

## How to deploy code from git in Tomcat?

Lets us take an example where we already have the repository mydemorepo

(<https://github.com/samson1487/mydemorepo.git>) containing a sample java project.

If you do not have the code on the local issue the following commands

- git clone <https://github.com/samson1487/mydemorepo.git>
  - git checkout feature\_x
1. Once you are on branch feature\_x , go to the location where pom file exists.

★ Favorites	Name	Date modified	Type	Size
Desktop	.git	03-08-2017 13:59	File folder	
Downloads	docs	02-08-2017 23:19	File folder	
Recent Places	src	03-08-2017 13:47	File folder	
OneDrive	pom.xml	17-10-2016 20:54	XML File	5 KB
Libraries	README.txt	02-08-2017 23:21	TXT File	1 KB

2. Issue the command mvn clean package

```
E:\git_learning\code 1\mydemorepo>mvn clean package
[INFO] Scanning for projects...
[INFO]
[INFO] Building SampleSpringMUCProject 1.0.0-BUILD-SNAPSHOT
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ spring ---
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ spring ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] Copying 1 resource
[INFO]
[INFO] --- maven-compiler-plugin:2.5.1:compile (default-compile) @ spring ---
[WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. build is platform dependent!
[INFO] Compiling 1 source file to E:\git_learning\code 1\mydemorepo\target\classes
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ spring ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] Copying 1 resource
[INFO]
[INFO] --- maven-compiler-plugin:2.5.1:testCompile (default-testCompile) @ spring ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ spring ---
[INFO]
[INFO] --- maven-war-plugin:2.2:war (default-war) @ spring ---
[INFO] Packaging webapp
[INFO] Assembling webapp [spring] in [E:\git_learning\code 1\mydemorepo\target\spring-1.0.0-BUILD-SNAPSHOT]
[INFO] Processing war project
[INFO] Copying webapp resources [E:\git_learning\code 1\mydemorepo\src\main\webapp]
[INFO] Webapp assembled in [94 msecs]
[INFO] Building war: E:\git_learning\code 1\mydemorepo\target\spring-1.0.0-BUILD-SNAPSHOT.war
[INFO] WEB-INF\web.xml already added, skipping
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 2.637 s
[INFO] Finished at: 2017-08-03T14:00:03+05:30
[INFO] Final Memory: 18M/324M
[INFO]
E:\git_learning\code 1\mydemorepo>
```

The above command first clean the target folder (if any) at the same location where pom exists and then creates a war file and again create folder target and copy there.

3. After the successful completion of maven command you can see the target folder consisting of the war file

Name	Date modified	Type	Size
classes	03-08-2017 14:00	File folder	
generated-sources	03-08-2017 14:00	File folder	
maven-archiver	03-08-2017 14:00	File folder	
spring-1.0.0-BUILD-SNAPSHOT	03-08-2017 14:00	File folder	
test-classes	03-08-2017 14:00	File folder	
spring-1.0.0-BUILD-SNAPSHOT.war	03-08-2017 14:00	WAR File	4,009 KB

4. Then goto the folder where tomcat folder exists it should have the following structure:

Name	Date modified	Type	Size
bin	03-08-2017 14:02	File folder	
conf	03-08-2017 14:02	File folder	
lib	03-08-2017 14:02	File folder	
logs	03-08-2017 14:02	File folder	
temp	03-08-2017 14:02	File folder	
webapps	03-08-2017 14:02	File folder	
work	03-08-2017 14:02	File folder	
LICENSE	17-10-2016 21:13	File	57 KB
NOTICE	17-10-2016 21:13	File	2 KB
RELEASE-NOTES	17-10-2016 21:13	File	8 KB
RUNNING.txt	17-10-2016 21:14	TXT File	17 KB

- the bin folder consists of scripts for starting or stopping the server.
  - The webapps folder consists of all the applications war to be deployed on server.
  - The logs folder consists of the logs generated by the application.
5. Now goto the command prompt where tomcat is running and press key Ctrl+C to stop the server.
6. Then go to the webapps folder and take the backup of the currently running war . For convenience sake lets us create a folder at same level where bin or webapps folder is situated.

