**SonarQube - Docker installation**

Would you like to learn how to install SonarQube using Docker on Ubuntu Linux? In this tutorial, we are going to show you all the steps required to perform the SonarQube installation using Docker on a computer running Ubuntu Linux in 5 minutes or less.

• Ubuntu 20.04  
• Ubuntu 18.04  
• Ubuntu 19.04  
• SonarQube 8.4.2

**Tutorial SonarQube - Docker Installation**

Edit the system configuration file.

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1

vi /etc/sysctl.conf

Insert the following lines at the end of this file.

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1

vm.max\_map\_count=262144

2

fs.file-max=65536

Enable the system configuration.

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1

sysctl -p

Create a configuration file named 99-sonarqube.conf.

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vi /etc/security/limits.d/99-sonarqube.conf

Here is the file content.

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1

root - nofile 65536

2

root - nproc 7610

Reboot the computer.

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reboot

Install the Docker service.

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apt-get update

2

apt-get install docker.io

Download the SonarQube Docker image from the online repository.

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docker pull sonarqube

List the Docker images installed on your system.

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1

docker images

Here is the command output:

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1

REPOSITORY TAG IMAGE ID CREATED SIZE

2

sonarqube latest 3287e6831017 3 weeks ago 461MB

Create Docker volumes to store the SonarQube persistent data.

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1

docker volume create sonarqube-conf

2

docker volume create sonarqube-data

3

docker volume create sonarqube-logs

4

docker volume create sonarqube-extensions

Verify the persistent data directories.

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1

docker volume inspect sonarqube-conf

2

docker volume inspect sonarqube-data

3

docker volume inspect sonarqube-logs

4

docker volume inspect sonarqube-extensions

Optionally, create symbolic links to an easier access location.

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1

mkdir /sonarqube

2

ln -s /var/lib/docker/volumes/sonarqube-conf/\_data /sonarqube/conf

3

ln -s /var/lib/docker/volumes/sonarqube-data/\_data /sonarqube/data

4

ln -s /var/lib/docker/volumes/sonarqube-logs/\_data /sonarqube/logs

5

ln -s /var/lib/docker/volumes/sonarqube-extensions/\_data /sonarqube/extensions

Start a SonarQube container with persistent data storage.

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1

docker run -d --name sonarqube -p 9000:9000 -p 9092:9092 -v sonarqube-conf:/opt/sonarqube/conf -v sonarqube-data:/opt/sonarqube/data -v sonarqube-logs:/opt/sonarqube/logs -v sonarqube-extensions:/opt/sonarqube/extensions sonarqube

Here is the command output:

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1

348b4ab00defe8e3621a61e5899d4eb04dd533046fce4cf2c5b0163f0717bd50

In our example, the SonarQube image was used to start a new container.

The new container has persistent data storage.

The container ID is 348b4ab00defe8e3621a61e5899d4eb04dd533046fce4cf2c5b0163f0717bd50.

**Tutorial Docker - SonarQube installation**

Open your browser and enter the IP address of your web server plus :9000

In our example, the following URL was entered in the Browser:

• http://192.168.15.10:9000

The SonarQube dashboard will be presented.

Click on the Login button and use the Sonarqube default username and password.

• Default Username: admin  
• Default Password: admin