

## 如何使用Maven上传本地jar包到Maven仓库

笔记本： 容器化部署

创建时间： 2020/6/9 16:17

更新时间： 2020/6/9 17:50

作者： 1849553578@qq.com

---

# 使用Maven上传本地jar包到Maven仓库[命令行方式]

---

## Maven仓库类型

---

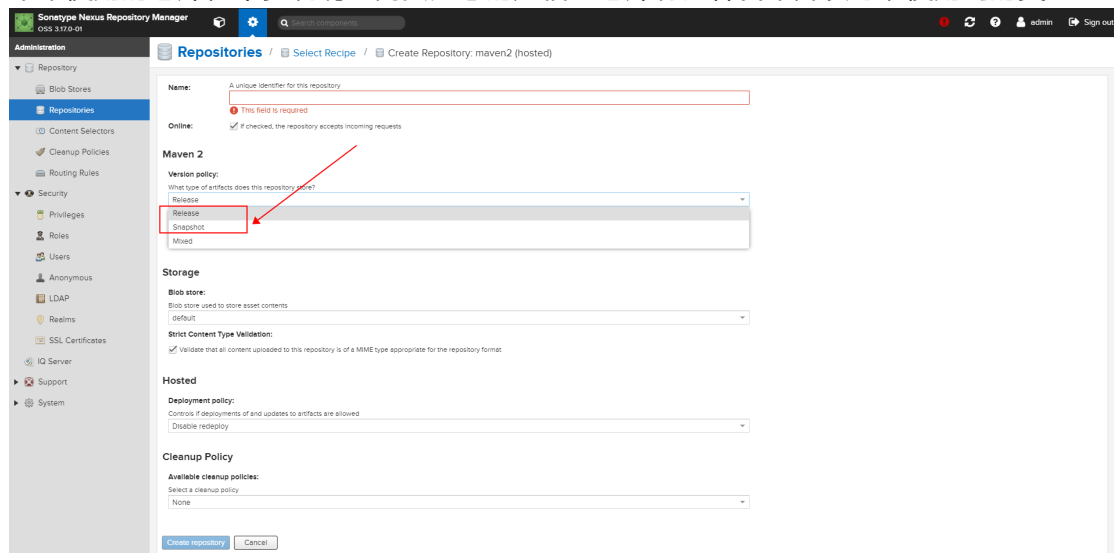
- 为了在**创建Maven仓库**时知道如何选择仓库的类型

### 仓库类型1：maven2（group）聚合仓库

将多个宿主仓库聚合到同一个group中，使用中统一指定聚合仓库的仓库地址可以获取到同一group下的所有包，免去多仓库多地址的配置繁琐。聚合仓库的聚合成员可以在仓库设置中添加和移除。

