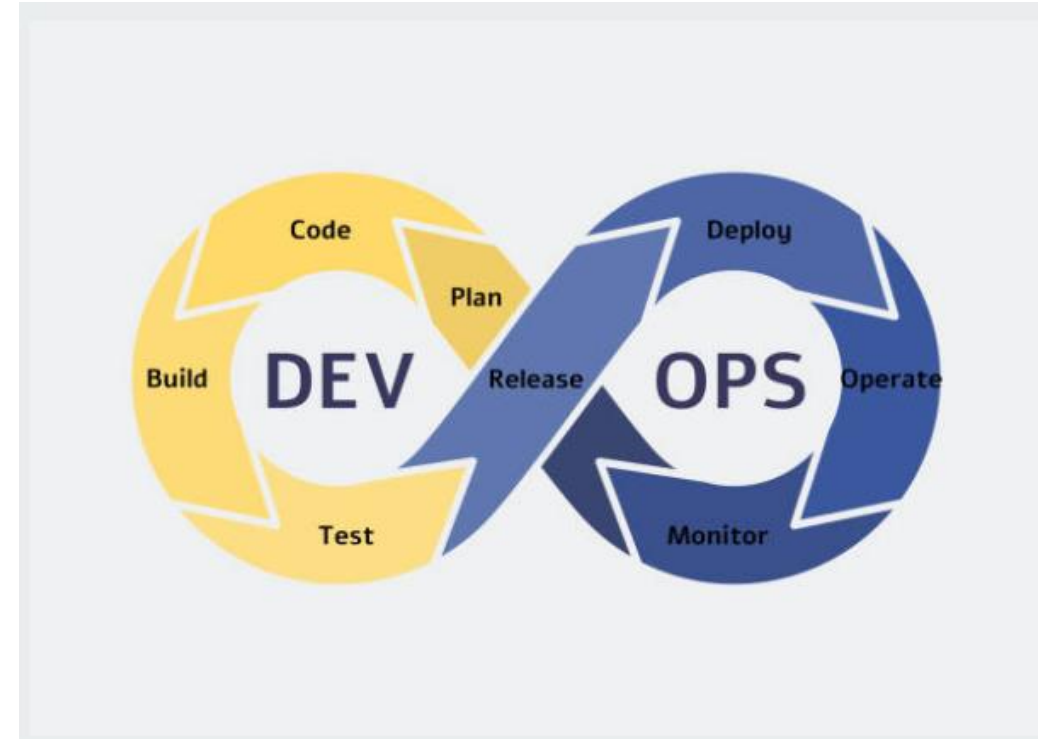


INTRODUCING DEVOPS FOR UDAPEOPLE



Introduction

DevOps is a software development approach that combines development (Dev) and operations (Ops) teams to streamline the software delivery process. It emphasizes collaboration, communication, and integration between these traditionally separate teams to improve efficiency and quality throughout the software development lifecycle.



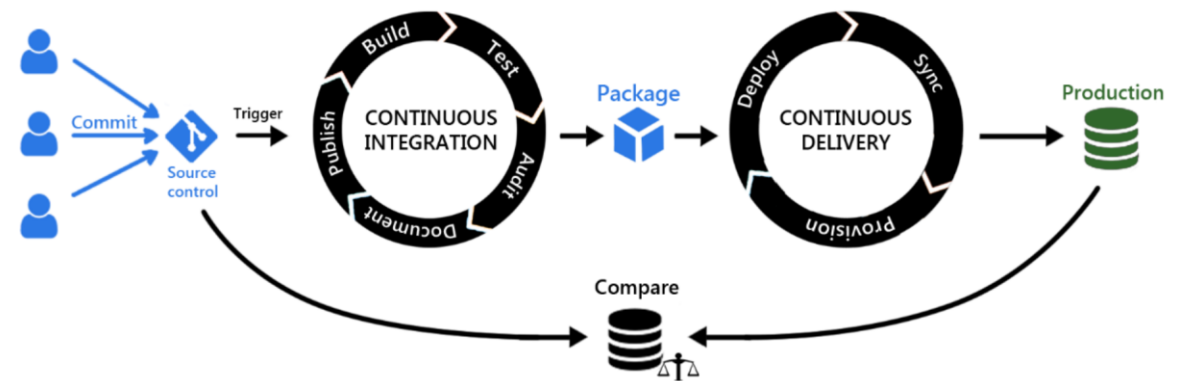
CI/CD: Streamlining Development and Deployment

Process

- Continuous Integration (CI): Frequent integration of code changes into a shared repository to detect issues early.
- Continuous Deployment (CD): Automated deployment of code to production environments after passing the necessary tests.

