# Why CI is important?

Continuous integration is important because it helps teams of software developers work together more efficiently and produce higher-quality software.

In simple terms, it means that instead of everyone working on their own separate versions of the code, they all work on a shared codebase that is regularly tested and merged together.

By catching issues early and frequently, teams can save time and reduce the likelihood of introducing errors into the final product. Overall, continuous integration makes the software development process smoother, more reliable, and more collaborative.
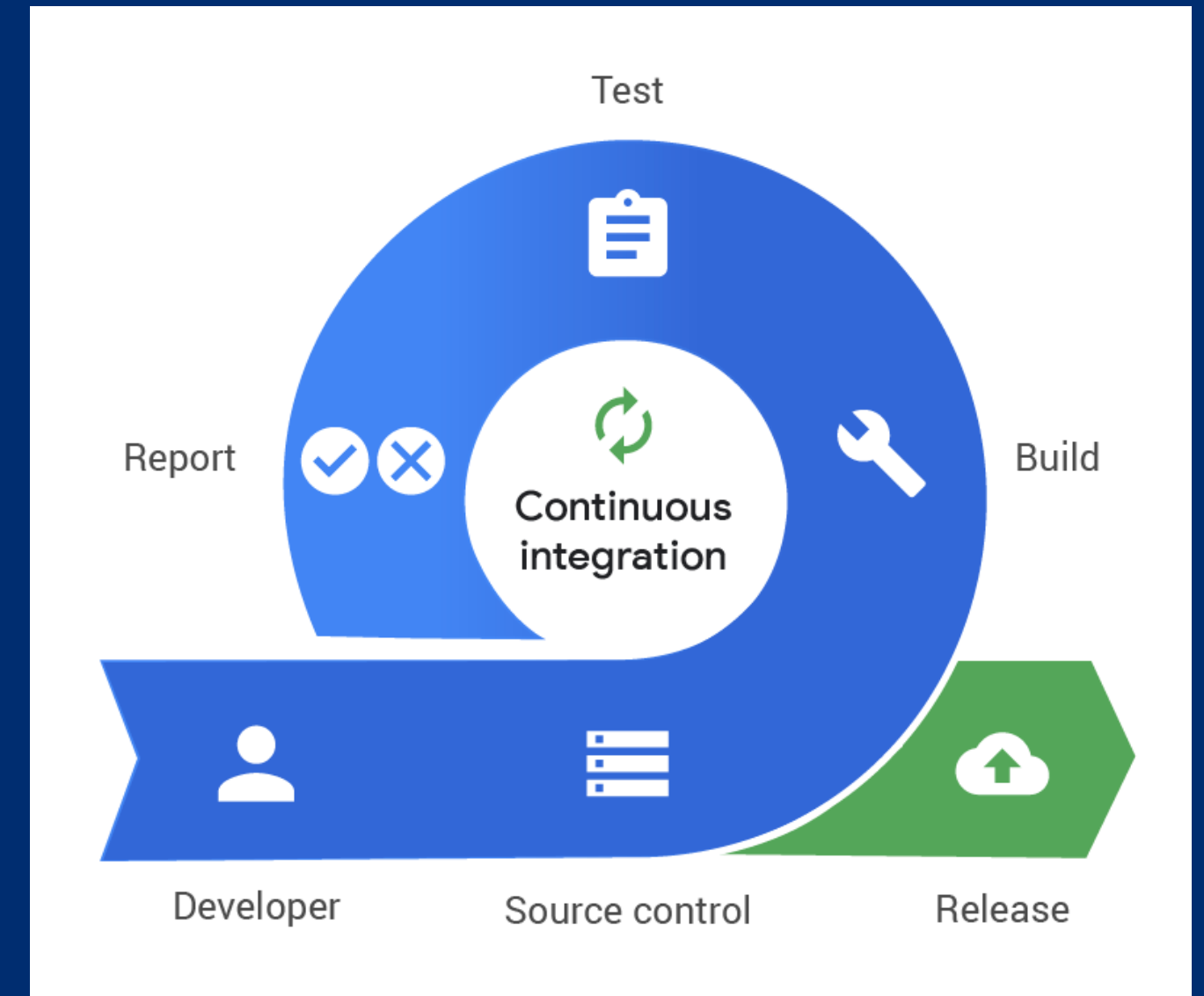
What is Jenkins?

Jenkins is an open-source automation tool that is used for continuous integration and continuous delivery (CI/CD) of software.

