

SEPM Experiment-1.

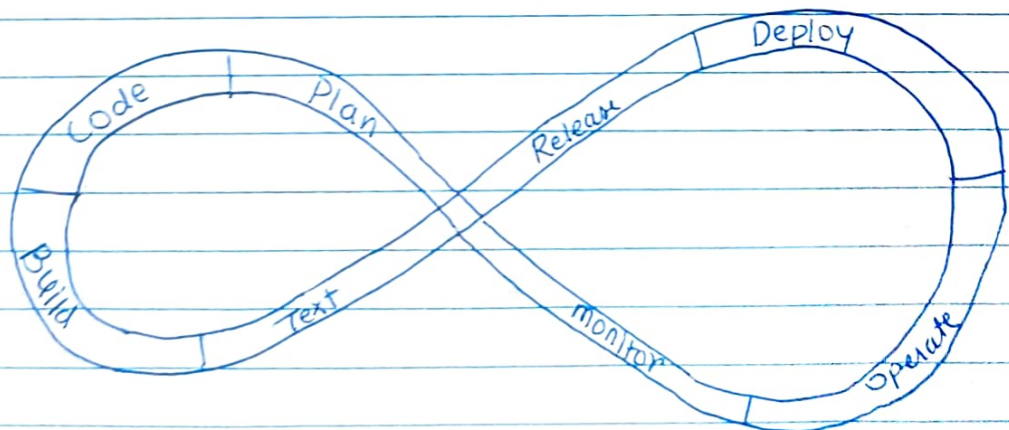
Aim: To understand Devops, principles, practises and devops roles and responsibilities.

Theory:

Definition:

- Devops is the combination of two words one is development and other is operations. It is culture to promote the development and operations process collectively.
- Devops helps to increase organisation speed to deliver applications and services. It also allows organisations to serve their customer better and complete more strongly in market.
- Devops can also be defined as sequence of development -nt IT operations with better communication and collaboration.
- Devops has become one of the most valuable business disciplines for enterprises and organisations.

Architecture -



1. Build:

Without devops the cost of consumption of resources was evaluated based on pre-defined individual usage with fixed hardware.

2. Code:

Many good practises such as git enables code to be used which ensures writing code for business helps to track changes getting notified about reason behind differences in the actual and the expected output.

3. Test:

The application will be ready for production after testing. In the case of manual testing it consumes more time in testing and moving the code to the output.

4. Plan

Devops use agile methodology to plan development with operations and development team in sync it helps in organising the work to plan accordingly to increase productivity.

5. Monitor

Continuous monitoring is used to identify any risk of failure. Also it helps in tracking system accurately so that health of application can be checked.

6. Deploy

Many systems can support the schedules for automated deployment. The cloud management platform enable users to capture accurate insights and view organisation scenario analytics on trends by deployment of dashboard.

7. Operate

Devops changes the traditional approach of developing and testing separately. The teams operate in a collaborative way where both team actively participate through service lifecycle. The operation team interacts with developers and they come up with monitoring plan.

8. Release

Development to an environment can be done by automation. But when deployment is made to production environment it is done by manual triggering.

Principles—

- Collaboration
- Data based decision making
- Customer centric decision making
- Automation
- Constant improvement.