Benefit

- Faster time-to-market
- Early issue detection
- Increased development velocity



CI/CD: Benefits

Accelerated Time to Market

- CI/CD enables faster delivery of software updates and new features.
- By automating build, testing, and deployment processes, development teams can rapidly release updates, allowing businesses to respond quickly to market demands.
- This speed to market can result in increased revenue by capturing market opportunities before competitors do.

Improved Quality and Stability

- CI/CD emphasizes automated testing and validation at every stage of the software development lifecycle.
- This ensures that potential issues are caught early, reducing the likelihood of bugs, errors, and vulnerabilities in production.
- Higher software quality leads to improved customer satisfaction, increased customer retention, and protection of revenue by preventing costly downtime or customer losses due to software failures.

CI/CD: Benefits

Enhanced Collaboration and Efficiency

- CI/CD practices encourage close collaboration between development, operations, and other stakeholders.
- Teams can work together seamlessly, leading to improved communication, faster feedback loops, and reduced inefficiencies.
- This collaboration and efficiency can reduce costs associated with rework, delays, and miscommunication, resulting in cost savings for the business.

Mitigated Risks

- CI/CD promotes small, incremental changes to software, allowing for easier identification and resolution of issues.
- Minimizes the risk of large, risky deployments that could cause significant disruptions or failures.
- By reducing the probability and impact of failures, businesses can avoid costly downtime, service disruptions, or reputational damage, thereby protecting revenue and avoiding costs.

CI/CD: Benefits

Increased Scalability and Flexibility

- CI/CD enables businesses to scale their software delivery processes effectively.
- Automated infrastructure provisioning, deployment, and configuration management allow for rapid scaling of applications as demand grows.
- This scalability ensures that businesses can handle increased workloads efficiently, without incurring excessive infrastructure costs or service degradation.

Cost Savings in Development and Operations

- CI/CD practices automate repetitive tasks, such as building, testing, and deployment, which reduces manual effort and increases productivity.
- By automating these processes, businesses can streamline their development and operations workflows, resulting in reduced costs associated with labor, infrastructure, and maintenance.

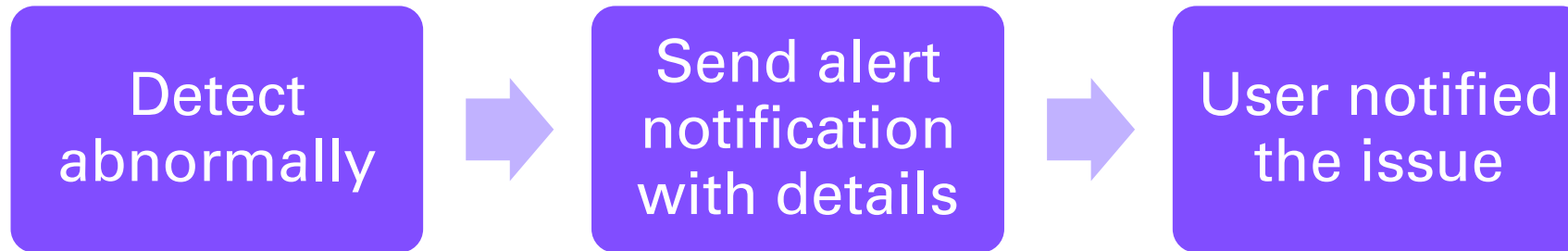
Automated Alerting: Proactive System Monitoring

Importance of monitoring

- Ensures proactive detection of performance issues, errors, and anomalies.
- Enables prompt resolution of critical incidents, reducing downtime and user/revenue impact.

Benefits of automated alerting

- Real-time visibility
- Increased reliability
- Efficient troubleshooting



PRESENTATION TITLE

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THANK YOU