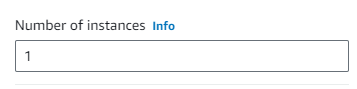
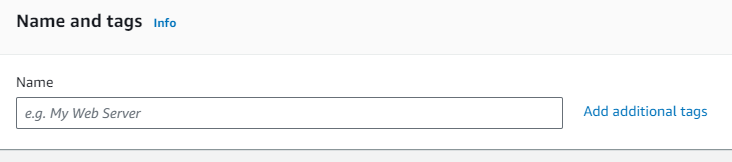
SonarQube Setup in Ubuntu

Step1:

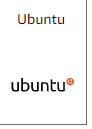
Launch the Instance: Ubuntu -t2 medium (UBUNTU)



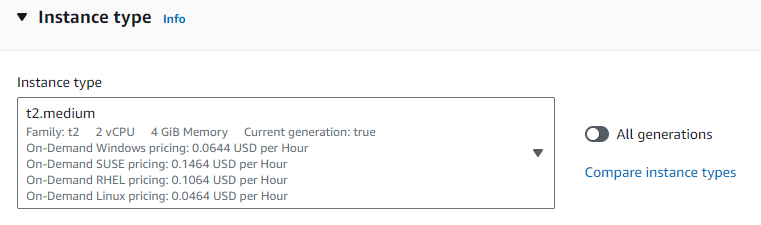
Name: SonarQube\_ubuntu



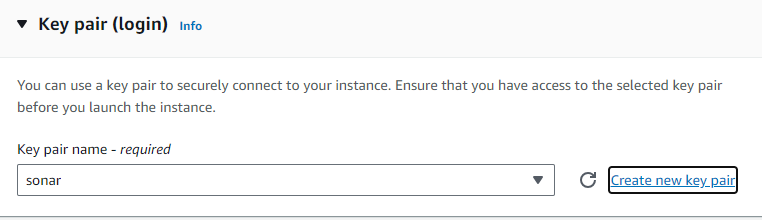
AMI: Ubuntu



Instance Type:t2.medium

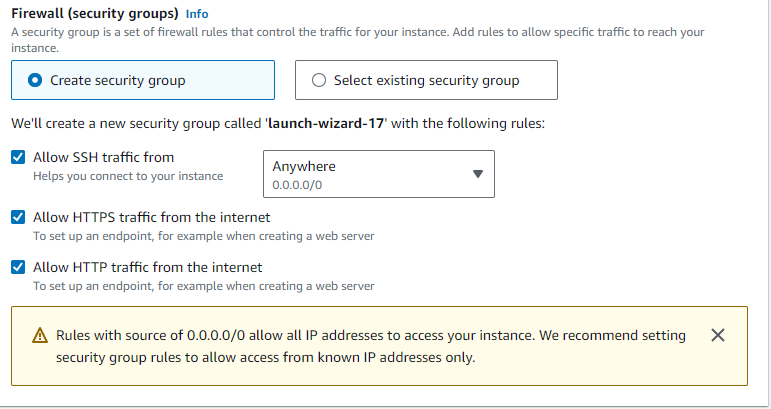


Keypair:sonar

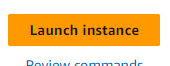


Firewalls:

Later :add all traffic (any where)

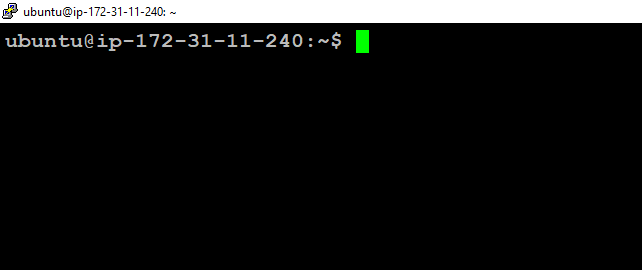


Launch:



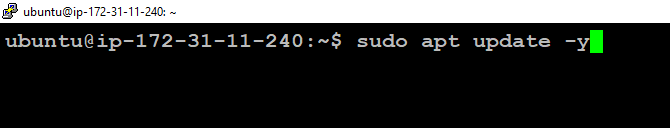
Instance creation Done

Connect to the instance using putty tool



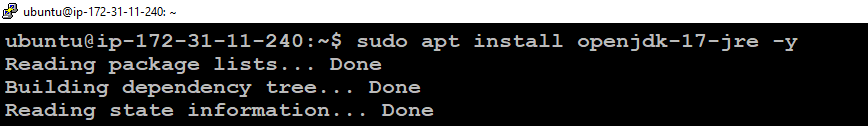
Update the instance :

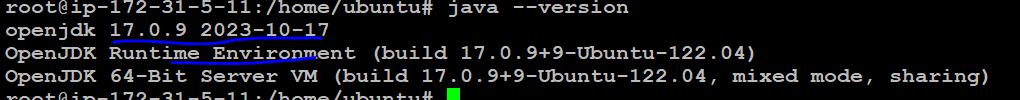
**sudo apt update -y**



**Install Java:**

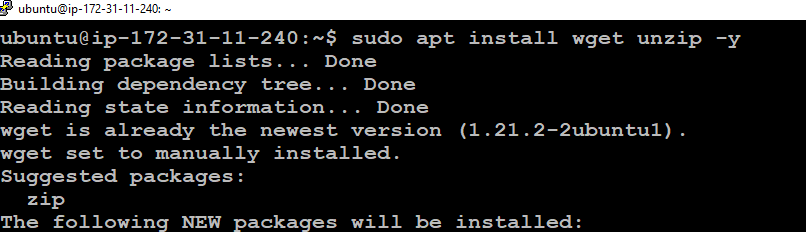
**sudo apt install openjdk-17-jre -y**





**Install wget and unzip packages:**

**sudo apt install wget unzip -y**



**Download SonarQube:**

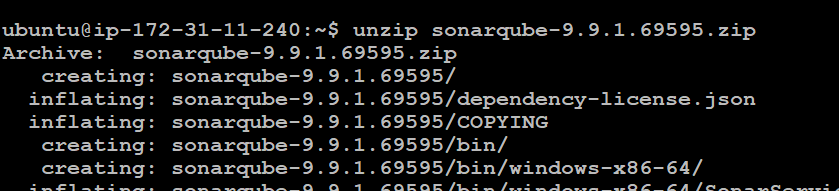
**wget https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-9.9.1.69595.zip**