### 仓库类型2：maven2（hosted）宿主仓库

平常使用的仓库，不多说明。需要注意的是宿主仓库有两种日常开发可以使用到的类型。

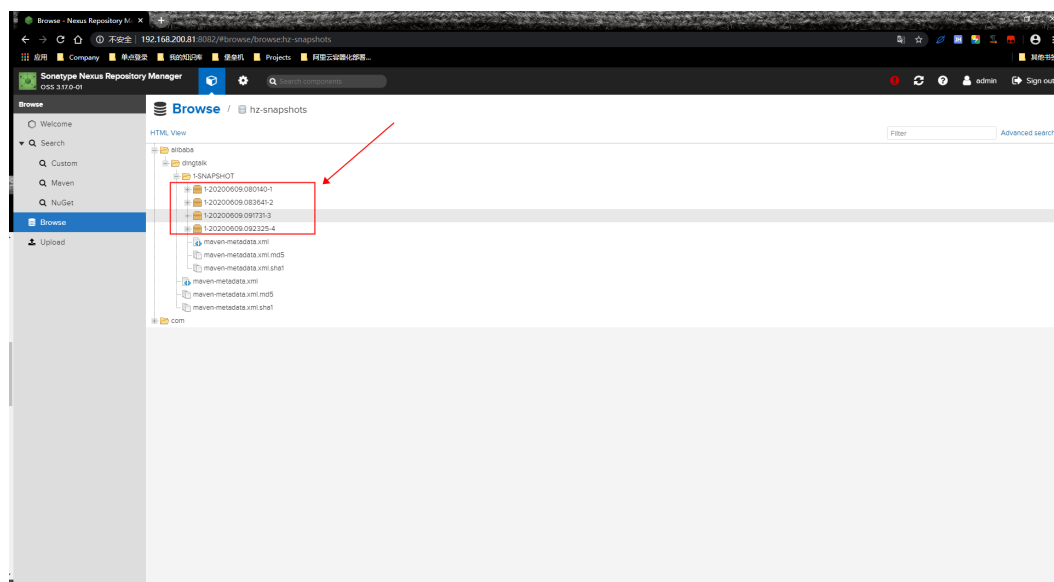


## 类型1: release

release 仓库不能重复上传同一版本号，版本不能覆盖，只能迭代，所以开发的稳定版本可以统一放置在release仓库中。

## 类型2: snapshot

snapshot 仓库允许版本覆盖，当多次上传同一个版本到 snapshot 仓库，会自动在版本号上添加时间戳来区分。建议在开发测试时使用。



## 仓库类型3: maven2(proxy) 远程代理仓库

这种类型的仓库，可以设置一个远程仓库的链接。当用户向 proxy 类型仓库请求下载一个依赖构件时，就会先在自己的库里查找，如果找不到的话，就会从设置的远程仓库下载到自己的库里，然后返回给用户，相当于起到一个中转的作用

---

# Jar包发布

---

## 命令

**命令:** mvn deploy:deploy-file -DgroupId=alibaba -DartifactId=dingtalk -Dversion=1-SNAPSHOT -Dfile=E:\浏览器下载\dingtalk-sdk-java\taobao-sdk-java-auto\_1479188381469-20200507.jar -DrepositoryId=maven-hz -Durl=http://192.168.200.81:8082/repository/hz-snapshots/ --settings settings.xml -X

## 参数解析

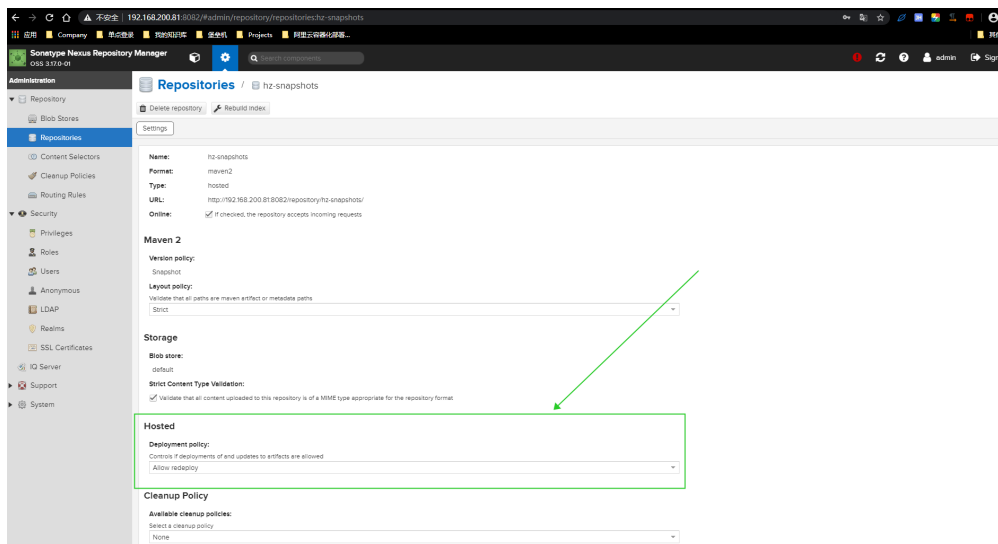
1. -DgroupId: jar包的坐标
2. -DartifactId: jar包的坐标
3. -Dversion: jar包版本
4. -Dfile: 需要上传的jar包的绝对路径
5. -DrepositoryId: 仓库ID，对应settings.xml中的server的id，用于获取maven仓库的登录用户名和密码
6. -Durl: 需要发布的仓库地址。
7. --settings: 指定maven的settings文件。这里没有指定路径，是因为settings.xml的路径与执行该条命令的路径是同一个路径。
8. -X: 以debug的方式运行，会打印出详细的日志信息

