

Streamlining Development: Dive Deep into Jenkins

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Installation Using Docker

1. Verify Docker: `$ docker --version`
2. Run Jenkins Image: `$docker pull jenkins/jenkins`
3. Start Jenkins Container:
`$ docker run -d -v jenkins_home:/var/jenkins_home -p 8080:8080 -p 50000:50000
--restart=on-failure jenkins/jenkins:its-jdk17`
4. Access Jenkins: `http://localhost:8080`



Types of Jenkins Projects

1. **Freestyle:** Simple, Single Tasks. Ex: Tests
2. **Pipeline:** Whole delivery cycle Ex: Test | Build |.. for single branch.
3. **Multibranch Pipeline:**



Create Multi branch Pipeline with Git

1. Credentials in Jenkins
2. Filter branch by Name

Credentials Scope:

System: Only available on Jenkins Server, **NOT** for Jenkins Jobs.

Global: Accessible Everywhere

Credentials Types:

Username & Password, Secret File, Certificates, New Type based on plugins



Jenkinsfile

Pipeline Syntax

Scripted: First syntax, Groovy engine, Advanced scripting capabilities, High flexibility, Difficult to learn

Declarative: More recent addition, Easier to get started but not that powerful, pre defined structure.

Replay

Restart from Stage