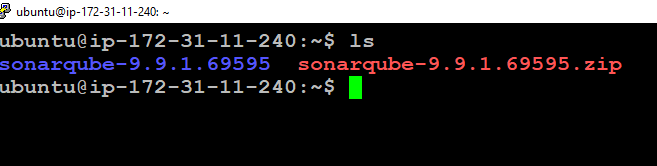
**Now Unzip :**

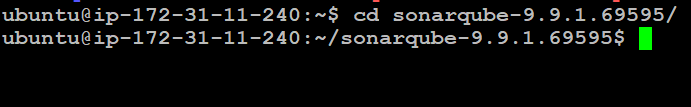
**unzip sonarqube-9.9.1.69595.zip**



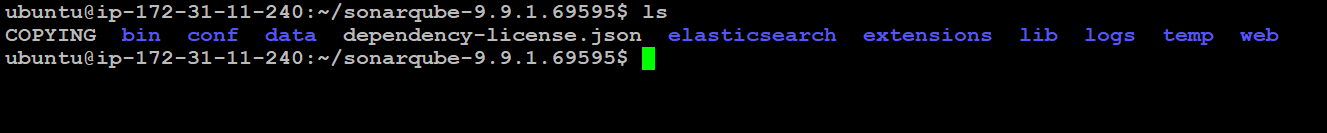
**Now navigate to the sonarqube directory:**

