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Devops Roadmap with free resources

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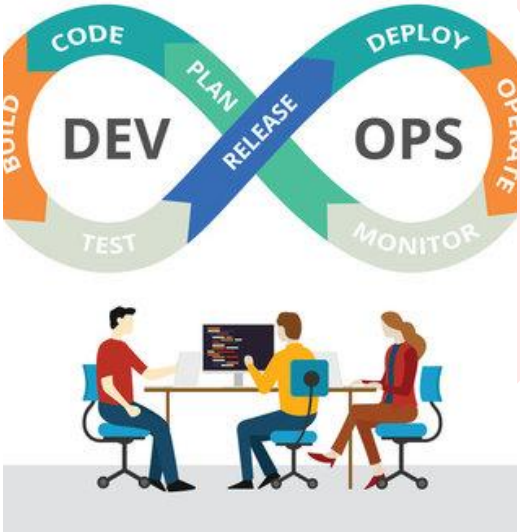
Devops Overview

DevOps, short for Development and Operations, is a set of practices that aim to improve collaboration and communication between the software development and IT operations teams within an organization. The goal of DevOps is to streamline the software delivery process, enabling teams to deliver high-quality software more quickly and efficiently. .



Details

Key principles and practices of DevOps include: Collaboration: DevOps emphasizes collaboration between development and operations teams, breaking down silos and fostering a culture of shared responsibility. Automation: Automation is a crucial aspect of DevOps. It involves automating repetitive tasks such as code builds, testing, and deployment to accelerate the software delivery pipeline and reduce the likelihood of errors. Continuous Integration (CI): CI involves automatically integrating code changes from multiple contributors into a shared repository. This is typically accompanied by automated build and test processes to catch and fix integration issues early in the development cycle. Continuous

Delivery (CD): CD extends CI by automatically deploying code changes to production or staging environments after successful integration and testing. This allows for a more rapid and reliable release process. Infrastructure as Code (IaC): IaC involves managing and provisioning infrastructure (such as servers, networks, and databases) through machine-readable script files. This helps ensure consistency and repeatability in infrastructure deployment. Monitoring and Logging: DevOps encourages the use of monitoring and logging tools to gain insights into the performance and health of applications and infrastructure. This facilitates proactive issue detection and resolution. Microservices: DevOps is often associated with the adoption of microservices architecture, where large applications are broken down into smaller, loosely coupled services that can be developed, deployed, and scaled independently. Feedback Loops: Continuous feedback is essential for improvement. DevOps promotes the establishment of feedback loops, allowing teams to learn from each deployment and make iterative improvements to the development and delivery processes. By embracing DevOps principles and practices, organizations can achieve faster release cycles, higher-quality software, and improved collaboration among cross-functional teams. The ultimate aim is to deliver value to end-users more efficiently and respond quickly to changing market demands.

COMPLETE DEVOPS TUTORIAL:

1. DevOps Pre-requisite

DevOps Prerequisites Course - Getting started with DevOps

2. Networking

Computer Networking Full Course - OSI Model Deep Dive From Expert.

3. Linux

https://youtu.be/sWbUDq4S6Y8?si=3q9sdI_0PQPI1uwZ

Introduction to Linux – Full Course for Beginners

4. Vagrant

https://youtube.com/playlist?list=PLhW3qG5bs-L9S272lwi9encQOL9nMOnRa&si=IEEAYwuWh-mcRQSb

5. Git & GitHub

https://youtube.com/playlist?list=PLLJ1hZKyeCH1I8dP0UNTpWoIhsl6KpVbu&si=rtxVw4UVQ0PS_M41

6. AWS

https://youtu.be/SOTamWNgDKc?si=2JMd8x84ESxrD8PG

7. Docker

https://youtube.com/playlist?list=PLbK0kCg6uU3AwrrKpvJ5p3dYBgBelN4NO&si=Ts6CUOPfkchdqYr_

8. Kubernetes

https://www.youtube.com/watch?v=Vjetwwgv36o

https://youtube.com/playlist?list=PLTCuRW0ikUdO_XzQtTNrvUAHAAuGeLXfY&si=IdPStGBhLhQY0UM-

9. Jenkins

https://www.youtube.com/live/QIhRgW7OhPY?si=wVjlzHqzqSUvSDAW

10. Putty

https://lnkd.in/gGgW7Ns9

11. Yaml

https://www.youtube.com/watch?v=ZuWgoMk7FQg

12. Terraform

https://youtu.be/SPcwo0Gq9T8?si=7AWQomICFwtpwfN7

13. Python

https://youtube.com/playlist?list=PLAdTNzDIZj_-3uxvcoF5bsx_MEHXSFgN5&si=Jk75zHdxccu_c8w-

14. Ansible

https://youtube.com/playlist?list=PLDhScTEBdP8zj2fpe_H3_R-mD9_-O3uXt&si=jjKeSrsLALB8rahB

15. Prometheus and Grafana

https://youtube.com/playlist?list=PLoVvAgF6geYNy12sJwYbNYdzNc6gkf8yf&si=G0e67Zn2ju9qxP9G

@ Connect for any help

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