

# JENKINS BASIC

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# AGENDA

- Overview
- Installation
- Tomcat
- Maven Setup



# OVERVIEW

Developers check their source code.



Jenkins will pick up the changed source code and trigger a build and run any tests if required.



The build output will be available in the Jenkins dashboards. Automatic notifications can also be sent back to the developer.

JDK	JDK 1.5 or above
Memory	2 GB RAM (recommended)
Disk Space	No minimum requirement. Note that since all builds will be stored on the Jenkins machines, it has to be ensured that sufficient disk space is available for build storage.
Operating System Version	Jenkins can be installed on Windows, Ubuntu/Debian, Red Hat/Fedora/CentOS, Mac OS X, openSUSE, FreeBSD, OpenBSD, Gentoo.
Java Container	The WAR file can be run in any container that supports Servlet 2.4/JSP 2.0 or later.(An example is Tomcat 5).



# INSTALLATION

<https://jenkins.io/index.html>





# MANAGE PLUGINS

Manage Jenkins [Jenkins] - Windows Internet Explorer

http://localhost:8080/manage

Manage Jenkins [Jenkins]

## Jenkins

search

[Jenkins](#) [ENABLE AUTO REFRESH](#)

- [New Job](#)
- [People](#)
- [Build History](#)
- [Manage Jenkins](#)

### Build Queue


No builds in the queue.

