

## **EXPERIMENT – 4**

**AIM** - To understand Continuous Integration, install and configure Jenkins with Maven/Ant/Gradle to setup a build Job

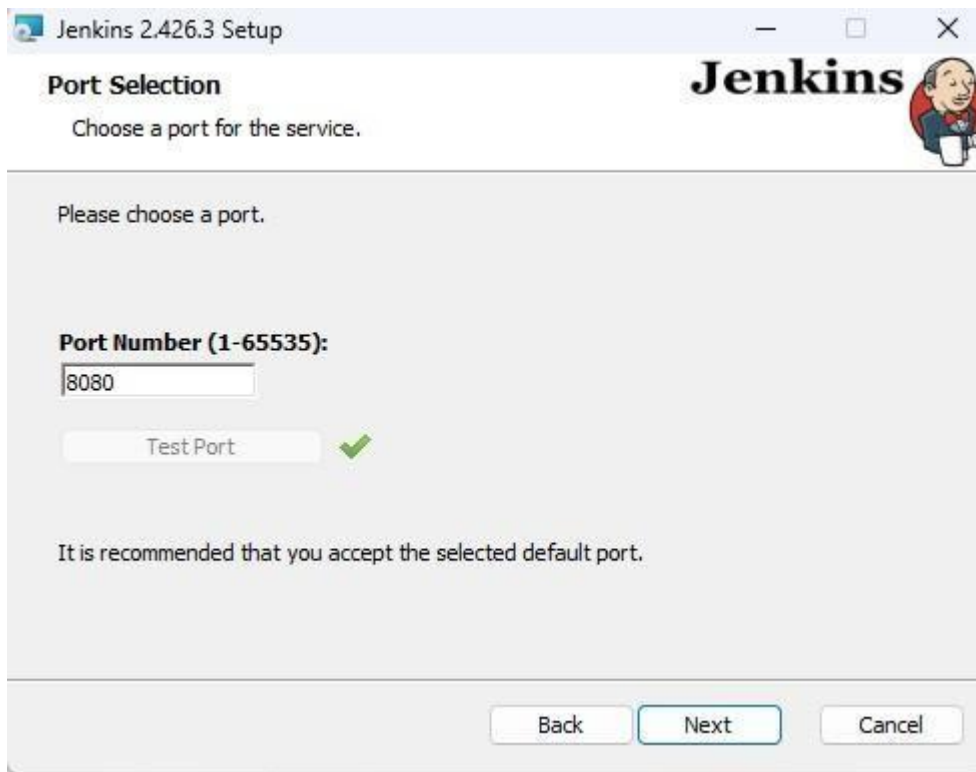
### **THEORY:**

Jenkins is an open-source automation tool written in Java with plugins built for Continuous Integration purpose. Jenkins is used to build and test your software projects continuously making it easier for developers to integrate changes to the project and making it easier for users to obtain a fresh build. It also allows you to continuously deliver your software by integrating with many testing and deployment technologies.

### **Step 1: Install Jenkins from website**



## Step 2: Select the desired options



The image shows a Windows-style window titled "Jenkins 2.426.3 Setup". The window has a standard title bar with minimize, maximize, and close buttons. The main content area is titled "Port Selection" and includes the instruction "Choose a port for the service." Below this, it says "Please choose a port." There is a text input field labeled "Port Number (1-65535):" containing the value "8080". To the right of the input field is a "Test Port" button, which is accompanied by a green checkmark icon. Below the input field, a message states: "It is recommended that you accept the selected default port." At the bottom of the window, there are three buttons: "Back", "Next", and "Cancel". The "Next" button is highlighted with a blue border. In the top right corner of the window, the Jenkins logo (a cartoon character) and the word "Jenkins" are displayed.

Jenkins 2.426.3 Setup

**Port Selection**

Choose a port for the service.

Please choose a port.

