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Summary

- Over 9+ years of extensive work experience on DevOps, Build/Release Management process and AWS cloud computing that includes end - to-end code configuration, automation, building, installation, upgrading of applications or databases for entire life cycle model in Enterprise Applications.
- Participate in the development of processes and software to configure, maintain and manage multi cloud infrastructure and deployments in Amazon AWS and GCP. Experience translating high level architecture diagrams into a highly available fault tolerant AWS deployments.
- Installed, Managed and troubleshooted both legacy applications and micro services running in K8s (hybrid environment).
- Automated blue/green deployment and Canary deployment (work item still in-progress) through helm charts using GitLab CICD.
- Installed and managed S3 and EFS CSI drivers in K8s clusters.
- Built Dynamic pipelines in GitLab which deploys the pods in various environments automatically using helm charts.
- Mentoring/Training other DevOps Engineers and developers.
- Level 3 Kubernetes and other DevOps tools support. Troubleshooting the complete tech stack from application layer to network layer.
- Deep Knowledge of AWS cloud and worked on most Amazon Web Services which includes EC2, S3, EBS, EFS, RDS, ELB, Route 53, Auto scaling, Security Groups, ACLs, SES, SQS, SNS, lambda, EKS (Kubernetes) etc.
- Experienced migrating workloads and databases from on-premises to cloud.
- Configured compute engines, VPCs, Load balancers, Cloud SQL in Google Cloud Platform.
- Deployed, administered, monitored and logging of RabbitMQ Cluster.
- Experience in building data warehouse on snowflake and understanding of snowflake roles and deployments of virtual warehouses.
- Hands-on Experience in J2EE Framework and its components as related to Java build, test, deployment and release management initiatives.
- Worked with database technology such as SQL, PLSQL, and MySQL including NoSQL databases.
- Experience in all build/release engineering tasks associated with the component/production releases.
- Strong knowledge in SDLC, QA Methodologies, Configuration & Change Management systems.
- Worked on GIT to maintain source code in Git and GitHub/GitLab/Bitbucket repositories.
- Maintained a Multi-Datacenter Cassandra cluster. Experience in performance tuning a Cassandra a cluster to optimize writes and reads. Involved in the process of data modeling Cassandra Schema.
- Configured virtual firewalls, AWS Direct Connect, VPN tunnels, Transit Gateway.
- Hands on experience in migrating Business from a physical data center environment to AWS environments.
- Experience in cloud automation using Terraform to create custom sized VPC across multiple AWS accounts, subnets to ensure successful deployment of Web Applications in multi cloud environment.
- Extensive experience in using build tools like Maven, ANT and XCode for the building of deployable artifacts from source code. knowledge of Databases including Oracle RDBMS programming, application architecture, physical and logical database design.
- Implemented a production ready, load balanced, highly-available, fault-tolerant Kubernetes infrastructure.
- Managed Kubernetes charts using Helm. Created reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and Managed releases of Helm packages.
- SSL/TLS certification generation and installation both for legacy program applications and microservices.
- Experience on reverse proxy servers such as Nginx, Apache and integrating them with Tomcat/Apache servers.
- Extensively worked on Jenkins for Continuous Integration and End-to-End automation for all builds and deployments.
- Experienced in Administration / Maintenance of source control management systems such as GIT.
- Created tags and branches, Fixed the merge issues and administered Software Repositories.
- Hands on experience in configuring and open monitoring tools like Checkmk#, Nagios, Prometheus, ELK/EFK stack.
- Slashed incident detection time 30% by implementing advanced dashboards, application monitoring and alerting via tools such as Prometheus.
- Routine upgrades and application support as well as root cause and post-mortem analyses around security incidents and service interruptions.
- Deployed and hosted the application on AWS using Ops Works, automated single click deployment onto AWS using Chef.
- Bash and Python (included Boto3) to supplement automation provided by Ansible and Terraform for tasks such as encrypting EBS volumes backing AMIs and scheduling Lambda functions for routine AWS tasks.
- Collaborate with developers and architects to refine build, test, and release practices across the organization.
- Implement Knowledge of Agile process & setting up of full- fledged DevOps culture for legacy distributed model.

