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Project Name: Artifactory and Code.

NEXUS ARTIFACTORY ON UBUNTU:

- As a Prerequisite installed the vim package and java package

sudo apt install openjdk-8-jre-headless

```
root@ip-172-31-44-241:/home/ubuntu# java -version
openjdk version "1.8.0_312"
OpenJDK Runtime Environment (build 1.8.0_312-8u312-b07-0ubuntu1-b07)
OpenJDK 64-Bit Server VM (build 25.312-b07, mixed mode)
```

Download the latest Nexus Repository Manager Setup

Navigate to **/opt** directory

cd /opt

Download the SonaType Nexus on Ubuntu using wget

sudo wget <https://download.sonatype.com/nexus/3/latest-unix.tar.gz>

Install Nexus Repository on Ubuntu

```
root@ip-172-31-44-241:/opt# ll
total 209632
drwxr-xr-x  4 root root    4096 Jul 27 04:51 ./
drwxr-xr-x 19 root root    4096 Jul 27 04:36 ../
-rw-r--r--  1 root root 214644368 Jun 24 23:54 latest-unix.tar.gz
drwxr-xr-x 10 root root    4096 Jul 27 04:51 nexus-3.40.1-01/
drwxr-xr-x  3 root root    4096 Jul 27 04:51 sonatype-work/
root@ip-172-31-44-241:/opt#
```

Extract the Nexus repository setup in **/opt** directory

tar -zxvf latest-unix.tar.gz

```
root@ip-172-31-44-241:/opt# ls
latest-unix.tar.gz  nexus-3.40.1-01  sonatype-work
root@ip-172-31-44-241:/opt#
```

Rename the extracted Nexus setup folder to nexus

```
sudo mv /opt/nexus-3.30.1-01 /opt/nexus
```

```
root@ip-172-31-44-241:/opt# sudo mv /opt/nexus-3.40.1-01 /opt/nexus
root@ip-172-31-44-241:/opt# ls
latest-unix.tar.gz  nexus  sonatype-work
root@ip-172-31-44-241:/opt#
```

As security practice, not to run nexus service using root user, so lets create new user named **nexus** to run nexus service

```
sudo adduser nexus
```

To set no password for nexus user open the **visudo** file in ubuntu

```
sudo visudo
```

Add below line into it , save and exit

```
nexus ALL=(ALL) NOPASSWD: ALL
```

```
# User privilege specification
root    ALL=(ALL:ALL) ALL
nexus   ALL=(ALL) NOPASSWD: ALL
```

Give permission to nexus files and nexus directory to **nexus** user

```
sudo chown -R nexus:nexus /opt/nexus
```

```
sudo chown -R nexus:nexus /opt/sonatype-work
```

To run nexus as service at boot time, open **/opt/nexus/bin/nexus.rc** file, uncomment it and add nexus user as shown below

```
sudo nano /opt/nexus/bin/nexus.rc
```

```
run_as_user="nexus"
```

```
GNU nano 6.2
#run_as_user="nexus"
```

To Increase the nexus JVM heap size, open the `/opt/nexus/bin/nexus.vmoptions`

```
-Xms2703m
-Xmx2703m
-XX:MaxDirectMemorySize=2703m
-XX:+UnlockDiagnosticVMOptions
-XX:+LogVMOutput
-XX:LogFile=../sonatype-work/nexus3/log/jvm.log
-XX:-OmitStackTraceInFastThrow
-Djava.net.preferIPv4Stack=true
-Dkaraf.home=.
```

file, you can modify the size as shown below

`../sonatype-work` to `../sonatype-work`

To run nexus as service using Systemd

`sudo nano /etc/systemd/system/nexus.service`

paste the below lines into it.

[Unit]

Description=nexus service

After=network.target

[Service]

Type=forking

LimitNOFILE=65536

ExecStart=/opt/nexus/bin/nexus start

ExecStop=/opt/nexus/bin/nexus stop

User=nexus

Restart=on-abort

[Install]

