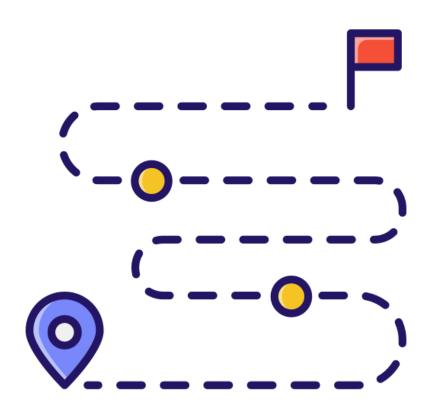


Steps For Continuous Integration Pipeline

Roadmap

- Jenkins setup
- Nexus setup
- Sonarqube Setup
- Security Groups
- Plugins
- Integrate
 - Nexus
 - Sonarqube
- Write Pipeline scripts
- Set notification



Continuous Integration Pipeline Overview

First, we will set up **Jenkins**. If we already have an instance running, we can use it; otherwise, we can create a new Jenkins server.

Next, we will establish a **Nexus server** and a **SonarQube server**. These setups will be executed using user data and bash scripts to automate the process.

During or after these setups, we'll configure the **security groups** to allow connections between Jenkins, Nexus, and SonarQube, ensuring seamless communication.

Following that, we will install essential plugins in Jenkins, including the Nexus plugin, SonarQube plugin, Git plugin, and Maven plugin. Each of these plugins will be installed sequentially to ensure compatibility.

Once the plugins are in place, we will integrate Nexus with Jenkins, which is relatively straightforward by saving the necessary credentials. For SonarQube integration, we'll need to follow a few additional steps to complete the setup.

After all setups and integrations are complete, we will write the **pipeline scripts**. These scripts will leverage the configured resources and define the CI/CD process.

Finally, we'll implement **notification settings** to alert us if any job fails during the pipeline execution. This ensures that we are immediately informed of any issues, allowing for prompt resolution.