**cd sonarqube-9.9.1.69595**

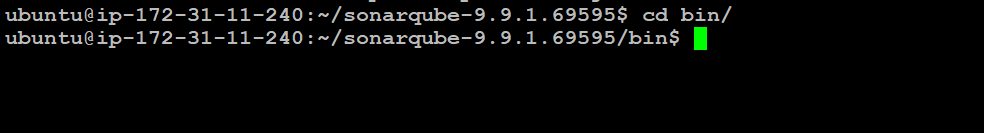




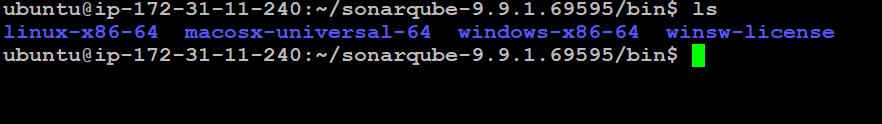
**Use ls command to list**



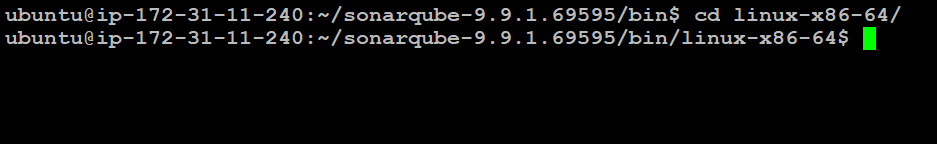
**cd bin**



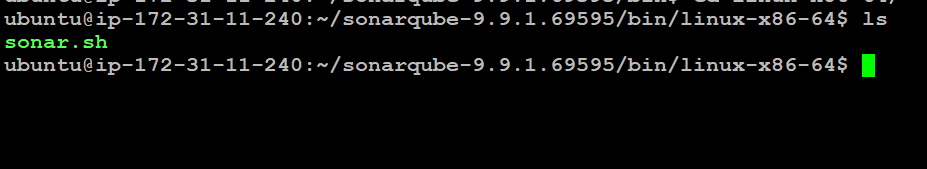
**Use ls command:**



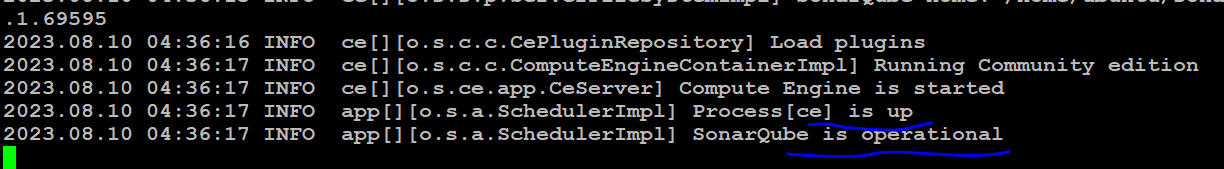
**cd linux-x86-64**



**use ls command :**



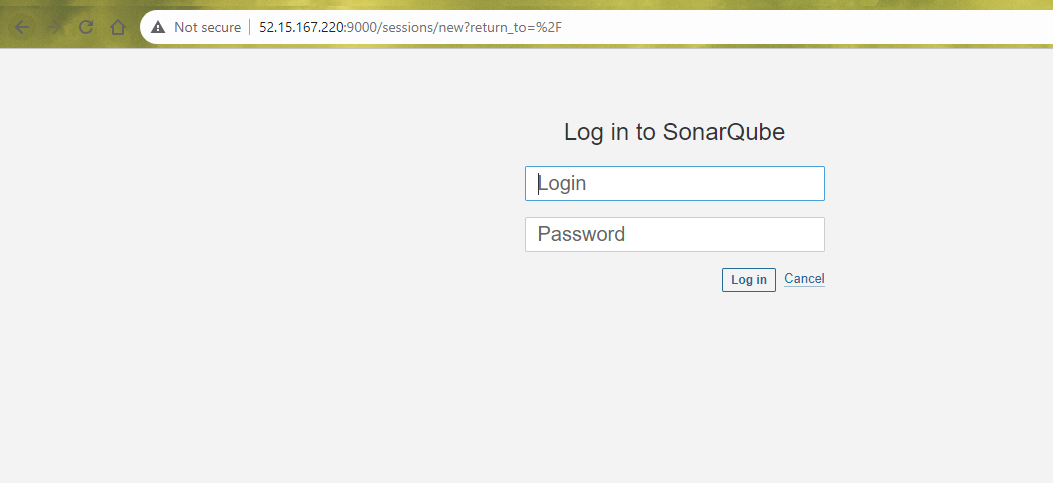
**execute : ./sonar.sh console**



**SonarQube is up and running**

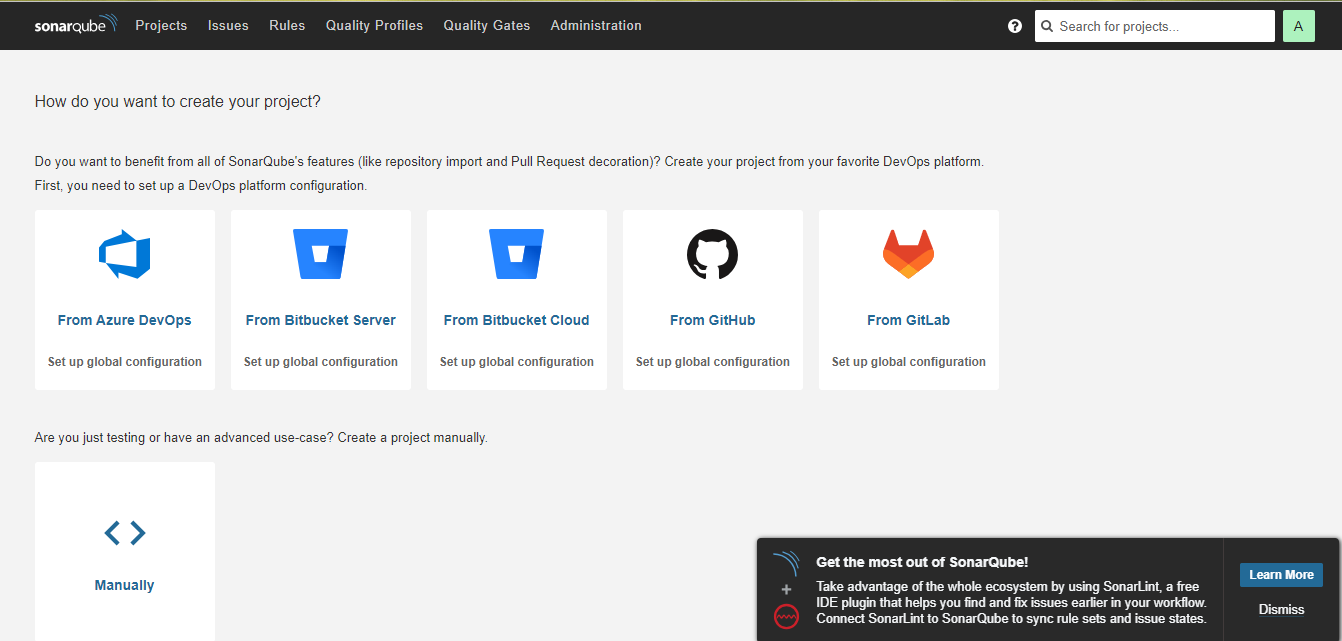
**Port number: 9000**

**Ip address instance**



**Username:admin**

**Password:admin**



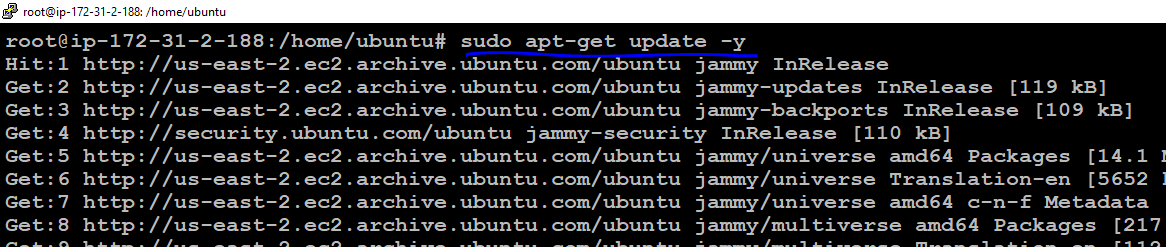
**SonarQube setup successful.**

**Step 2:**

**Jenkins Instalaltion : UBUNTU (t2 medium)**

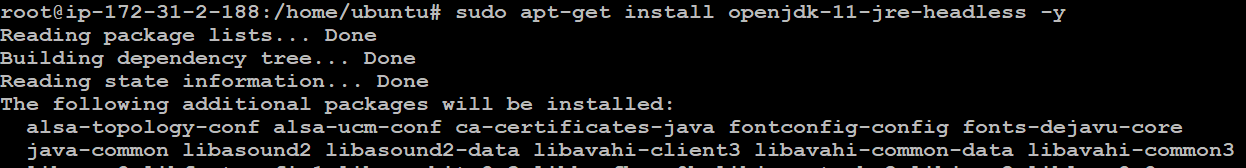
**Update the instance :**

**sudo apt-get update -y**



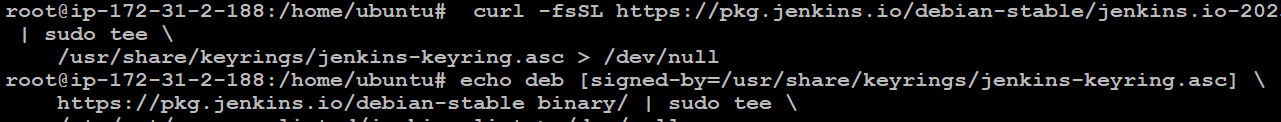
**Install jre:**

**sudo apt-get install openjdk-11-jre-headless -y**



**curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee \**

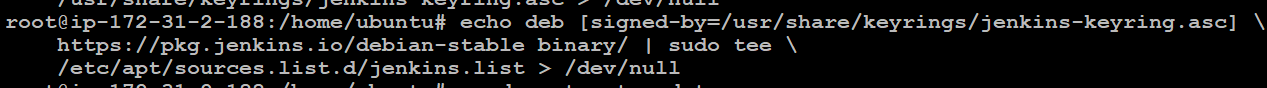
**/usr/share/keyrings/jenkins-keyring.asc > /dev/null**



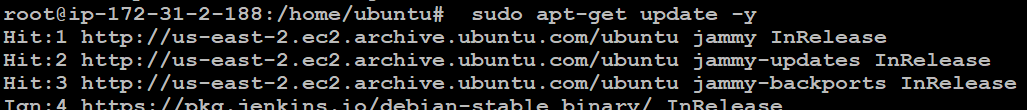
**echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \**

**https://pkg.jenkins.io/debian-stable binary/ | sudo tee \**

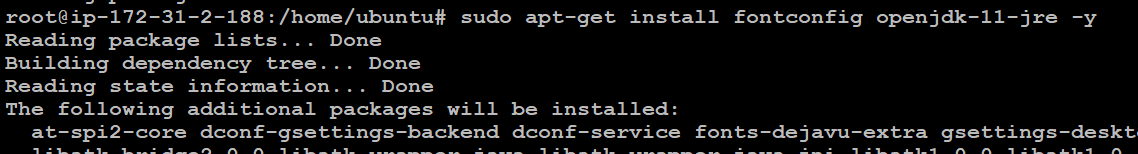
**/etc/apt/sources.list.d/jenkins.list > /dev/null**



