

# Repository Connector Plugin

## Plugin Information

View Repository Connector [on the plugin site](#) for more information.



Older versions of this plugin may not be safe to use. Please review the following warnings before using an older version:

- [Credentials stored in plain text](#)

Repository Connector adds features for resolving artifacts from a Maven repository like Nexus or Artifactory. When installing this plugin, you'll be given an additional build parameter 'Maven Repository Artifact' and a build step 'Artifact Resolver', allowing you to select versions from a remote repository and to download the artifact.

The Repository Connector Plugin can also be used to deploy artifacts to target servers and it uses [Sonatype's Aether API](#) internally to resolve artifacts from a repository and to determine the sorting order of versions.

## Usage

The build parameter 'Maven Repository Artifact' allows for simple version selection and the build step 'Artifact Resolver' lets you download the artifact from a Maven repository without the need to install Maven.

It is possible to use the version selection feature of this plugin alone and let a Maven POM do the artifact download, or you can allow Jenkins to do the download before a script is invoked.

The way you use the plugin is completely up to you.

Using only the version selection feature makes sense when you have previously installed Maven and you want to have all aspects of the artifact processing under version control (see Maven example below)

## Version Selection

### String Parameter

You can use a simple string build parameter (e.g. 'VERSION') to enter a version as free text:

- **1.0.0** - a regular version
- **RELEASE** - the latest release version
- **LATEST** - the latest version, which is usually a SNAPSHOT version
- **[0-SNAPSHOT,)** - a version range

This string parameter can be used in the later stages of the job by specifying the property `${VERSION}`. It can even be used in the version field of the Artifact Resolver build step.

### Maven Repository Artifact Parameter

The version selection feature is provided by the build parameter 'Maven Repository Artifact':

### Maven Repository Artifact ?

Repository:

Property Name:

Group Id:

Artifact Id:

Description:

When you click on "Build with Parameters" you will see a drop-down box with all the versions that have been found in the Maven repository:

This build requires parameters:

commons-collections.commons-collections

RELEASE

LATEST

20040616

20040102.233541

20031027.000000

20030418.083655

3.2.1

3.2

3.1-brew

3.1

3.0-dev2

3.0

2.1.1

2.1

2.0.20020914.020858

2.0.20020914.020746

2.0.20020914.015953

2.0\_taco

2.0

1.0

The special versions "LATEST" and "RELEASE" are added to the list where the latter is the default selection (new, not yet-released feature, see [JENKINS-28323](#)).

The selected version is passed in 2 properties to the build:

- `<groupId>.<artifactId>=<version>` (e.g. "commons-collections.commons-collections=1.0.0")
- `<global-repo-name>=<version>` (e.g. "central=1.0.0")

## Artifact Resolver Build Step

The 'Artifact Resolver' build step allows you to download the specified artifact in a build step. The location where the artifact is downloaded to can be specified by the parameters "target directory" and "target filename":

For passing the parameter version use

### Passing parameter version

```
${<groupId>.<artifactId>}
```

### Passing parameter version example

```
${commons-collections.commons-collections}
```

The screenshot shows the 'Artifact Resolver' configuration page in Jenkins. It includes several sections: 'Fail on error' (checked), 'Enable repository logging' (unchecked), 'Target directory' (text input: 'target'), 'Release update policy' (dropdown: 'daily'), and 'Snapshot update policy' (dropdown: 'daily'). Under the 'Artifacts' section, there are fields for 'Group Id' (commons-collections), 'Artifact Id' (commons-collections), 'Version' (placeholder: \${commons-collections.commons-collection}), 'Classifier' (empty), 'Extension' (jar), and 'Target file name' (empty). A note below the 'Target file name' field states: '(optional) if not defined the file name will be as resolved, can also include subdirectories'. At the bottom right, there are 'Add artifact' and 'Delete' buttons.

## Global Configuration

The repositories to resolve the artifacts from, can be configured in Jenkins' global configuration section:

The screenshot shows the 'Artifact Resolver' section of the Jenkins Global Configuration. It includes a 'Local Repository' field (text input: /tmp/dummy-repo) with a note: 'local repository on master (falls back to 'java.io.tmpdir')'. Below this are fields for 'Repo Id' (central), 'Repo type' (default), and 'Url' (http://repo1.maven.org/maven2). An 'Add new repo' button is located at the bottom right. A note at the bottom of the section reads: 'Repositories to download the artifacts from (e.g. maven central 'http://repo1.maven.org/maven2')'.

## Example

The following Maven POM downloads the artifact, and passes the path to the artifact to a shell script for further processing. The shell script also gets an environment parameter which comes from a "Choice Paramater" to determine the target environment on which to deploy the artifact.

