

# SSH Agent Plugin

## Plugin Information

View SSH Agent [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:

- [Plugin could reveal SSH key passphrase when used inside pipeline](#)

## SSH Agent Plugin

This plugin allows you to provide SSH credentials to builds via a ssh-agent in Jenkins.

## Requirements

Currently all **Windows** nodes (including the master) on which this plugin will be used must have the [Apache Tomcat Native libraries](#) installed. As of 1.0 should be unnecessary for Unix nodes. As of 1.14 unnecessary if `ssh-agent` is installed.

## Configuring

First you need to add some SSH Credentials to your instance:

[Jenkins](#) | [Manage Jenkins](#) | [Manage Credentials](#)

**Manage Credentials**

These credentials can be used by Jenkins and by jobs running in Jenkins.

**SSH Username with private key**

Scope: Global

Username:

Private Key:  Enter directly

Key:

From a file on Jenkins master

From the Jenkins master ~/.ssh

Advanced... Delete

Add Credentials Save

Note that only Private Key based credentials can be used.

Then configure your build to use the credentials:

**Build Environment**

SSH Agent

Credentials: Stephen's private key

And then your build will have those credentials available, e.g.

```
Started by user anonymous
Building remotely on acer
[ssh-agent] Using credentials Stephen's private key
[ssh-agent] Started.
[test] $ /bin/sh -xe /tmp/hudson5423086894145276913.sh
+ uname
Linux
+ ssh stephenc@192.168.1.101 uname
Darwin
[ssh-agent] Stopped.
Finished: SUCCESS
```

From a Pipeline job, use the `sshagent` step.

## Installation Example: MacOSX (10.7.5)

Irrelevant in 1.14+ when `ssh-agent` is available in the path.

Prerequisites:

- JDK7. The tomcat native libraries target the java 7 version.
- APR - this seems to be preinstalled in `/usr/lib/apr`.

Note that tomcat itself is not needed. This works fine with winstone (just running `jenkins jar` from command line).

Download and extract the tomcat native library: <http://tomcat.apache.org/download-native.cgi>

```
tar -zxvf tomcat-native-1.1.XX-src.tar.gz
```

Build the native library:

```
cd tomcat-native-1.1.XX/jni/native
./configure --with-apr=/usr/bin/apr-1-config
make && sudo make install
```

Build the java interface:

```
cd ..
export JAVA_HOME=/Library/Java/JavaVirtualMachines/jdk1.7.0_17.jdk/Contents/Home

ant build

ant jar
```

Copy the output jar somewhere suitable for inclusion in your jenkins CLASSPATH.

Set environment variables prior to starting jenkins:

```
export DYLD_LIBRARY_PATH=/usr/local/apr/lib
export CLASSPATH=/path/to/tomcat-native-1.1.XX.jar
java -jar jenkins.war
```

Additionally, you might have to add bouncycastle to your JCE providers. If you attempt to use the plugin and get an exception like the following:

```
java.lang.IllegalStateException: BouncyCastle must be registered as a JCE provider
```

Then you may need to configure the jce provider. One way is to do this right in the JRE, so if Jenkins is using the same jdk as above, edit /Library/Java/JavaVirtualMachines/jdk1.7.0\_17.jdk/Contents/Home/jre/lib/security/java.security, and add the following line:

```
security.provider.11=org.bouncycastle.jce.provider.BouncyCastleProvider
```

Then, restart jenkins.

From there, configure using the instructions above.

## Version History

### Version 1.17 (2018-10-02)

- Did not properly interact with `withDockerContainer` when run on a machine with `DISPLAY=:0` set.

### Version 1.16 (2018-07-30)

- [Fix security issue](#)

### Version 1.15 (2017-04-06)

- [issue@42093](#) Fixed quoting for askpass in command-line implementation.

### Version 1.14 (2017-02-10)

- [JENKINS-36997](#) New default implementation that uses command-line `ssh-agent`. Should fix various problems with crypto APIs, `docker.image(...).inside {sshagent(...) {...}}`, etc.
- [JENKINS-38830](#) Track credentials used in the wrapper.
- [JENKINS-35563](#) Fixes to credentials dropdown.

### Version 1.13 (2016-03-03)

- [JENKINS-32120](#) Register Bouncy Castle on the remote agent by using Bouncy Castle API plugin



Apparently does not work in some versions of Jenkins; see [JENKINS-36935](#).

### Version 1.12 (2016-03-03)

- **Wrong release.** Release process broken due a network issue.

### Version 1.11 (2016-03-03)

- [JENKINS-35463](#) First release using [bouncycastle-api-plugin](#)

### Version 1.10 (2016-03-03)

- [JENKINS-27152](#) / [JENKINS-32624](#) Use a standardized temporary directory compatible with Docker Pipeline.

### Version 1.9 (2015-12-07)

Changelog unrecorded.

### Version 1.8 (2015-08-07)

- Compatible with [Workflow](#) (issue [#28689](#))

### Version 1.7 (2015-06-02)

- Fixed a socket and thread leak (issue [#27555](#))

### Version 1.6 (2015-04-20)

- SSH agent socket service thread shouldn't keep JVM alive.

## Version 1.5 (2014-08-11)

- Add support for multiple credentials
- Add support for parameterized credentials

## Version 1.4.2 (2014-08-11)

- Fix for [JENKINS-20276](#)
- **WARNING: Due to classpath conflicts, this plugin will not work if 1.518 <= Jenkins Version < 1.533 (i.e. 1.518 broke it, 1.533 fixed it)**

## Version 1.4.1 (2013-11-08)

- Switch from f:select to c:select so that in-place addition of credentials is supported when the credentials plugin exposes such support
- **WARNING: Due to classpath conflicts, this plugin will not work if 1.518 <= Jenkins Version < 1.533 (i.e. 1.518 broke it, 1.533 fixed it)**

## Version 1.4 (2013-10-08)

- Minor improvement in exception handling
- Minor improvement in fault reporting
- Update JNR libraries
- **WARNING: Due to classpath conflicts, this plugin will not work if 1.518 <= Jenkins Version < 1.533 (i.e. 1.518 broke it, 1.533 fixed it)**

## Version 1.3 (2013-08-09)

- Set-up SSH Agent before SCM checkout, this way [GIT can use the ssh agent](#). (Contributed by Patric Boos)
- Upgrade to [SSH Credentials 1.3](#)

## Version 1.2 (2013-08-07)

- Upgrade to [Credentials plugin 1.6](#) and [SSH Credentials plugin 1.0](#). This now allows serving multiple private keys from the users home directory, e.g. `~/.ssh/id_rsa`, `~/.ssh/id_dsa` and `~/.ssh/identity`

## Version 1.1 (2013-07-04)

- If BouncyCastleProvider is not registered, try to register it ourselves anyway... this should make installation and configuration even easier.

## Version 1.0 (2012-11-01)

- Using `jnr-unixsocket` have been able to remove the requirement on Apache Tomcat Native for unix nodes. Likely still require the Apache Tomcat Native for Windows nodes.

## Version 0.1 (2012-10-26)

- Initial release