

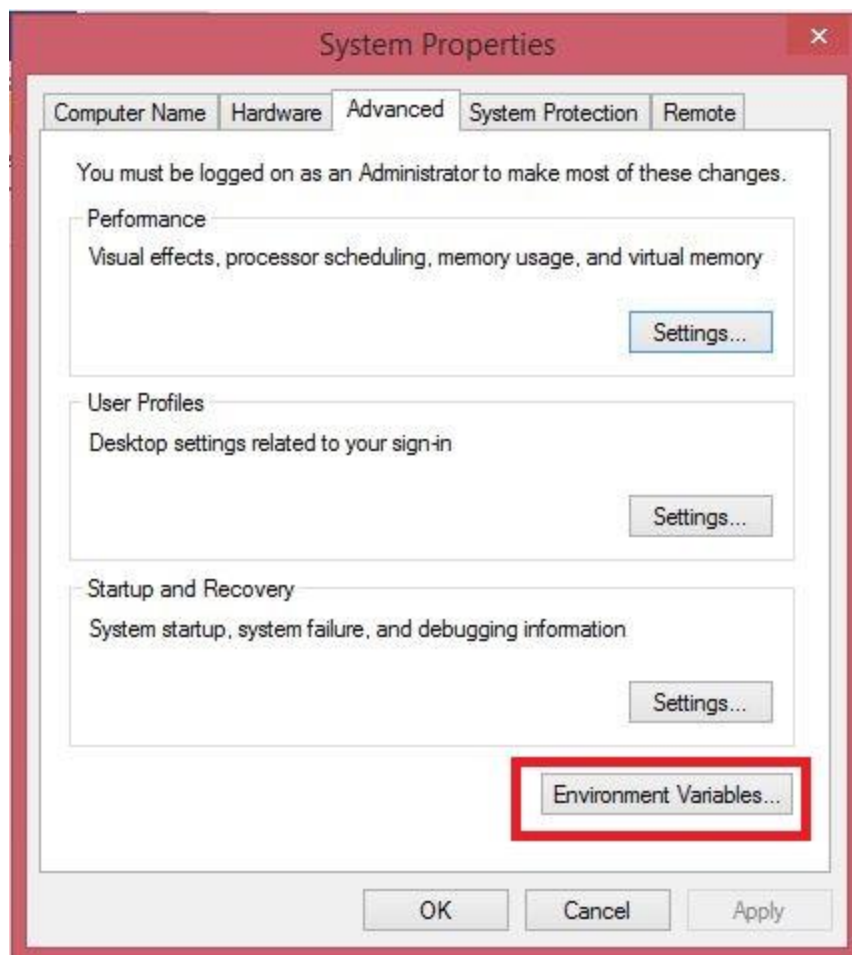
Nexus Installation in Windows machine

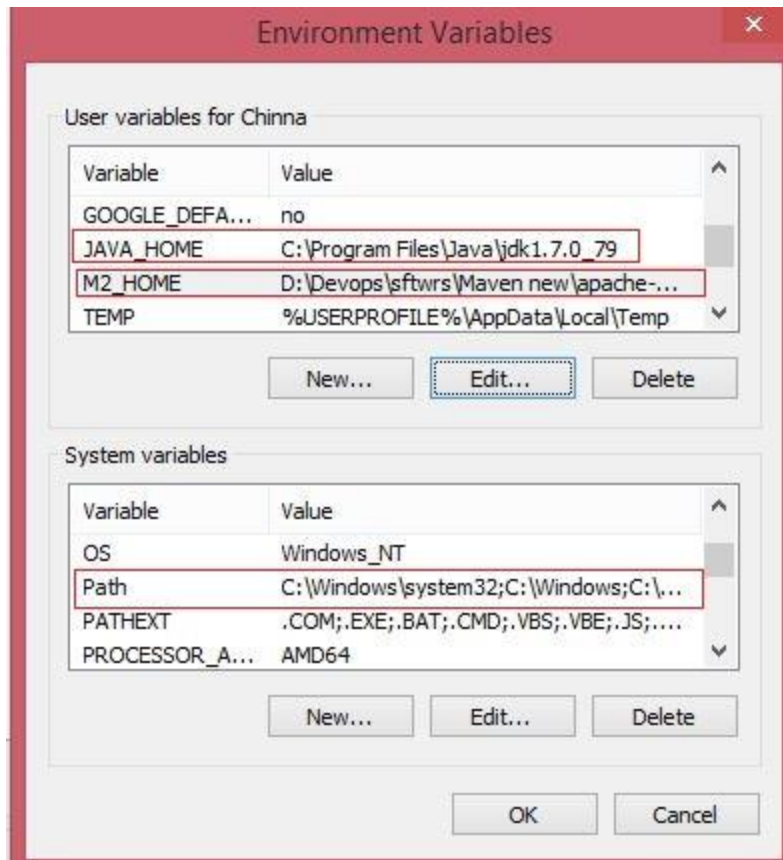
Nexus repository

Before going to install nexus repository we have to set maven path and JDK path in environment variables as shown in the below pictures.

Go to system properties → advanced system settings → environmental variables.







Paths:

M2 path : D:\Devops\sftwrs\Maven new\apache-maven-3.0.4-bin\apache-maven-3.0.4 (new Maven-3.0.4 path)

JDK path : C:\Program Files\Java\jdk1.7.0_79

Main Path : keep the cursor at the end to present path and then give ';' then give latest maven path then save and exit.

Steps to install nexus repository:

Step1: Download Nexus from <https://www.sonatype.com/download-oss-sonatype>

Nexus Repository Manager OSS 2.x

The original version of Nexus Repository OSS, deployed across thousands of organizations.

Note: For those upgrading, please consult our [upgrade article](#) before proceeding. Additionally, previous versions of Nexus Repository Manager can be downloaded via our [Support Knowledge Base](#).

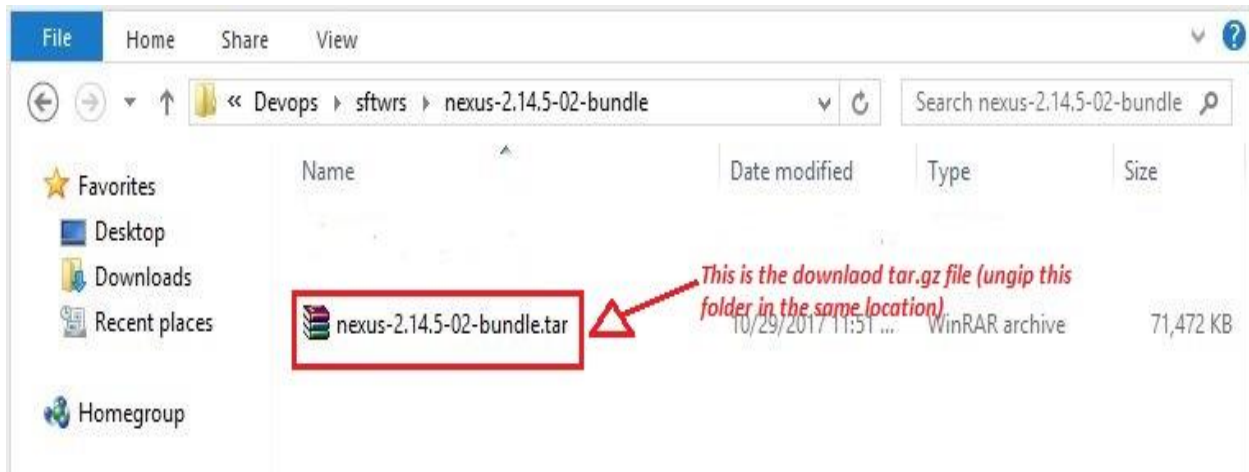
Manage these formats:

