



****This study guide is based on the video lesson available on TrainerTests.com****

Automation in DevOps Study Guide

Automating Processes

Automation involves using tools and scripts to perform tasks traditionally done manually. In DevOps, automation can be applied across various stages of the software development lifecycle:

- **Continuous Testing:** Automated tests are integrated throughout the coding process. These tests can identify bugs early and provide feedback to developers quickly.
- **Continuous Integration:** Code changes are automatically merged into a central repository frequently. This allows for early detection and resolution of integration issues.
- **Continuous Delivery:** Automated deployment pipelines can deliver new code versions to production environments efficiently.

Benefits of Automation in DevOps

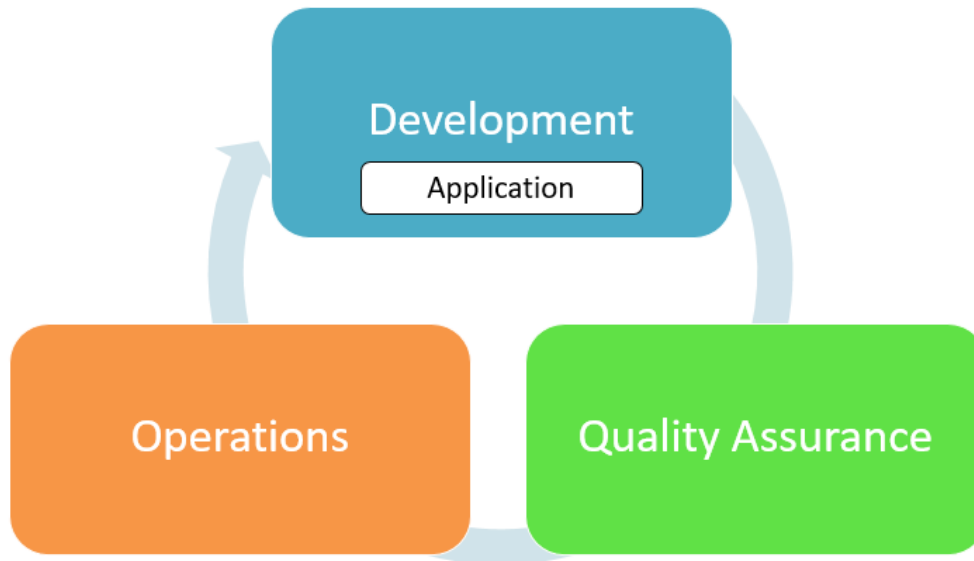
- **Faster Feedback Loops:** Automation reduces the time between code changes and feedback from testing or monitoring. This allows developers to fix issues promptly.
- **Reduced Context Switching:** By automating repetitive tasks, developers can focus on higher-level activities. They don't need to wait for manual handoffs between teams.
- **Improved Collaboration:** Shared automated processes foster better communication and collaboration between development and operations teams.
- **Increased Stability and Reliability:** Automated monitoring can proactively identify and address potential issues in production before they impact users.

Impact on Stakeholders

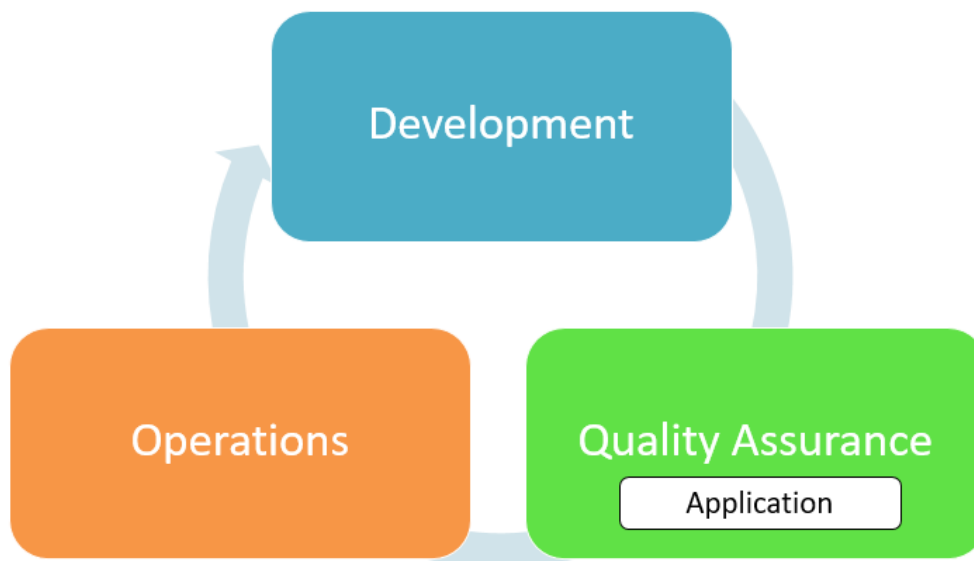
- **Development Teams:** Automation frees up developer time for creative work and reduces rework caused by late-stage bug discovery.
- **Operations Teams:** Automated deployments and monitoring reduce manual work and improve the efficiency of infrastructure management.
- **End Users:** Faster release cycles with fewer bugs lead to a more stable and reliable software experience.

*See slides below:

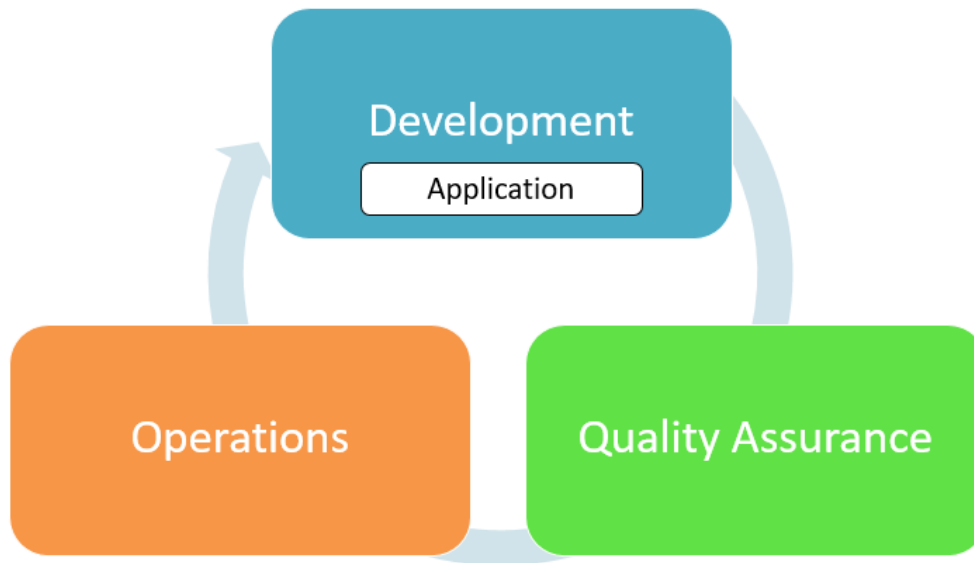
Automation



Automation



Automation



Impact

