## **Build Tool assignment**

#Write a shell script to automate Install git, install maven, install java, install tomcat pull repository which contains source code, build java application using maven steps. And set tomcat server user configuration setting.

# Update package list sudo yum update -y # Install Git sudo yum install -y git # Install Java sudo yum install -y java # Install Maven sudo yum install -y maven #tomcat installation #download tomcat application using wget wget https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.91/bin/apache-tomcat-9.0.91.tar.gz #uzip the the downloaded file tar -xvzf apache-tomcat-9.0.91.tar.gz #remove compressed (tar.gz) file rm -rf apache-tomcat-9.0.91.tar.gz #rename the file mv apache-tomcat-9.0.91 tomcat #start the tomcat sh /home/ec2-user/tomcat/bin/startup.sh #clone source code to local repo git clone https://github.com/sunilb66/java-hello-world-with-maven cd java-hello-world-with-maven mvn clean install cd target cp /home/ec2-user/java-hello-world-with-maven/target/jb-hello-world-maven-0.2.0.jar /home/ec2user/tomcat/webapps/

# Steps to configure tomcat server user configuration setting (server status/manger/host manager)

- 1) Add port number 8080 in inbound rules of EC2 instance
- 2) Navigate to path /home/ec2-user/tomcat/webapps/manager/META-INF
- 3) Vi context.xml
- 4) Comment out the value

```
<!-- <Valve className="org.apache.catalina.valves.RemoteAddrValve" allow="127\.\d+\.\d+\.\d+\::1\mid0:0:0:0:0:0:1" />-->
```

- 5) Navigate to path /home/ec2-user/tomcat/webapps/host-manager/META-INF
- 6) Vi context.xml
- 7) Comment out the value

```
<!-- <Valve className="org.apache.catalina.valves.RemoteAddrValve" allow="127\.\d+\.\d+\.\d+\:1|0:0:0:0:0:0:1" />-->
```

- 8) Navigate the path cd tomcat/conf
- 9) vi tomcat-users.xml
- 10) add roles and set username, passwords (admin,admin-gui,manager,manager-gui)
- 11) Restart the tomcat sh tomcat/bin startup.sh

```
Last metadata expiration check: 0:54:59 ago on Tue Aug 6 03:05:07 2024. Dependencies resolved.
Nothing to do.
Last metadata expiration check: 0:54:59 ago on Tue Aug 6 03:05:07 2024.
Package git-2.40.1-1.amzn2023.0.3.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
Last metadata expiration check: 0:55:00 ago on Tue Aug 6 03:05:07 2024.
Package java-22-amazon-corretto-1:22.0.2+9-1.amzn2023.1.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
Last metadata expiration check: 0:55:00 ago on Tue Aug 6 03:05:07 2024. Package maven-1:3.8.4-3.amzn2023.0.5.noarch is already installed.
Dependencies resolved.
Nothing to do.
apache-tomcat-9.0.91/bin/ciphers.sh
apache-tomcat-9.0.91/bin/configtest.sh
apache-tomcat-9.0.91/bin/daemon.sh
apache-tomcat-9.0.91/bin/digest.sh
apache-tomcat-9.0.91/bin/makebase.sh
apache-tomcat-9.0.91/bin/setclasspath.sh
apache-tomcat-9.0.91/bin/shutdown.sh
apache-tomcat-9.0.91/bin/startup.sh
apache-tomcat-9.0.91/bin/tool-wrapper.sh
apache-tomcat-9.0.91/bin/version.sh
Using CATALINA_BASE:
Using CATALINA_HOME:
                                   /home/ec2-user/tomcat
                                   /home/ec2-user/tomcat
Using CATALINA_TMPDIR: /home/ec2-user/tomcat/temp
Using JRE HOME:
Using CLASSPATH:
                                    /home/ec2-user/tomcat/bin/bootstrap.jar:/home/ec2-user/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
  Cloning into 'java-hello-world-with-maven'...
 remote: Total 81 (delta 0), reused 0 (delta 0), pack-reused 81 Receiving objects: 100% (81/81), 14.96 KiB | 2.99 MiB/s, done. Resolving deltas: 100% (27/27), done.
  INFO] Scanning for projects...
          Building jb-hello-world-maven 0.2.0
                                                      ---[ jar ]------
           --- maven-clean-plugin:2.5:clean (default-clean) @ jb-hello-world-maven ---
  [INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ jb-hello-world-maven ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /home/ec2-user/java-hello-world-with-maven/src/main/resources
  [INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ jb-hello-world-maven ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!
[INFO] Compiling 2 source files to /home/ec2-user/java-hello-world-with-maven/target/classes
  [INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ jb-hello-world-maven ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /home/ec2-user/java-hello-world-with-maven/src/test/resources
```

--- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ jb-hello-world-maven ---

--- maven-jar-plugin:2.4:jar (default-jar) @ jb-hello-world-maven --- Building jar: /home/ec2-user/java-hello-world-with-maven/target/jb-hello-world-maven-0.2.0.jar

--- maven-surefire-plugin:2.12.4:test (default-test) @ jb-hello-world-maven ---

No sources to compile

No tests to run.

```
₽
🗬 ec2-user@ip-172-31-28-255:~/tomcat/webapps/manager/META-INF
 Context antiResourceLocking="false" privileged="true" > 
<CookieProcessor className="org.apache.tomcat.util.http.Rfc6265CookieProcessor"
                        sameSiteCookies="strict" />
                                                                        \.lang\.(?:Boolean|
inked)?HashMap"/>
ec2-user@ip-172-31-28-255:~/tomcat/webapps/host-manager/META-INF
                                                                                                                                                                         - 🗗 X
 Context antiResourceLocking="false" privileged="true"
<CookieProcessor className="org.apache.tomcat.util.h
```

Home Documentation Configuration Examples Wiki Mailing Lists

Find Help

# Apache Tomcat/9.0.91



# If you're seeing this, you've successfully installed Tomcat. Congratulations!



Recommended Reading: Security Considerations How-To Manager Application How-To

Clustering/Session Replication How-To

Server Status

Manager App

Host Manager

#### **Developer Quick Start**

Tomcat Setup First Web Application Realms & AAA JDBC DataSources **Examples** 

Servlet Specifications **Tomcat Versions** 

# **Managing Tomcat**

For security, access to the  $\underline{\text{manager webapp}}$  is restricted. Users are defined in:

\$CATALINA\_HOME/conf/tomcat-users.xml

In Tomcat 9.0 access to the manager application is split between different users. Read more...