✓ Maven ✓ OBR ✓ P2 ✓ Yum

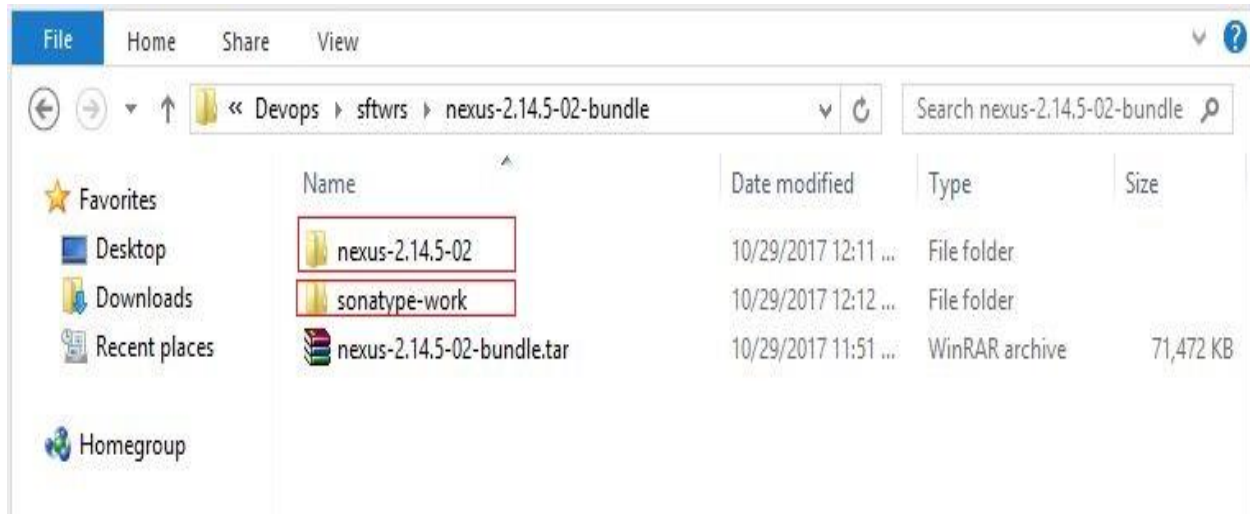
Choose your Nexus:

All platforms - Nexus Repository Manager OSS 2.x - bundle.tar.gz	ASC	MD5	SHA
All platforms - Nexus Repository Manager OSS 2.x - bundle.zip	ASC	MD5	SHA

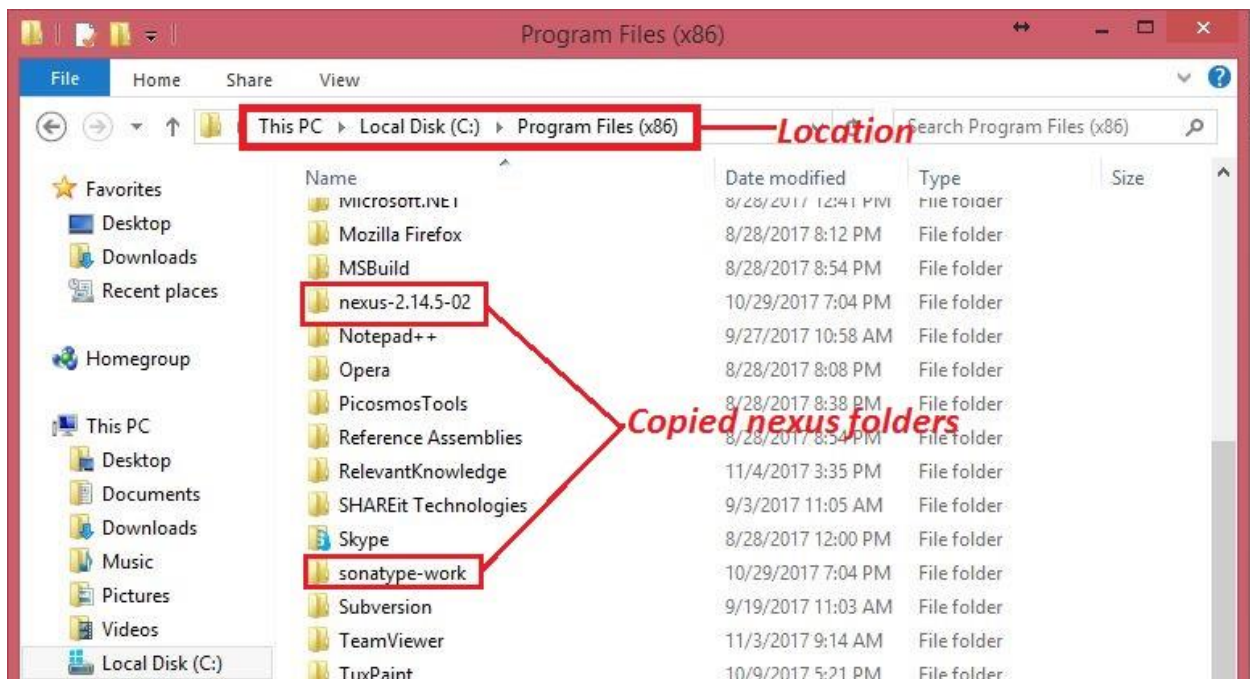
Click on the above marked bundle.tar.gz hyper link to download



