

How to include custom library into maven local repository?

By mkyong (<https://www.mkyong.com/author/mkyong/>) | May 12, 2009 | Updated : December 13, 2012 | Viewed : 439,897 times +1,911 pv/w

There are 2 cases that you need to issue Maven's command to include a jar into the Maven local repository manually.

1. The jar you want to use doesn't exist in the Maven center repository.
2. You created a custom jar, and need to use for another Maven project.

P.S Trust me, there are still many jars that doesn't support Maven.

Case study

For example, kaptcha (<http://code.google.com/p/kaptcha/>), a popular third party Java library, which is used to generate "captcha" image to stop spam, but it's not available in the Maven center repository.

In this tutorial, we will show you how to install the "kaptcha" jar into your Maven's local repository.



1. mvn install

Download the "kaptcha" (<http://code.google.com/p/kaptcha/downloads/list>), extract it and copy the `kaptcha-version.jar` to somewhere else, for example, c drive. Issue following command :

```
mvn install:install-file -Dfile=c:\kaptcha-{version}.jar -DgroupId=com.google.code
-DartifactId=kaptcha -Dversion={version} -Dpackaging=jar
```

Demo.

```
D:\>mvn install:install-file -Dfile=c:\kaptcha-2.3.jar -DgroupId=com.google.code
-DartifactId=kaptcha -Dversion=2.3 -Dpackaging=jar
[INFO] Scanning for projects...
[INFO] Searching repository for plugin with prefix: 'install'.
[INFO] -----
[INFO] Building Maven Default Project
[INFO]   task-segment: [install:install-file] (aggregator-style)
[INFO] -----
[INFO] [install:install-file]
[INFO] Installing c:\kaptcha-2.3.jar to
D:\maven_repo\com\google\code\kaptcha\2.3\kaptcha-2.3.jar
[INFO] -----
[INFO] BUILD SUCCESSFUL
[INFO] -----
[INFO] Total time: < 1 second
[INFO] Finished at: Tue May 12 13:41:42 SGT 2009
[INFO] Final Memory: 3M/6M
[INFO] -----
```

Now, the "kaptcha" jar is copied to your Maven local repository.



2. pom.xml

After installed, just declares the kaptcha coordinate in `pom.xml`.

```
<dependency>
  <groupId>com.google.code</groupId>
  <artifactId>kaptcha</artifactId>
  <version>2.3</version>
</dependency>
```

3. Done

Build it, now the "kaptcha" jar is able to retrieve from your Maven local repository.

References

1. Maven install file documentation (<http://maven.apache.org/plugins/maven-install-plugin/install-file-mojo.html>)
2. Kaptcha website (<http://code.google.com/p/kaptcha/>)

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mkyong

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Siddhanta Kumar Pattnaik • 5 years ago

Hi All,

Can any one tell me what is the purpose of groupId,artifactId tag in dependency tag and -Dpackaging property in the mvn command

5 ^ ▲ ▼ • Reply • Share ›

**Hima Bindu** • 4 months ago

Thank you, It worked for me. It saved my time

[^](#) [v](#) [Reply](#) [Share](#)**Prabhakar** • 2 years ago

Can't we just copy the jar file directly into Maven local repository?

[^](#) [v](#) [Reply](#) [Share](#)**adi** • 2 years ago

worked perfectly for me

[^](#) [v](#) [Reply](#) [Share](#)**jntme** • 2 years ago

The problem I'm facing after this is the following error:

[WARNING] The POM for pipapo.jar is missing, no dependency information available

Obviously there is no POM because the other project had nothing to do with maven. So how do I get rid of these errors?

[^](#) [v](#) [Reply](#) [Share](#)**Rams** • 2 years ago

Thanks for the post. I'm trying this but looks like it did not work for me.

I'm creating a library a project and copied the jar to c:\mylib\test-automation-library-0.0.1-SNAPSHOT.jar

I'm running the test scripts through Jenkins.

