Activities

requirement gathering - jira,rally,azure boards

analyzing requirement - jira,rally aure boards

code review - sonar/ whitesoure bolt/fxcop/resharper

test panning - microsoft test manager/jira (they help in test planning and creating test caeses )

compilation and packaging - creating a package that can be deployed like - ant/maven/gradle (for java)

testing - unit/integration/system/load

deployment - creating multiple environment

provisioning - create infrastructure

configuration management - ansible/puppet/chef

feedback -

STAKE HOLDERS IN DEVOPS

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po: product owner

scrum master

devs

QA team

BA

consultants

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there are certain solution that help to do all this ,

asure devops is a end to end set of tools that helps us to do end to end automation .

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There are lots of devops solution tools likes jenkins , teamct, gitlab, etc.

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JENKINS

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scope of jenkins is-

CI PIPELINE##

coding

code review

compilation

packaging

CD PIPELINE##

testing

deployment

provisioning : creating infrastructure

configuration management

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why should we use jenkins

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it is open source (as no cost involved)

it has plugins , it can work with all platforms python/java/ruby/.net/c++

it is flexible and transparent.

cons--

In general jenkins implementation may require additional efforts and time (example everything is already there in azure devops hence development is faster in azure devops)

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WHAT IS CI AND CD PIPELINE

Pipeline is a chain of activities or tasks and those tasks are executed one after the other

CI PIPELINE

continuous integration pipeline

Activities done in ci

1 pull source code (could be pulling java / python source code )

2 source code can be pulled from git /bitbucket/svn (so basically Jenkins provides the feature to pull code from various sources )

3 code analysis (Jenkins will analyze your code for best practices example let say you have a class where all the methods are static then you can make that class as static as well, similarly you can create different rules and accordingly the analysis reports are created.

There can be a passing criteria like there should not be more than 10% violation of the coding rules .)

4 compiles

5

CD PIPELINE

continuous deployment pipeline

OR

continuous delivery pipeline