> Support production systems outside of standard working hours by periodically volunteering to be on call 24/7 to help with production issues.

Certifications

> Certified Kubernetes Administrator
> Certified Kubernetes Application Developer
> Certified AWS Developer

Technical Skills

Operating Systems	Ubuntu, UNIX, Amazon LINUX, RHEL 5/6/7, CentOS, SE Linux, Windows
Languages	C, SQL, Python 2.7/3, Java, AWS CLI/SDK
Scripting	Shell, Perl, Powershell, Zsh, Bash, Jython and Python
Version Control / Tracking	Git, Subversion, TFS, JIRA, ServiceNow, Siemens Polarion
Build Tools	Apache MAVEN, Ant, Django Ecosystem
CI/CD Tools	Gitlab, Jenkins, Jenkins Plugins, AWS Code Pipeline, AWS Code Deploy, Spinnaker
Repositories	AWS ECR, Docker hub, Nexus, Artifactory, Snowflake
CM/Iac Tools	Ansible-Playbooks, Roles; AWS SSM, AWS-Cloud Formation Templates, Terraform
Cloud Technologies	AWS, EC2, S3, AWS-Lambda, RDS, IAM, Elastic Beanstalk, API gateway, Hashicorp Vault
Container Services	Docker, Podman
Container Orchestration:	Kubernetes (EKS, GKE, Kops, Rancher),
Monitoring tools	AWS – CloudWatch and X-Ray, CloudTrail, Dynatrace, Promotheus, EFK
Web servers	Apache HTTPD, NGINX, Web Logic, Apache Tomcat, Web Sphere and JBOSS, IIS
Databases	MySQL, PostgreSQL, Snowflake, NoSQL - Dynamo DB

Professional Experience:

Bioclinica (now Clario), New Jersey, USA (Mar2021 – Till date)
Role: Sr DevOps Engineer/Architect

- Architecting Software Systems with High Performance, Scalability, Availability and Security using modern technologies.
- Setup full CI/CD pipelines so that each commit a developer makes will go through standard process of software lifecycle and gets tested well enough before it can make it to the production.
- Design, build and manage infrastructure in compliance to HIPAA/GDPR Regulations and assist with quarterly audits
- Extensively worked on GitLab to implement Continuous Integration (CI) and Continuous Deployments (CD) processes. Deployed and managed GitLab runners and KAS
- Created RabbitMQ clusters with terraform and Ansible
- Created and deployed MongoDB and Redis clusters in K8s.
- Experience in excerpting metrics and results from CI/CD security tools
- Planning the team structure, activities, and involvement in project management activities.
- Created automated dynamic CICD pipeline and helm templates so that the developers from many teams can use the same template in their workflows for both on-premise and cloud.
- Create infrastructure in AWS using terraform as per project requirements.
- Hands on implementing and troubleshooting features such as ingress, autoscaling, pod security policies, network policy, loadbalancing resource requirements, rolling updates, livenessprobes, readinessprobes, volumeclaims, RBAC etc. along with all the other k8s resources.
- Used Terraform for cloud Automation like setting up the target environment which comprises of VPC's, Subnet's, Security Group's for the migrated server's to be launched.
- Setting up the build and deployment automation for Terraform scripts using GitLab.
- Involved in daily Scrum meetings. Also involved in Iteration/Sprint planning meeting to plan the efforts for upcoming sprint based on the priority and estimated effort.
- Participated in weekly release/Environment meetings with Technology stakeholders to identify and mitigate potential risks associated with the releases.

- Integrated Kafka source to read the payment confirmation messages.
- Developed Shell/Python scripts to automate the deployment process.
- Launching Amazon EC2 Cloud Instances using Amazon Images (Linux/ Ubuntu) and Configuring launched instances with respect to specific applications.
- Worked on building and deploying Java code through Jenkins, used Jenkins Amazon Web Services (AWS) Code Deploy plug-in to deploy to AWS and worked AWS Cloud management.
- Implemented custom procedures to unify streamline and automate application development and deployment process with Linux container technology using Docker.
- Ability to write deployment, build scripts and automated solutions using bash shell.
- Actively manage, improve, and monitor cloud infrastructure on AWS, EC2, S3, and RDS, including backups, patches, and scaling.
- Configured AWS lambda function to automatically backup/delete AMIs.
- Centralize cloud trail log files from multiple accounts, multiple regions to SecOps account.
- Monitoring infrastructure using Dynatrace and OMD (checkMK).