In simple terms, Jenkins helps software development teams to automate their development, testing, and deployment processes.

It allows developers to build, test, and deploy code quickly and consistently, and provides feedback on any errors or issues that may arise.

Jenkins is highly customizable and can be integrated with a wide range of third-party tools, making it a popular choice for software development teams of all sizes.

Jenkins installation

Create EC2 server on which we are going to install the Jenkins software

Jenkins has depedency on Java so make sure you install Java first before instllation Jenkins

Below is the link from which you can check Jenkins Installation process

https://www.jenkins.io/doc/book/installing/
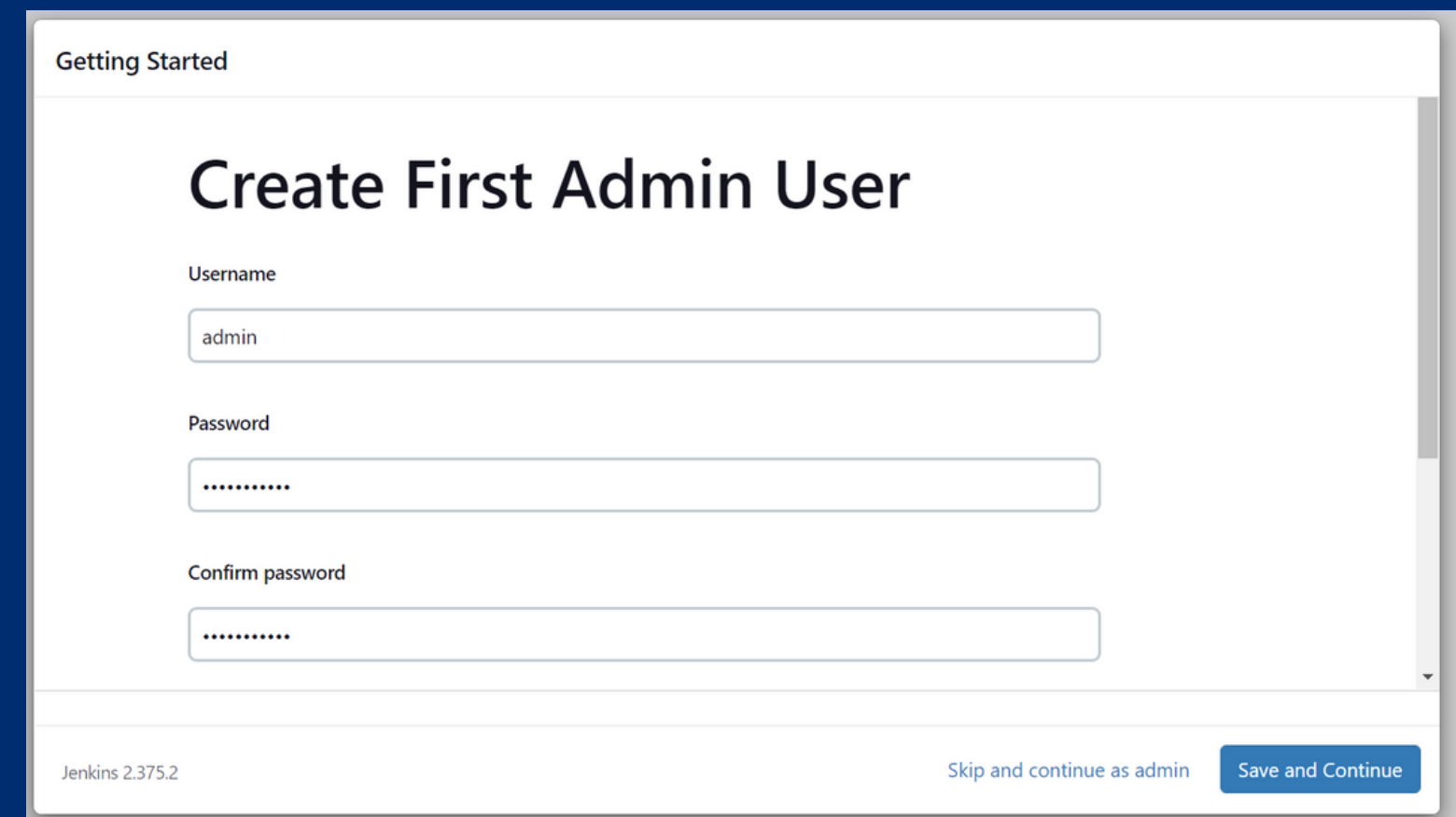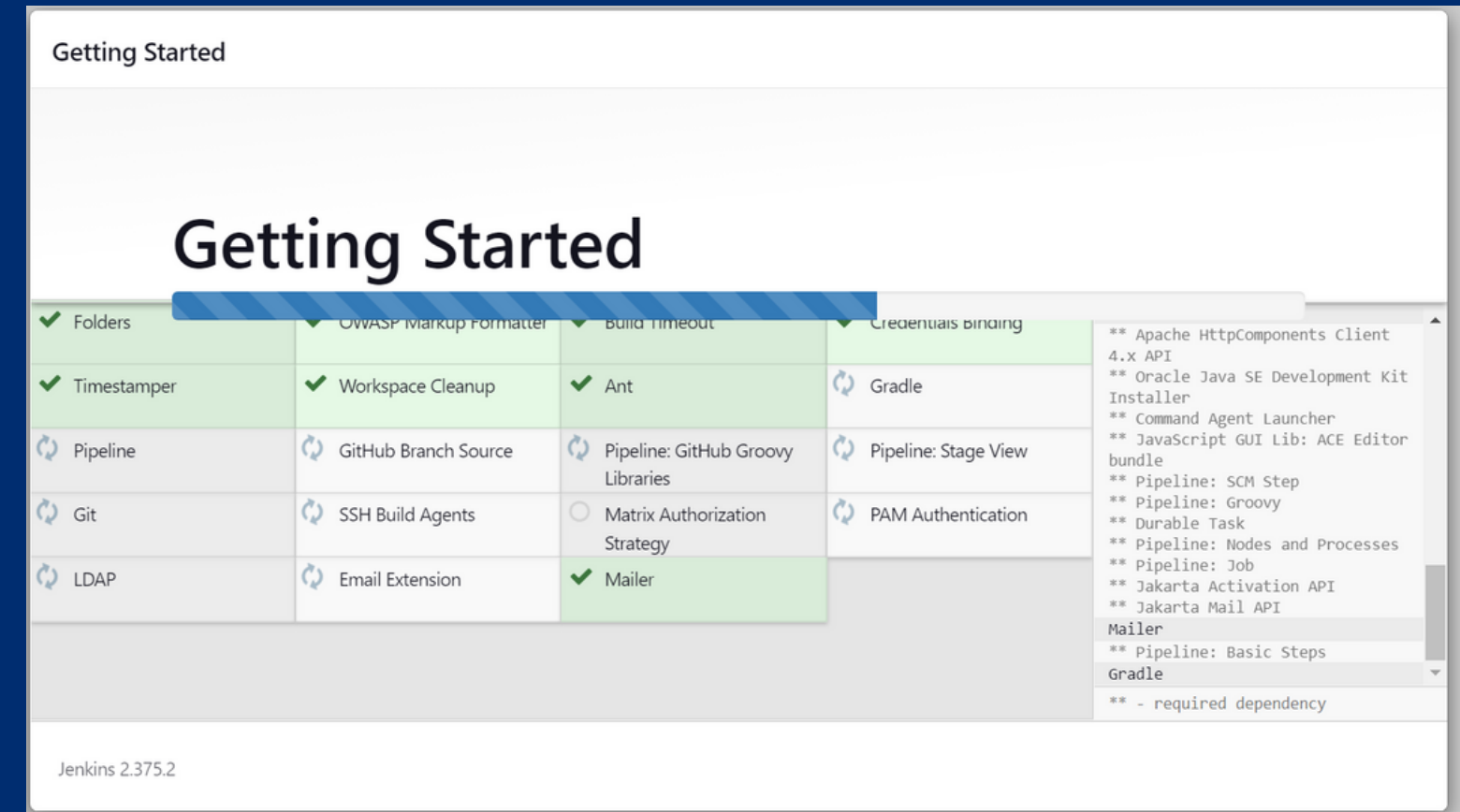
Follow the steps for installation