### Example deployment POM

```
<?xml version="1.0" encoding="UTF-8"?>
<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.foobar.deploy.maven</groupId>
  <artifactId>maven-deploy-template</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <packaging>pom</packaging>
  <name>Maven deployment template</name>

  <properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  </properties>

  <dependencies>
    <dependency>
      <groupId>com.foobar.templates</groupId>
      <artifactId>maventemplate-ear</artifactId>
      <version>${distversion}</version>
      <type>ear</type>
    </dependency>
  </dependencies>

  <scm>
    <connection>scm:git:https://yourgitserver/jenkins-deploy-job-maven.git</connection>
    <developerConnection>scm:git:https://yourgitserver/jenkins-deploy-job-maven.git</developerConnection>
  </scm>

  <ciManagement>
    <system>jenkins</system>
    <url>https://yourjenkinssserver/jenkins/</url>
  </ciManagement>

  <repositories>
    <repository>
      <id>project</id>
      <url>https://yourreposerter/nexus/content/groups/public/</url>
    </repository>
  </repositories>

  <pluginRepositories>
    <pluginRepository>
      <id>project</id>
      <url>https://yourreposerter/nexus/content/groups/public/</url>
    </pluginRepository>
  </pluginRepositories>

  <build>
    <plugins>
      <plugin>
        <artifactId>maven-antrun-plugin</artifactId>
        <version>1.7</version>
        <executions>
          <execution>
            <phase>compile</phase>
            <configuration>
              <target>
                <!-- dump all available properties -->
                <echoproperties />
                <exec dir="." executable="cmd" osfamily="windows">
                  <arg value="/c"/>
                  <arg value="deploy.cmd ${maven.dependency.com.foobar.templates.maventemplate-ear.ear.path}
${environment} ${distversion}" />
                </exec>
              </target>
            </configuration>
          </execution>
        </executions>
      </plugin>
    </plugins>
  </build>
</project>
```

```

        <exec dir="." executable="/bin/bash" osfamily="unix">
            <arg value="-c"/>
            <arg value="./deploy.sh ${maven.dependency.com.foobar.templates.maventemplate-ear.ear.path}>
    ${environment} ${distversion}" />
        </exec>
    </target>
</configuration>
<goals>
    <goal>run</goal>
</goals>
</execution>
</executions>
</plugin>
</plugins>
</build>
<profiles>
</profiles>
</project>

```

NOTE: This is just a suggestion. Instead of forking a shell script, all the necessary steps could also be performed by the Antrun Maven plugin.

## Help and Support

type	key	summary
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 Can't show details. Ask your admin to whitelist this Jira

URL.

[View these issues in Jira](#)

For Help and support please use the [Jenkins Users](#) mailing list.  
The comment list below is not monitored.

## Version History

### 1.2.6 (05. June 2019)

- fix [JENKINS-52669](#): IndexOutOfBoundsException after upgrade to 1.2.3

### 1.2.5 (05. Mar 2019)

- don't store repository credentials in plain text

### 1.2.4 (18. May 2018)

- fix [JENKINS-50293](#): Repository Connector Plugin does not use Jenkins configured proxy correctly
- fix [JENKINS-50963](#): UpdatePolicy reset to default on edit

### 1.2.3 (31. Jan 2018)

- partial fix for [JENKINS-33796](#), adds pipeline support for artifact resolution
- fix [JENKINS-36149 \(SECURITY-170\)](#)
- NOTE: 1.2.0/1.2.1/1.2.2 were released versions that failed to upload to nexus

### 1.1.3 (29. March 2016)

- integrate [JENKINS-30671](#) expand tokens in file for artifact deploy

### 1.1.2 (10. Sep 2015)

- Implemented [JENKINS-28323](#): Add RELEASE and LATEST to version selection dropdown list
- fix [JENKINS-27678](#): NullPointerException when non proxy hosts is not set
- Implemented [JENKINS-27641](#): Name of version selection build parameter should be customized
- fix [JENKINS-17541](#) target directory does not expand token macro parameters
- fix [JENKINS-29166](#) list of artifacts stored on maven repository not refreshed
- fix [JENKINS-20263](#) Artifact Resolver does not retrieve the latest version from central Maven Repository

### 1.1.1 (28. Feb 2015)

- fix [JENKINS-24243](#) respect nonProxySettings

### 1.1.0 (2. Feb 2015)

- fix [JENKINS-25620](#) and [JENKINS-24781](#) Repository Connector Plugin failed to resolve dependency after upgrade (0.8.2 -> 1.0.1)

### 1.0.1 (16. Aug. 2014)

- fix [JENKINS-23946](#) Artifact Resolver failed to expand tokens

### 1.0.0 (18. July 2014)

- fix [JENKINS-17541](#) target directory does not expand token macro parameters
- integrate [PR #3](#) (thanks to mrumpf!)
  - Sort the list of Maven repositories in the global configuration page
  - Added I18N and translated all help files and texts to german
  - Extracted the global configuration from the ArtifactResolver and moved it into the central class GlobalConfiguration
  - Added the version selection build parameter
  - When your ArtifactResolver build step and the build parameter is used in one job, the version, selected by the build parameter overrides the version of the ArtifactResolver build step.
  - Added proxy support which makes the plugin usable in corporate environments

### 0.8.2 (18. Feb. 2012)

- use [Token Macro Plugin](#) to resolve variables in version, group, packaging ...

### 0.8.0 (18. Sep. 2011)

- add support for variable resolving in configuration

### 0.7.0

- update to aether 1.12 and fix a classloader issue

### 0.6.1

- update to aether 1.11 and fix update policy issue

### 0.6

- now supports to configure the repository update policy (for each builder individually)

### 0.5

- Inital