Environment: Java/J2EE, GIT, AWS Services, Kubernetes 1.21 with NGINX Ingress, Docker, Selenium, RabbitMQ, bash, Rancher v2.6, GitLab EE 15.9, MetalLB 0.12(for On-premises), HA Proxy

Airbus-Americas, AL, USA (Jul 2013 – Dec 2020)
Role: Sr System Engineer (Contract through Adventa Corporation)

- Reduced deployment time for projects from ~15 days to few hours.
- Automated the Docker Images creation from Docker files and deployed the Docker containers in Kubernetes.
- Setup Continuous-Deployment pipelines that deploy Java/Python/CAD applications in Kubernetes cluster Dev Environment.
- Automated installing and scaling Kubernetes on bare metal using bash scripts.
- Worked with Docker containers and Kubernetes on AWS cloud, helped to bridge the gap between developers and operations by providing the same environment with the help of Docker and Kubernetes.
- Utilized Kubernetes (with federation) as a platform to provide a platform for automating deployments, scaling and operation of application containers across a cluster of hosts.
- Managed deployment of micro-services using Kubernetes, Docker and Helm charts for service mesh to create and configure production environment.
- Implemented a Continuous Delivery pipeline with Docker, Jenkins and bitbucket and AWS AMI's.
- Migrated Linux environment to AWS by creating and executing a migration plan, deployed EC2 instances, lambda functions in VPC, configured security groups &NACL's, attached profiles and roles using AWS Cloud Formation templates and Ansible modules.
- Managed different infrastructure resources, like physical machines, VMs and Docker containers using Terraform. It supports different Cloud service providers like AWS and GCP.
- Created clusters of instances running on Kubernetes and pushing them into Google Cloud using Jenkins and deploying them into hosting environments using GCP Containers as a Service (CAAS).
- Created and configured AWS EC2 instances using preconfigured templates such as AMI, RHEL, Centos, Ubuntu as well as used corporate based VM images which includes complete packages to run build and test in those EC2 Instances.
- Experience in alert handling, standard availability and performance report generation. Experience in root cause analysis of post-production performance related issues through prometheus tool. Setup Alert manger and monitored all the servers and hosts to maintained accurate update on Grafana Dashboard.
- Integrated Jenkins with various DevOps tools such as Jfrog, SonarQube and used CI/CD system of Jenkins on Kubernetes container environment, utilizing Kubernetes and Docker for the runtime environment for the CI/CD system to build and test and deploy.
- Built Jenkins jobs to create AWS infrastructure from GitHub repos containing Terraform code and administered/engineered Jenkins for managing weekly builds.
- Owning the Activity of Upgrading, administering, plug-in management, and User Management and Job creation in Jenkins.
- Created notification using SNS AND SQS for data uploading and downloading to S3 buckets when they are making API calls.
- Launched AWSEC2 Cloud Instances using Amazon Web Services (Linux/ Ubuntu/RHEL) and Configured launched instances with respect to specific applications. Created Snapshots and Amazon Machine Images (AMI's) of EC2 Instance.
- Used Terraform for cloud Automation like setting up the target environment which comprises of VPC's, Subnet's, Security Group's for the migrated server's to be launched.
- Configured Prometheus as metrics and monitoring tool for application.
- Automating the whole infrastructure (IAAC) by using terraform scripts.

- Responsible for installation and upgrade of patches and packages using RPM &YUM.
- Maintained DNS records using Route53. Used AWSRoute53 to manage DNS zones and give public DNS names to elastic load balancers IP's.
- Used build tools like MAVEN for the building of deployable artifacts such as .war &ear from source code. Created and maintained Ant script's and Maven script's for performing the build procedures.
- Created a Continuous Delivery process to include support building of Docker Images and publish into a private repository- Nexus v3.
- Installed and configured Nexus repository manager for sharing artifacts between internal teams and created proxy Nexus repositories to speed up the build process.
- Using Shell and Bash I was able to develop scripts to automate most of our day to day processes that allowed for more time to be spent on developing new and improved ways of meeting the needs of our clients.
- Maintaining SQL databases, Cassandra, MongoDB and NoSQL solutions and working on replication of these databases across multiple datacenters.
- Provided timely support to Integration, Middleware, Development teams for issues related to system and resolved the issues.
- Worked closely with product owner, developers and other stack holders for faster software cycle release.

