

SEPM Experiment 1

AIM -

To understand DevOps, principles, Practices and DevOps values and responsibilities

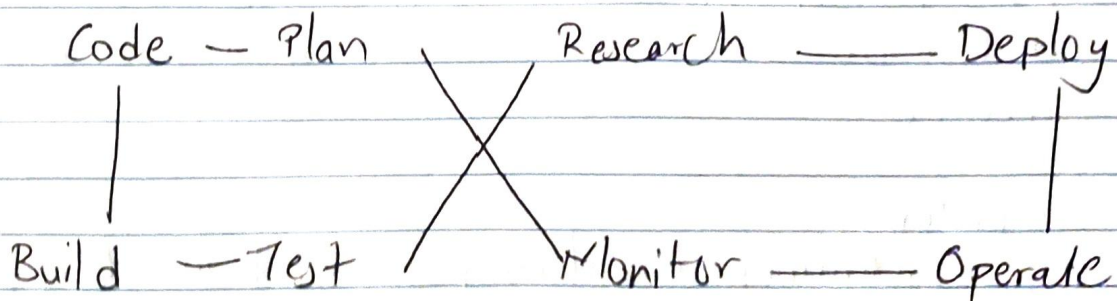
Theory

DevOps is a combination of two words, Development and Operations. It is a culture to promote the development and operation process collectively.

Helps increase the organization's speed to deliver applications and services. Also allows orgs to serve their customers better and compete more strongly in the market.

DevOps can also be defined as a sequence of development and IT operations, with better communication and collaboration.

DevOps has become one of the most valuable business disciplines for enterprises or organizations. With the help of DevOps, quality and speed of the application delivery has improved to a greater extent.



Build

Without devops the cost of consumption of the resources was evaluated based on the predefined individual ~~usage~~ usage with fixed hardware allocation.

Devops the usage of cloud sharing the resources come into the picture and the build is independent upon user needs which is a mechanism to control resources.

Code

Many good practices such as Git can enable the code to be used which ensures with writing the code for business, helps to track change, getting notified about the reason behind the difference in actual and expected code.

Test

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. The testing can be automated which decreases the time so that the time to deploy code can be reduced.

Monitor.

Continuous monitoring is used to identify any risk of failure. Also it helps in tracking the system accurately so that

Advantages

DevOps is an excellent approach for quick development and deployment of applications

Responds faster to the market changes to improve business growth.

~~Cost.~~

Escalate business profit by decreasing software delivery time and costs

Disadvantages

DevOps professional or expert developers are less available

Developing with DevOps is expensive
Adoption of new technology is hard

Deploy-

Many systems support the scheduler for automated deployment. The cloud management platform enables users to capture accurate insights and view the optimization scenario analytics on trends by the deployment of dashboards.

Operate

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

Release

Deployment to an environment can be done by automation. But when deployment is made to production environment, it is done by manual triggering. Many processes involved in release management commonly used to do the deployment.

Principle

Collaboration

Data Based Decision Making

Customer Centric Decision Making

Constant Improvement