the build process. Setup and executed process to code review system effectively.
* Responsible for defining branching & merging strategy, checkin policies, improving code quality, automated Gated Checkins, defining backup and archival plans.
* Troubleshoot Build and Deployment Issues, with little downtime.
* Organized and Coordinated Product Releases, work closely with product development, QA, Support across global locations to ensure successful releases.
* Documented release metrics, software configuration process. Used Maven scripts to build the source code. Supported and helped to create Dynamic Views and Snapshot views for end users.

**Environment** GIT, Jenkins, Python, Puppet, Maven, AWS, EC2, WebSphere, Ant, Putty, Confluence, SOA, Ansible, Dockers.

**Client:Wells Fargo, Charlotte, NC Dec 2014– Dec 2016**

|  |
| --- |
| **Role: Cloud Developer** |

* Member of the Technical Design team, Build and Release Module for Development of new products.
* Cloud Platform Support in Oakland, CA. Puppet deployments, RabbitMQ, Sensu, Vagrant, F5.
* Worked for DevOps Platform team responsible for specialization areas related to Chef for Cloud Automation.
* Designed and developed communication between client and server using Secured Web services such as Django-rest-framework.
* Demonstrated ability in installation, configuration and management of provision tools chef, Puppet and Ansible.
* Utilized Docker to implement testing / production environment for use with existing Architecture
* Automated whole management process and achieved required state of environment by using configuration management automation tools (Ansible and Chef) in creating continuous delivery systems.
* Developed, designed and handled a dashboard control panel for customers and Administrators using Django and MySql.
* Implemented data pipeline which monitors, scrapes and de-dupes latest news (MongoDB, Redis,
* RabbitMQ, TF-IDF).
* Used AWS Beanstalk for deploying and scaling web applications and services developed with Java, PHP, Node.js, Python, Ruby, and Docker on familiar servers such as Apache, and IIS
* Technical leader to align processes and tools, such as branching, source control structure, dependency management, Linux\Windows hybrid build infrastructure, code review, and check-in policies, that are developed and instrumented by DevOps teams across projects globally.
* Managed Ubuntu Linux and Windows virtual servers on AWS EC2 using Puppet.
* Experienced with working on Puppet Master and Puppet Agents. Defined Puppet Master and Puppet Agents to manage and configure nodes.
* Designed and deployed AWS solutions using E2C, S3, RDS, EBS, Elastic Load Balancer, Auto scaling groups, Opsworks.
* Maintain and update internal Dockerfiles to create different Docker images for each project release.
* Ran docker compatibility testing on various Linux distros, Amazon(AWS) and Google cloud Engine(GCE)
* Developed Node.js utilities to monitor page load times for the many 1000's of landing pages, significantly improving Google
* Optimized volumes and EC2 instances & Created multi AZ VPC instances.
* Used IAM to create new accounts, roles and groups.
* Configured S3 versioning and lifecycle policies to and backup files and archive files in Glacier.
* Deployed cloud stack using AWS OpWorks.
* Configured Elastic Load Balancers with EC2 Autoscaling groups.
* Configured and monitored distributed and multi-platform servers using Nagios.
* Supported 2000+ AWS Cloud instance’s and also familiar with Amazon Cloud command line management.
* Worked on User administration setup, maintaining account, Monitor system performance using Nagios and Tivoli.
* Encrypted EBS volumes via KMS service.
* Created monitors, alarms and notifications for EC2 hosts using Cloudwatch.
* Set up Elasticache using memcached.
* Migrated applications to the AWS cloud.
* Provided stable build environments for product development.
* Actively involved in architecture of DevOps platform and cloud solutions.
* Developed installer scripts using Ant, Python, UNIX for various products to be hosted on Application Servers.
* Used chef for server provisioning and infrastructure automation in different environments.
* Set up CI (Continuous Integration) for major releases in Jenkins and TeamCity.
* Integration of Automated Build with Deployment Pipeline. Currently installed Chef Server and clients to pick up the Build from Jenkins repository and deploy in target environments (Integration, QA, and Production).
* Implemented and building tools such as Ant/Maven in order to automate and enhance the overall operational environment.
* Worked on Cloud automation using AWS Cloud Formation templates.
* Implemented Chef Recipes for Deployment on build on internal Data Centre Servers. Also re-used and modified same Chef Recipes to create a Deployment directly into Amazon EC2 instances.
* Implemented scheduled downtime for non-prod servers for optimizing AWS pricing.
* Integrated various provisioning and monitoring modules into a single platform using Jenkins/Hudson CI tools.
* Developed GUI using Django for dynamically displaying the test block documentation and other features of Python code using a web browser.
* Maintaining a farm of EC2 instances, ELB’s and RDS.
* Troubleshoot issues along the CI/CD pipelines.
* Evaluated testing of Chef Recipes – Concept of Test Driven Development for Infrastructure as a Code.
* Implemented Chef Cookbooks for OS component configuration to keep AWS server’s template minimal.
* Written Chef Cookbooks for various DB configurations to modularize and optimize end product configuration.
* Configured Jenkins to integrate tools (Maven, git, Selenium, Docker, Ansible, Puppet, Chef, Kubernetes) to accomplish the goal and notify the status of the build by creating and mailing the reports to the members of team.
* Developed Custom Scripts to monitor repositories, Server storage.
* Managed central repositories: Implemented Atlassian Stash along with GIT to host GIT central repositories for source code across products, facilitate code reviews and login audits for Security Compliance.
* Automated deployment of builds to different environments using Jenkins/Hudson CI tools.
* Designed and implemented the backup strategy for all the critical systems such as build machines, bug tracking tools, central repositories etc.
* Worked on administering the METACASE client-server architecture domain specific modeling software.
* Documented all build and release process related items. Level one support for all the build and deploy issues encounter during the build process.

