

Instalar servidor de Tomcat

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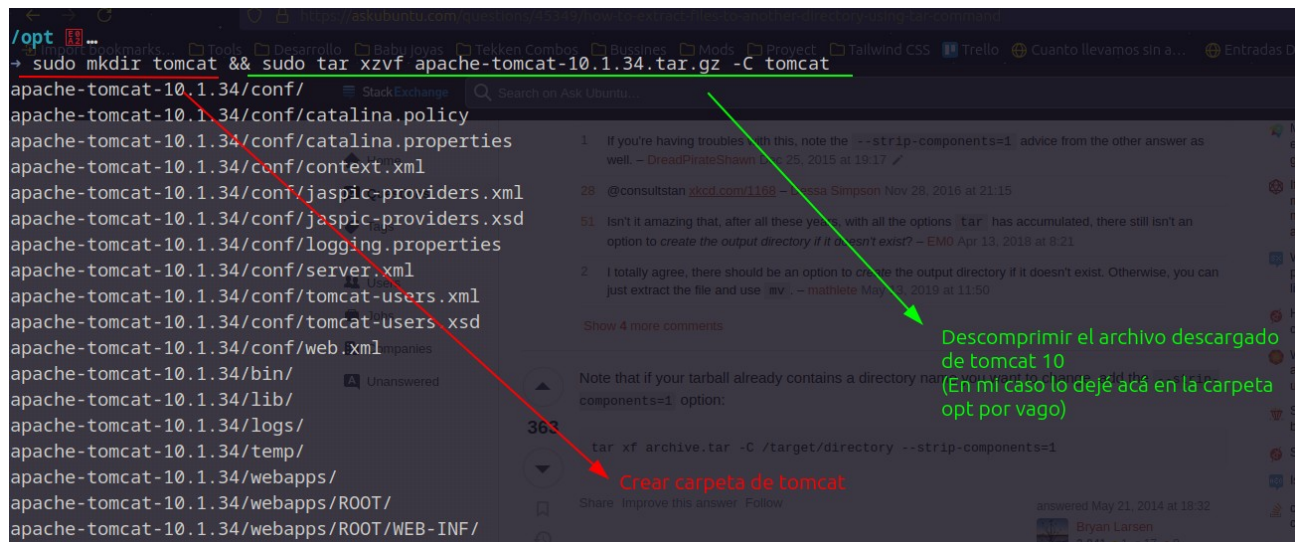
Index

Instalación.....	3
Darle permisos a tomcat del proyecto.....	3
.....	3
Configuración de tomcat.....	4
Crear el servicio de tomcat.....	5
Comprobar que funciona.....	8
Meter el war de ejemplo.....	10

Instalación

Obtener el archivo comprimido de tomcat

wget https://dlcdn.apache.org/tomcat/tomcat-10/v10.1.34/bin/apache-tomcat-10.1.34.tar.gz