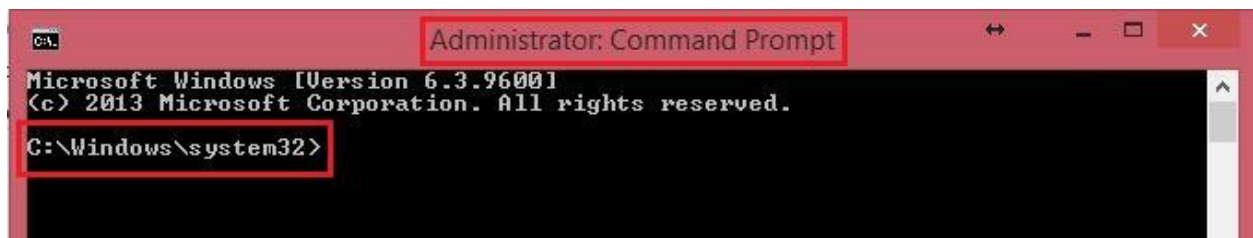
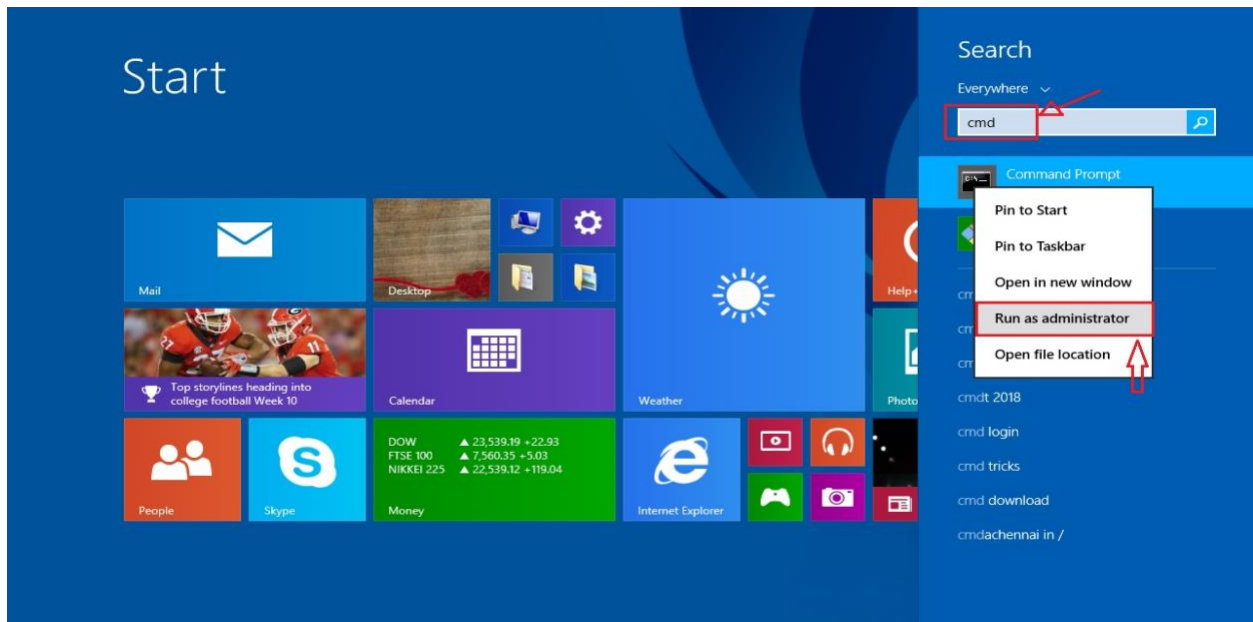
Step2: Unzip downloaded nexus folder in the same location then you will get **nexus-2.14.5-02** and **sonatype-work** as below.



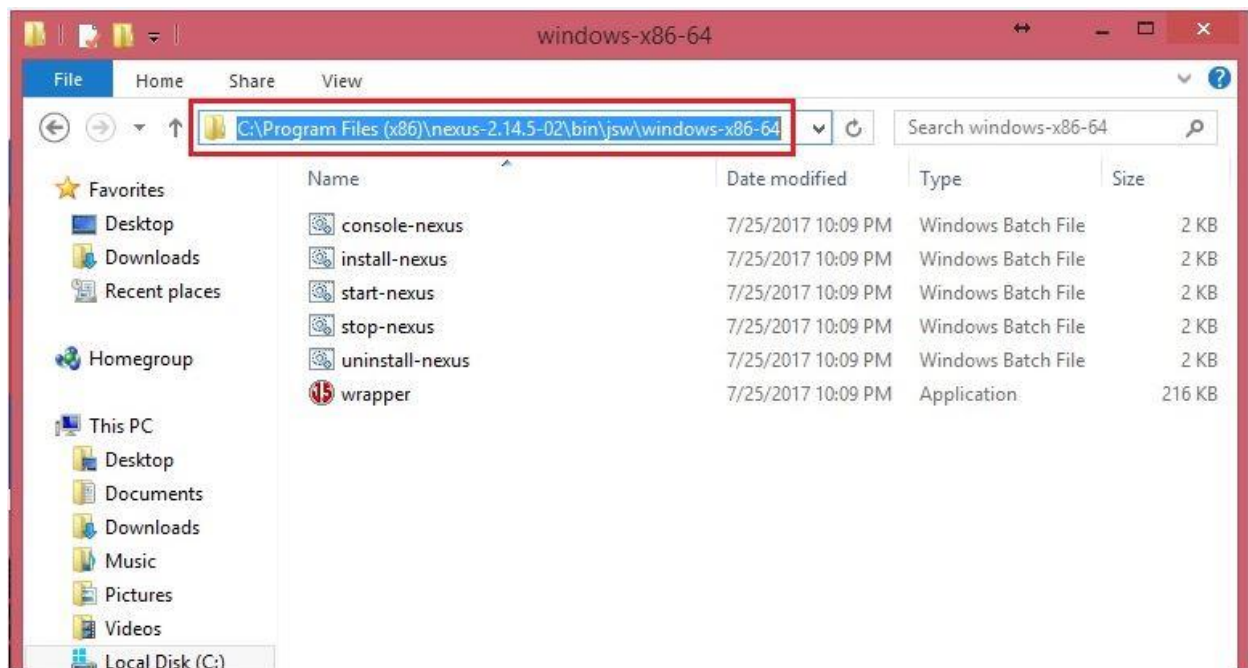
Step3: Copy both the marked folders to the location **C:\Program Files (x86)** in your local machine.

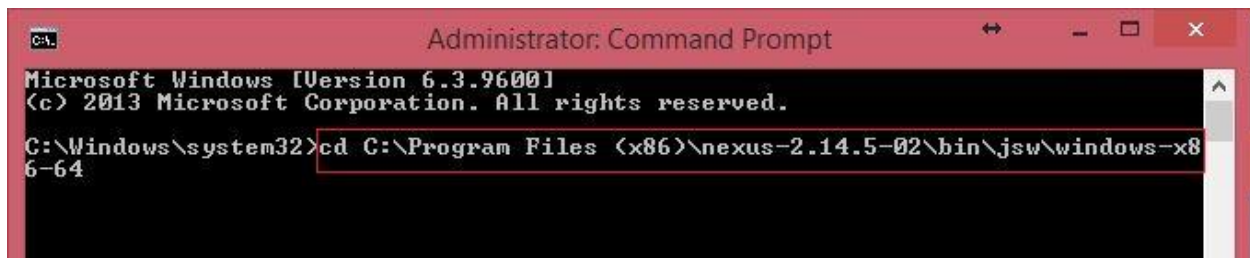


Step4: Click on start button in your windows machine and search for command prompt then open it as Administrator as shown below.



Step5: Go to the given path in your local machine **C:\Program Files (x86)\nexus-2.14.5-02\bin\jsw\windows-x86-64** and copy the path to command prompt using **cd** .