**Environment:**GIT, Jenkins, Python, Puppet, Maven, AWS, EC2, WebSphere, Ant, Putty, Confluence, SOA, Ansible, Dockers.

**Client:Citibank - Township of Warren, NJ**

**Role:Cloud Developer** **Jul 2014 to Feb 2015**

* Defined and Implemented CM and Release Management Processes, Policies and Procedures.
* Hands-on development experience and a strong passion for the LAMP (Linux, Apache, and MySQL& PHP) development stack.
* Worked in developing Python/Django based web application, MySQL DB and integrations with 3rd party email, messaging, Storage services
* Created EC2 instances in AWS. Also worked with Aws concepts like IAM, S3, and Cloud watch. Used Chef for deploying applications and on experience with Ruby.
* Involved in migration activities of Java scripts and Database scripts from Oracle, MS SQL Server and MY SQL into different environments like Development, QA.
* Build, manage, and continuously improved the build infrastructure for global software development.
* Created test plans,executed test cases on various features in including flexnet licensing, docker plugins to create volumes.
* Participating in design, code, and test inspections throughout the life cycle to identify issues/defects; participate in other meetings.
* Familiar with Git hub admin tasks like creating users, providing access to them and maintained source repositories. Managed Maven project.
* Experience with IT automation tools like Chef, Puppet.
* Developed and implemented an agile SDLC and refinement of the Software Configuration Management (SCM) infrastructure.
* Created Python Django forms to record data of online users and used PyTest for writing test cases.
* Worked in development, testing, and production environment using SQL, PL/SQL procedure, python, Ruby, PowerShell and shell scripts and managed to host the servers like Tomcat, apache and NGINX.
* Created EC2 instances in VPC and installed applications. Expertise in Identity Access Management. Created users, groups and assigned roles based on their duties.
* Maintained good support for development team from Intermediate to advanced level in ASP.NET MVC and ASP.NET Web API.
* Managed Nexus repository for the current project created a new repository and provisioned it. Have hands on experience with Bitbucket server.
* Provided the assistance for the smooth phase of Release for the Emergency and Expedite Releases by getting the Director Level Approval and coordinating with different teams.
* Configured Workflows created new Jobs and modified existing projects to automate.
* Experienced in the Design/Architecture of AWS and hybrid cloud solutions.
* Scheduled the Linux Cron jobs and Jenkins jobs for build automation.
* Configuration Management and source code repository management using tools like GIT, Subversion (SVN), Clear Case JIRA and CI tools like Jenkins.