## 注意事项

1. 参数之间的空格需要注意(目前参数之间使用一个空格进行分隔)，否则可能会报错

```
Imported: org.eclipse.aether.resolution < plexus.core
Imported: org.eclipse.aether.spi < plexus.core
Imported: org.eclipse.aether.transfer < plexus.core
Imported: org.eclipse.aether.version < plexus.core
Imported: org.fusesource.jansi.* < plexus.core
Imported: org.slf4j.* < plexus.core
Imported: org.slf4j.helpers.* < plexus.core
Imported: org.slf4j.spi.* < plexus.core
Populating class realm maven-3.6.0
[INFO] Error stacktraces are turned on.
[DEBUG] Message styles: debug info warning error success failure strong mojo project
[DEBUG] Reading global settings from E:\Software\InstalledDevTools\Maven\apache-maven-3.6.0\conf\settings.xml
[DEBUG] Reading user settings from E:\Software\InstalledDevTools\Maven\apache-maven-3.6.0\conf\toolchains.xml
[DEBUG] Reading global toolchains from E:\Software\InstalledDevTools\Maven\apache-maven-3.6.0\conf\toolchains.xml
[DEBUG] Reading user toolchains from E:\Software\InstalledDevTools\Maven\apache-maven-3.6.0\conf\toolchains.xml
[DEBUG] Using local repository at E:\Software\InstalledDevTools\Maven\mvn_resposity_project_base
[DEBUG] Using maven central as a repository manager with priority 10.0 for E:\Software\InstalledDevTools\Maven\mvn_resposity_project_base
[INFO] Scanning for projects...
[DEBUG] Using mirror aliyun maven (http://maven.aliyun.com/nexus/content/groups/public) for central (https://repo.maven.apache.org/maven2).
[DEBUG] Extension realms for project com.alibaba:dingtalk:jar:1.0-SNAPSHOT: (none)
[DEBUG] Looking up lifecycle mappings for packaging jar from ClassRealm[plexus.core, parent: null]
[DEBUG] Resolving plugin prefix deploy from [org.apache.maven.plugins, org.codehaus.mojo]
[DEBUG] Resolved plugin prefix deploy to org.apache.maven.plugins:maven-deploy-plugin from POM com.alibaba:dingtalk:jar:1.0-SNAPSHOT
[INFO] BUILD FAILURE
[INFO] Total time: 0.487 s
[INFO] Finished at: 2020-06-09T15:25:56+08:00
[ERROR] Could not find goal 'deploy-file' in plugin org.apache.maven.plugins:maven-deploy-plugin:2.7 among available goals deploy-file, help, deploy -> [help,1]
org.apache.maven.plugin.MojoNotFoundException: Could not find goal 'deploy-file' in plugin org.apache.maven.plugins:maven-deploy-plugin:2.7 among available goals deploy-file, help, deploy
    at org.apache.maven.plugin.DefaultPluginManager.getMojoDescriptor(DefaultPluginManager.java:292)
    at org.apache.maven.plugin.DefaultBuildLifecycleManager.getMojoDescriptor(DefaultBuildLifecycleManager.java:244)
    at org.apache.maven.lifecycle.internal.DefaultLifecycleTaskSegmentCalculator.calculateTaskSegments(DefaultLifecycleTaskSegmentCalculator.java:239)
    at org.apache.maven.lifecycle.internal.DefaultLifecycleTaskSegmentCalculator.calculateTaskSegments(DefaultLifecycleTaskSegmentCalculator.java:103)
    at org.apache.maven.lifecycle.internal.DefaultLifecycleTaskSegmentCalculator.calculateTaskSegments(DefaultLifecycleTaskSegmentCalculator.java:83)
    at org.apache.maven.DefaultMaven.doExecute(DefaultMaven.java:303)
    at org.apache.maven.DefaultMaven.doExecute(DefaultMaven.java:192)
    at org.apache.maven.DefaultMaven.execute(DefaultMaven.java:105)
    at org.apache.maven.cli.MavenCli.execute(MavenCli.java:948)
    at org.apache.maven.cli.MavenCli.doMain(MavenCli.java:288)
    at org.apache.maven.cli.MavenCli.main(MavenCli.java:192)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
    at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethod)
    at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
    at java.lang.reflect.Method.invoke(Method.java:498)
    at org.codehaus.plexus.classworlds.launcher.Launcher.launchWithClassLoader(Launcher.java:289)
    at org.codehaus.plexus.classworlds.launcher.Launcher.launch(Launcher.java:229)
    at org.codehaus.plexus.classworlds.launcher.Launcher.mainWithExitCode(Launcher.java:415)
    at org.codehaus.plexus.classworlds.launcher.Launcher.main(Launcher.java:355)
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [help 1] http://wiki.apache.org/luce/DisplayMavenMojoNotFoundException
```