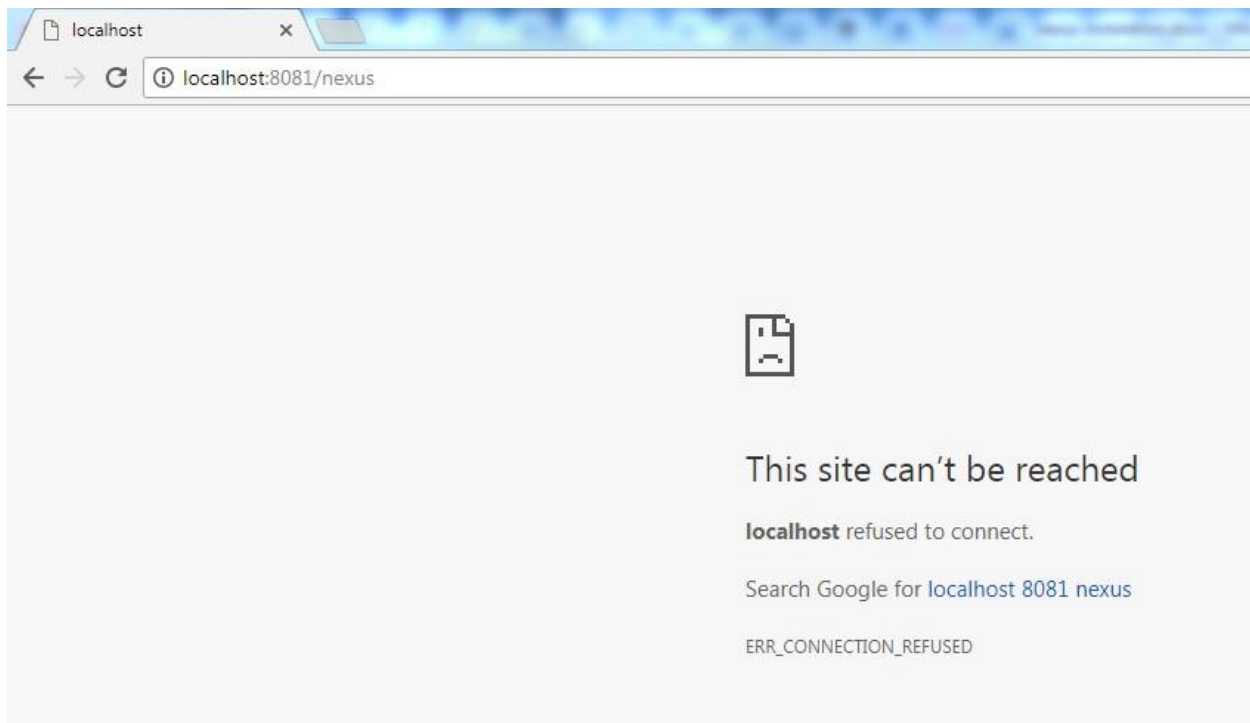




```
Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
C:\Windows\system32>cd C:\Program Files (x86)\nexus-2.14.5-02\bin\jsw\windows-x86-64
```

Step6: In that given path we have to run the command **# install-nexus.bat** in windows cmd prompt then nexus will automatically install in your local machine.

Step7: Open browser and enter the given link <http://localhost:8081/nexus> you will get error as below.



Step8: Here we have to start nexus service in your local machine in the following way.

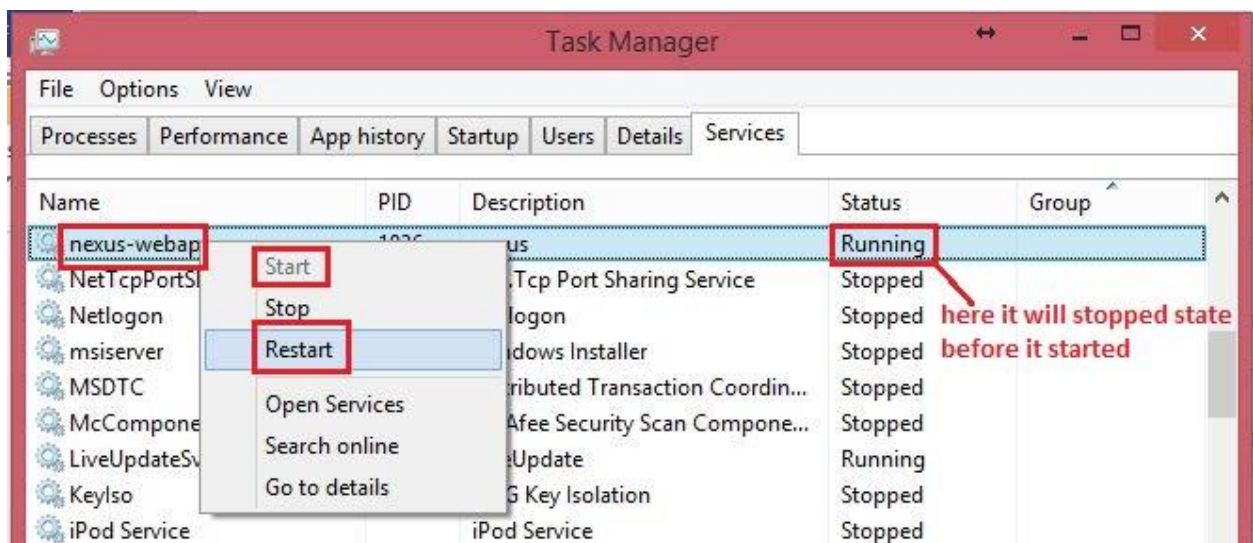
Right click on Task bar and got **Task manager** you will get a new window, here you will find **services** tab click on that and search for nexus.

Right click on **nexus service** and click on **start** or **restart** option.

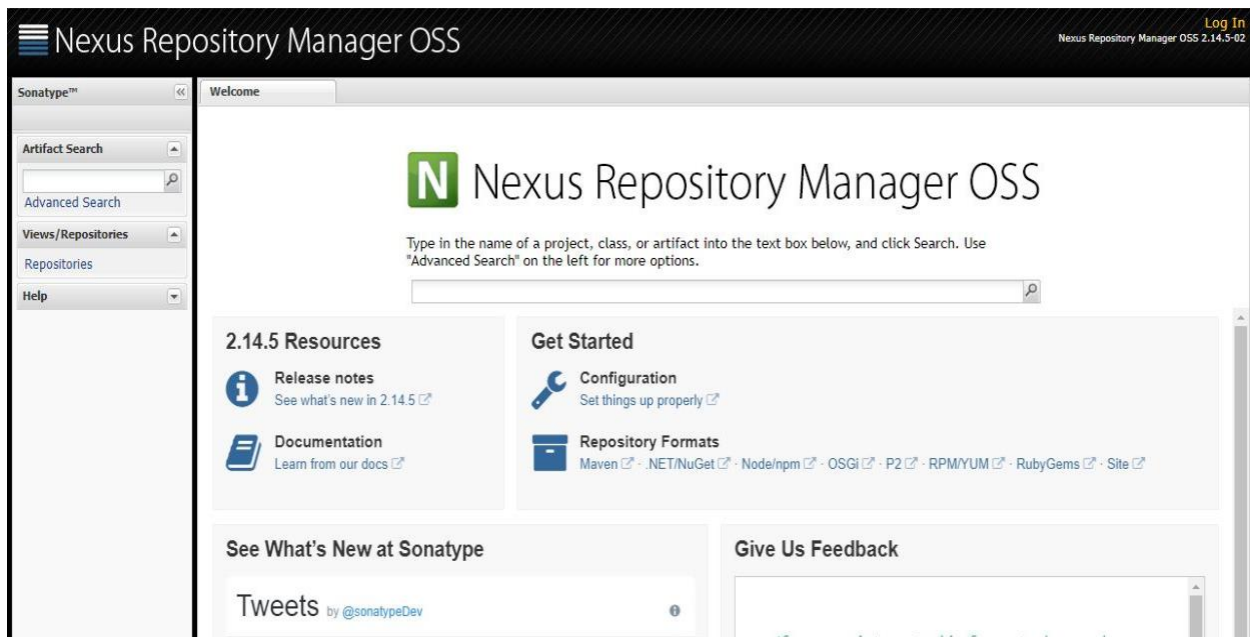
We have another option to get Task manager and services i.e, click on start button in local machine and search for **Task manager**.