**Environment:**WebSphere, Perl Scripts, Shell Scripts, XML, Ant, Chef, Maven, Tortoise SVN, JIRA, Ruby, Jenkins, Java/J2EE, Oracle, UNIX

**Client :Crown Castle - Pittsburgh, PA**

**Role :DevOps Engineer, Feb 2011 – July 2012**

* Project Name: GTIS DDS (Global Technology Infrastructure Support- Developer Deployment services) - UBS-Investment Bank.
* Provided day-to-day support/Admin activities of Build and Release/Configuration Management tools used in UBS IB.
* Provided and supported SCM infrastructure on Windows/Unix/Linux platforms, including coordination with IT department, troubleshooting and testing.
* Provided day-to-day support/Admin activities of File Transfers services. This includes configuration, troubleshoot and analysis.
* Performed schedule change activities in coordination with different teams like DB, UNIX, Wintel etc.
* Provided technical assistance for work administration of users and L1 team, related modifications and archival of projects.
* Implemented Change requests and do sanity test.
* Troubleshoot issues escalated by Level 1 team and fixed them.
* Performed admin activities of Confluence, Jira, Subversion, ClearCase and Quality Center.
* Performed release cycle for various applications.

**Environment** Confluence, Jira, Subversion, ClearCase, Quality Center

**Client :Bell Canada Nexus-CGI India**

**Role :Linux Administrator, Feb 2009 – Jan 2011**

* Installed, Configured and Managed VMware ESXi 4.5/5.0Server and Windows 2008/2012 servers. Installing vCenter Server, vSphere Client and Web Client for operations and management. Configured and Managed Virtual Networks, Storage, Memory and processers for the Virtual Machines.
* Created and Managed Virtual Machines using templates and images, and building production ready VM’s. Monitored and managed performance of vSphere ESXi servers and Virtual Machines. Experience in adding NFS storage and iSCSI storage to vSphere hosts.
* Implemented Virtual Machine cold clone and hot clone procedure while cloning the VM’s. Implemented Virtual Machine cold migration and hot migration procedures. Configured Resource pools and Shares in VMware Environment for Prod, test and development environments.
* Experience in configuring customized alarms in vCenter server for data store usage, host CPU and Memory usage. Implemented storage vMotion to migrate VM’s from HP EVA to EMC VMAX, VNX storage.
* Maintained and administered all virtual backups with EMC Avamar/DataDomain Backup and Recovery Technology.
* Created and managed maintenance process procedures for VMware version updates patches on all ESXi Hosts. Ensuring seamless failover and testing during maintenance tasks.
* Reported on VM improvements, and made recommendations for the upgrades, which included VM virtual hardware versions and VMware Tools with less business impact.
* Developed and implemented processes to streamline management and VM builds within our ESXi environment. Integrated EMC storage array VNX, VMAX with vCenter server using VSI plugins, and enabled VAAI and VASA.
* Participated in strategic planning and guidance of ESXi environment, which includes various sites, and DR solutions including SRM and VSphere replication. Developed and maintained proper documentation for procedures, processes, and design builds in regards to the virtual infrastructure.
* Management, monitoring and troubleshooting of physical server environment using Dell Open Manager, Firmware and Bios updates and working with respective hardware vendors for ordering troubleshooting.
* Enabled monitoring and alerting of virtual environment with the utilization of Solarwinds VM Monitor, vCOPS and various other monitoring tools. Provide on-call support for server infrastructure or application failures resulting in the need to engage on-call IT personnel.

**Environment** :VMware ESXI, HA, DRS, NETAPP, EMC, VNX, VMAX, Virtual ISCSI, VM Monitor, vCenter, VSphere