## 2. maven仓库允许发布jar包



## 3. 不要在git bash下执行该命令（在windows下的PowerShell中发布成功过，以及在Linux下的命令行(bash)中发布成功过），会报文件找不到的错误。

```
Created new class realm plugin:org.apache.maven.plugins:maven-deploy-plugin:2.7
Importing foreign packages into class realm plugin:org.apache.maven.plugins:maven-deploy-plugin:2.7
Imported: org.apache.maven.plugins:maven-deploy-plugin:2.7
Populating class realm plugin:org.apache.maven.plugins:maven-deploy-plugin:2.7
Included: junit:junit:jar:3.8.1
Included: org.codehaus.plexus:plexus-utils:jar:1.5.6
Configuring mojo org.apache.maven.plugins:maven-deploy-plugin:2.7:deploy-file from plugin realm ClassRealm[plugin:org.apache.maven.plugins:maven-deploy-plugin:2.7, parent: sun.misc.Launcher$AppClassLoader@25134f]
Configuring mojo org.apache.maven.plugins:maven-deploy-plugin:2.7:deploy-file' with basic configurator -->
  (r) artifact = dingtalk
  (f) file = E:\dingtalk-sdk-java\...dingtalk-sdk-javataobao-sdk-java-auto_1479188381469-20200507.jar
  (f) generation = true
  (f) groupId = alibaba
  (f) localRepository =
    url: file:///E:/Software/InstalledDevTools/Maven/mvn_resposity_project_base/
    layout: default
    snapshots: [enabled => true, update => always]
    releases: [enabled => true, update => always]
  (f) offline = false
  (f) project = MavenProject: com.alibaba:dingtalk:1.0-SNAPSHOT @ E:\dingtalk-sdk-java\pom.xml
  (f) repositoryId = maven-hz
  (f) repositoryLayout = default
  (f) retryAfterDeploymentCount = 1
  (f) uniqueVersion = true
  (f) updateReleaseInfo = false
  (f) url = http://192.168.200.81:8082/repository/hz-snapshots/
  (f) version = 1.0-SNAPSHOT
-- end configuration --
[INFO] BUILD FAILURE
[INFO] Total time: 1.160 s
[INFO] Finished at: 2020-06-09T17:16:42+08:00
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-deploy-plugin:2.7:deploy-file (default-cli) on project dingtalk: E:\dingtalk-sdk-java\...dingtalk-sdk-javataobao-sdk-java-auto_1479188381469-20200507.jar not found. -> [Help 1]
org.apache.maven.lifecycle.internal.LifecycleExecutionException: Failed to execute goal org.apache.maven.plugins:maven-deploy-plugin:2.7:deploy-file (default-cli) on project dingtalk: E:\dingtalk-sdk-java\...dingtalk-sdk-javataobao-sdk-java-auto_1479188381469-20200507.jar not found.
    at org.apache.maven.lifecycle.internal.MojoExecutor.execute(MojoExecutor.java:156)
    at org.apache.maven.lifecycle.internal.MojoExecutor.execute(MojoExecutor.java:148)
    at org.apache.maven.lifecycle.internal.LifecycleModuleBuilder.buildProject(LifecycleModuleBuilder.java:117)
    at org.apache.maven.lifecycle.internal.LifecycleModuleBuilder.buildProject(LifecycleModuleBuilder.java:81)
    at org.apache.maven.lifecycle.internal.builder.singlethreaded.SingleThreadedBuilder.build(SingleThreadedBuilder.java:56)
    at org.apache.maven.lifecycle.internal.LifecycleStarter.execute(LifecycleStarter.java:128)
    at org.apache.maven.DefaultMaven.doExecute(DefaultMaven.java:305)
    at org.apache.maven.DefaultMaven.doExecute(DefaultMaven.java:192)
    at org.apache.maven.DefaultMaven.execute(DefaultMaven.java:105)
    at org.apache.maven.cli.MavenCli.execute(MavenCli.java:948)
    at org.apache.maven.cli.MavenCli.doMain(MavenCli.java:288)
    at org.apache.maven.cli.MavenCli.main(MavenCli.java:192)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
    at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethod)
    at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
```