**sudo apt-get update -y**

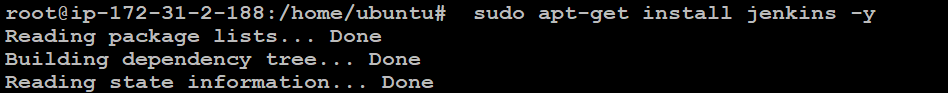


**sudo apt-get install fontconfig openjdk-11-jre -y**



**Install Jenkins:**

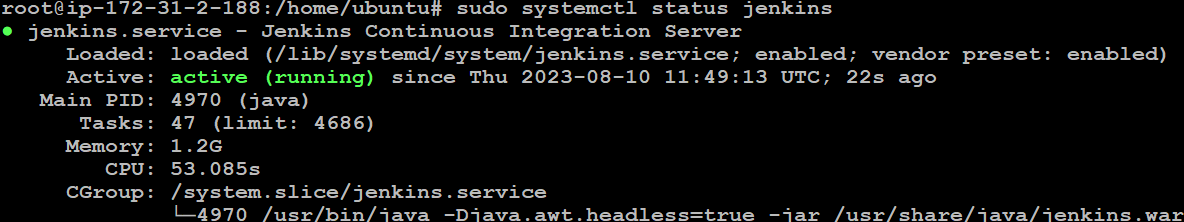
**sudo apt-get install jenkins -y**



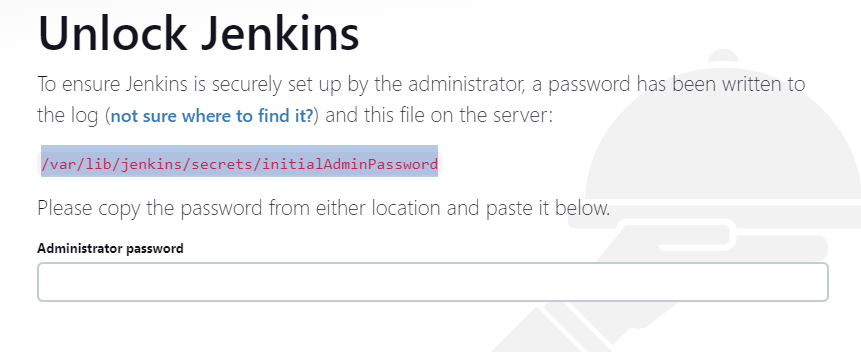
**sudo systemctl start Jenkins**



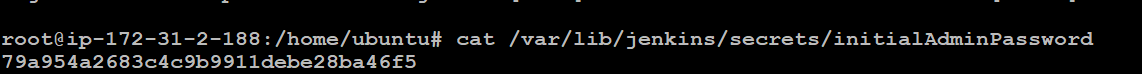
**sudo systemctl status Jenkins**

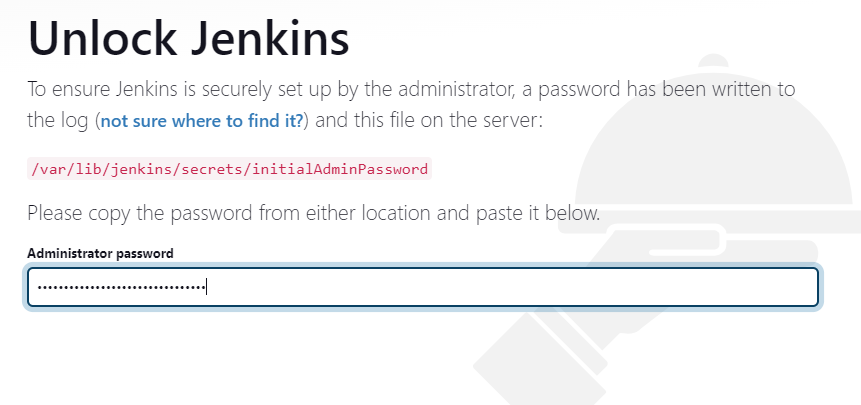