WantedBy=multi-user.target

To start nexus service using systemctl

sudo systemctl start nexus

To enable nexus service at system startup

sudo systemctl enable nexus

To check nexus service status

sudo systemctl status nexus

To stop Nexus service

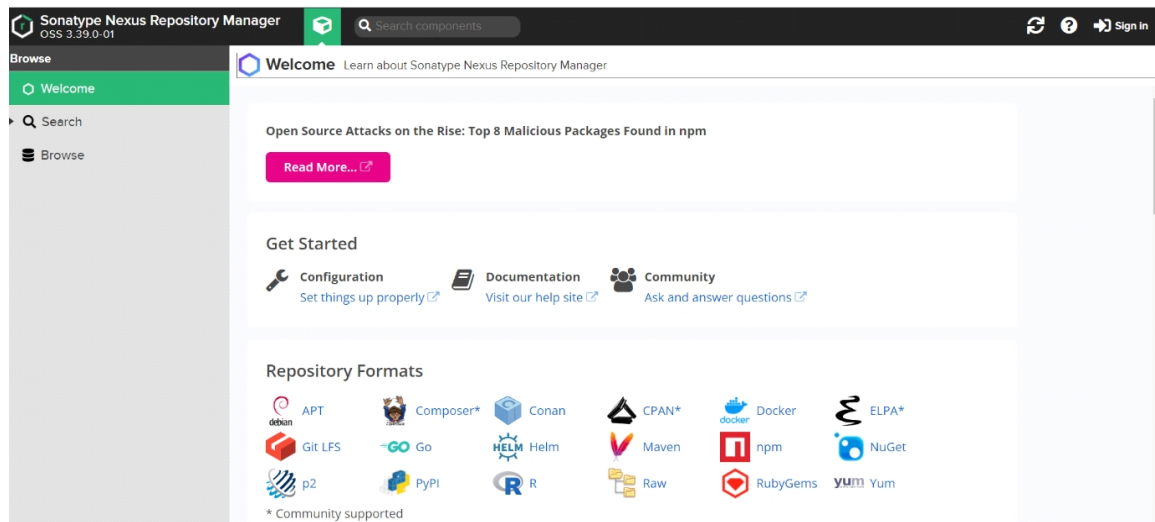
sudo systemctl stop nexus

To access Nexus repository web interface , open your favorite browser

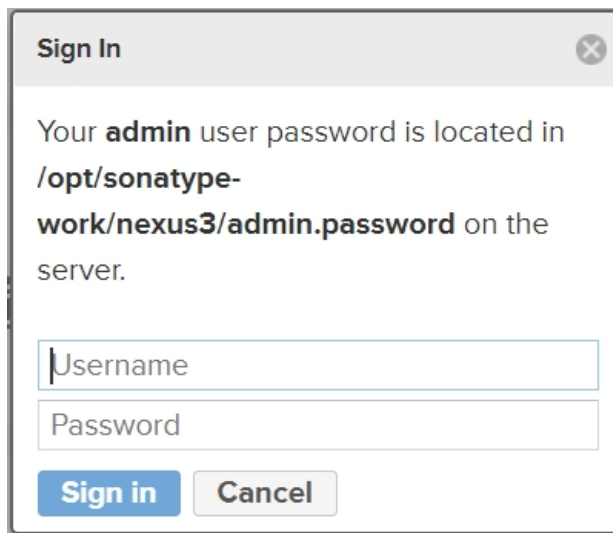
if you are running UFW firewall on Ubuntu, open the firewall port 8081 using below command

