

DevOps

Introduction to DevOps

DevOps is a software development methodology that integrates software development (*Dev*) and IT operations (*Ops*) to improve collaboration, automation, and efficiency in software delivery. The goal of DevOps is to shorten the development lifecycle and deliver high-quality software continuously.

Key Objectives of DevOps

- Faster and more frequent software releases
- Improved collaboration between development and operations teams
- Enhanced automation and monitoring
- Higher efficiency and reliability in deployment
- using the devops by automation using continuous integration and continuous deployment.
- In order to upgrade the versions is very easy with **devops**

DEVOPS TEAMS

- It uses the continuous integration and continuous deployment.
- **System admin** : maintain the server
- **build and releasing team** : to deploy the application to server
- **server admin** : check whether it needs to select the web applications / data application

DEV-OPS

Developers team + Operations team

Developers team : simple planning — code — built (format) — test

Operations team : continuously monitor the application — automation

Devops tools

1. VCS (version control system) : GIT , JERA
2. Continuous integration : jenkins
3. Continuous testing : automation using python
4. Continuous management and deployment : Ansible , puppet & chef
5. Continuous monitoring : Nagios
6. Containerisation : Docker, kubernetes