Name	Date modified	Type	Size
backup	03-08-2017 14:13	File folder	
bin	03-08-2017 14:02	File folder	
conf	03-08-2017 14:02	File folder	
lib	03-08-2017 14:02	File folder	
logs	03-08-2017 14:10	File folder	
temp	03-08-2017 14:02	File folder	
webapps	03-08-2017 14:02	File folder	
work	03-08-2017 14:02	File folder	
LICENSE	17-10-2016 21:13	File	57 KB
NOTICE	17-10-2016 21:13	File	2 KB
RELEASE-NOTES	17-10-2016 21:13	File	8 KB
RUNNING.txt	17-10-2016 21:14	TXT File	17 KB

7. Copy the current war file into backup folder.
8. Copy the new war from target folder to the webapps folder.

Computer ► New Volume (E:) ► automic\_workspace ► SampleSpringMVCProject ► target ►

Name	Date modified	Type	Size
classes	03-08-2017 14:22	File folder	
generated-sources	03-08-2017 14:22	File folder	
maven-archiver	03-08-2017 14:22	File folder	
spring-1.0.0-BUILD-SNAPSHOT	03-08-2017 14:22	File folder	
test-classes	03-08-2017 14:22	File folder	
spring-1.0.0-BUILD-SNAPSHOT.war	03-08-2017 14:22	WAR File	4,009 KB

Computer ► New Volume (E:) ► Servers ► tomcat ► apache-tomcat-7.0.55 ► webapps ►

Name	Date modified	Type	Size
docs	03-08-2017 14:20	File folder	
examples	03-08-2017 14:20	File folder	
host-manager	03-08-2017 14:20	File folder	
manager	03-08-2017 14:20	File folder	
ROOT	03-08-2017 14:20	File folder	
spring-1.0.0-BUILD-SNAPSHOT.war	03-08-2017 14:22	WAR File	4,009 KB

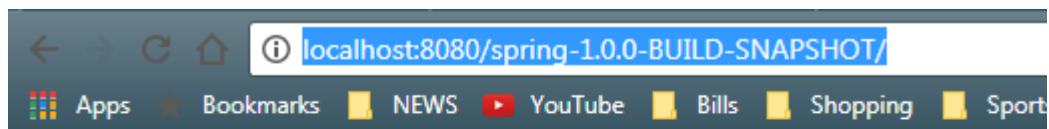
9. Now go to tomcat bin folder and run the script startup.bat (windows) or startup.sh

10. You should see the following if server started successfully

```
INFO: Deployment of web application directory E:\Servers\tomcat\apache-tomcat-7.0.55\webapps\examples has finished in 219 ms
Aug 03, 2017 2:29:27 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\Servers\tomcat\apache-tomcat-7.0.55\webapps\host-manager
Aug 03, 2017 2:29:27 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deployment of web application directory E:\Servers\tomcat\apache-tomcat-7.0.55\webapps\host-manager has finished in 62 ms
Aug 03, 2017 2:29:27 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\Servers\tomcat\apache-tomcat-7.0.55\webapps\manager
Aug 03, 2017 2:29:27 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deployment of web application directory E:\Servers\tomcat\apache-tomcat-7.0.55\webapps\manager has finished in 109 ms
Aug 03, 2017 2:29:27 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\Servers\tomcat\apache-tomcat-7.0.55\webapps\ROOT
Aug 03, 2017 2:29:27 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deployment of web application directory E:\Servers\tomcat\apache-tomcat-7.0.55\webapps\ROOT has finished in 31 ms
Aug 03, 2017 2:29:27 PM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["http-apr-8080"]
Aug 03, 2017 2:29:27 PM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["ajp-apr-8009"]
Aug 03, 2017 2:29:27 PM org.apache.catalina.startup.Catalina start
INFO: Server startup in 3061 ms
```

11. Got browser and copy paste the following url

<http://localhost:8080/spring-1.0.0-BUILD-SNAPSHOT/>



# Hello world!

The time on the server is August 3, 2017 2:23:25 PM IST.