ufw allow 8081/tcp

http://server_IP:8081

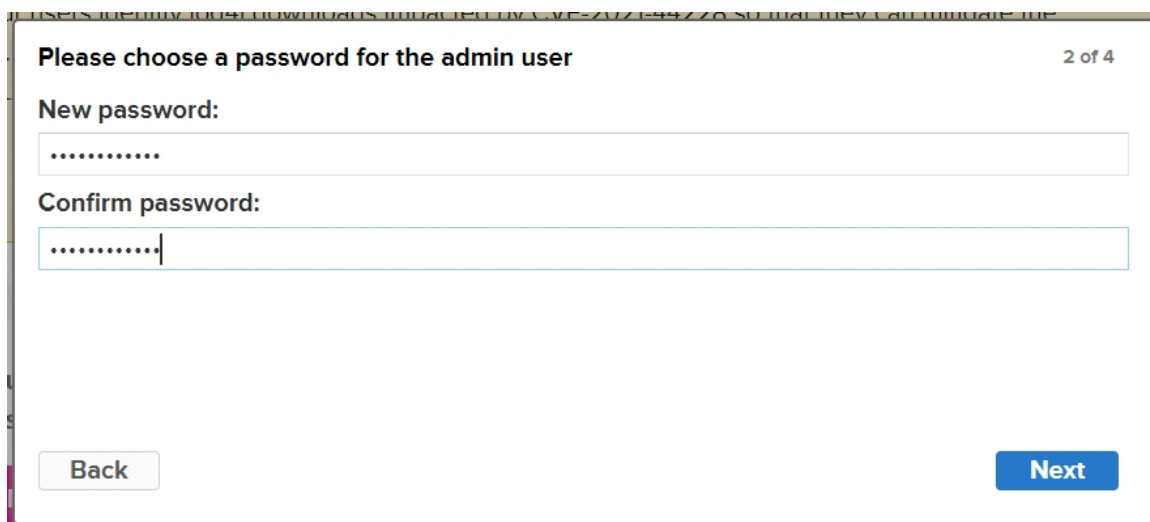


Default admin user password is located in /opt/sonatype-work/nexus3/admin.password on the server



A 'Sign In' dialog box with a title bar containing the text 'Sign In' and a close button. The main text reads: 'Your **admin** user password is located in **/opt/sonatype-work/nexus3/admin.password** on the server.' Below the text are two input fields: 'Username' and 'Password'. At the bottom are two buttons: 'Sign in' (blue) and 'Cancel' (grey).

- Accessed the Password by running the (`cat /opt/sonatype-work/nexus3/admin.password`) command.
- To log in used admin as the username and password as the default password.
- Changed the password immediately once login with the default password and enabled a few steps.



A dialog box titled 'Please choose a password for the admin user' with a progress indicator '2 of 4' in the top right corner. It contains two input fields: 'New password:' and 'Confirm password:'. Both fields have a password mask consisting of dots. At the bottom are two buttons: 'Back' (grey) and 'Next' (blue).

Configure Anonymous Access

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Enable anonymous access means that by default, users can search, browse and download components from repositories without credentials. Please **consider the security implications for your organization**.

Disable anonymous access should be chosen with care, as it **will require credentials for all** users and/or build tools.

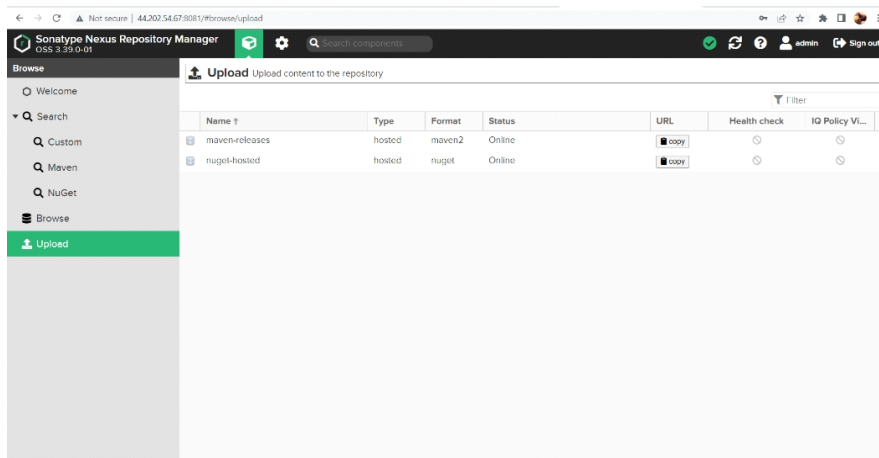
[More information](#)

- ☐ Enable anonymous access
- ☐ Disable anonymous access

Back

Next

- Successfully logged in to nexus artifact and was able to access it.



SONARQUBE INSTALLATION ON AMAZON LINUX:

- Installed Java 11 by running the (amazon-linux-extras install java-openjdk11) command.

```
[root@ip-172-31-41-163 ec2-user]# java -version
openjdk version "11.0.13" 2021-10-19 LTS
OpenJDK Runtime Environment 18.9 (build 11.0.13+8-LTS)
OpenJDK 64-Bit Server VM 18.9 (build 11.0.13+8-LTS, mixed mode, sharing)
[root@ip-172-31-41-163 ec2-user]#
```

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Fetches the sonarqube setup file from the internet by using the

wget https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-9.4.0.54424.zip

```
[root@ip-172-31-41-163 ec2-user]# ls
sonarqube-9.4.0.54424.zip sonarqube-9.4.0.54424.zip.1
[root@ip-172-31-41-163 ec2-user]#
```

Moved to /opt directory and unzipped by running command unzip the sonarqube-9.4.0.54424. directory

