Agenda:

1. What is Devops
2. CI CD

Developer:

1. Coding
2. Testing
3. package
4. coding

* write code
* compile
* test
* package [ war, jar, ear]

1. Operations:

Infrastructure creation:

1. Linux server creation
2. Package installation
3. Tomcat/apache/weblogic
4. Deployment

Manually.

Devops: Dev is developer and ops is operations

Devops :

The main goal of Devops is to automate the activities done by developer and operations

1. Software quality will improved
2. Deployment faster
3. Time to delivery to market will be less
4. Costing will be reduced

Facebook project

Rohan : feature1

Ravi: feature2

Manoj: feature3

Jwalasing: feature4

Facebook:

Feature1,feature2 , feature 3 ani feature4

1. Project requirement, Project management : JIRA
2. Coding : eclipse –java for .net – visual studio
3. Source code management/ version control system: svn, Git
4. Github, bitbucket: virtual hosting platform
5. Software building: maven
6. Repository: artifactory/ nexus
7. Deployment: udeploy/puppet/docker/chef
8. Automated testing: selenium
9. Continuous integration tool: Jenkins/teamcity

Product facebook:

Project requirement gathering: BA, PM

Coding : developers

Testing: test cases

Backup: nexus facebook.war, facebook.jar, facebook.ear

Infrastructure: creation of server

Middleware team: apache/tomcat

Deployment team: perform the deployment

Testing team: test the software developed by you

Monitoring team: will monitoring the application and infra

. development time is more

. software quality is not that good

. time to market is more

. cost is increased

Cron: \* \* \* \* \*

Code checkout -> compile -> test -> package -> upload to nexus ->deploy to DEV -> testing ->approval -> deploy to QA ->approval -> deploy to prod

1. CI –CD D deployment D: delivery

Static website: Continous deployment

Continuous integration : developer pushes their code on remote repository many times a day, once code available on remote repository it is build and tested by CI server and report error if any.

Continuous deployment

Continuous testing

Continuous monitoring : nagios

Devops:

1. Git
2. Github
3. Jenkins
4. Maven
5. Nexus
6. Docker
7. Udeploy

Software development process

:

Waterfall model:

Project requirement gathering -> planning -> implement -> deploy ->testing -> maintainance

Facebook: feature1, feature2, feature3 and feature4,feature5

1. Develop time was more
2. Difficult to implement new change
3. Time to market is more
4. Software quality was not good
5. Resource utilization was not proper

Agile methodology :

Is software development practise to develop software.

Incremental software development process.

Facebook:

feature1, feature2, feature3 and feature4,feature5

scrum team, scrum master, product owner

feature1, feature 2: 2 months

design -> Implement ->deploy

feature3 : 1 month

design -> Implement ->deploy

feature 4 ani 5 : 1 month