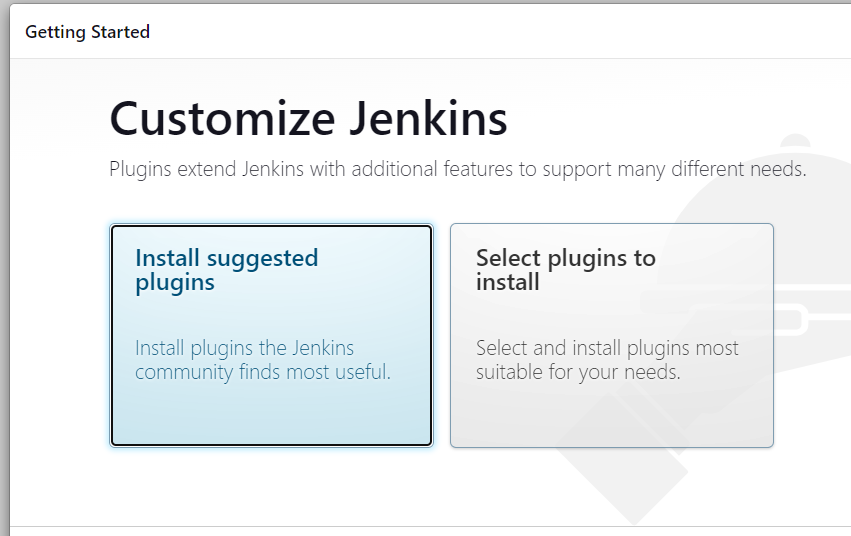
**Jenkins Installation Successful.**

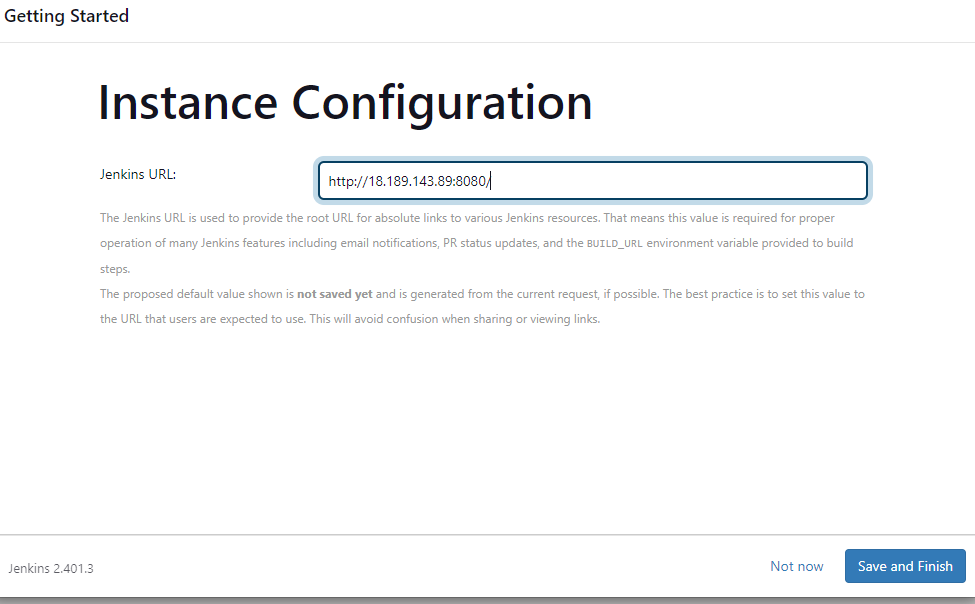


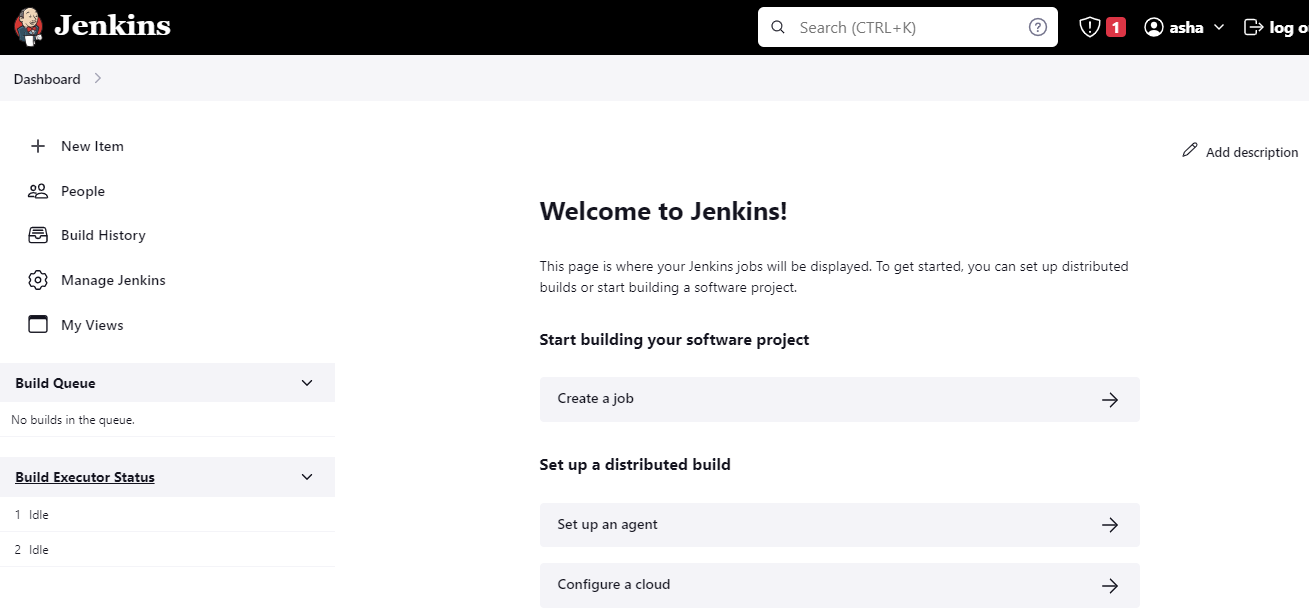
**cat /var/lib/jenkins/secrets/initialAdminPassword**









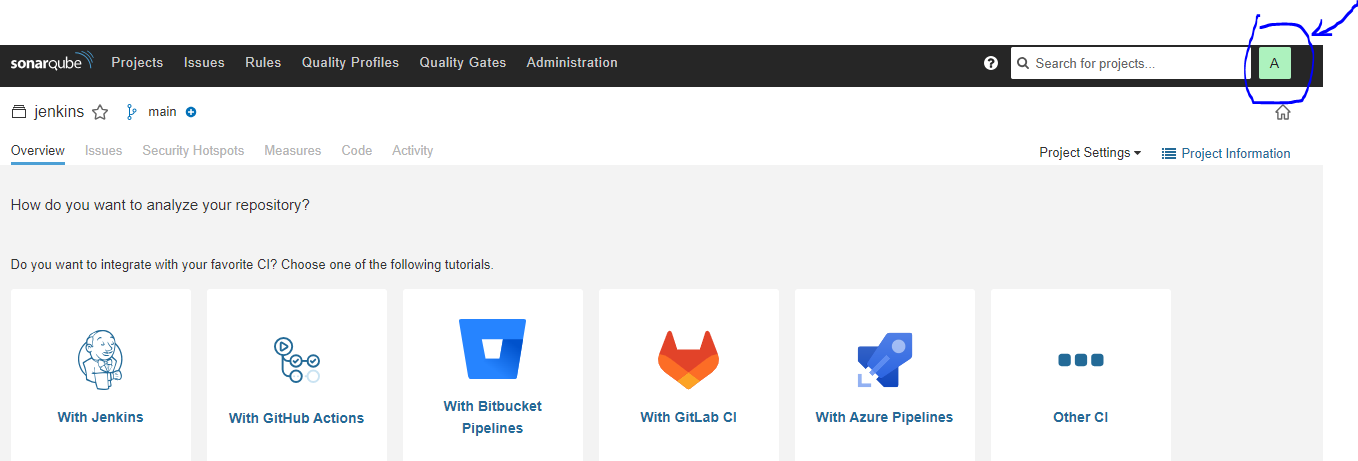


**Jenkins Dashboard is ready…..**

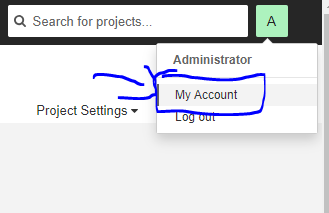
**Generate the authentication token in sonarqube :**