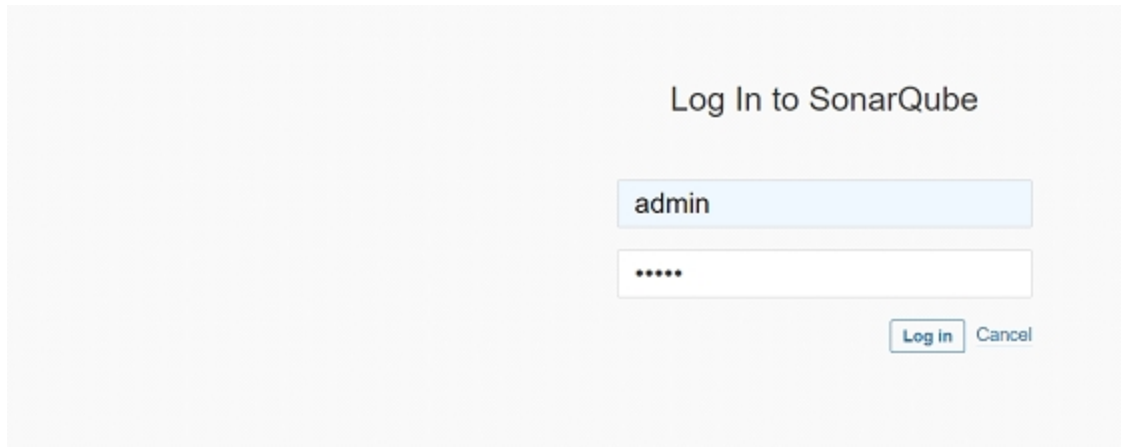
- Moved to /opt directory and unzipped by running command
- unzip the sonarqube-9.4.0.54424. directory

```
[root@ip-172-31-22-223 ~]# mv sonarqube-9.4.0.54424.zip /opt
[root@ip-172-31-22-223 ~]# ls
[root@ip-172-31-22-223 ~]# cd /opt
[root@ip-172-31-22-223 opt]# ll
total 280924
drwxr-xr-x 4 root root      33 Jun 13 18:53 aws
drwxr-xr-x 2 root root      6 Aug 16 2018 rh
-rw-r--r-- 1 root root 287666040 Apr  1 09:50 sonarqube-9.4.0.54424.zip
```

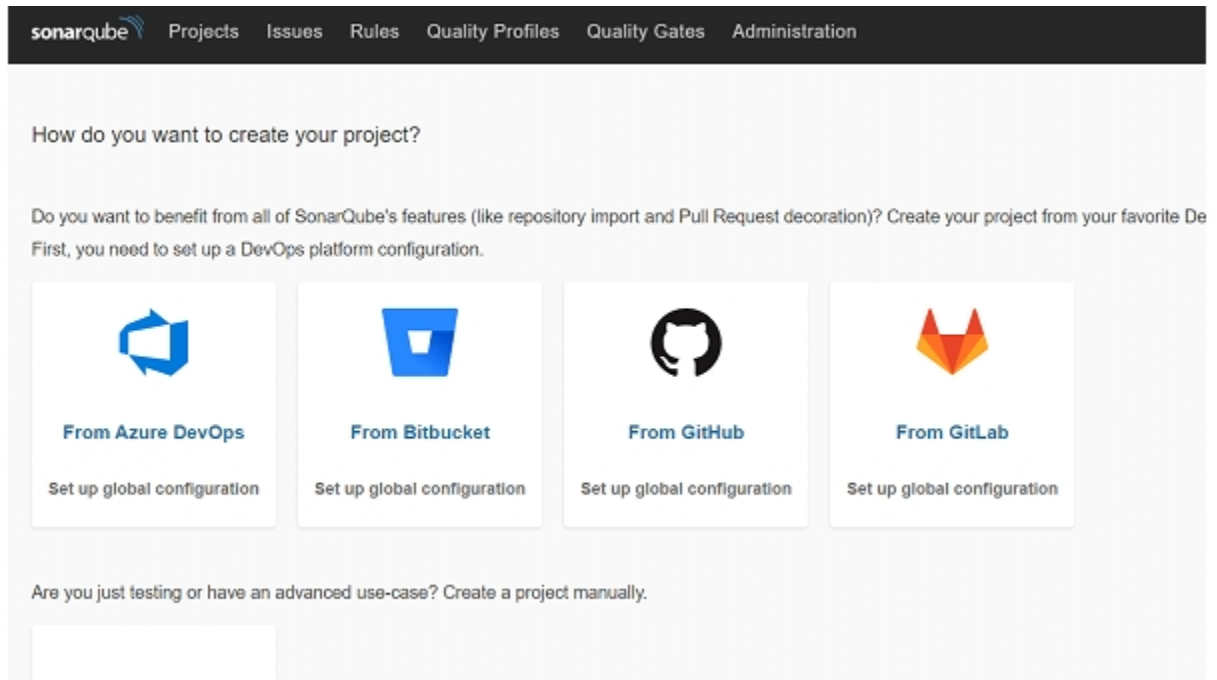
- Added sonaradmin user
- Changed the ownership of the file to sonaradmin by running the (chown -R sonaradmin:sonaradmin sonarqube-9.4.0.54424) command.

```
drwxr-xr-x 4 root      root      33 Jun 13 18:53 aws
drwxr-xr-x 2 root      root      6 Aug 16 2018 rh
drwxr-xr-x 11 sonaradmin sonaradmin 172 Apr  1 09:15 sonarqube-9.4.0.54424
-rw-r--r-- 1 root      root      287666040 Apr  1 09:50 sonarqube-9.4.0.54424.zip
```