Once done open the 8080 port of security group and access the Jenkins application on browser with http://<public-ip>:8080
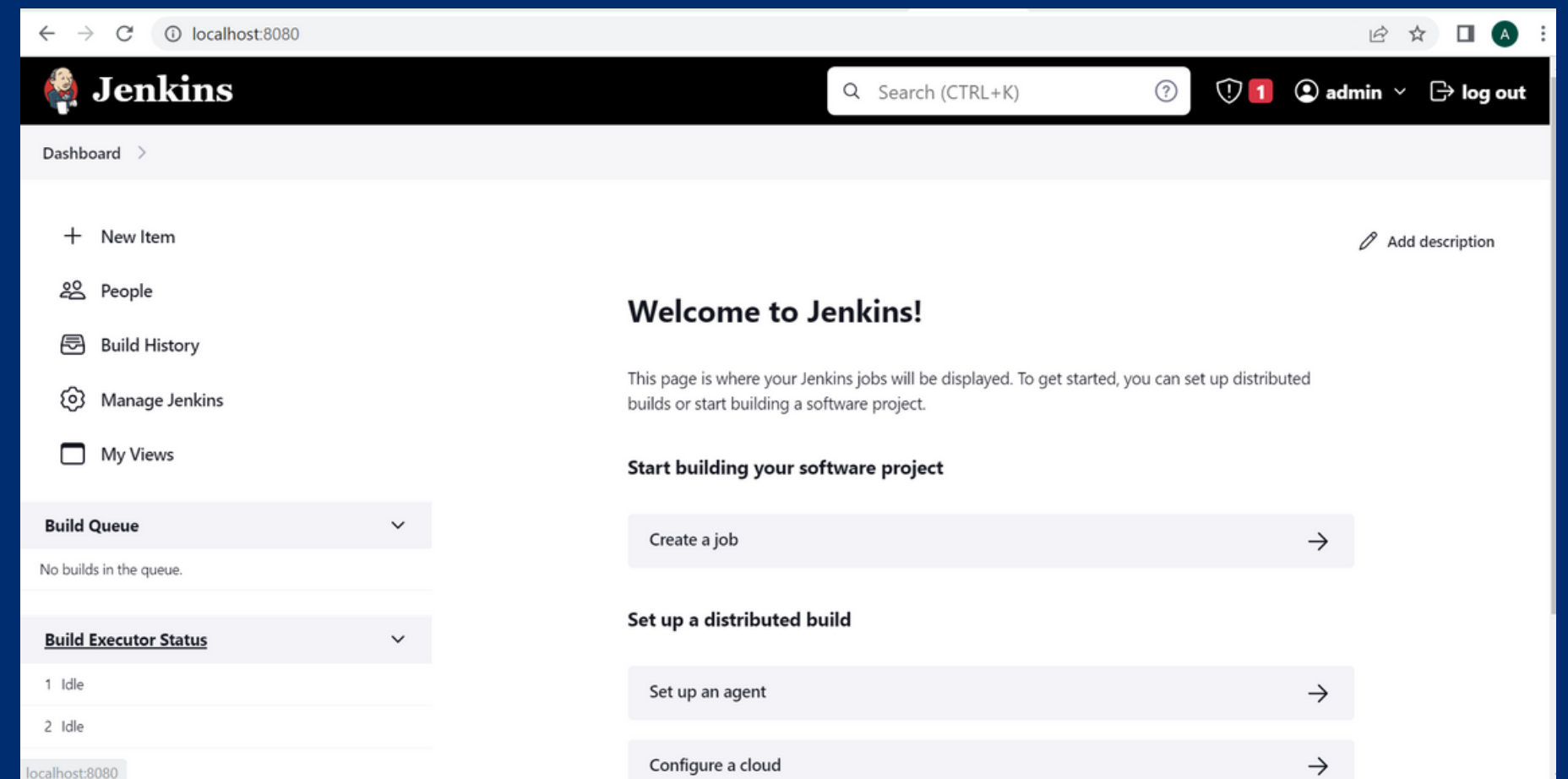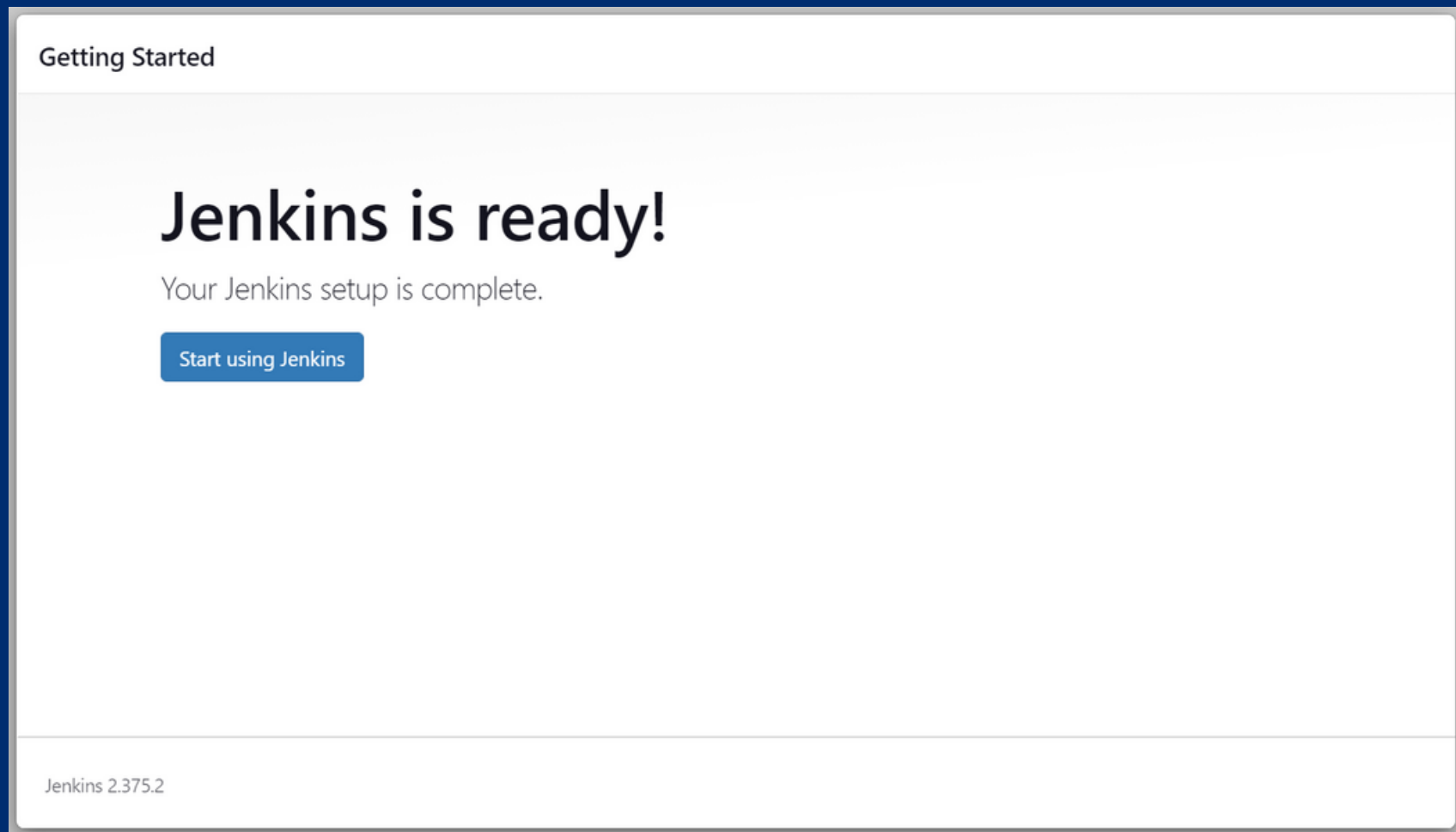
Configure Jenkins