**Got to the sonarqube dashboard**

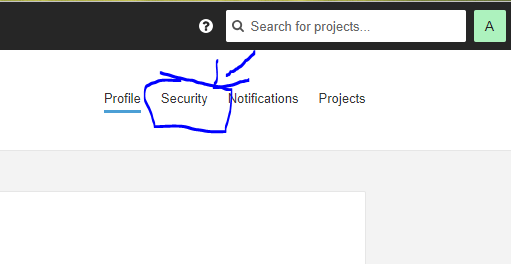
**Generate Authentication Token :**



**Select : MyAccount**



**Select :security**

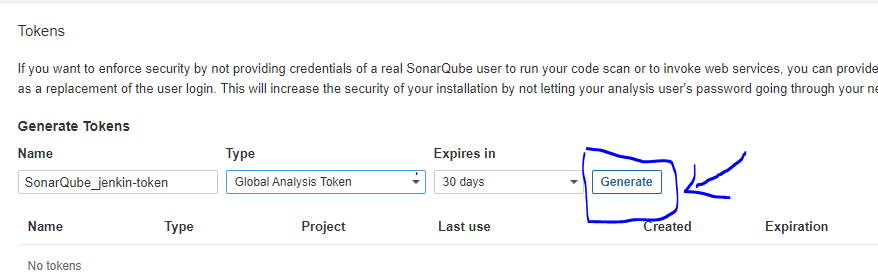


**Generate Token:**

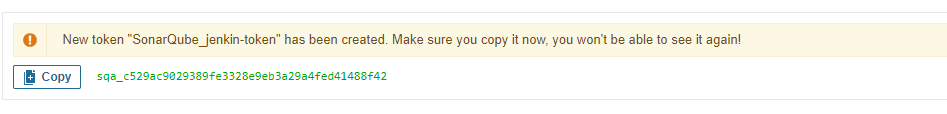
**Name:Sonarqube-jenkins-token**

**Type:global**

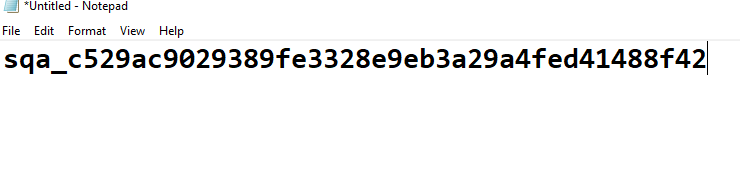
**Generate.**



**A token generated.**

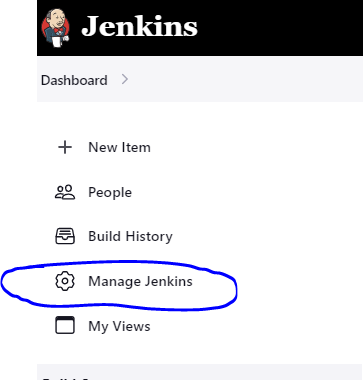


**Now copy the token ans save it in notepad**

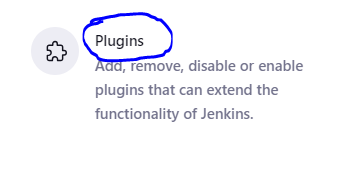


**Now got to Jenkins dashboard:**

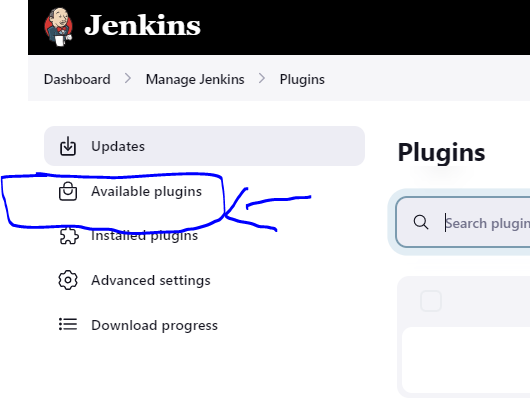
**First install sonarqube plugin:**



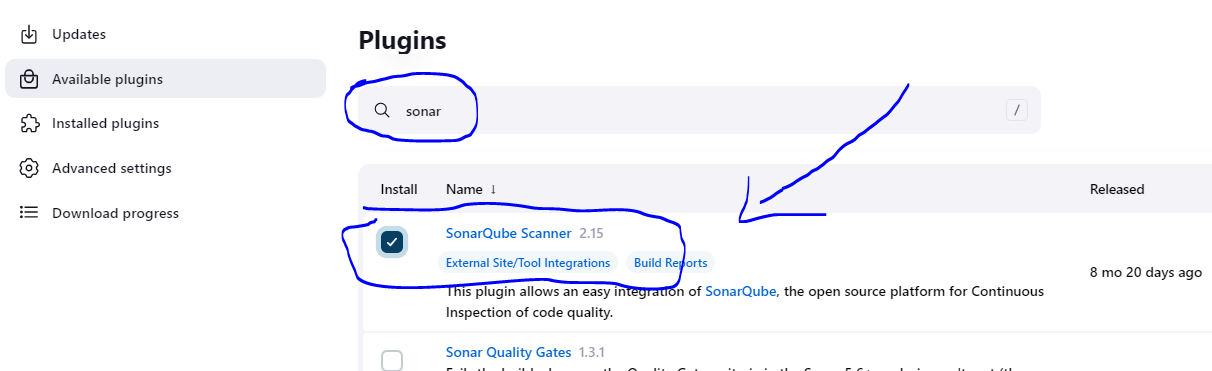
**Select: plugin**



**choose :available plugin**



**Choose :sonarqube scanner plugin**

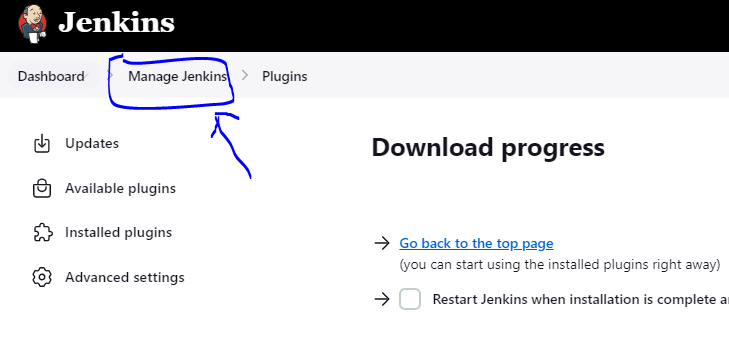


**Note:restart**

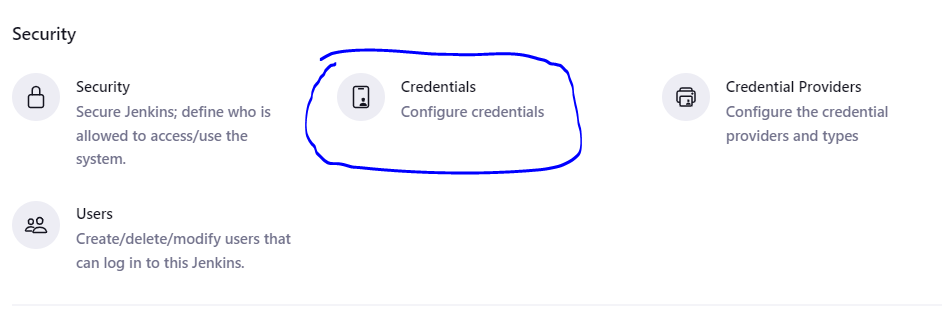


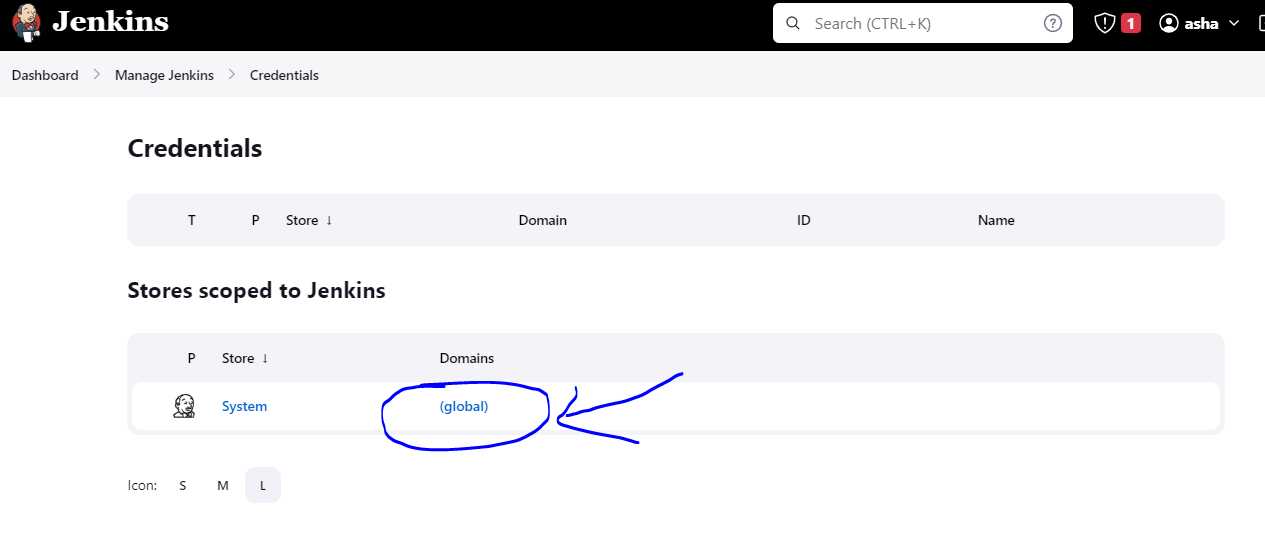
**Now:**

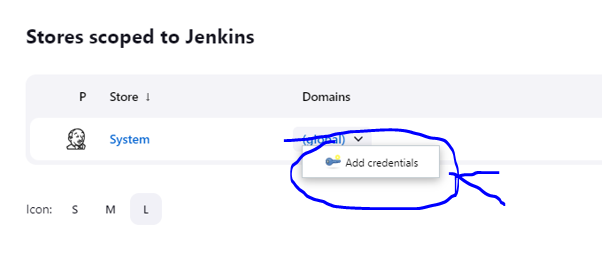
**again go to manage Jenkins**



**Select: credentials**





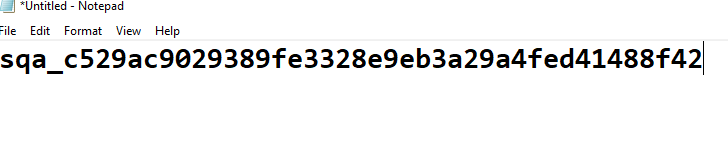