In the Jenkins job of test scripts, I included the following pre-build step install the library:

```
install:install-file
-Dfile=c:\mylib\test-automation-library-0.0.1-SNAPSHOT.jar
-DgroupId=com.mycompany.taf -DartifactId=test-automation-library
-Dversion=0.0.1 -Dpackaging=jar
```

This installs the jar to maven local repository (where are the scripts are supposed to run) and build is successful

in the POM file of the test-scripts, I included the

[see more](#)[^](#) [v](#) [Reply](#) [Share](#)**manaf** • 2 years ago

Hi,

am try to build my maven project...but i got an error

Failed to read artifact descriptor for org.fusesource.jansi:jansi:jar:1.1: Could not transfer artifact org.fusesource.jansi:jansi:pom:1.1 from/to jansi (<http://jansi.fusesource.org/re...> Connection to <http://jansi.fusesource.org> refused: Connection timed outbcse..jansi.pom file now available only in <http://repo.fusesource.org/rep...>am just install jansi.pm file in my local repository folder(following u r website) ...
but again got same error,...how to fix it,...???[^](#) [v](#) [Reply](#) [Share](#)**emylyano3** • 2 years ago

To generate the pom automatically just add -DgeneratePom=true to the command

[^](#) [v](#) [Reply](#) [Share](#)**tech_user** • 3 years ago

hi..

I'm getting follwing error.please what can i do for that?

run code

```
mvn install:install-file -Dfile=~/Desktop//captcha-2.3.2.jar -DgroupId=com.google.code -DartifactId=captcha -Dversion=2.3.2 -Dpackaging=j...
```

error

```
[INFO] -----
```

[INFO] BUILD FAILURE

[INFO] -----

[INFO] Total time: 6.279s

[see more](#)

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tech_user → **tech_user** • 3 years ago

sorry the -Dfile as follows without double slash

|| -Dfile=~/Desktop/kaptcha-2.3.2.jar

^ | v · Reply · Share >



Andre Albert • 3 years ago

I recently created a small UI util to install libraries in the local repository. It does the same as described in the article. The name is: maven-install-ui and can be found on github

^ | v · Reply · Share >



Jueser • 3 years ago

Thank you so much! you save my life...

^ | v · Reply · Share >



msesiom • 3 years ago

Thank you very much!

Regards

^ | v · Reply · Share >



Suresh • 4 years ago

Hai it's great..

Thank u so much..

^ | v · Reply · Share >



Amol Sharma • 4 years ago

Thanx Man !

Very Helpful :)

^ | v · Reply · Share >



gurpinars • 4 years ago

I did like that but im getting:

missing artifact

^ | v · Reply · Share >



gurpinars → **gurpinars** • 4 years ago

I need this library :<https://code.google.com/p/redm...>

^ | v · Reply · Share >



Meenakshi • 4 years ago

Thanks!. Worked for me

^ | v · Reply · Share >



nizar • 4 years ago

hi mkyong

you are the best really

^ | v · Reply · Share >



Hiway • 4 years ago

Hi,mkyong, I am installing ojdbc6.jar to my local repository, the install command is just like you write in article and ojdbc6.jar is copied to local repo, then I try to search this artifact in eclipse pom Dependencies panel, I can't find this artifact, I try to add in pom.xml manually, it works. So what can I do to make sure I can search out this newly installed artifact? My command line maven and eclipse maven use the same local repository.

^ | v · Reply · Share >



Hiway → **Hiway** • 4 years ago

I get answer from stackoverflow:<http://stackoverflow.com/questions/...>, hope can help others with same question.

^ | v · Reply · Share >



Sunil • 4 years ago

What is that you haven't still written about! I found an article for everything I look around for! Thanks!

^ | v · Reply · Share >

**anand babu** • 4 years ago

Well, it worked for me too.. thanks man!

^ | v • Reply • Share >

**Parris** • 4 years ago

Worked for me! Thanks :).

^ | v • Reply • Share >

**tumit** • 4 years ago

How to add dependencies of jar in command line?

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**Jayaram** • 5 years ago

Hi,

I followed the steps you mentioned.

Step 1: using wsimport I generate the class file

Step 2: using jar -cvf command I create a jar named TestClient.jar

Step 3: From the same directory I issued the command like:

```
mvn install:install-file -Dfile= /Users/Jayaram/TestClient/FriendsMirrorRegisterClient.jar -DgroupId=com.friendsmirror.register.ws.client -DartifactId=friendsMirrorRegisterClient -Dversion=0.1 -Dpackaging=jar
```

OutPut:

```
[INFO] Scanning for projects...
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 0.108s
[INFO] Finished at: Sun Jun 24 16:13:36 GMT+05:30 2012
```

[see more](#)

^ | v • Reply • Share >

**Kaustubh Subhash Joshi** → Jayaram • 2 years ago

Hi, I've following scenario with jenkins, i'm able to run custom jars via command prompt using maven but when I configure any maven or free style job then job is failing due to following error-

```
ERROR] Failed to execute goal on project ConnectorAutomation: Could not resolve dependencies for project com.cisco.connector.tests:ConnectorAutomation:jar:0.0.1-SNAPSHOT: The following artifacts could not be resolved: ere:ere-core-api:jar:9.0.10, Could not find artifact aie:aie-core-api:jar:4.0.10 in central (http://repo.maven.apache.org/m... -> [Help 1])
[ERROR]
```

How to resolve such error to use in full cycle phase?

