

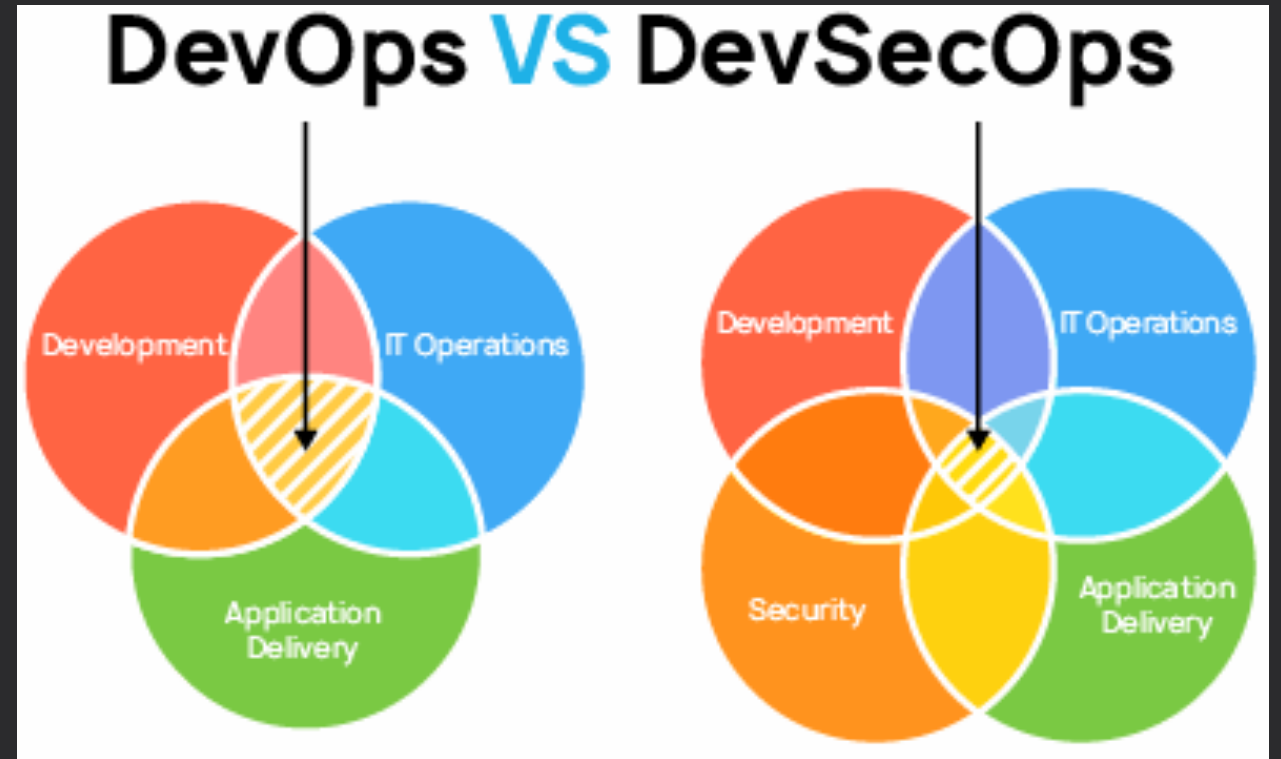
DevSecOps

What is DevSecOps?

DevSecOps is an approach to culture, automation, and platform design that integrates development, operations, and security as a shared responsibility throughout a product's lifecycle.

Build security into everything:

- Standardize and automate the environment
- Centralize user identity and access control capabilities
- Isolate containers running microservices from each other and the network
- Encrypt data between apps and services
- Introduce secure API gateways
- Automate security testing in the CI process
- Add automated tests for security capabilities into the acceptance test process
- Automate security updates, such as patches for known vulnerabilities
- Automate system and service configuration management capabilities



<https://pvs-studio.com/en/blog/posts/0710/>

GitOps

As specified by the CNCF

What is GitOps?

GitOps is a set of principles for operating and managing software systems. Under GitOps, the infrastructure and application state are fully represented by the contents of a Git repository. Thus, any changes to the Git repository are reflected in the corresponding state of the associated infrastructure and applications through automation. The [desired state](#) of a GitOps managed system must be:

- **Declarative**

A [system](#) managed by GitOps must have its desired state expressed [declaratively](#).

- **Versioned and Immutable**

Desired state is [stored](#) in a way that enforces immutability, versioning and retains a complete version history.

- **Pulled Automatically**

Software agents automatically pull the desired state declarations from the source.

- **Continuously Reconciled**

Software agents [continuously](#) observe actual system state and [attempt to apply](#) the desired state.