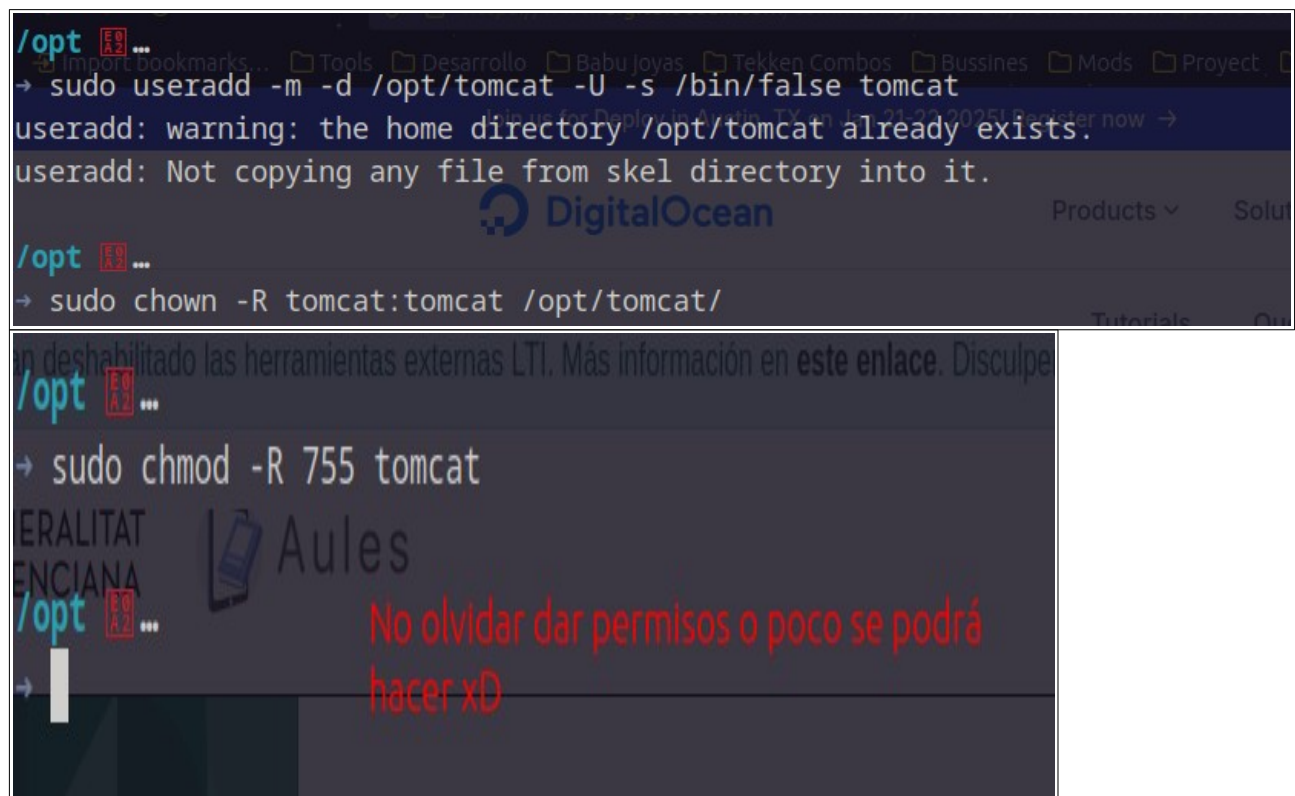


```
/opt
→ sudo mkdir tomcat && sudo tar xzvf apache-tomcat-10.1.34.tar.gz -C tomcat
apache-tomcat-10.1.34/conf/
apache-tomcat-10.1.34/conf/catalina.policy
apache-tomcat-10.1.34/conf/catalina.properties
apache-tomcat-10.1.34/conf/context.xml
apache-tomcat-10.1.34/conf/jaspic-providers.xml
apache-tomcat-10.1.34/conf/jaspic-providers.xsd
apache-tomcat-10.1.34/conf/logging.properties
apache-tomcat-10.1.34/conf/server.xml
apache-tomcat-10.1.34/conf/tomcat-users.xml
apache-tomcat-10.1.34/conf/tomcat-users.xsd
apache-tomcat-10.1.34/conf/web.xml
apache-tomcat-10.1.34/bin/
apache-tomcat-10.1.34/lib/
apache-tomcat-10.1.34/logs/
apache-tomcat-10.1.34/temp/
apache-tomcat-10.1.34/webapps/
apache-tomcat-10.1.34/webapps/ROOT/
apache-tomcat-10.1.34/webapps/ROOT/WEB-INF/
```

Descomprimir el archivo descargado de tomcat 10 (En mi caso lo dejé acá en la carpeta opt por vago)

Crear carpeta de tomcat

Darle permisos a tomcat del proyecto



```
/opt
→ sudo useradd -m -d /opt/tomcat -U -s /bin/false tomcat
useradd: warning: the home directory /opt/tomcat already exists.
useradd: Not copying any file from skel directory into it.

→ sudo chown -R tomcat:tomcat /opt/tomcat/

→ sudo chmod -R 755 tomcat
```

No olvidar dar permisos o poco se podrá hacer xD

Configuración de tomcat

tomcat-users.xml

Añadir las siguientes líneas:

sudo nano /opt/tomcat/conf/tomcat-users.xml

```
<!--
-->
<user username="tomcat" password="<must-be-changed>" roles="tomcat" />
<user username="both" password="<must-be-changed>" roles="tomcat,role1" />
<user username="role1" password="<must-be-changed>" roles="role1" />
-->
<role rolename="manager-gui" />
<user username="manager" password="manager_password" roles="manager-gui" />
<role rolename="admin-gui" />
<user username="admin" password="admin_password" roles="manager-gui,admin-gui" />
</tomcat-users>
```

context.xml

Comentar la siguiente parte del código:

sudo nano /opt/tomcat/webapps/manager/META-INF/context.xml

sudo nano /opt/tomcat/webapps/host-manager/META-INF/context.xml

```
<!--
-->
<Context antiResourceLocking="false" privileged="true" >
  <CookieProcessor className="org.apache.tomcat.util.http.Rfc6265CookieProcessor"
    sameSiteCookies="strict" />
  <!--<Valve className="org.apache.catalina.valves.RemoteAddrValve"
    allow="127.\.0.\.0:1" />-->
  <Manager sessionAttributeValueClassNameFilter="java\.lang\.(?:Boolean|Integer|Long|Number|string)|org\.apache\.catalina\.filters\.CsrfPreventionFilter$LruCache(?:\d+)?$" />
</Context>
```

Crear el servicio de tomcat

Hacemos el siguiente comando:

```
sudo nano /etc/systemd/system/tomcat.service
```

Contenido a meter en e file:

[Unit]

Description=Tomcat

After=network.target

[Service]

Type=forking

User=tomcat

Group=tomcat

Environment="JAVA_HOME=/usr/lib/jvm/java-1.[TU-VERSIÓN-DE-JAVA].0-openjdk-amd64"

Environment="JAVA_OPTS=-Djava.security.egd=file:///dev/urandom"

Environment="CATALINA_BASE=/opt/tomcat"

Environment="CATALINA_HOME=/opt/tomcat"

