

SONARQUBE IN AWS EC2

- HARSINI A M

SONARQUBE

- SonarQube is an open-source platform used for continuous inspection of code quality, detecting bugs, vulnerabilities, and code smells in software projects.
- It supports various programming languages and integrates with CI/CD pipelines to ensure clean, maintainable code.
- With customizable rules and comprehensive reports, SonarQube helps teams improve code health and ensure best practices.

STEPS TO CREATE AN EC2 INSTANCE AND LOG IN USING PUTTY:

1. Launch EC2 Instance:

- Log in to AWS Console, go to **EC2**, and click **Launch Instance**.
- Choose **Amazon Linux 2 AMI** and select an instance type. Choose **t2.medium**.

2. Configure Instance:

- Proceed with default settings.

3. Security Group:

- Ensure **SSH (port 22)** is open in the security group for inbound rules.

4. Key Pair:

- Create or select a **key pair**. Download the **.pem** file to your local system.

5. Launch Instance:

- Review and click **Launch**. Wait for the instance to initialize.

6. Convert .pem to .ppk:

- Open **PuTTYgen**, load your **.pem** file, and save it as a **.ppk** file (for PuTTY).

7. Get Public IP:

- In the EC2 dashboard, copy your instance's **public IP** or **DNS**.

8. Open PuTTY:

- Enter the **public IP** in PuTTY's **Host Name** field, under **Connection > SSH > Auth**, browse and select your **.ppk** file.

9. Login:

- Click **Open**, then log in as **ec2-user** when prompted in the terminal.

We will be logged in to our EC2 instance through PuTTY.

STEPS TO DOWNLOAD AND RUN SONARQUBE IN EC2- INSTANCE

☐ **Connect to EC2 Instance:**

- SSH into your EC2 instance using **PuTTY** or terminal.

☐ **Update Packages:**

- Run `sudo yum update -y` to update the system packages.

☐ **Install Java:**

- Install Java 11 (required for SonarQube 7.6):
`sudo yum install java-11-openjdk-devel -y.`

☐ **Download SonarQube 7.6:**

- Run:
`wget https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-7.6.zip.`

☐ **Install Unzip:**

- Install unzip using:
`sudo yum install unzip -y,`
- Then unzip SonarQube:
`unzip sonarqube-7.6.zip.`

☐ **Move SonarQube Files:**

- Move the extracted files to `/opt/`:
`sudo mv sonarqube-7.6 /opt/sonarqube.`

☐ **Create a Sonar User:**

- Create a dedicated user for SonarQube:
`sudo adduser sonar,`
then assign directory permissions:
`sudo chown -R sonar:sonar /opt/sonarqube.`

☐ **Start SonarQube:**

- Switch to the sonar user:
`sudo su - sonar,`
navigate to SonarQube bin folder:
`cd /opt/sonarqube/bin/linux-x86-64/,`
and start SonarQube:
`./sonar.sh start.`

☐ **Configure Security Group:**

- In the AWS EC2 dashboard, open **port 9000** in the security group to allow inbound traffic.

☐ **Access SonarQube:**

- In a browser, go to:
`http://your-ec2-ip:9000` to access the SonarQube dashboard.