

Jenkins integration with SonarQube

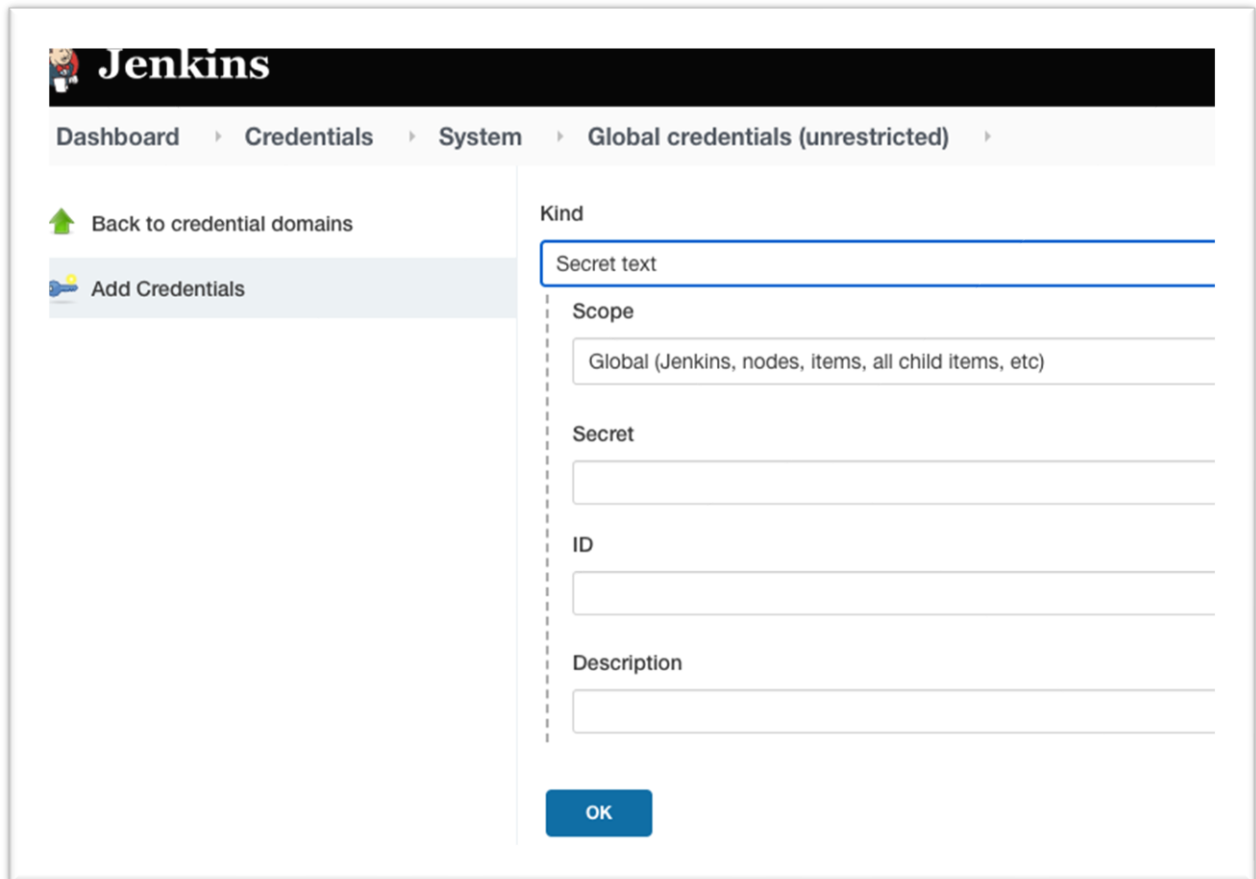
Jenkins configuration

First of all need to install **SonarQube**

Scanner plugin <https://plugins.jenkins.io/sonar/>

The easiest way of installing plugins is through the UI **Manage Jenkins > Manage Plugins** view, available to administrators of a Jenkins environment.