### Build Executor Status

#	Status
1	Idle
2	Idle

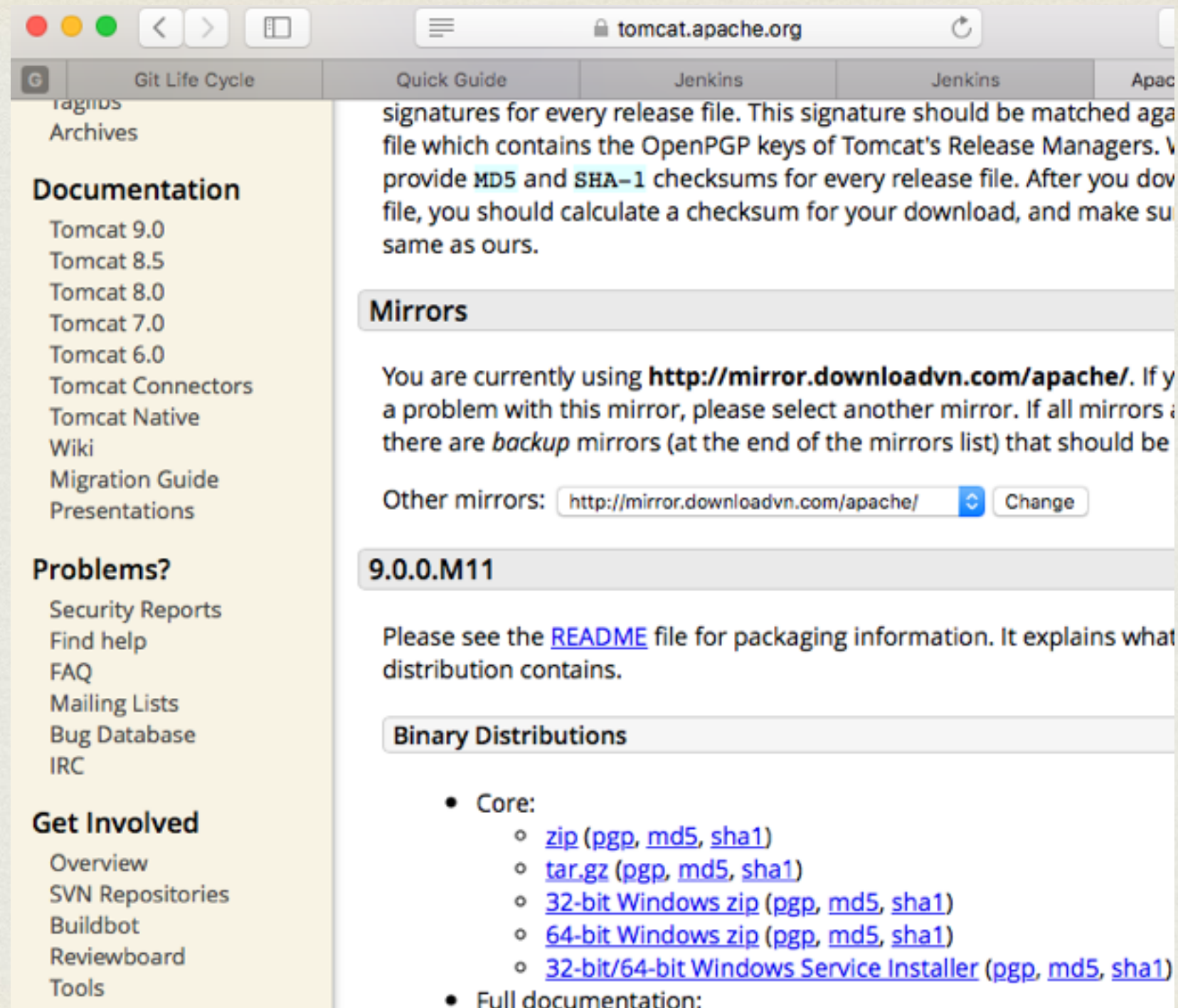
## Manage Jenkins

- [Configure System](#)  
Configure global settings and paths.
- [Reload Configuration from Disk](#)  
Discard all the loaded data in memory and reload everything from file system. Useful when you modified config files directly on disk.
- [Manage Plugins](#)  
Add, remove, disable or enable plugins that can extend the functionality of Jenkins.
- [System Information](#)  
Displays various environmental information to assist trouble-shooting.
- [System Log](#)  
System log captures output from `java.util.logging` output related to Jenkins.
- [Load Statistics](#)  
Check your resource utilization and see if you need more computers for your builds.
- [Jenkins CLI](#)  
Access/manage Jenkins from your shell, or from your script.
- [Script Console](#)  
Executes arbitrary script for administration/trouble-shooting/diagnostics.
- [Manage Nodes](#)  
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
- [About Jenkins](#)  
See the version and license information
- [Prepare for Shutdown](#)





# TOMCAT - DOWNLOAD



The screenshot shows the Tomcat Apache website. The browser address bar displays `tomcat.apache.org`. The left sidebar contains navigation links: **Documentation** (Tomcat 9.0, 8.5, 8.0, 7.0, 6.0, Connectors, Native, Wiki, Migration Guide, Presentations), **Problems?** (Security Reports, Find help, FAQ, Mailing Lists, Bug Database, IRC), and **Get Involved** (Overview, SVN Repositories, Buildbot, Reviewboard, Tools). The main content area has a top navigation bar with links to Git Life Cycle, Quick Guide, Jenkins, and Apache. The main text explains that signatures are provided for every release file, including MD5 and SHA-1 checksums. Below this is a **Mirrors** section, which states the current mirror is `http://mirror.downloadvn.com/apache/` and provides a dropdown menu to change mirrors. The **9.0.0.M11** version is highlighted, with a note to see the [README](#) file for packaging information. The **Binary Distributions** section lists the following options:

- Core:
  - [zip](#) ([pgp](#), [md5](#), [sha1](#))
  - [tar.gz](#) ([pgp](#), [md5](#), [sha1](#))
  - [32-bit Windows zip](#) ([pgp](#), [md5](#), [sha1](#))
  - [64-bit Windows zip](#) ([pgp](#), [md5](#), [sha1](#))
  - [32-bit/64-bit Windows Service Installer](#) ([pgp](#), [md5](#), [sha1](#))
- Full documentation:



# PLUGIN

**manage Jenkins**

[People](#)  
[Build History](#)  
**Manage Jenkins**  
[My Views](#)

**Build Queue**  
No builds in the queue.

**Build Executor Status**

#	Status
1	Idle
2	Idle

[Configure System](#)  
Configure global settings and paths.

[Configure Global Security](#)  
Secure Jenkins; define who is allowed

[Reload Configuration from Disk](#)  
Discard all the loaded data in memory

**Manage Plugins**  
Add, remove, disable or enable plugin

[System Information](#)  
Displays various environmental inform

Filter:

Updates **Available** Installed Advanced

Install	Name	Version
<input type="checkbox"/>	<a href="#">Artifactory Plugin</a> This plugin allows deploying Maven 2, Maven 3, Ivy and Gradle artifacts and build info to the Artifactory artifacts manager.	2.2.4
<input type="checkbox"/>	<a href="#">Build Publisher Plugin</a> This plugin allows records from one Jenkins to be published on another Jenkins.	1.19
<input type="checkbox"/>	<a href="#">Confluence Publisher Plugin</a> This plugin allows you to publish build artifacts as attachments to an <a href="#">Atlassian Confluence</a> wiki page.	1.8
<input type="checkbox"/>	<a href="#">Deploy Plugin</a> This plugin takes a war/ear file and deploys that to a running remote application server at the end of a build	1.10
<input type="checkbox"/>	<a href="#">Deploy WebSphere Plugin</a> This plugin is an extension of the <a href="#">Deploy Plugin</a> . It takes a war/ear file and deploys that to a running remote WebSphere Application Server at the end of a build.	1.0
<input type="checkbox"/>	<a href="#">Heroku Plugin</a> (This version is experimental and may change in backward incompatible way) Build tasks for interacting with <a href="#">Heroku</a> including deployment, scaling dynos, running processes, and more.	0.7.1-BETA
<input type="checkbox"/>	<a href="#">HockeyApp Plugin</a> Lets you publish iOS, Mac and Android apps to <a href="#">HockeyApp</a> from a Jenkins build.	1.1.0
<input type="checkbox"/>	<a href="#">MongoDB Document Upload Plugin</a> Adds a Post-Build step to upload JSON documents into MongoDB.	1.0
<input type="checkbox"/>	<a href="#">Publish Over CIFS Plugin</a> Send build artifacts to a windows share (CIFS/SMB/lanman)	0.3