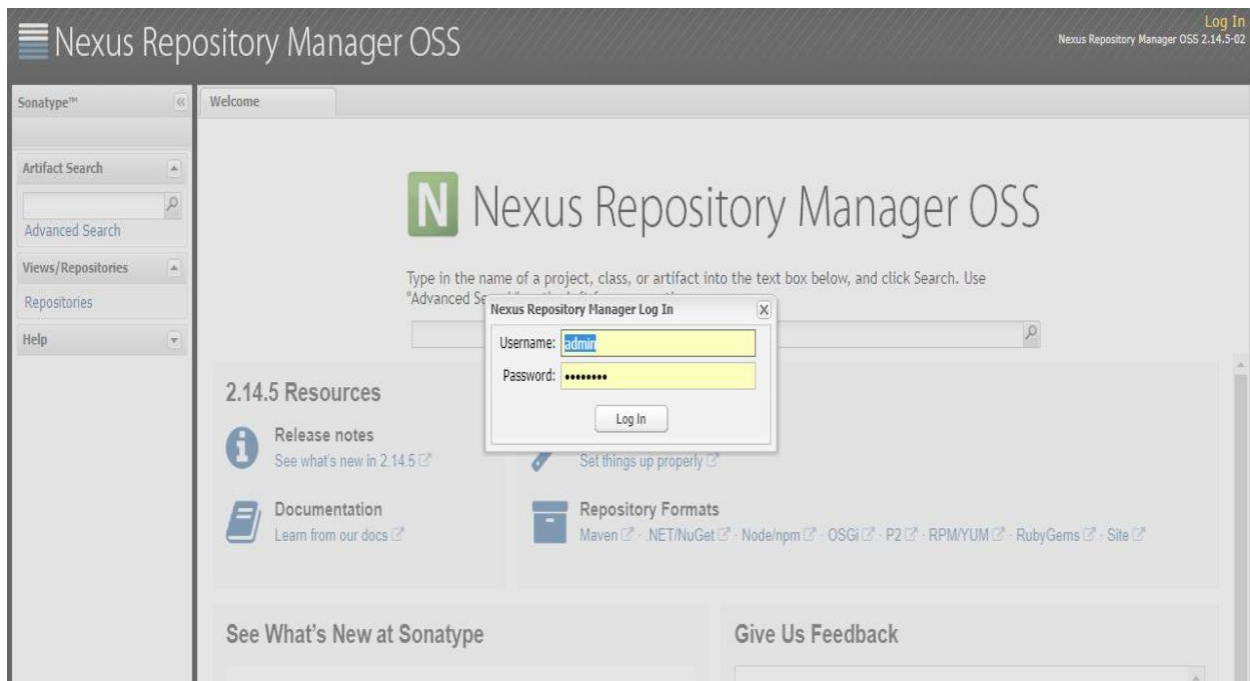
After clicking the services you will get list of services which are running in your local machine, then search for Nexus and start it as shown below for up and running.



After that restart the browser then you will get the home page of nexus repository as given below.



Click on Login option in the webpage and login to the nexus repository using below credentials.



Username: admin

Password: admin123

Then you will login as admin into the nexus repository with various options as shown in the below picture.

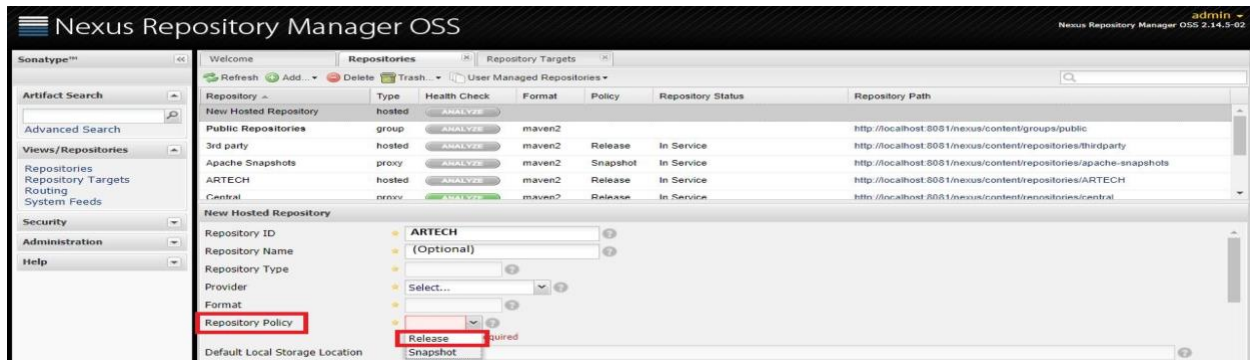
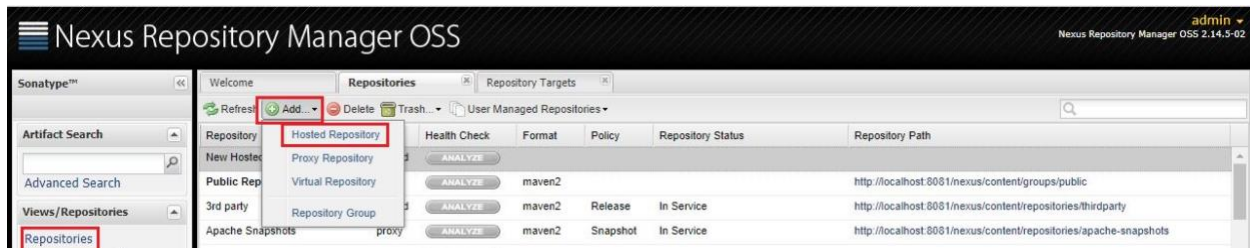
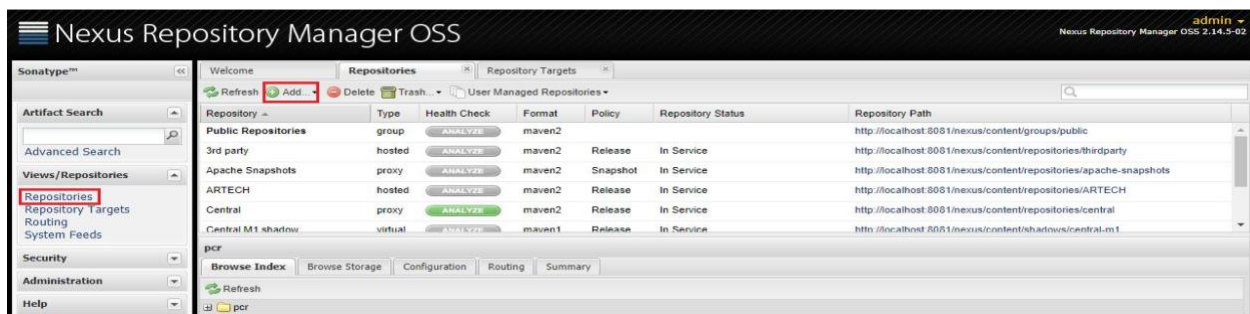


Step9: Here we have to create one repository with Id: **ARTECH**.