Release Notes

Changelog

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### **Documentation**

## Tomcat 9.0 Documentation

Tomcat 9.0 Configuration

### Tomcat Wiki

Find additional important configuration information in:

\$CATALINA\_HOME/RUNNING.txt

Developers may be interested in:

## **Getting Help**

### FAQ and Mailing Lists

The following mailing lists are available:

tomcat-announce Important announcements, releases, security vulnerability notifications. (Low volume).

tomcat-users User support and discussion

taglibs-user
User support and discussion for Apache Taglibs

C ① 54.221.49.230:8080/manager/status

Sign in	
http://54.22	1.49.230:8080
Your connec	tion to this site is not private
Username	admin
Password	
	Sign in Cancel











# **Server Status**

Nanager			
<u>ist Applications</u>	HTML Manager Help	<u>Manager Help</u>	Complete Server Status

Server Information							
Tomcat Version JVM Version JVM Vendor OS Na		OS Name	OS Version	OS Architecture Hostname		IP Address	
Apache Tomcat/9.0.91	22.0.2+9-FR	Amazon.com Inc.	Linux	6.1.97-104.177.amzn2023.x86_64	amd64	ip-172-31-28-255.ec2.internal	172.31.28.255

#### VM

ee Memory: 11.81 MiB Total Memory: 29.14 MiB Max Memory: 230.12 MiB

Memory Pool	Type	Initial	Total	Maximum	Used
Eden Space	Heap memory	4.31 MiB	8.06 MiB	63.56 MiB	2.56 MiB (4%)
Survivor Space	Heap memory	0.50 MiB	1.00 MiB	7.87 MiB	1.00 MiB (12%)
Tenured Gen	Heap memory	10.68 MiB	20.07 MiB	158.68 MiB	13.76 MiB (8%)
CodeHeap 'non-nmethods'	Non-heap memory	2.43 MiB	2.43 MiB	5.55 MiB	1.26 MiB (22%)
CodeHeap 'non-profiled nmethods'	Non-heap memory	2.43 MiB	2.43 MiB	117.22 MiB	1.89 MiB (1%)
CodeHeap 'profiled nmethods'	Non-heap memory	2.43 MiB	8.75 MiB	117.21 MiB	8.69 MiB (7%)
Compressed Class Space	Non-hean memory	0.00 MiB	2 62 MiR	1024 00 MiR	2.48 MiB (0%)







ОК

None specified

None specified

Servlet and JSP Examples

Tomcat Host Manager Application

Message:

/examples

/host-manager



minutes

# **Tomcat Web Application Manager**

Manager							
List Applications		HTML Manager Help	HTML Manager Help		<u>Manager Help</u>	Ş	Server Status
Applications							
Path	Version	Display Name	Running	Sessions	Commands		
L None specified	Manager Ford	Walana Ar Tanan	true	<u>0</u>	Start Stop Reload Under	loy	
	None specified	Welcome to Tomcat			Expire sessions with idle ≥ 30	minutes	
/docs None specific		Tomcat Documentation	true	0	Start Stop Reload Under	loy	
	None specified				Expire sessions with idle ≥ 30	minutes	
					Start Stop Reload Under	lov	

true

0

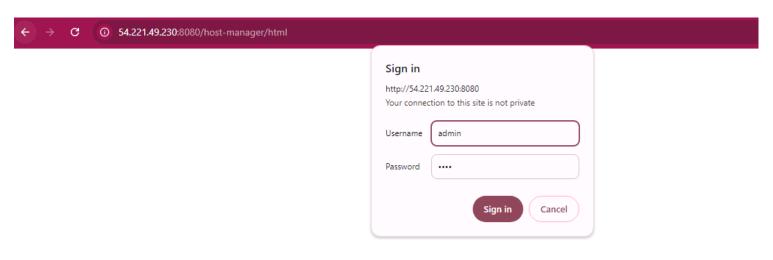
<u>0</u>

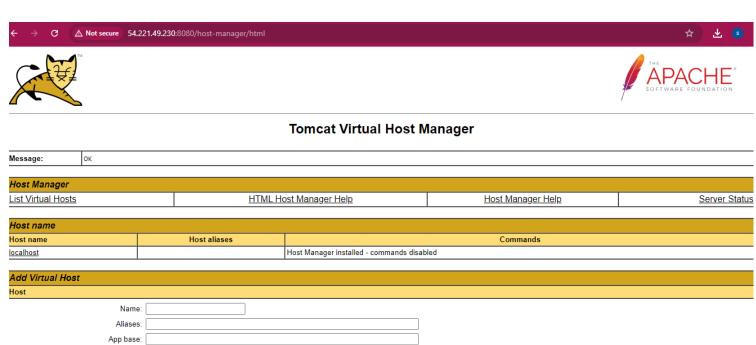
Expire sessions | with idle ≥ 30

Expire sessions with idle ≥ 30

Start Stop Reload Undeploy

Start Stop Reload Undeploy





AutoDeploy <