

## Ansible Task 2

### 1 - Setup PostgreSQL Latest

### 2 - Create Sonar User and Database from postgres

### 3 - Setup Sonarqube Web Server

Note \*-\* I used private server using bastion server

## The Solution

```
amr@DESKTOP-D5VVHN0: ~/ansible_tasks/Task_2$ ansible-playbook -i inventory.ini install_sonarqube.yml
[WARNING]: Found both group and host with same name: public_server
[WARNING]: Found both group and host with same name: private_server

PLAY [Install SonarQube] *****

TASK [Gathering Facts] *****
ok: [public_server]

TASK [Update apt cache] *****
ok: [public_server -> 10.0.1.200]

TASK [Install OpenJDK 11] *****
ok: [public_server -> 10.0.1.200]

TASK [Import PostgreSQL repository key] *****
ok: [public_server -> 10.0.1.200]

TASK [Add PostgreSQL repository] *****
ok: [public_server -> 10.0.1.200]

TASK [Update apt repository list] *****
changed: [public_server -> 10.0.1.200]

TASK [Install PostgreSQL 15] *****
ok: [public_server -> 10.0.1.200]

TASK [Configure Firewall] *****
ok: [public_server -> 10.0.1.200] => (item=http)
ok: [public_server -> 10.0.1.200] => (item=https)
```

```
TASK [Check firewall status] *****
changed: [public_server -> 10.0.1.200]

TASK [Debug firewall status] *****
ok: [public_server -> 10.0.1.200] => {
  "ufw_status.stdout_lines": [
    "Status: inactive"
  ]
}

TASK [Modify pg_hba.conf for password-based authentication] *****
ok: [public_server -> 10.0.1.200]

TASK [Restart PostgreSQL service] *****
[WARNING]: sftp transfer mechanism failed on [10.0.1.200]. Use ANSIBLE_DEBUG=1 to see detailed information
changed: [public_server -> 10.0.1.200]

TASK [Check if sonaruser role already exists in PostgreSQL] *****
[WARNING]: Consider using 'become', 'become_method', and 'become_user' rather than running sudo
ok: [public_server -> 10.0.1.200]

TASK [Create sonaruser role in PostgreSQL if it doesn't exist] *****
skipping: [public_server]

TASK [Check if sonarqube database already exists in PostgreSQL] *****
ok: [public_server -> 10.0.1.200]

TASK [Create sonarqube database in PostgreSQL if it doesn't exist] *****
skipping: [public_server]
```

```
TASK [Create sonarqube database in PostgreSQL if it doesn't exist] *****
skipping: [public_server]

TASK [Install unzip package] *****
ok: [public_server -> 10.0.1.200]

TASK [Download SonarQube] *****
changed: [public_server -> 10.0.1.200]

TASK [Unzip SonarQube] *****
changed: [public_server -> 10.0.1.200]

TASK [Remove existing SonarQube directory] *****
changed: [public_server -> 10.0.1.200]

TASK [Move SonarQube files] *****
changed: [public_server -> 10.0.1.200]

TASK [Delete downloaded SonarQube archive] *****
changed: [public_server -> 10.0.1.200]

TASK [Create sonarqube system user] *****
ok: [public_server -> 10.0.1.200]

TASK [Set ownership for SonarQube directory] *****
changed: [public_server -> 10.0.1.200]

TASK [Configure SonarQube properties] *****
changed: [public_server -> 10.0.1.200] => (item={'line': 'sonar.jdbc.username=sonaruser', 'state': 'present'})
changed: [public_server -> 10.0.1.200] => (item={'line': 'sonar.jdbc.password=MyPassword@123', 'state': 'present'})
```

```

changed: [public_server -> 10.0.1.200] => (item={'line': 'sonar.jdbc.url=jdbc:postgresql://localhost:5432/sonarqube', 'state': 'present'})
changed: [public_server -> 10.0.1.200] => (item={'line': 'sonar.web.javaAdditionalOpts=-server', 'state': 'present'})
changed: [public_server -> 10.0.1.200] => (item={'line': 'sonar.web.host=127.0.0.1', 'state': 'present'})

TASK [Increase virtual memory for Elasticsearch] *****ok: [public_server -> 10.0.1.200] => (item=vm.max_map_count=524288)
ok: [public_server -> 10.0.1.200] => (item=fs.file-max=131072)

TASK [Create limits configuration directory] *****ok: [public_server -> 10.0.1.200]

TASK [Create limits configuration for sonarqube user] *****ok: [public_server -> 10.0.1.200] => (item=sonarqube - nofile 131072)
ok: [public_server -> 10.0.1.200] => (item=sonarqube - nproc 8192)

TASK [Reboot the system] *****fatal: [public_server]: FAILED! => {"msg": "Failed to connect to the host via ssh: kex_exchange_identification: Connection closed by remote host\r\nConnection closed by UNKNOWN port 65535"}
...ignoring

TASK [Wait for the system to reboot] *****ok: [public_server -> 10.0.1.200]

TASK [Setup SonarQube service] *****ok: [public_server -> 10.0.1.200]

TASK [Start SonarQube service] *****ok: [public_server -> 10.0.1.200]

PLAY RECAP *****public_server
                : ok=30  changed=10  unreachable=0  failed=0  skipped=2  rescued=0  ignored=1

amr@DESKTOP-D5VVHN0:~/ansible_tasks/Task_2$

```

```

ubuntu@ip-10-0-1-200: ~
Last login: Wed Jul 19 15:39:47 2023 from 10.0.0.7
ubuntu@ip-10-0-1-200: $ curl localhost:9000

<!DOCTYPE html>
<html lang="en">

<head>
  <meta http-equiv="content-type" content="text/html; charset=UTF-8" charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <link rel="apple-touch-icon" href="/apple-touch-icon.png">
  <link rel="apple-touch-icon" sizes="57x57" href="/apple-touch-icon-57x57.png">
  <link rel="apple-touch-icon" sizes="60x60" href="/apple-touch-icon-60x60.png">
  <link rel="apple-touch-icon" sizes="72x72" href="/apple-touch-icon-72x72.png">
  <link rel="apple-touch-icon" sizes="76x76" href="/apple-touch-icon-76x76.png">
  <link rel="apple-touch-icon" sizes="114x114" href="/apple-touch-icon-114x114.png">
  <link rel="apple-touch-icon" sizes="120x120" href="/apple-touch-icon-120x120.png">
  <link rel="apple-touch-icon" sizes="144x144" href="/apple-touch-icon-144x144.png">
  <link rel="apple-touch-icon" sizes="152x152" href="/apple-touch-icon-152x152.png">
  <link rel="apple-touch-icon" sizes="180x180" href="/apple-touch-icon-180x180.png">
  <link rel="icon" type="image/x-icon" href="/favicon.ico">
  <meta name="application-name" content="SonarQube" />
  <meta name="msapplication-TileColor" content="#FFFFFF" />
  <meta name="msapplication-TileImage" content="/mstile-512x512.png" />
  <title>SonarQube</title>

  <link rel="stylesheet" href="/js/out3HXNKQBj.css" />
</head>

<body>
  <div id="content">
    <div class="global-loading">
      <i class="spinner global-loading-spinner"></i>
      <span aria-live="polite" class="global-loading-text">Loading...</span>
    </div>
  </div>

  <script>
    window.baseUrl = '';
    window.serverStatus = 'STARTING';
    window.instance = 'SonarQube';
    window.official = true;

```