**Select:**

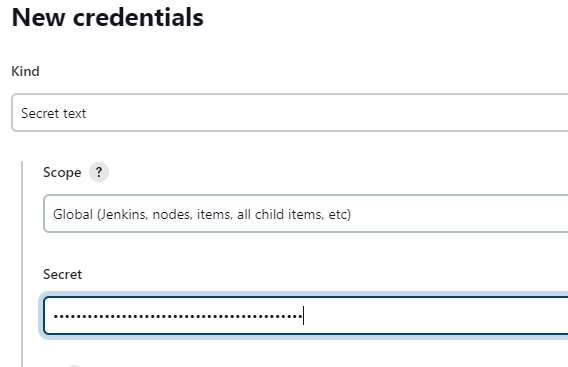
**secret text**



**Copy the secret test (sonarqube quthentication token)**

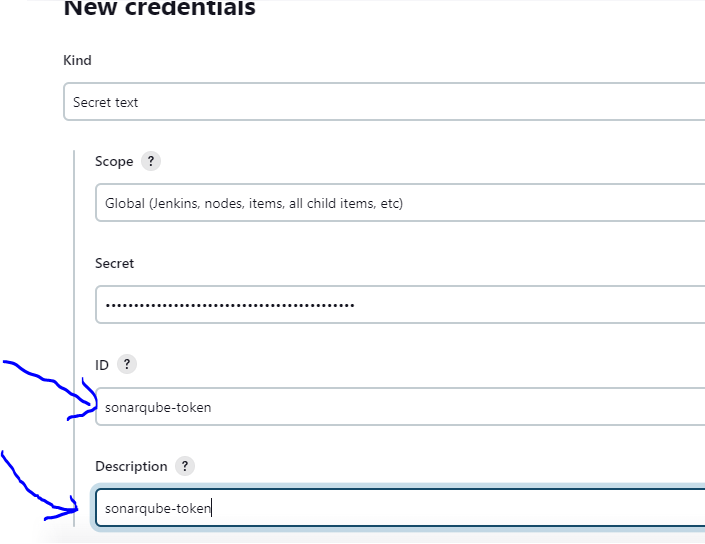


**Paste the sonarqube authentication token:**

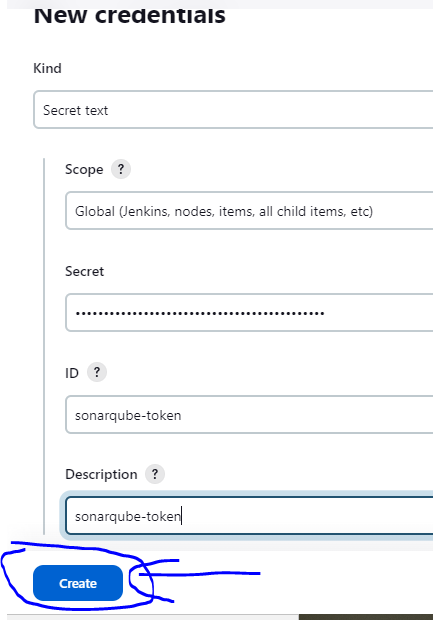


**Id: sonarqube-token**

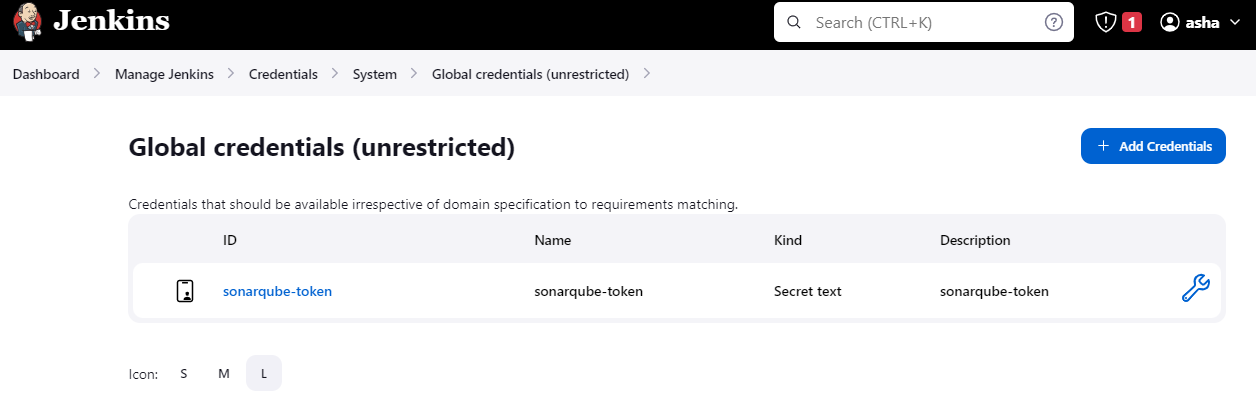
**Description:sonarqube-token**



**Create:**



**Sonarqube adden with authneitcation token**



**Now go to the Manage Jenkns:**

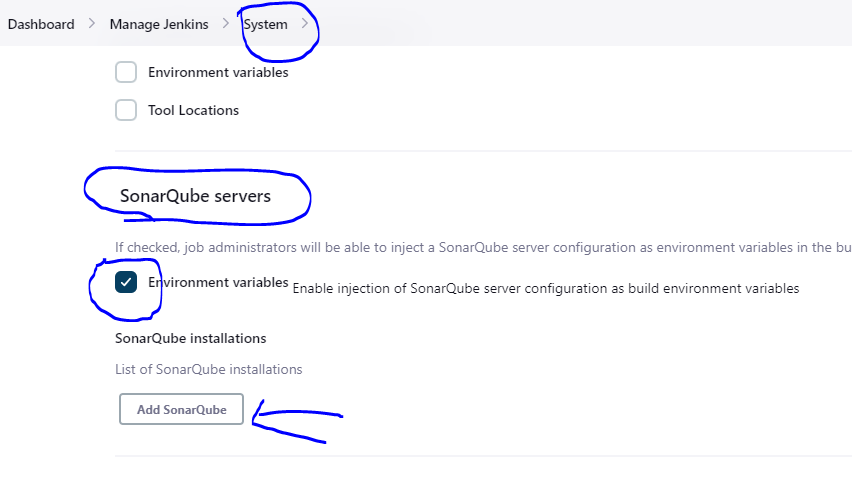
**Select : configure system**

**Choose: system**

**Choose: the checkbox (environment variables)**

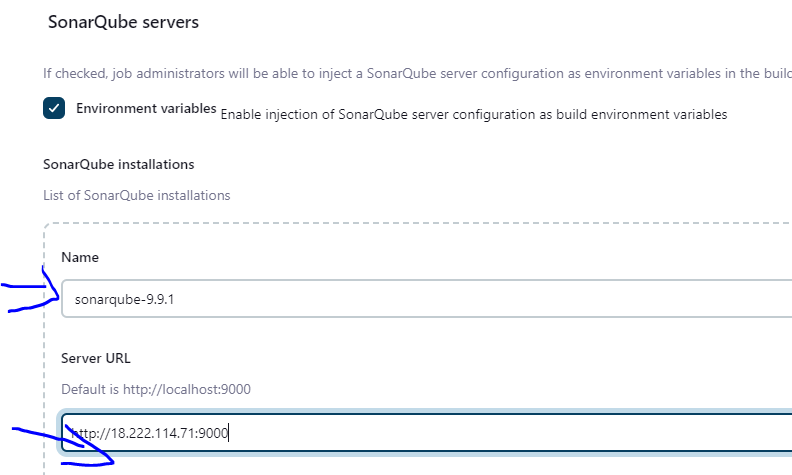
**Then**

**Select :add sonarqube**



**Name: sonarqube-9.9.1**

**url:** <http://18.222.114.71:9000>



**Choose: token: sonarqube-token**

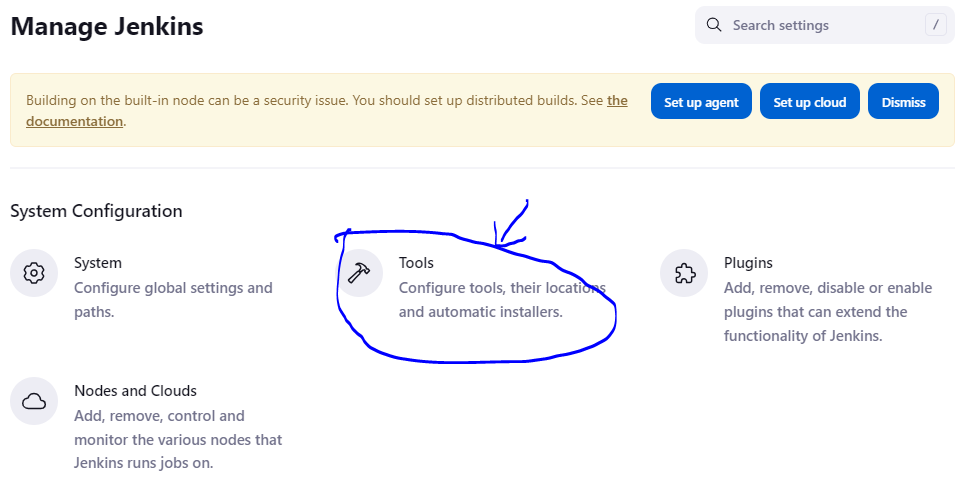
**Apply and save**



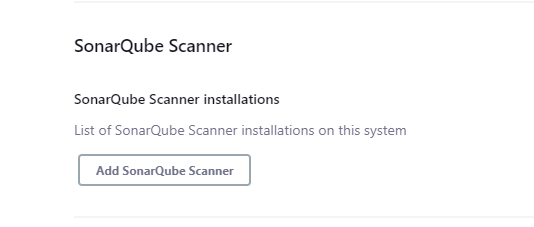
**Now we will install the sonarqube scanner:**

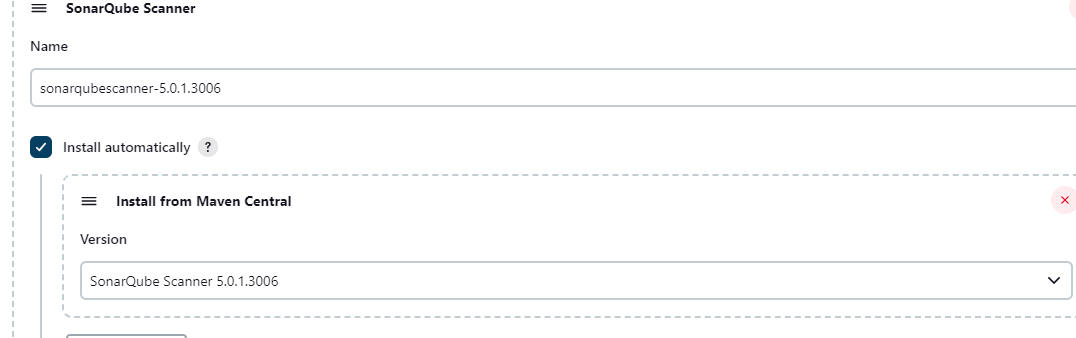
