Roles & Responsibilities

Build & Release/Devops Engineer

Daily Activities

→ StandUp Meeting - 15 mins
What you done yesterday and what you going to do today.
Share to team if you faceing any challenges.
→ Work on POC,User Stories.
→ Giving Demo to different clients on CI/CD pipelines to start DevOps services.
→ Attended various trainings on GIT, Ant, Maven, and Jenkins to create DevOps POC's.
→ Documenting all the Build and deployment related issues
→ Participate in a various meetings and status calls including project meetings, Troubleshooting Issues.
→ Communicating with development team for Build plan and Build failures.
→ EOD update the Tasks in ALM (Jira,TFS ,HP ALM...)

Sprint Mgmt

→ Every 2 Weeks one sprint
→ Every 2 sprints one person will be scrum master
→ Scrum master create a Sprint
→ Send Status Meeting Report to manager
→ Bourn Down Report Generate send to manager
→ End of the Sprint have a Retrospective meeting what went well and what the things pending taking the action for that.

CI Activities

→ Creating Automated job
-- configure a new job with newly created branch
-- continuous builds
-- Post build sending email to respective stakeholders
→ Creating CI/CD pipelines by integrating GitHub, maven, Jenkins, Chef.
→ Creating Manual Job
→ Updates on CI plug-in
→ Installing Plug-in in Jenkins as per project requirements.
→ Configuring Slaves in Jenkins.
→ Monitor the health of your project with night builds
-- Every day check the build statuses
-- Email Notifications

→ Troubleshoot compile and build failures and facilitate resolution.
→ Coordinating with the Development team to fix the Build related issues.
→ create Nightly Builds to check sanity of our code.
→ Implemented release management processes which reduced manual mistakes, and the faster rollback of golden build releases in case of emergency
→ Communicating with development team for Build plan and Build failures.
→ Integrated Jenkins with different code quality analysis and Review tools like Sonarqube, Jacoco.
→ Integrate jenkins with nexus for artifactory management.
→ Implemented multi-parallel jobs in Jenkins which does CI, packaging, Sonar job and deployment job to different environments such as DEV, TEST and PROD

Environment Mgmt

→ Setup dev,test,uat and production environments.

Dev Env
dev server 1
dev server 2
dev server 3

QA Env
qa server 1
qa server 2
qa server 3

UAT Env
uat server 1
uat server 2
uat server 3

→ For every project have 3/4 environments.
→ For every environment have minimum 2-4 servers.

SCM Activities

→ create branch for new release
→ Branching, Tagging, Release Activities
→ Backup servers in Non working Hours

Other Tool Activities

→ Installed and Configured Nexus repository for all Snapshot and Release versions.
→ Installed MYSQL and configured database schemas for SonarQube 6.0.

Release Cycle

Every 2 weeks have QA Release
Every 4 weeks have UAT Release
Every 2 months have PROD Release

NOTE:
To release the code to qa testing environment we will create release branch and create the tag from release branch. Once it's released delete the release branch.
we will deploy to released artifacts into testing environments.i.e deploying application qa environment.

Your testing environments can be anywhere
Can be OnPremise - Linux VMS
Can be Cloud Instances - Ec2 instance
Can be docker containers

QA/UAT builds

Release plan is for 3 months then

→ 12 builds in QA
To test functional bugs (with dummy data)
→ 3 builds for UAT
To Testing functionality with prod data

Activities while doing builds

Ex: At 12:00pm : the build starts

→ Open Build Server (win/linux)
→ Checkout codebase from branch
→ Trigger Ant/maven build scripts
→ Stop services
→ Backup the existing artifacts
→ Deployment of your current artifacts

→ Start the services
→ smoke testing /sanity testing

Script related Activities:

→ Writing/modifying shell scripts to stop/start WebLogic/tomcat/websphere servers.
→ Written/modifying shell scripts to deploy into WebLogic/tomcat/websphere servers.
→ Writing/modifying shell scripts for daily database backup.

Challenges while doing Builds

→ SVN/GIT is going down
-- checkout Fails(by another user locker the file)
→ Ant/maven
-- compilation errors(by dev team)
→ Stopping servers
-- server not reachable/ not able to stop the service Http status codes 404,503
→ Backup time
-- Disk space issues
→ Deployment
-- permission issues/connectivity issues
-- App loading will failure
-- server listener issues
-- Framework issues

AWS Sysops/Devops Engineer

→ Setting up dev,test,uat and production environments on cloud.
→ Troubleshooting EC2 related to network,firewall and performance issues.
→ Created the roles and groups for users and resources using AWS Identity Access Management (IAM).
→ Provided highly durable and available data by using S3 data store, versioning, lifecycle policies.
→ Created AMIs for critical production servers for backup.
→ Given support for all other AWS products such as Autoscalling,S3, RDS, Elastic Load Balancing, and Route53 (DNS)
→ Writing/modifying CloudFormation/terraform scripts automate the provisioning of aws resources like IAM,EC2,Route 53,RDS,ELB and Autoscaling.
→ Created deployment process using code pipeline and Elastic Beanstalk..
→ Using Cloud Watch monitoring resources such as
EC2,

CPU memory,
Amazon RDS DB services,
Dynamo DB tables,
EBS volumes;
To set alarms for notification or automated actions;
To monitor logs for a better understanding and operation of the system.

→ Installing patches and packages on ec2 instances.
→ Configured the SNS notification when instances are stopping.
→ Configuring awslogs for application servers.