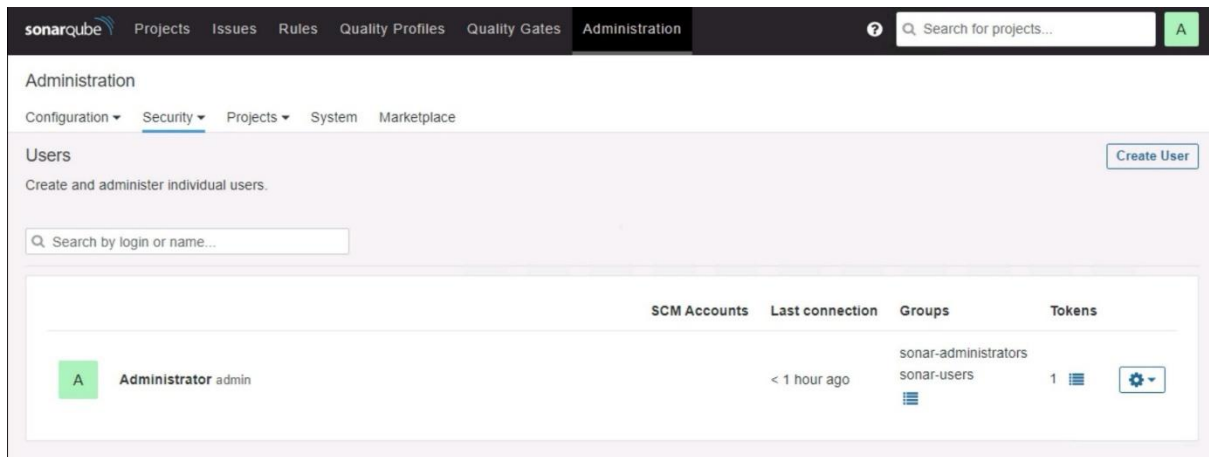
When **SonarQube Scanner** plugin installed need to add Sonar credentials with generated token. From the Jenkins page click **Manage Jenkins > Manage Credentials**



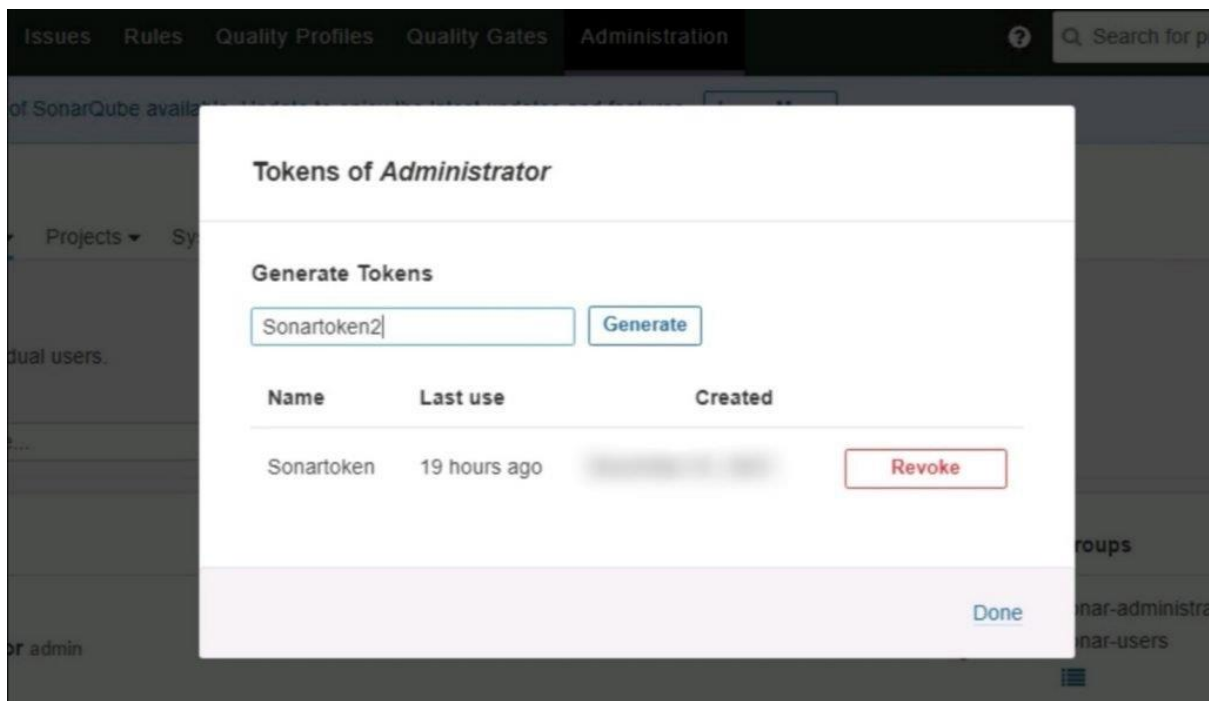
The screenshot shows the Jenkins web interface. At the top is the Jenkins logo and a navigation breadcrumb: Dashboard > Credentials > System > Global credentials (unrestricted). On the left sidebar, there are two links: 'Back to credential domains' with a green arrow icon, and 'Add Credentials' with a key icon. The main area displays the 'Add Credentials' form. The form has a dashed vertical line on the left side. The fields are: 'Kind' (a dropdown menu with 'Secret text' selected), 'Scope' (a text input field containing 'Global (Jenkins, nodes, items, all child items, etc)'), 'Secret' (a text input field), 'ID' (a text input field), and 'Description' (a text input field). At the bottom right of the form is a blue 'OK' button.