Environment: Redhat Linux 6/7/Solaris 11, Java, Python, AWS(EC2,VPC,S3,EKS, Route 53,ElasticLoadBalancer,SSM), GIT, Jenkins, Maven, Terraform, Kubernetes 1.6/1.9,Docker1.10/17.03, Cassendra, Spinnaker, Prometheus, Tomcat.

United Health Group, Raleigh, NC   (Nov 2012 – Jun 2013)
Role: Devops engineer (through Najsoft Inc)

- Introducing and implementing Continuous Integration principles and practices for the Billing Development Team using Jenkins & JNLP Nodes, Subversion, VMWare, ClearQuest, JUnit, DBFit, Atlassian JIRA.
- Part of a 10-person team that developed a CI/CD pipeline and cut software release times by 50%.
- Developing automated process for builds and deployments; Jenkins, Ant, Maven, SonarQube, Nexus, Shell Script, Perl, Java.
- Creating and managing Development and Continuous Integration Environments using VMWare ESX, automated through Jenkins using PXE boot, Perl and the VM Ware CLI, also involved in several projects setting up builds using Foreman.
- System and User Administration – responsible for the maintenance of DHCP, DNS, LDAP, AD and NFS services on Windows and Red Hat Enterprise Linux in Development environments.
- Automating the installation, deployment and maintenance of Middleware Application Servers to RHEL Development and Test Environments on VMWare ESX.
- Creating bespoke tools to support and enable Continuous Integration, Continuous Deployment and system monitoring/reporting; using JSP and Shell Scripts with a MySQL database, harvesting data from various sources and API's (Spark, Remedy, ClearQuest etc) to provide consolidated and automated live reports.
- Created a strategic architectural design of the platform with networking (vLANs, firewalls, load balancers), hypervisors (KVM and VMware), workflow and orchestration (APIs, Smart Cloud Orchestrator), security (keystone, LDAP), Inventory and monitoring, licensing, backup/restore.
- Developed systems to enable baselining and tracking of different types of Reference Data; automated the creation and labelling and adding to version control, then set up push-button deployments from Subversion to Oracle Databases via Jenkins and JNLP Nodes, with full auditing and user authentication and authorization provided by the corporate Active Directory.

Environment: Jenkins, Subversion, Continuous Integration, Agile, Maven, Nexus, Ant, Java, Nagios, Solaris, RHEL Linux, VM Ware

Hamburger Sparkasse AG-Hamburg, Germany   (Jan 2010 – May 2012)
Role: Python developer (through P3 Group, Hamburg Germany)

- Re-engineered various modules for implementing changes and creating efficient system.
- Worked with the Stakeholders, gathered requirements developed High level design Detail design documents.
- Gathering requirements and translating the Business details into Technical design.
- Performed troubleshooting, fixed and deployed many Python bug fixes of the two main applications that were a main source of data for both customers and internal customer service team.
- Used JIRA for Bug tracking and issue tracking and Used GIT version control and deployed project.
- Setup Continuous integration and Continuous Delivery (CI/CD) pipeline. This primarily consists of a Hudson and Sonar server, the infrastructure to run these packages and various supporting software components.