**Port Number (1-65535):**

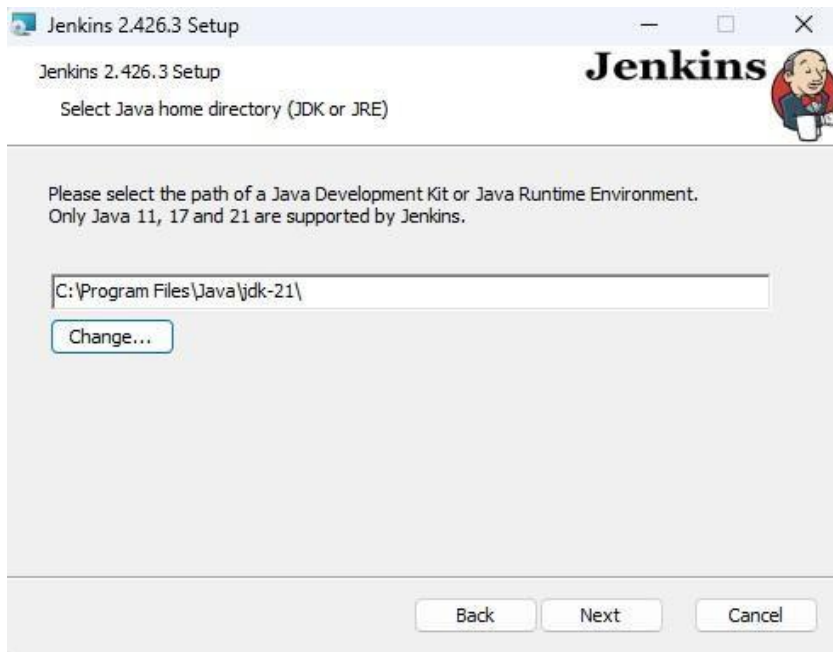
8080

Test Port ✓

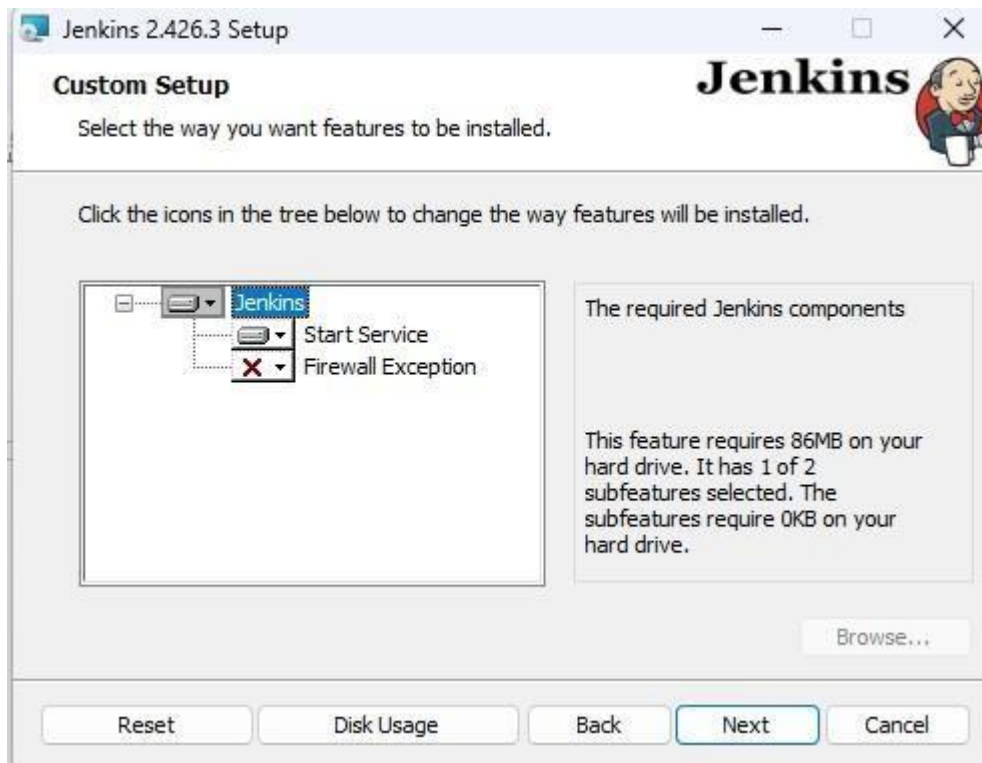
It is recommended that you accept the selected default port.

