Devops Training Notes:

Devops is not a technology . it is not a new culture here development team and operation team will develop a product.

System admin: works in data centers

Devops roles:

Development includes Ad hoc, Build, compile source control debug operations continuous build environmental release.

QA includes: Performance, regression , automation.

A operation guy monitors the application if a error is reported fire fighting will look for bug and development team resolves it and production is done.

Developers role:

Application Code Version control Continuous delivery Pipeline Production stage



Build and Release: we have got bunch of tools

Role: writing a software and build, deploying.

Write a software, save the code and build the code.

Application Life cycle Management:

Design write code build source code Test Deploy Application



Build source code : C coding and J coding-------------- compilation.

In Windows ---- source code ---- compiler -----.exe

IDE: Integrated Development environment such as Intell EJ , Eclipse , Net beans.

.NET uses Visual studio.

Version Control: There are different Versions:

Git is command line tool which keeps the track of the files we use. Keeps the track of changes in the directory. It tracks the files or the project.

Commands:

git add

git status

git init

git - -help

Cat

Git config

Git commit -am “ message”

Git push

Git checkout -b “ “

CD sample\_maven

Git init

Git commit -am “ “

Git add

Git push

Username

Password

Git branch a

Git branch checkout -b “ branch creation”

Git checkout “ branch name” switching branches.

Git status

Vim pom.xml

Touch creates an empty file.

Master is the ultimate branch where the source code is present changes should come from master branch.

Website running on the version 1.2 so for next update developers edit new branch and commits and merges all the branches and commits new and builds the new version 1.3 and deploys and 1.3 version is created.

It makes the developers to work independently on a single project.

Bit Bucket: it is not for individuals and its not free need to purchase like enterprise software.

Git repositories have a folder with git folder.

Git is version control system.

Bamboo: SDLC: From code development with deployment with continuous delivery.

Jenkins : continuous Integration and continuous delivery of projects.

install git and create the repository.

Git: It tracks the changes in a file or project.

Git hub: open source repository system. Where you store your source code. Advantage is you won’t lose your source code.

It is used to store the code when the hard disc is failed

Suppose if you want to set up or develop an application. You can store all the application source code files at a location github where you can visit the repository and clone the repository through command line by command git clone url

Apache maven:

A tool is used to understand the language and automate build process in java projects.

It is a build automation tool

it is tool independent. Apache maven had folder SRC with main and test. Maven relies on POM.XML

maven complies all the java files in intial step and syntax verification is done.

Compiles java program

Compiles several java programs at one go.

Maven goal is the compilation

Rm

Rf

Mv(rename the file)

Mvn repository.

Maven creates .jar file which is executable.

Dependencies;

When java code needs an external help for compilation the dependencies serve them and help them for the process.

Some one else code are dependencies.

Jar files: a source code which written by some one and it is reusable source code.

Plugins are the way to extend the functionality of the maven

It enhances the functionality of the maven

Plugins are used to create jar files and war files to compile code.

Anything java requires which is externally shipped with language.

Contineous Integration :

Requirement gathering

SDLC

Conceptual design

Technical design

Developmental team

Writing code

Testing team test bug will be fixed by developers

Delivered to customers

Learn:

How to execute basic shell scripts.

Unix file system

Storage

System admin