- Develops Python scripts to get data and contents from websites for clients to analyze and reuse.
- Exposure on Multi-Threading factory to distribute learning process back-testing and into various worker processes.
- Skilled in using Collections in Python for manipulating and looping through different user defined objects.
- Created PowerShell bash scripts to automate recurring tasks which helped provide efficiency in time spend working on tasks.
- Developed scripts for timing, efficiency, and comparison with garbled circuits in Python and Bash.
- Coding automation scripts in BASH and Python, to drastically reduce testing time.
- Worked in development of applications especially in UNIX environment and familiar with all its commands.
- Built various graphs for business decision making using Python matplotlib library.
- Maintained program libraries, users' manuals and technical documentation.
- Built python framework to transform Datasets and Data tables into HTTP-serializable JSON strings.
- Worked on writing the code and implementing to retrieve data from NoSQL stores.
- Compare the trade-offs between SQL and NoSQL.
- Experience working with Django framework.
- Using Django evolution and manual SQL modifications was able to modify Django modules while retaining all data, while site was in production mode.
- Implemented REST APIs using Python and Django framework.
- Knowledge working in Java APIs to build multi-threaded server-side components for large-scale web and standalone applications.
- Created Test script in Python/Unix from automation and Ran the Test and validated results.
- Work with feature engineers to reproduce and troubleshoot defects found in the system. Participate in root cause analysis of hardware quality problems and software defects. Clearly document software defects encountered during the testing process.
- Did Peer reviews of the Design and Source Code.
- Implemented automation script using Crontab in python to run the tasks.
- Worked in Agile and scrum environment which includes daily standup and sprint planning.

Environment: Python 2.6/2.7, shell scripting, Hudson, Ansible, RESTful, Linux, Git, Jira, Confluence, Ubuntu, PyCharm, Pylint, PEP-8, Django 1.3, RabbitMQ

Hapag-Lloyd AG-Hamburg, Germany (Aug 2008 – Nov 2009)
Role: Build and release engineer (through P3 Group, Hamburg Germany)

- For New applications, work with development to get the requirements of application build and deployment instructions.
- Maintaining the source code in SVN for various applications.
- Created the Branching Strategy for the parallel development.
- Creating pre commit hooks & post commit hooks for SVN to control the svn access.
- Develop and configure of Continuous Integration (CI) scripts for releases and Enhancing/Maintaining to suite the request from teams across the organization.
- Configure the setup of every release by weekly and monthly on the regular basis for product teams to perform integration testing.
- Perform smoke/sanity tests for the applications deployed and also troubleshoot the application for the issues that arise as part of the smoke test process.
- Monitor health, disk space and optimize performance.
- Configuration Management using Subversion.
- Merging and tagging need to be done after the code went live in environment
- Maintain a Live Like environment to test any production issues on the setup and push it into production.
- Get the knowledge of architecture of all the applications to help trouble shoot any issues for each applications.

Environment: ANT, Subversion, Shell Scripting, RHEL 4.x

Robert Bosch GmbH – Stuttgart, Germany (Feb 2006 – July 2008)
Role: Unix/Linux Administrator (through Satyam Computers)

- Managed AIX server's backups, restores and general system administration.
- Handled user and client security and access on AIX and Linux servers for remote access.
- Wrote Perl and shell scripts for data mining and data integration solutions to reduce labor force and data entry.
- Maintained multiple Oracle databases with an Apache/Tomcat web front end.
- Using Shell and Perl I was able to develop scripts to automate most of our day to day processes that allowed for more time to be spent on developing new and improved ways of meeting the needs of our clients.
- Used to track the tickets in Remedy ticketing tool.
- Implemented new EDI standards and new mapping functionality to handle more in depth requirements.
- Assisted in planning and testing new applications and operating systems
- Setup of Environments and Networks
- Installation of Linux, Unix and Windows Servers
- Administration of Linux, Unix and Windows Application Servers
- Supported Linux Oracle Servers in Terms of Troubleshooting and General Maintenance
- Scripting on Linux, Unix and Windows Servers
- Installation of Linux servers for Web Serving, File Sharing, Database, and Subversion
- Maintenance of a Linux Firewall System
- Management of Internal Systems and Hosted Systems.

Environment: Red Hat Linux 3/4, SUSE 10, VMware ESXi 3.x, OracleWeblogicServer 9.2, Web/Application Server Apache 2.4,Remedytool.

Education:

Master of Science in Mechatronics at Hamburg University of Technology - **Hamburg, Germany** (Modules: Computer Programming on Linux systems, Robotics, Instrumentation & Sensor technologies).

Bachelors in Engineering at Jawaharlal Nehru Technological University, Hyderabad, India (Modules: Mathematics, Computer Systems, RDBMS, Production Technology).