Step 1: Generate a token in SonarQube

As a first step, we need to generate a user token in SonarQube so that we are able to access SonarQube from Jenkins server. We will create a secret text credential in Jenkins with the token created in SonarQube. To create the token in SonarQube, let us go to SonarQube → Administration → Security



Go to the user with which you want Jenkins to access SonarQube. In our case, we will see the Administrator user. In the Tokens column, we will see a number and a set of dashes beside it. This number is the number of tokens already available for this user. If your SonarQube setup is new, this number should be 0 in your case. Now when we click the set of dashes beside this number, it will open the a dialog box like the one shown below.

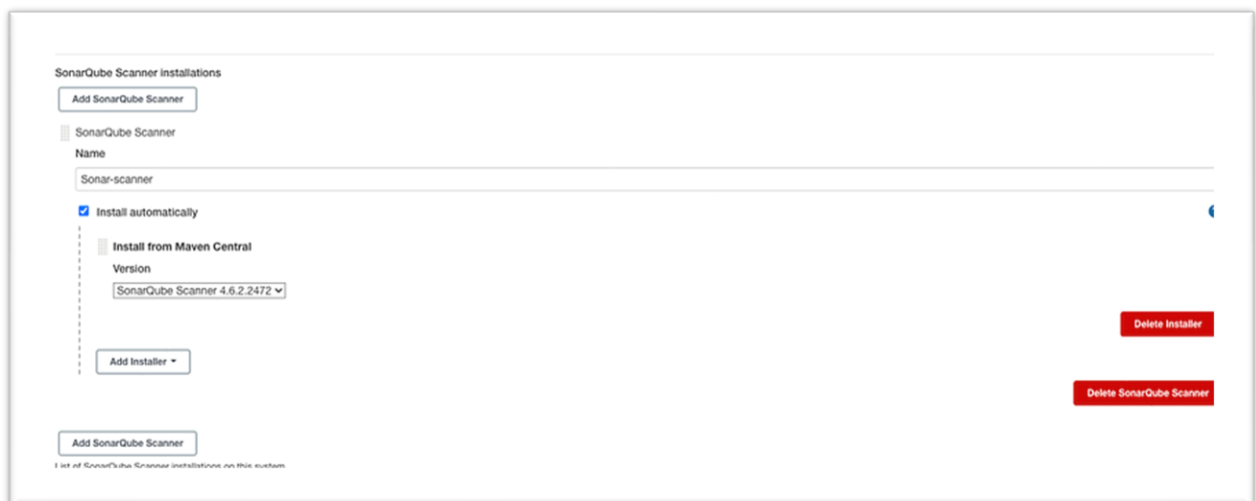


Enter any name for the token in the text box beside *Generate* button. Then click on Generate. It will create a new token and add a row in the list of generated tokens.

Manage Jenkins > Configure System > SonarQube servers

You should add SonarQube server URL without / at the end and chose token name

Installation of the Sonar-scanner



The screenshot shows the 'SonarQube Scanner Installations' configuration page. At the top, there is a button 'Add SonarQube Scanner'. Below it, a section titled 'SonarQube Scanner' contains a 'Name' field with the value 'Sonar-scanner'. A checkbox 'Install automatically' is checked. Underneath, there is a section 'Install from Maven Central' with a 'Version' dropdown menu set to 'SonarQube Scanner 4.6.2.2472'. To the right of this section is a red button 'Delete Installer'. At the bottom of the configuration section is a button 'Add Installer'. Below the configuration section is another 'Add SonarQube Scanner' button. At the very bottom, there is a small text line: 'List of SonarQube Scanner installations on this system'.


```

    steps {
      withSonarQubeEnv(credentialsId: 'sonar-credentialsId',
        installationName: 'Sonar') {
        sh '''$SCANNER_HOME/bin/sonar-scanner \
          -Dsonar.projectKey=projectKey \
          -Dsonar.projectName=projectName \
          -Dsonar.sources=src/ \
          -Dsonar.java.binaries=target/classes/ \
          -Dsonar.exclusions=src/test/java/****/*.java \
          -Dsonar.java.libraries=/var/lib/jenkins/.m2/**/*.jar \
          -Dsonar.projectVersion=${BUILD_NUMBER}-
          ${GIT_COMMIT_SHORT}'''
      }
    }
  }
  stage('SQuality Gate') {
    steps {
      timeout(time: 1, unit: 'MINUTES') {
        waitForQualityGate abortPipeline: true
      }
    }
  }
}
}
}

```

Results:

As a result you will see the SonarQube dashboard with analyzed results