[Install without restart](#) [Download now and install after restart](#)



# MAVEN



The screenshot shows the Apache Maven Project download page in a web browser. The browser's address bar displays the URL `https://maven.apache.org/download.cgi`. The page header includes the Apache Maven Project logo and the text "Maven™". Below the header, a breadcrumb trail reads "Apache / Maven / Download Apache Maven", and the date "Last Published: 2015-09-24" is shown on the right. A left-hand navigation menu lists various links, with "Download" highlighted. The main content area is titled "Downloading Apache Maven 3.3.3" and states that this is the latest release. It provides information about the currently selected download mirror (`http://www.us.apache.org/dist/`) and offers a link to the complete list of mirrors. A dropdown menu for "Other mirrors" is set to `http://www.eu.apache.org/dist/` with a "Change" button. Below this, the "System Requirements" section lists requirements for Java Development Kit (JDK), Memory, Disk, and Operating System. The "Files" section explains that Maven is distributed in several formats and provides instructions on how to verify the signature of the release bundles. At the bottom, there are columns for "Link", "Checksum", and "Signature".

**Apache Maven Project**  
`http://maven.apache.org/`

Apache / Maven / Download Apache Maven Last Published: 2015-09-24

**Downloading Apache Maven 3.3.3**

Apache Maven 3.3.3 is the latest release and recommended version for all users.

The currently selected download mirror is <http://www.us.apache.org/dist/>. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are backup mirrors (at the end of the mirrors list) that should be available. You may also consult the [complete list of mirrors](#).

Other mirrors:  [Change](#)

**System Requirements**

<b>Java Development Kit (JDK)</b>	Maven 3.3 requires JDK 1.7 or above to execute - it still allows you to build against 1.3 and other JDK versions by <a href="#">Using Toolchains</a>
<b>Memory</b>	No minimum requirement
<b>Disk</b>	Approximately 10MB is required for the Maven installation itself. In addition to that, additional disk space will be used for your local Maven repository. The size of your local repository will vary depending on usage but expect at least 500MB.
<b>Operating System</b>	No minimum requirement. Start up scripts are included as shell scripts and Windows batch files.

**Files**

Maven is distributed in several formats for your convenience. Simply pick a ready-made binary distribution archive and follow the [installation instructions](#). Use a source archive if you intend to build Maven yourself.

In order to guard against corrupted downloads/installations, it is highly recommended to [verify the signature](#) of the release bundles against the public [KEYS](#) used by the Apache Maven developers.

Link	Checksum	Signature
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## JDK

### JDK installations

name

JAVA\_HOME

☐ Install automatically



Delete JDK

name

JAVA\_HOME

☐ Install automatically



Delete JDK

Add JDK

List of JDK installations on this system



## Maven

### Maven installations

name

MAVEN\_HOME

☐ Install automatically




Delete Maven

name

☒ Install automatically



 **Install from Apache**

Version

Delete Installer

Add Installer ▼

Delete Maven

Add Maven

List of Maven installations on this system



### Source Code Management

- ☐ None  
☐ CVS  
☐ Subversion  
☐ Mercurial  
☒ Git

Repositories

Repository URL  ? ?

Name  ?

Refspec  ?

Delete Repository

Add

Branches to build

Branch Specifier (blank for default):  ?

Delete Branch

Add

Advanced...

Repository browser

?



### Build Environment

☒ Delete workspace before build starts

Advanced...

☐ Send files or execute commands over SSH before the build starts



☐ Send files or execute commands over SSH after the build runs



☐ Abort the build if it's stuck

☐ Assign unique TCP ports to avoid collisions



☐ Run Xvnc during build



☐ SSH Agent

### Build

☒ Invoke top-level Maven targets



Maven Version

3.0.4

Goals

clean verify

Advanced...

Delete

Add build step

### Post-build Actions

Add post-build action

Save

Apply



# REFERENCE

- [https://www.tutorialspoint.com/jenkins/jenkins\\_quick\\_guide.htm](https://www.tutorialspoint.com/jenkins/jenkins_quick_guide.htm)



# THANK YOU !

