
accenture technology
Agile University: Delivery School
Introduction to DevOps
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Strategy | Digital | Technology | Operations

Introduction to DevOps

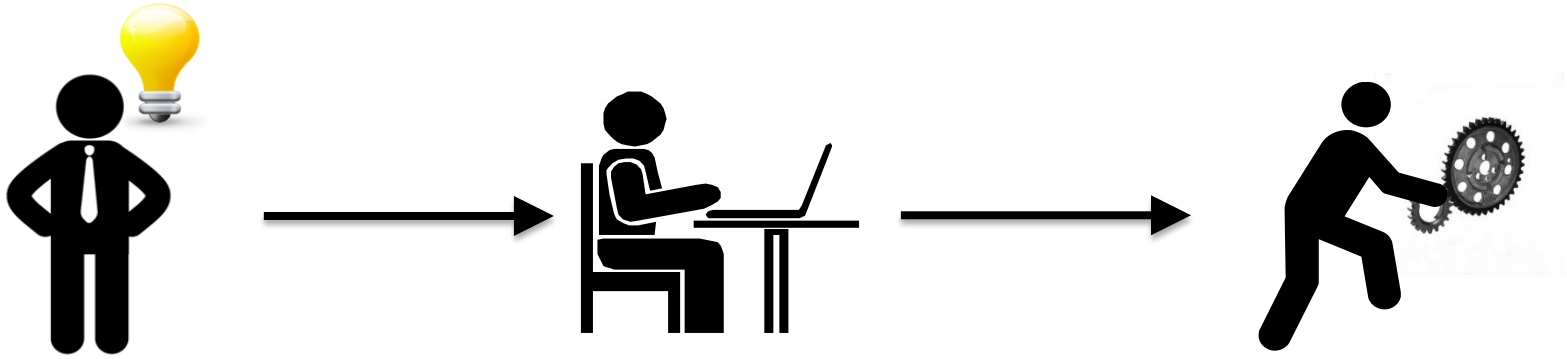
What is DevOps?

Latest trend in software development, which focuses on partnership between developers and operations staff coupled with automation tools, for an end to end streamlined**,** rapid, and repeatable release cycle.

End to end release = Conception + Development + Operations

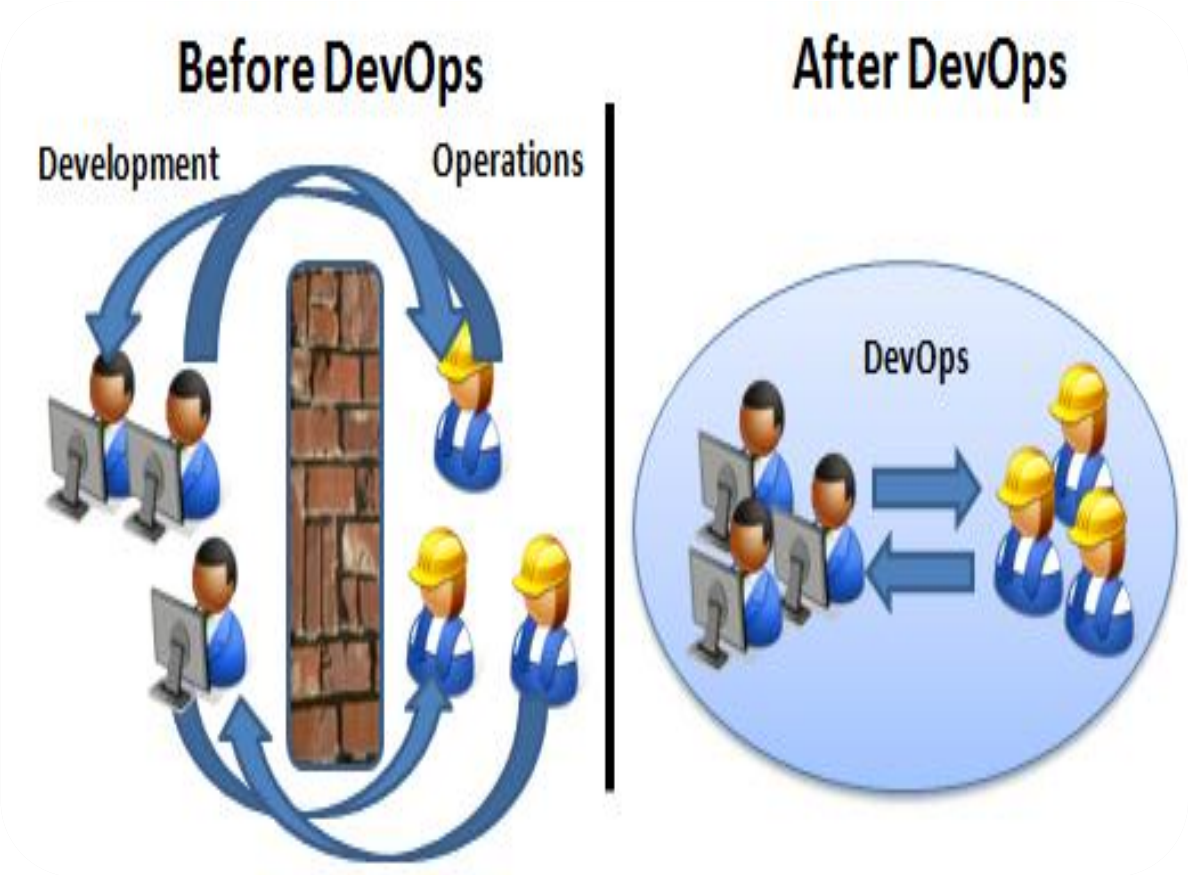
DevOps = Streamlined, rapid, repeatable process of end to end release

