

Assignment

Q1 Why is Devops a major requirement in Today's Scenario?

Ans → (1) Improve the Speed & Stability of Software Development & Deployment
⇒ It is found that top-performing Devops organization do far better on software. Due to development/deployment speed and stability at much faster rate which includes faster software releases, optimized process, enhanced trust and ability to resolve critical issues quickly - better serves to customers.

(2) They are Agile

⇒ Agile refers to the faster delivery of the product. It guarantees the problem are fixing at every stage or phases rather than finding problem after the ~~problem~~ product is launched. More products put in the market with utmost quality and security.

(3) Reduced Overall Costs

⇒ Implementing Devops methodology reduces overall operational costs and IT staff requirements due to better productivity from staff and optimal resource utilisation.

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Q Explain the DevOps tool in detail.

Ans → DevOps Tool is an application that helps automate the software development process. It mainly focuses on the communication & collaboration between product management, software development, and operations Profession.

1. Version Control Tool : Git (GitLab, GitHub, BitBucket)
⇒ Git is a distributed version control system for tracking of changes in computer files.
2. Build Tool : Kubernetes, Docker, Maven
⇒ These are important tools in DevOps for building projects. It eases the build and monitoring process through automation & maintains a uniform build process. Kubernetes & Docker are container platform.
3. CI/CD (Continuous Integration/Continuous Deployment)
Most popular software for CI/CD is Jenkins.
Jenkins is an open-source Java based automated CI server that supported by multiple OS. They can also be deployed on cloud based platform.
4. CM (Configuration Management Tool) : Ansible
It refers to the maintenance & control of the component of large complex system. Ansible is an open-source CM DevOps tool that is used for deployment, automation and maintenance. Other example includes Puppet & Chef.

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