^ | v • Reply • Share >

**Jakub** → Jayaram • 4 years ago

this command works fine when run in plain cmd instead of win powershell

^ | v • Reply • Share >

**Siddhanta Kumar Pattnaik** • 5 years ago

Hi All,

Can any one tell me what is the purpose of , in tag and -Dpackaging property in the mvn command

^ | v • Reply • Share >

**gagaeloel** • 5 years ago

For me works this:

```
mvn install:install-file -DgroupId=com.google.code.kaptcha -DartifactId=kaptcha -Dversion=2.3 -Dpackaging=jar -Dfile=kaptcha-2.3.jar
```

instead of "...-DgroupId=com.google.code ..."

^ | v • Reply • Share >

**gagaeloel** → gagaeloel • 5 years ago

forget my answer, i was wrong

^ | v • Reply • Share >

**Abhishek** • 5 years ago

Hi,

I have a requirement in which I have to upload the internally created jar(project related) to repo without version.

Please suggest how to do that.

Thanks!! :)

^ | v • Reply • Share >



AKS • 5 years ago

Great, you are so good to explain things in a simple manner. How do we do the same if I have to install a library or project to nexus repository?

[^](#) [v](#) [• Reply](#) [• Share](#)

mkyong ➔ AKS • 5 years ago

Sorry, never use nexus. But, nexus should have a screen to let user to add the library manually, try search it.

[^](#) [v](#) [• Reply](#) [• Share](#)



praneeth • 5 years ago

How to create custom project structure with Maven (step by step mkyong style).

Thank you,
Praneeth.

[^](#) [v](#) [• Reply](#) [• Share](#)



red • 5 years ago

Hi! Thank you for tutorial but how can I add a jar library that uses native external libraries (.dll, .so)?

[^](#) [v](#) [• Reply](#) [• Share](#)

mkyong ➔ red • 5 years ago

I don't think Maven can handle it automatically. You can still use Maven to add Java library but put your .dll or .so manually into project classpath.

[^](#) [v](#) [• Reply](#) [• Share](#)



Sharaf • 6 years ago

thanx alot it made simple to add my own jar and not to place into nexus.

[^](#) [v](#) [• Reply](#) [• Share](#)

Macluq ➔ Sharaf • 5 years ago

Yeah, but sometimes you need to add it into Nexus (so other people can use it in your organization, for example).

[^](#) [v](#) [• Reply](#) [• Share](#)

mkyong ➔ Macluq • 5 years ago

Yes, if your company is using Nexus or others to host a Maven repository server.

[^](#) [v](#) [• Reply](#) [• Share](#)

tecowiz ➔ mkyong • 4 years ago

Hi mkyong,

Thanks for such wonderful maven tutorials.

[^](#) [v](#) [• Reply](#) [• Share](#)



serortlop • 7 years ago

Thanks a lot!!!!

it was really a great. Simple and easy as everything must be.

[^](#) [v](#) [• Reply](#) [• Share](#)



Issam • 7 years ago

Thanks a lot... Your steps were simple and very helpful...

[^](#) [v](#) [• Reply](#) [• Share](#)



Enkay • 7 years ago

Thanks for the detailed simple steps!!!

[^](#) [v](#) [• Reply](#) [• Share](#)



prabhu • 7 years ago

Thanks a lot for your effort. It helped a lot. Thanks!

[^](#) [v](#) [• Reply](#) [• Share](#)



Alex Turetsky • 8 years ago

Make sure to add -Dpackaging=jar to that mvn:install command. This parameter is not optional. (In your instructions, it appears in the result section, but not in the command)

[^](#) [v](#) [• Reply](#) [• Share](#)

mkyong ➔ Alex Turetsky • 8 years ago

hi -Dpackaging=jar is a must in order for the install the maven library manually into our local repository. Post is updated , thanks for it.

[^](#) [v](#) [• Reply](#) [• Share](#)

Skb ➔ mkyong • 6 years ago

I Have one problem. This command is ok for a single Custom jar file. But we have 17 custom jars files in the file system. I do not want to write dependency in pom.xml file for each and every jars instead inside one dependenc through which all the jars will be available to

2/24/2017

How to include custom library into maven local repository?

build patha. Is there any way to do this. Please suggest me.

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