What Is DevOps?

The consensus regarding the definition of DevOps is that it is a process that unifies the roles of software **DEV**elopment and IT **OP**eration**S**.

DevOps is a software deployment strategy with bridges the gap between the developers and the operations teams. The DevOps practices work to automate and integrate software development and IT teams, which enables them to build, test, and release software swiftly and reliably.

What Is Azure DevOps?

Azure DevOps is a Software as a service (SaaS) by Microsoft which provides DevOps toolchain for developing and deploying software.

It not only provides its own tools but also integrates with most of the leading tools on the market which cover the full development lifecycle. As a SaaS offering, Azure DevOps is reliable, scalable and globally available. It is also backed by an SLA of 99.9% uptime and by 24×7 support, and Azure DevOps users get access to the latest features.

Roles & Responsibilities As An Azure DevOps Engineer

DevOps Engineer is someone who has an understanding of the Software Development Lifecycle and if familiar with various automation tools for developing digital pipelines (CI/CD pipelines).

DevOps Engineer works with developers and the IT team to oversee the code releases. Many-times developers who get interested in deployment and network operations or sysadmins who have a passion for scripting and coding and move into the development side where they can improve the planning of test and deployment.

In DevOps, there is more scope for frequent changes in the code, which includes continuous automating, and deployment. It's not expected to write the code right from scratch but choosing the right combination of coding, how to integrate several elements of SQL data is important as a part of DevOps engineer role.



Objective Responsibilities Of DevOps Engineer

- Management: The role of the DevOps Manager involves coordinating the efforts of product design
 and development with the more business-oriented operations and production to achieve successful
 new product launches.
- **Design and Development:** Design and development of an organization's infrastructure is one of the key responsibilities of a DevOps Engineer, they also deploy automation which reduces risk management and uphold the infrastructure of the organization.
- **Collaboration and Support:** Extensive collaboration is required to yield good results. Everything ranging from technical analyses to deployment and monitoring is handled, with the focus to enhance overall system reliability and scalability.
- **Knowledge:** DevOps engineers have to stay on top of industry trends and best practices whilst recognizing opportunities for automation, design development, and other solutions in a comprehensive manner to boost operational efficiency.
- Versatile Duties: DevOps Engineers have to be adaptive to take on a variety of work.

Roles Of Azure DevOps Engineer

Designing DevOps Strategy

- Recommend a migration and consolidation strategy for DevOps tools
- Design and implement an Agile work management approach
- Make a quality strategy
- Design a secure development process
- Create a tool integration strategy

Implementing DevOps Development Processes

- Design a version control strategy
- Integrate source control
- Manage build infrastructure
- Implement code flow
- Implement a mobile DevOps strategy
- Managing application configuration and secrets

Implementing Continuous Integration

- Manage code quality and security policies
- Implement a container build strategy
- Implement a build strategy

Implementing Continuous Delivery

- Design a release strategy
- Set up a release management workflow
- Implement an appropriate deployment pattern

Implementing Dependency Management

- Design a dependency management strategy
- Manage security and compliance

Implementing Application Infrastructure

- Design an infrastructure and configuration management strategy
- Implement Infrastructure as Code (IaC)
- Manage Azure Kubernetes Service infrastructure
- Implement infrastructure compliance and security

Implementing Continuous Feedback

- Recommend and design system feedback mechanisms
- Implement a process for routing system feedback to development teams
- Optimize feedback mechanisms