**Goto Jenkins Dashboard**

**Manage Jenkins-🡪tools**



**Select; Sonarqube scanner**





**Apply and save**

**We need maven Install:**

**STEPS**

 Update the system repository using:

**sudo apt update**

Install Maven from the official repository:

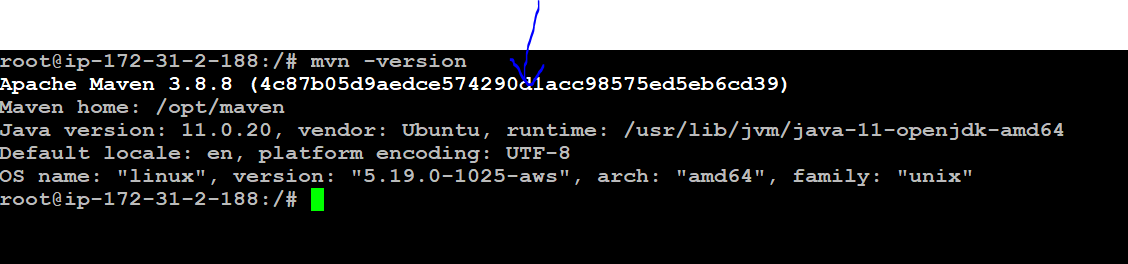
**sudo apt install maven**

Install Maven from the official repository

**sudo apt install maven**

Check the current version of Maven to verify the installation:

**mvn -version**



**Maven Instalaltion Successful**

**Create a Job: pipeline**





**Pipeline Script:**

**pipeline{**

**agent any**

**environment {**

**PATH="$PATH:/opt/apache-maven-3.8.8/bin"**

**}**

**stages**

**{**

**stage('GetCode') {**

**steps {**

**git 'https://github.com/zafar-khan123/docker-project'**

**}**

**}**

**stage('Build') {**

**steps {**

**sh 'mvn clean install'**

**}**

**}**

**stage ('SonarQube Analysis')**

**{**

**steps{**

**withSonarQubeEnv("sonarqube-9.9.1"){**

**sh "mvn sonar:sonar"**

**}**

**}**

**}**

**}**

**}**

**Pipeline Script: Declared Pipeline script**



**SAVE and APPLY**