Provide the initial password

Install Suggested Plugins

Create First Admin User

Getting Started

Getting Started

✔ Folders	✔ OWASP Markup Formatter	✔ Build Timeout	✔ Credentials Binding	** Apache HttpComponents Client 4.x API
✔ Timestamper	✔ Workspace Cleanup	✔ Ant	⟳ Gradle	** Oracle Java SE Development Kit Installer
⟳ Pipeline	⟳ GitHub Branch Source	⟳ Pipeline: GitHub Groovy Libraries	⟳ Pipeline: Stage View	** Command Agent Launcher ** JavaScript GUI Lib: ACE Editor bundle ** Pipeline: SCM Step
⟳ Git	⟳ SSH Build Agents	○ Matrix Authorization Strategy	⟳ PAM Authentication	** Pipeline: Groovy ** Durable Task ** Pipeline: Nodes and Processes
⟳ LDAP	⟳ Email Extension	✔ Mailer		** Pipeline: Job ** Jakarta Activation API ** Jakarta Mail API

Mailer
** Pipeline: Basic Steps
Gradle
** - required dependency

Jenkins 2.375.2

Getting Started

Create First Admin User

Username

`admin`

Password

`•••••••••••`

Confirm password

`•••••••••••`

Jenkins 2.375.2   Skip and continue as admin   [Save and Continue]

Jenkins is Ready !

Thank You