Back Next Cancel

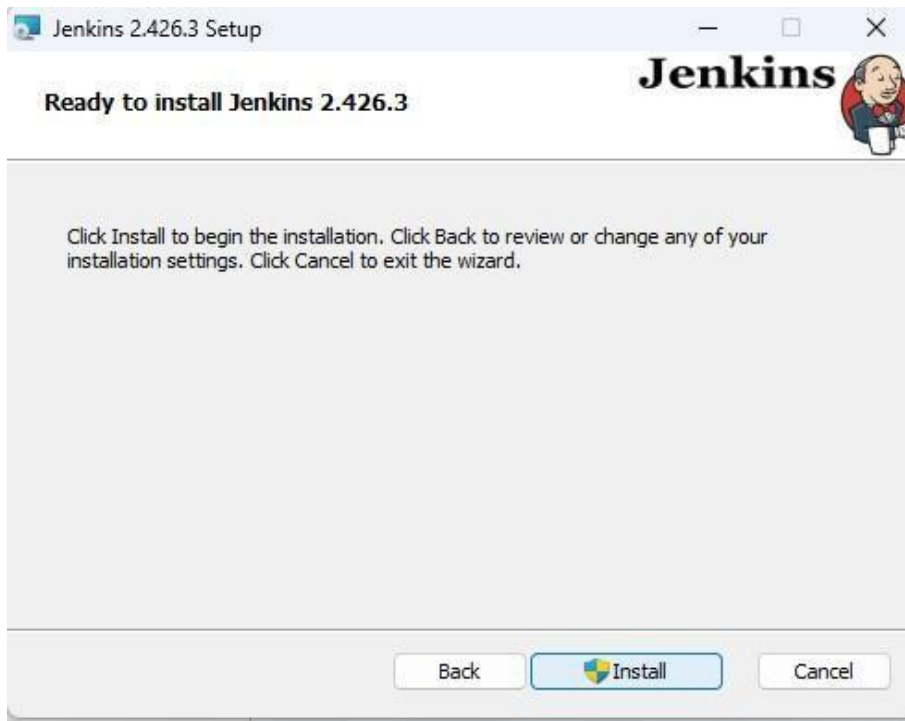
## Step 3: Select the files where jdk 21 is installed