Click on the **Repositories** option in the nexus home page and then it will redirect to another page there you will find so many radio buttons and also list of in build repositories as below.

Click in **Add** radio button and select **Hosted Repository** to create a new repository.

In that we have given repo Id as **ARTECH** and repo name can be optional and then we have to select **Release** in **Repository Policy** and save it.



After creating the repository click on the created repo link the you will prompt to another page as below.

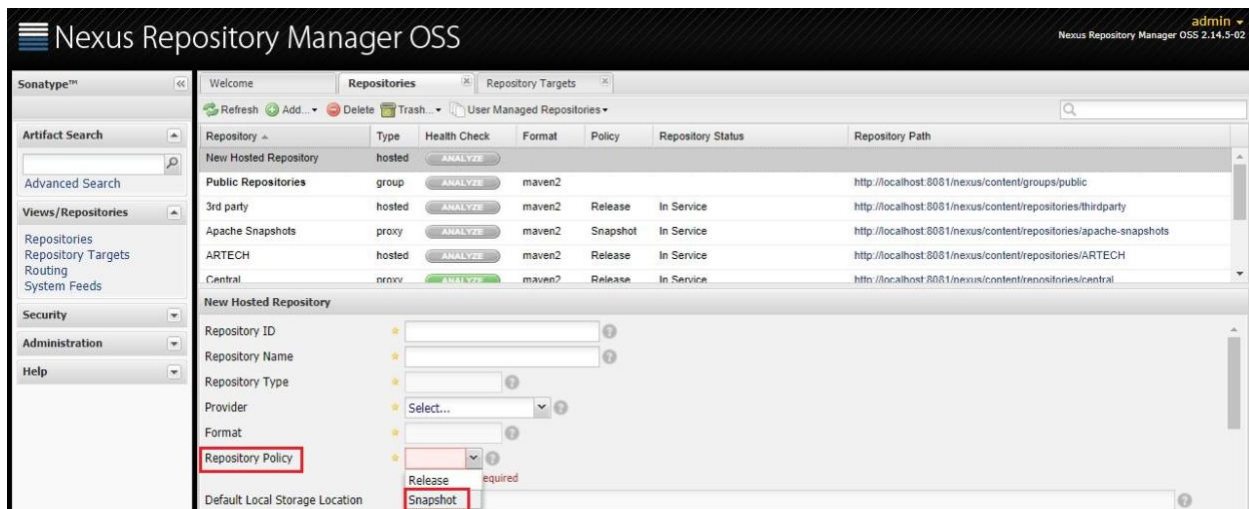


localhost:8081/nexus/content/repositories/ARTECH/

Index of /repositories/ARTECH

Name	Last Modified	Size	Description
Parent Directory			
archetype-catalog.xml	Sat Nov 04 22:37:28 IST 2017	25	

Step10: Create one more repository with any Id and any name and then select **Snapshot** in **Repository Policy**.



Nexus Repository Manager OSS

Repository ID:

Repository Name:

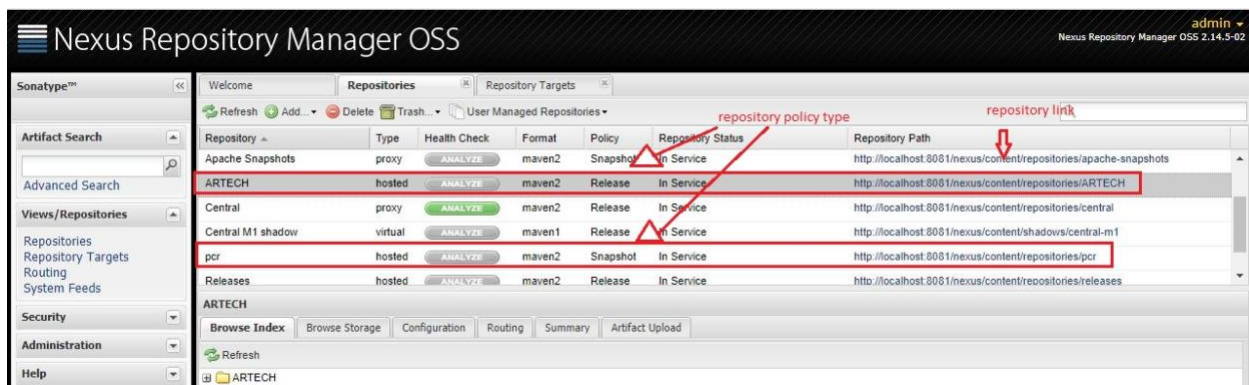
Repository Type:

Provider:

Format:

Repository Policy: **Snapshot**

Default Local Storage Location:



Nexus Repository Manager OSS

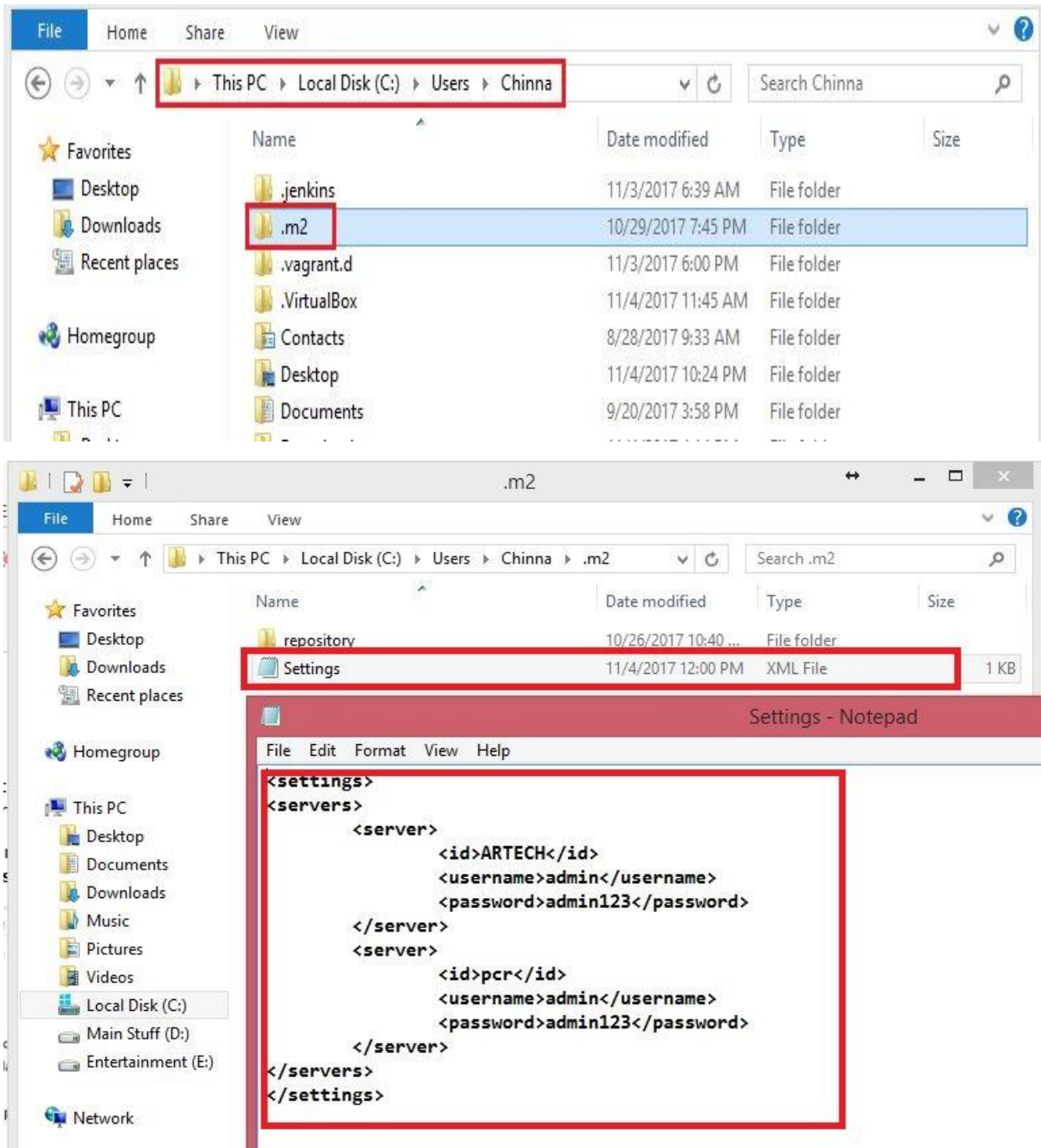
Repository	Type	Health Check	Format	Policy	Repository Status	Repository Path
Apache Snapshots	proxy	ANALYZE	maven2	Snapshot	In Service	http://localhost:8081/nexus/content/repositories/apache-snapshots
ARTECH	hosted	ANALYZE	maven2	Release	In Service	http://localhost:8081/nexus/content/repositories/ARTECH
Central	proxy	ANALYZE	maven2	Release	In Service	http://localhost:8081/nexus/content/repositories/central
Central M1 shadow	virtual	ANALYZE	maven1	Release	In Service	http://localhost:8081/nexus/content/shadows/central-m1
pcr	hosted	ANALYZE	maven2	Snapshot	In Service	http://localhost:8081/nexus/content/repositories/pcr
Releases	hosted	ANALYZE	maven2	Release	In Service	http://localhost:8081/nexus/content/repositories/releases

