**Devops Intro:**

* Overall, I have 10years of experience in the IT industry. So, Initially I started my career as a **Developer** and then moved into **System administrator.** And now for the past few years I have been working as a **cloud automation engineer.**
* I have been exposed to multiple **DevOps** tools, let’s say For **Source code Repository**, I have been using **GitHub**, **Gitlab**, **Bit-Bucket**, etc.
* Coming to **Build Tools,** I have used **ANT, Maven** for **java**-based applications and **Nugget** for **.net** based applications.
* For configuration and management I have been using **ansible, puppet and also chef .**
* For Artifacts management I have using **Nexus** and **JFROG**
* For **code quality** we used **SonarQube** and for code security we are using **IBM checkmark** and **Fortify**
* We are also using **Service now** for change management and production releases.
* I am also having hands on cloud experience like **AWS**, **Azure**, **GCP** as well.

Coming to tools side

For monitoring and alerting, Been using prometheus, grafana, alert manager and datadog and nagios

For incident management and collaboration, am using Pager duty and servicenow and slack etc.

For Automation and infrastructure as a code , am using Ansible, Terraform and K8s for container orchestration etc

For logging and analytics, am using splunk and elastic search etc For ci/cd , have been exposed to Jenkins, gitlab, github etc.

**Daily job duties:**

**Devops:**:

1. We used to create cicd pipelines in Jenkins and gitlab .
2. We create and modify cloud resources infrastructure using iac -terraform based on need.
3. We create K8s clusters across all env and help development teams to deploy their micro services into it.
4. In my recent project tenable, I used to write several ansible playbooks for the automation like you know the tasks which are defined in YAML Format.
5. Involves with issues resolutions and troubleshooting with vendors and dev and server/network teams with on going issues
6. involves in capacity planning sessions to optimize resource usage and reduce cloud cast
7. As part of on-call, will support all prod and non prod issues.

**Recent issues:**

* **In one project, we encountered a performance issue with a highly scalable application running on managed Kubernetes clusters. Through monitoring and analysis, we identified that the issue was related to insufficient resource allocation. We resolved it by scaling up the cluster nodes, optimizing resource limits, and implementing horizontal pod autoscaling based on custom metrics.**
* **When we had a vulnerability recently, our applications got affected, immediately we got a new version and applied across all our environments using runbooks.**

**Recent automation:**

1. **Initially we were using bash/python to create infrastructure, we moved to terraform, so we created all resources in cloud using modules**
2. **Created ansible playbooks for configuration management activities like installed softwares and packages using it.**

**Devops Use case:**

**As we had a lot of traditional based applications using tightly coupled approaches, due to it we are using a lot of resources and cost became so high, so we thought of creating microservices using 12 factor principles and follow agile methodology to release it faster, so we decided to form a shared devops team and help all dev teams across organization.**

**We are part of the global digital devops team where we build templates for all programming languages and we also versioning those and manage in gitlab and constantly upgrade to newer versions to work with applications.**