- Switched to sonaradmin to start the sonar services
 - Moved to /opt/sonarqube-9.4.0.54424/bin/linux-x86-64 directory.
 -
 - Checked the status of the sonarqube services by running the (./sonar.sh status) command
- Taken the instance Public IP address: 13.233.195.224 and used port 9000 to access the SonarQube web interface.



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- Logged with admin user name and password admin.
- Changed the Password.
- Successfully accessed SonarQube Web interface.



JFROG INSTALLATION ON AMAZON INSTANCE:

Artifactory Pro Install in Linux

- **Connected to instance and switched to root user**

- Performed below commands:

```
$ cd /opt/
```

```
$ wget
```

```
https://releases.jfrog.io/artifactory/artifactory-pro/org/artifactory/pro/jfrog-artifactory-pro-7.23.3/jfrog-artifactory-pro-7.23.3-linux.tar.gz
```

```
z
```

```
$ tar -zxvf jfrog-artifactory-pro-7.23.3-linux.tar.gz
```

```
$ cd artifactory-pro-7.23.3
```

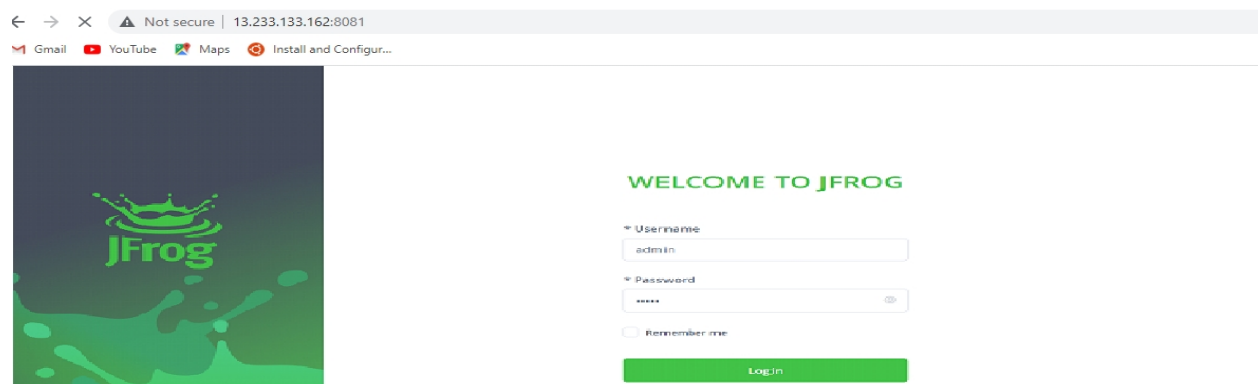
```
$ cd app/bin
```

```
$ ./artifactory.sh start
```

```
$ ./artifactory.sh status
```

```
[root@ip-172-31-13-151 bin]# ./artifactory.sh status
Using default router's certificate and private key
router is running (PID: 7286)
metadata is running (PID: 7463)
event is running (PID: 7594)
frontend is running (PID: 7730)
Artifactory is running, on pid=7825
```

- Taken the Public IP address and accessed the JFROG with port number 8081.



Logged into JFROG with username= admin and Password: password. After Successfully logged in changed the password.



WELCOME TO JFROG

* Username

admin

* Password



☐ Remember me

Login