## 4. 成功案例

```

[DEBUG] (f) updateReleaseInfo = false
[DEBUG] (f) url = http://192.168.200.81:8082/repository/hz-snapshots/
[DEBUG] (f) version = 1-SNAPSHOT
[DEBUG] -- end configuration --
[DEBUG] Using transporter WagonTransporter with priority -1.0 for http://192.168.200.81:8082/repository/hz-snapshots/
[DEBUG] Using connector BasicRepositoryConnector with priority 0.0 for http://192.168.200.81:8082/repository/hz-snapshots/ with username=admin, password=***
Downloading from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml
Downloaded from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml (753 B at 12 kB/s)
[DEBUG] Writing tracking file /home/wang/dingtalk-sdk-java/E:/SoftwareInstalled/Dev_Tools/Maven/mvn_respository_project_base/alibaba/dingtalk/1-SNAPSHOT/resolver-status.properties
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.092325-4.jar
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.092325-4.jar (4.1 MB at 9.4 MB/s)
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.092325-4.pom
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.092325-4.pom (393 B at 1.6 kB/s)
Downloading from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml
Downloaded from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml (271 B at 23 kB/s)
[DEBUG] Writing tracking file /home/wang/dingtalk-sdk-java/E:/SoftwareInstalled/Dev_Tools/Maven/mvn_respository_project_base/alibaba/dingtalk/resolver-status.properties
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml (753 B at 24 kB/s)
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml (271 B at 6.0 kB/s)
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 01:06 min
[INFO] Finished at: 2020-06-09T17:23:26+08:00
[INFO] -----
[root@localhost dingtalk-sdk-java]#
```

```

[DEBUG] Imported: < maven-apt
[DEBUG] Populating class realm plugin>org.apache.maven.plugins:maven-deploy-plugin:2.7
[DEBUG] Included: org.apache.maven.plugins:maven-deploy-plugin:jar:2.7
[DEBUG] Included: junit:junit:jar:3.8.1
[DEBUG] Included: org.codehaus.plexus:plexus-utils:jar:1.5.6
[DEBUG] Configuring mojo org.apache.maven.plugins:maven-deploy-plugin:2.7:deploy-file from plugin realm ClassRealm[plugin>org.apache.maven.plugins:maven-deploy-plugin:2.7, parent: sun.misc.Launcher$AppClassLoader@6c1b14f]
[DEBUG] Configuring mojo 'org.apache.maven.plugins:maven-deploy-plugin:2.7:deploy-file' with basic configurator -->
[DEBUG] (f) artifactId = dingtalk
[DEBUG] (f) file = E:/SoftwareInstalled/Dev_Tools/Maven/mvn_respository_project_base/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.091731-3.jar
[DEBUG] (f) generatePom = true
[DEBUG] (f) groupId = alibaba
[DEBUG] (a) localRepository = id: local
[DEBUG] (a) url: file:///E:/SoftwareInstalled/Dev_Tools/Maven/mvn_respository_project_base/
[DEBUG] layout: default
[DEBUG] snapshots [enabled => true, update => always]
[DEBUG] releases [enabled => true, update => always]
[DEBUG] (f) offline = false
[DEBUG] (f) project = MavenProject: com.alibaba:dingtalk:1.0-SNAPSHOT @ E:/dingtalk-sdk-java/pom.xml
[DEBUG] (f) repositoryId = maven-hz
[DEBUG] (f) repositoryLayout = default
[DEBUG] (f) retryFailedDeploymentCount = 1
[DEBUG] (f) uniqueVersion = true
[DEBUG] (f) updateReleaseInfo = false
[DEBUG] (f) url = http://192.168.200.81:8082/repository/hz-snapshots/
[DEBUG] (f) version = 1-SNAPSHOT
[DEBUG] -- end configuration --
[DEBUG] Using transporter WagonTransporter with priority -1.0 for http://192.168.200.81:8082/repository/hz-snapshots/
[DEBUG] Using connector BasicRepositoryConnector with priority 0.0 for http://192.168.200.81:8082/repository/hz-snapshots/ with username=admin, password=***
Downloading from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml
Downloaded from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml (753 B at 2.3 kB/s)
[DEBUG] Writing tracking file E:/SoftwareInstalled/Dev_Tools/Maven/mvn_respository_project_base/alibaba/dingtalk/1-SNAPSHOT/resolver-status.properties
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.091731-3.jar
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.091731-3.jar (4.1 MB at 966 kB/s)
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.091731-3.pom
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/dingtalk-1-20200609.091731-3.pom (393 B at 5.8 kB/s)
Downloading from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml
Downloaded from maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml (271 B at 6.9 kB/s)
[DEBUG] Writing tracking file E:/SoftwareInstalled/Dev_Tools/Maven/mvn_respository_project_base/alibaba/dingtalk/resolver-status.properties
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/1-SNAPSHOT/maven-metadata.xml (753 B at 12 kB/s)
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml
Uploading to maven-hz: http://192.168.200.81:8082/repository/hz-snapshots/alibaba/dingtalk/maven-metadata.xml (271 B at 3.7 kB/s)
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 7.659 s
[INFO] Finished at: 2020-06-09T17:17:36+08:00
[INFO] -----
PS E:/dingtalk-sdk-java>
```