repository policy type

repository link

Step11: After that go to your local machine into .M2 folder and the create Settings.xml file and enter the below mentioned code.

This PC→C:/ drive→users→select local user→you will get .M2 folder and then get into the folder then create **Settings.xml** .



Code for Settings.xml:


```

<settings>
<servers>
    <server>
        <id>ARTECH</id>
        <username>admin</username>
        <password>admin123</password>
    </server>
    <server>
        <id>pcr</id>
        <username>admin</username>
        <password>admin123</password>
    </server>
</servers>
</settings>

```

After creating the settings.xml go to pom.xml file and add repositories URL and ID in the **distribution management**.

Copy Release repository and Snapshot repository url's along with their Id's from the nexus and paste them in pom.xml as below.

Pom.xml code:

```

<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-
v4_0_0.xsd">
<modelVersion>4.0.0</modelVersion>
<groupId>com.mkkyong</groupId>
<artifactId>NumberGenerator</artifactId>
<packaging>jar</packaging>
<version>1.0.1-SNAPSHOT</version>
<name>NumberGenerator</name>
<properties>
<jdk.version>1.7</jdk.version>
</properties>
<build>
<plugins>
<plugin>
<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-compiler-plugin</artifactId>
<version>2.3.2</version>
<configuration>
<source>${jdk.version}</source>
<target>${jdk.version}</target>
<encoding>${project.build.sourceEncoding}</encoding>
</configuration>
</plugin>
<plugin>
<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-release-plugin</artifactId>

```

```

<version>2.4.2</version>
</plugin>
</plugins>
</build>
<url>http://maven.apache.org</url>
<dependencies>
<dependency>
<groupId>junit</groupId>
<artifactId>junit</artifactId>
<version>4.11</version>
<scope>test</scope>
</dependency>
</dependencies>
<scm>
<connection>scm:svn:http://192.168.33.12:8081/subversion/</connection>
<developerConnection>scm:svn:http://192.168.33.12:8081/subversion/</developerConnection>
</scm>
<distributionManagement>
<repository>
<id>ARTECH</id>
<url>
http://localhost:8081/nexus/content/repositories/ARTECH/
</url>
</repository>
<snapshotRepository>
<id>pcr</id>
<url>
http://localhost:8081/nexus/content/repositories/pcr/
</url>
</snapshotRepository>
</distributionManagement>
</project>

```


Step12: After that create a job in Jenkins using CI as in the following way.

Open Jenkins → Mange Jenkins → configure system here we have to give invoke maven as below and then save and exit.

Maven

Maven installations

Maven	Name	Maven-home
	MAVEN_HOME	
	<input type="checkbox"/> Install automatically	



List of Maven installations on this system

Go to Node or slave open it's configure here we have to set maven path and also all the paths as shown below then save and exit.

Node Properties

☐ Environment variables

☒ Tool Locations

List of tool locations

Name	(Ant) Ant-home	
Home	D:\Devops\sftwrs\ANT Installation\apache-ant-1.9.7-bin\apache-ant-1.9.7	Delete
Name	(JDK) Java-home	
Home	C:\Program Files\Java\jdk1.7.0_79	Delete
Name	(Maven) Maven-home	
Home	D:\Devops\sftwrs\Maven new\apache-maven-3.0.4-bin\apache-maven-3.0.4	Delete

Add

After that create a new job with name CI_Maven_Nexus by selecting it as maven project as shown below and then click on **ok**.

← → ↻ ⓘ 192.168.33.10:8080/view/All/newJob

Jenkins

Jenkins > All >

New Item

People

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

Maven Repository

Credentials

Dependency Graph

Build Queue

No builds in the queue.

Build Executor Status

master	
1 Idle	
2 Idle	
linux (offline)	
redhat (offline)	

Item name **C_MAVEN_NEXUSS**

☐ Freestyle project
This is the central feature of Jenkins. Jenkins will build your project

☒ **Maven project**
Build a maven project. Jenkins takes advantage of your POM files

☐ Cascade Project
Maven Cascade Release Plugin orchestration project. Cascade pr

☐ External Job
This type of job allows you to record the execution of a process run automation system. See [the documentation for more details](#).

☐ Folder
Creates a container that stores nested items in it. Useful for groupi the same name as long as they are in different folders.

☐ GitHub Organization
Scans a GitHub organization (or user account) for all repositories r

☐ Multi-configuration project
Suitable for projects that need a large number of different configur

☐ Copy existing Item
Copy from

OK

Inside project we have to give the below details.

1. We have to select **Restrict where this project can be run** and there we have to enter **Node** or **Slave** name.

☒ Restrict where this project can be run 

Label Expression 

Slaves in label: 1

2. Select **Subversion** in **Source code management** and then give check-in repository URL.

Source Code Management

☐ CVS
☐ CVS Projectset
☐ Git
☐ None
☒ Subversion

Modules

Repository URL 

Local module directory (optional) 

Repository depth 

Ignore externals ☐ 

[Add more locations...](#)

3. Go to **Post Steps** and then select **Invoke top-level maven targets** and give details as below.

Post Steps

☐ Run only if build succeeds ☐ Run only if build succeeds or is unstable ☒ Run regardless of build result

Should the post-build steps run only for successful builds, etc.