#### Step 4: Select the desired options



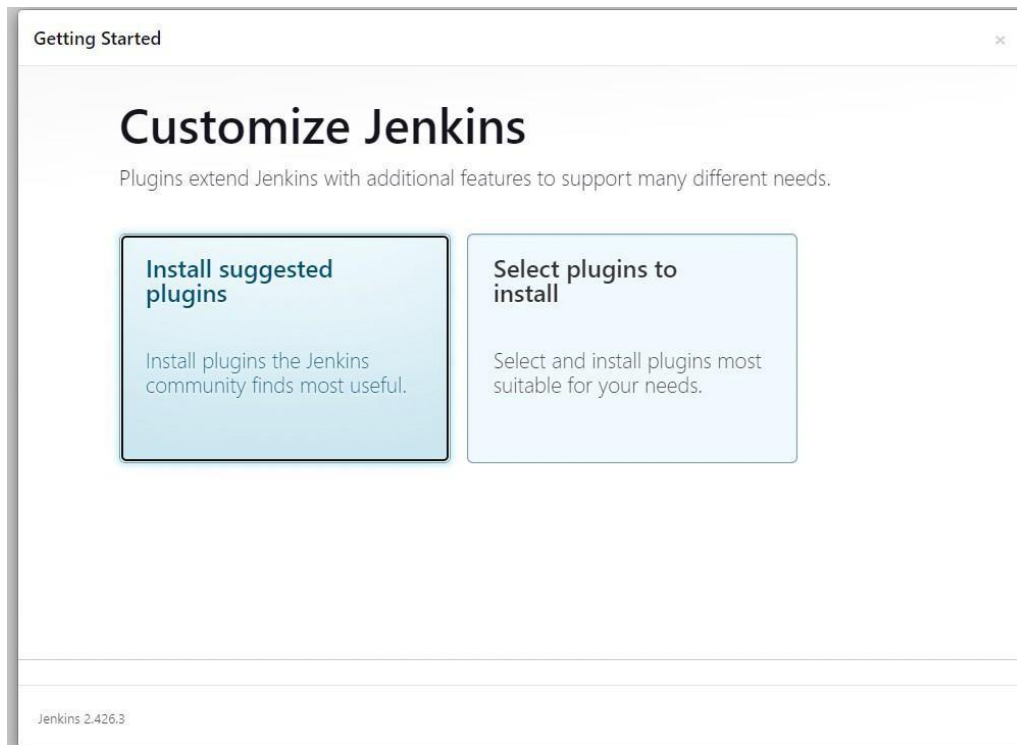
#### Step 5: Install the file



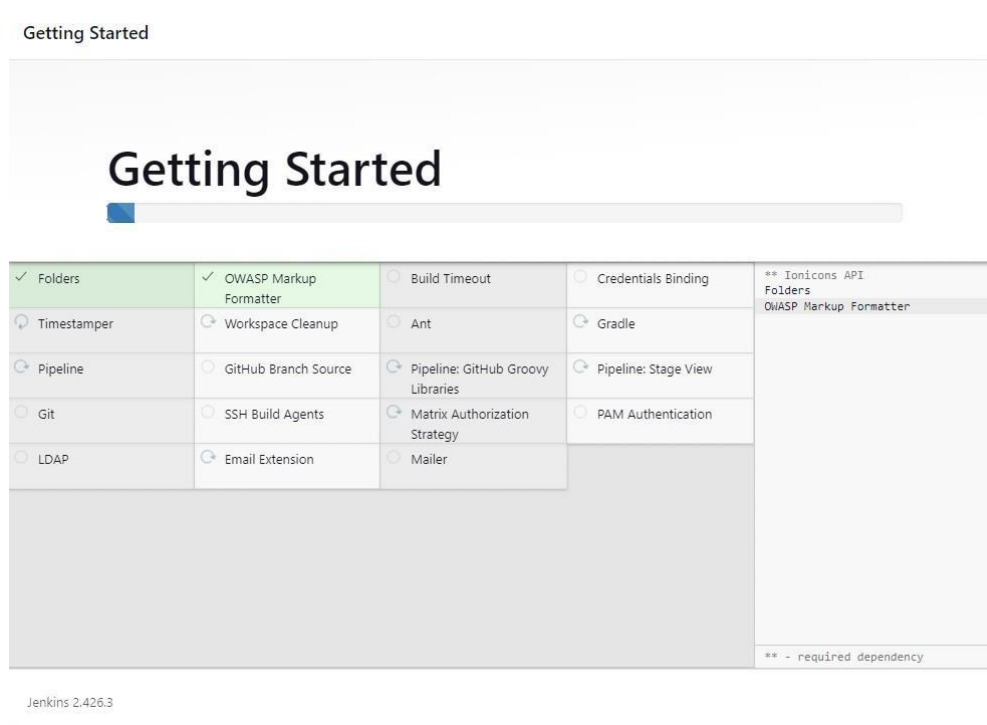
### Step 6: Installation is finished



### Step 7: Go on localhost:8080



### Step 8: Select the options and wait for a few minutes



## Step 9: Fill the appropriate credentials

Getting Started

# Create First Admin User

Username

Password

Confirm password

Full name


E-mail address

Jenkins 2.426.3

[Skip and continue as admin](#)

[Save and Continue](#)

## Step 10: Congratulations! You have created your Jenkins account

 Jenkins

🔍

🔔

🛡️

👤 Aditya Dikonda

🚪 log out

Dashboard >

+ New Item

📜 Build History

⚙️ Manage Jenkins

📌 My Views

Build Queue

No builds in the queue.

Build Executor Status

0/2

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Start building your software project

Create a job

+

Set up a distributed build

Set up an agent

🖨️

Configure a cloud

☁️

Learn more about distributed builds

📘

REST API

Jenkins 2.492.1

## CONCLUSION:

Jenkins with Maven simplifies Continuous Integration, automating builds and improving project efficiency for faster development cycles and higher software quality.