Jenkins Manual Approval Pipeline

Create Jenkins Pipeline
add description, SCM Poll, Discard Old Build configurations as per requirements.
Pipeline Script

```
pipeline {
agent any

stages {
stage('Build') {
steps {
echo 'This is Build Stage'
}
}
stage('Test') {
steps {
echo 'This is Test Stage'
}
}
stage('Approval'){
steps{
timeout(time:15,unit:'MINUTES'){
input message:'Do you want to approve the Deployment?',ok:'yes'
}
}
}
stage('Deployment') {
steps {
echo 'Application Deployed'
}
}
}
}
```

Save the Pipeline and click on build.

```
[Pipeline] timeout
Timeout set to expire in 15 min
[Pipeline] {
[Pipeline] input
Do you want to approve the Deployment?
yes or Abort
Approved by Sonam Soni
[Pipeline] }
[Pipeline] // timeout
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deployment)
[Pipeline] echo
Application Deployed
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Click on yes for approve then only it can continue with deployment.

Configure Email Notification in Jenkins Pipeline

Manage jenkins --> System -->

Maven Project Configuration

Global MAVEN_OPTS ?

Default notification URL

GitHub

GitHub API usage

GitHub Enterprise Servers

Local Maven Repository ?

Global Trusted Pipeline Libraries

Default ("~/.m2/repository",

Global Untrusted Pipeline Libraries

Build-timeout Plugin > BuildStep Action

# of executors

Git plugin

2

Shell

Labels

Extended E-mail Notification

E-mail Notification

Click on Email notification

SMTP server

smtp.gmail.com

Default user e-mail suffix ?

Click on Advanced.
click on SMTP Authentication:

Advanced ^   ✎ Edited

☑ Use SMTP Authentication   ?

User Name

sonam.gravity@gmail.com

Password

🔒 Concealed

Use SSL (465) or TLS (587)

☑ Use SSL ?

☐ Use TLS

SMTP Port ?

463

Reply-To Address

sonam_skills@pw.live

For Temporary Testing like this working or not click on Check Box

☑ Test configuration by sending test e-mail
Test e-mail recipient

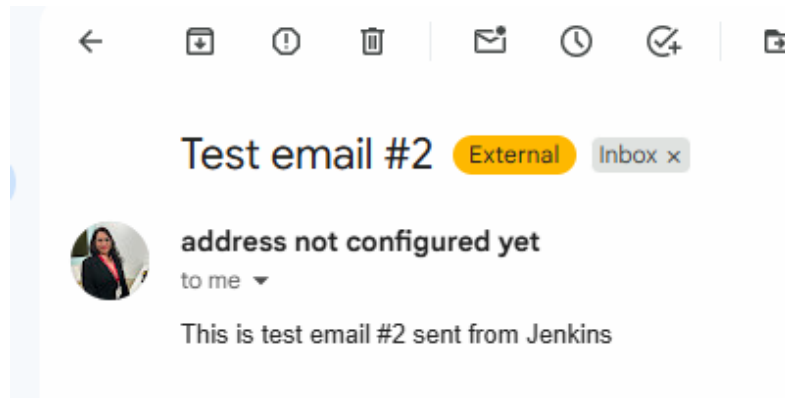enter test emailD and the click on Test Confi Button

Test configuration

☑ Test configuration by sending test e-mail

Test e-mail recipient

sonam_skills@pw.live

Email was successfully sent

Email received

Save Your Configurations.
Create Free Style Project to Send Email If Build Fails

Select Execute Shell

Build Steps

Automate your build process with ordered tasks like code compilation, testing, and deployment.

☰ **Execute shell** ?   ✕

Command
See the list of available environment variables

```
mvn clean install
```

Add post-build action ⌃

🔽 Filter

Aggregate downstream test results

Archive the artifacts

Build other projects

Publish JUnit test result report

Publish Javadoc

Record fingerprints of files to track usage

Git Publisher

SonarQube analysis with Maven

E-mail Notification

Editable Email Notification

Set GitHub commit status (universal)

☰ **E-mail Notification** ?   ✕

Recipients
Whitespace-separated list of recipient addresses. May reference build parameters like $PARAM. E-mail will be sent when a build fails, becomes unstable or returns to stable.

```
sonam_skills@pw.live
```

☑ Send e-mail for every unstable build

?

☐ Send separate e-mails to individuals who broke the build

Click on Build Now-- once the Build failed you will receive an email

Create pipeline For Sending Email if Build Fails

Create Jenkins pipeline name: EmailPipeline

```
pipeline {
agent any

environment{
EMAIL_TO="sonam_skills@pw.live"
}
stages {
stage('Test') {
steps {
echo 'Testing an Email'
}
}
}
post{
failure{
emailext(
to:"${EMAIL_TO}",
subject:"Build Failed:${env.JOB_NAME} #${env.BUILD_NUMBER}",
body:"Please Check and Build logs at ${env.BUILD_URL}"
)
}
}
}
```

Now Let's Configure Email Extentions.

Manage Jenkins --> System --> Extended Email Notification

System

Home directory **?**

By default, Jenkins stores all of

/var/lib/jenkins

System Message

This message will be displayed

Default notification URL

GitHub

GitHub API usage

GitHub Enterprise Servers

Global Trusted Pipeline Libraries

Global Untrusted Pipeline Libraries

Build-timeout Plugin > BuildStep Action

Git plugin

Shell

Extended E-mail Notification

E-mail Notification

Extended E-mail Notification

SMTP server

smtp.gmail.com

SMTP Port

465

Advanced ∧   ✎ Edited

Credentials

- none -

+ Add

☑ Use SSL

☐ Use TLS

☐ Use OAuth 2.0

Here in this credentials click on Add

enter your email as username and app password in password.
save it and then select credentials as well.

Click on Save.

Now Let's Make Some changes to fail pipeline.
updated code

```
pipeline {
agent any

environment{
EMAIL_TO="sonam_skills@pw.live"
}
stages {
stage('Build'){
steps{
echo 'Building Java Project'
sh ''' mvn clean install '''
}
}
stage('Test') {
steps {
echo 'Testing an Email'
}
}
}
post{
failure{
emailext(
to:"${EMAIL_TO}",
subject:"Build Failed:${env.JOB_NAME} #${env.BUILD_NUMBER}",
body:"Please Check and Build logs at ${env.BUILD_URL}"
)
}
}
}
```

Save and then Build again

```
[Pipeline] { (Test)
Stage "Test" skipped due to earlier failure(s)
[Pipeline] getContext
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Declarative: Post Actions)
[Pipeline] emailext
Sending email to: sonam.gravity@gmail.com
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
```

Check your Email.

Build Failed:EmailPipeline #6 ∑ Inbox ×

address not configured yet <sonam.gravity@gmail.com>
to me ▾

Please Check and Build logs at http://localhost:8080/job/EmailPipeline/6/

If you click on Build URL you will be redirected to your Jenkins screen where you can see the Logs.

Note: If you are using free style projects then Email Notification which you have configured its fine.
For Sending email from pipelines you need to configure Extended Email notification.Practi

Practice Task:
Create Jenkins Pipeline With SonarQube with Approvals twice
1 approval before start sonar analysis and another one before quality check
(Send Email Notification for Approval)