Invoke top-level Maven targets 

Maven Version


Goals

[Advanced...](#)
[Delete](#)

4. Go to **Post-Build Actions** and select **Archive the artifacts** then give the details as below and then save the job.

Post-build Actions

Archive the artifacts 

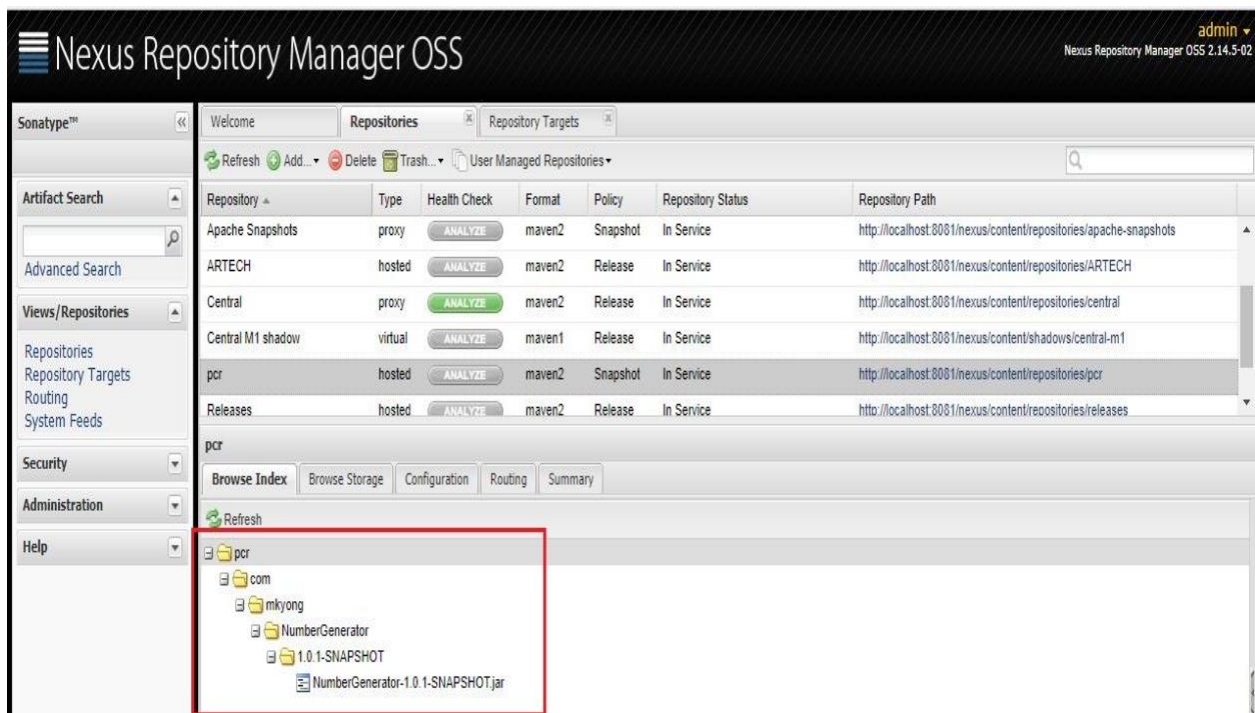
Files to archive 

[Advanced...](#)
[Delete](#)

Now click on the **Build-now** option to build the job then you will get the output as following in the Jenkins.

```
[INFO] --- maven-install-plugin:2.3.1:install (default-install) @ NumberGenerator ---
[INFO] Installing C:\Users\China\Desktop\nexus logs new\workspace\C_Maven_Nexus\target\NumberGenerator-1.0.1-SNAPSHOT.jar to
C:\Users\China\m2\repository\com\mkvong\NumberGenerator\1.0.1-SNAPSHOT\NumberGenerator-1.0.1-SNAPSHOT.jar
[INFO] Installing C:\Users\China\Desktop\nexus logs new\workspace\C_Maven_Nexus\pom.xml to C:\Users\China\m2\repository\com\mkvong\NumberGenerator\1.0.1-
SNAPSHOT\NumberGenerator-1.0.1-SNAPSHOT.pom
[INFO] --- maven-deploy-plugin:2.7:deploy (default-deploy) @ NumberGenerator ---
Downloading: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/1.0.1-SNAPSHOT/maven-metadata.xml
Uploading: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/1.0.1-SNAPSHOT/NumberGenerator-1.0.1-20171104.064236-1.jar
2/3 KB
3/3 KB
Uploaded: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/1.0.1-SNAPSHOT/NumberGenerator-1.0.1-20171104.064236-1.jar (3 KB at 2.8
KB/sec)
Uploading: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/1.0.1-SNAPSHOT/NumberGenerator-1.0.1-20171104.064236-1.pom
2/3 KB
3/3 KB
Uploaded: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/1.0.1-SNAPSHOT/NumberGenerator-1.0.1-20171104.064236-1.pom (3 KB at 2.0
KB/sec)
Downloading: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/maven-metadata.xml
Uploading: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/1.0.1-SNAPSHOT/maven-metadata.xml
775/775 B
Uploaded: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/1.0.1-SNAPSHOT/maven-metadata.xml (775 B at 1.6 KB/sec)
Uploading: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/maven-metadata.xml
285/285 B
Uploaded: http://localhost:8081/nexus/content/repositories/pcr/com/mkvong/NumberGenerator/maven-metadata.xml (285 B at 0.9 KB/sec)
[INFO] BUILD SUCCESS
[INFO] Total time: 18.578s
[INFO] Finished at: Sat Nov 04 12:12:39 IST 2017
[INFO] Final Memory: 14M/100M
[INFO]
```

Then go to nexus and refresh the page then you will get the Snapshot output as in the following way.



If you open the repository url in separate tabs you will get nexus page as follows.

The screenshot shows a web browser with the address bar displaying `localhost:8081/nexus/content/repositories/ARTECH/`. The browser's tab bar shows several open tabs: 'Apps', 'Mahabharata Ebook', 'HTML5 CSS3 Course', 'AIX', and 'Notifications101'. The main content area displays the title 'Index of /repositories/ARTECH' in a large, bold, black font.

Name	Last Modified	Size	Description
Parent Directory			
archetype-catalog.xml	Sat Nov 04 22:37:28 IST 2017	25	

If you open Snapshot url you will get in the following way.

The screenshot shows a web browser with the address bar displaying `localhost:8081/nexus/content/repositories/pcr/`. The browser's tab bar shows the same tabs as the previous screenshot. The main content area displays the title 'Index of /repositories/pcr' in a large, bold, black font. Below the title, there is a red text annotation: 'In this folder we have so many sub-folder's as we seen in the nexus main page'. A red box highlights the 'com/' entry in the table, and a red arrow points from the annotation to this entry. The table lists the following items:

Name	Last Modified	Size	Description
Parent Directory			
com/	Sat Nov 04 12:12:36 IST 2017		
archetype-catalog.xml	Sat Nov 04 12:14:15 IST 2017	25	