Business **Development** **Operations**



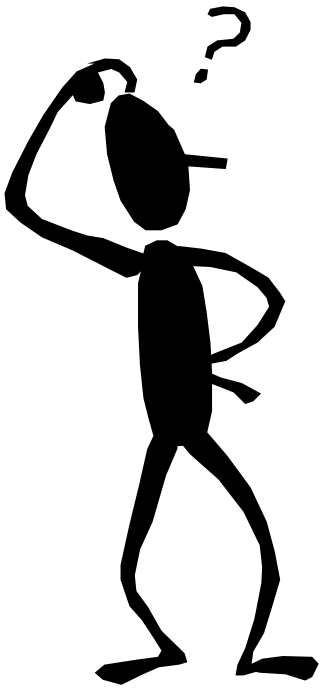
Introduction to DevOps

DevOps is a software development method that focuses on close collaboration between software development and operations teams (IT professionals), to optimize the whole IT process.



- **Traditionally separate teams exist for building software and its operations**
- **DevOps - breaks the separation**
- **To - help organizations rapidly produce and release software products and services**

Why?



Embracing Agile

- In order to deliver business value Agile enables organizations to move smaller changes into production
- Agile resolves disconnect between the “business” and “development team” but not operations team
- This disconnect slows down the organizations ability to realize business value

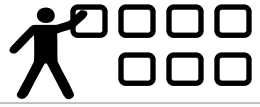
Moving to Cloud

- Development lifecycle does not end anymore with shipping software to customers
- SaaS based organizations as operators of service are required to meet complex SLA requirements

Complex Environments

- Increasing number of COTS software components making environments complex
- Operations team members required instead of developers to setup and maintain complex environments

The Principles

Cohesive Teams 	Strong collaboration between business, developers, testers and IT professionals required for smooth release of small and frequent changes.
Automate Everything 	Process of releasing software must be repeatable and reliable through automation of tasks involved in releasing the software.
Strong Source Control 	A strong version control process not only for code, but also configuration items.
Test Early & Often 	Environment configurations, infrastructure etc. must be tested early and often during the software life cycle.
Improve Continuously 	Teams must consistently evaluate and update their practices, processes, tools, environments, configurations and source

DevOps – Tool-set

- Infrastructure as a Service
  - Amazon Web Services
- Virtualization Platforms
  - Vagrant
- Configuration Management
  - Puppet Labs
  - Chef
  - CFEngine
- Change and Release Management
  - Electric Cloud

Agile DevOps:

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DevOps - Defined, Origins, Why, Implement, Approach, Success Stories & Client Discussions:

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Questions & Answers