Environment="CATALINA_PID=/opt/tomcat/temp/tomcat.pid"

Environment="CATALINA_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC"

ExecStart=/opt/tomcat/bin/startup.sh

ExecStop=/opt/tomcat/bin/shutdown.sh

RestartSec=10

Restart=always

[Install]

WantedBy=multi-user.target

```
GNU nano 7.2 /etc/systemd/system/tomcat.service
[Unit]
Description=Tomcat
After=network.target

[Service]
Type=forking

User=tomcat
Group=tomcat

Environment="JAVA_HOME=/usr/lib/jvm/java-1.17.0-openjdk-amd64"
Environment="JAVA_OPTS=-Djava.security.egd=file:///dev/urandom"
Environment="CATALINA_BASE=/opt/tomcat"
Environment="CATALINA_HOME=/opt/tomcat"
Environment="CATALINA_PID=/opt/tomcat/temp/tomcat.pid"
Environment="CATALINA_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC"

ExecStart=/opt/tomcat/bin/startup.sh
ExecStop=/opt/tomcat/bin/shutdown.sh

RestartSec=10
Restart=always

[Install]
WantedBy=multi-user.target

```

Inciso mío:

Aquí me estuvo dando problemas el inicio de systemctl, y es porq los permisos no estaban correctamente puestos, entonces, el archivo de startup.sh por ejemplo, no podía acceder donde tenía que acceder :>

```
Press <enter> to keep the current choice[*], or type selection number:

/opt [E] took 4.0s ...
→ sudo -u tomcat /opt/tomcat/bin/startup.sh

Using CATALINA_BASE:   /opt/tomcat
Using CATALINA_HOME:   /opt/tomcat
Using CATALINA_TMPDIR: /opt/tomcat/temp
Using JRE_HOME:        /usr
Using CLASSPATH:       /opt/tomcat/bin/bootstrap.jar:/opt/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
touch: cannot touch '/opt/tomcat/logs/catalina.out': Permission denied
/opt/tomcat/bin/catalina.sh: 465: cannot create /opt/tomcat/logs/catalina.out: Permission denied

/opt [E] ...
→ sudo chown -R tomcat:tomcat /opt/tomcat/logs
sudo chmod -R 755 /opt/tomcat/logs

```



```
systemctl status tomcat

→ sudo chown -R tomcat:tomcat /opt/tomcat/logs
sudo chmod -R 755 /opt/tomcat/logs

/opt [E0 A2] ...
→ sudo chown -R tomcat:tomcat /opt/tomcat
sudo chmod -R 755 /opt/tomcat

/opt [E0 A2] ...
→ sudo systemctl restart tomcat.service

/opt [E0 A2] ...
→ systemctl status tomcat
• tomcat.service
  Loaded: loaded (/etc/systemd/system/tomcat.service; enabled; preset: enabl>
  Active: active (running) since Thu 2025-01-09 18:53:29 CET; 5s ago
  Process: 29798 ExecStart=/opt/tomcat/bin/startup.sh (code=exited, status=0/>
  Main PID: 29805 (java)
  Tasks: 32 (limit: 18306)
  Memory: 124.5M
  CPU: 2.907s
  CGroup: /system.slice/tomcat.service
```

Comprobar que funciona

```
/opt [1] ~
+ systemctl daemon-reload

/opt [1] took 4.7s ~
+ systemctl status tomcat
* tomcat.service - Tomcat
   Loaded: loaded (/etc/systemd/system/tomcat.service; enabled; preset: enabled)
   Active: active (running) since Thu 2025-01-09 18:53:29 CET; 8min ago
     Main PID: 29805 (java)
       Tasks: 31 (limit: 18306)
      Memory: 126.6M
         CPU: 3.883s
    CGroup: /system.slice/tomcat.service
            └─29805 /usr/lib/jvm/java-1.17.0-openjdk-amd64/bin/java -Djava.util.logging.config.file=/opt/tomcat/conf/logging.properties -Djava.util.logging.manager=org.ap

Jan 09 18:53:29 kyogre systemd[1]: Starting tomcat.service...
Jan 09 18:53:29 kyogre startup.sh[29798]: Tomcat started.
Jan 09 18:53:29 kyogre systemd[1]: Started tomcat.service.
Jan 09 18:53:35 kyogre systemd[1]: /etc/systemd/system/tomcat.service:1: Assignment outside of section. Ignoring.
Jan 09 18:53:35 kyogre systemd[1]: /etc/systemd/system/tomcat.service:2: Assignment outside of section. Ignoring.
Jan 09 18:53:35 kyogre systemd[1]: /etc/systemd/system/tomcat.service:3: Assignment outside of section. Ignoring.
lines 1-16/16 (END)
```

Con los comandos

```
sudo systemctl daemon-reload && sudo systemctl start tomcat
```

Y para comprobar que funcione correctamente:

```
sudo systemctl status tomcat
```

Y luego ya con el comando

```
sudo ufw allow 8080
```


Para habilitar en el firewall el puerto 8080 y que por allá se muestre el service de tomcat

The image shows a web browser displaying the Apache Tomcat 10.1.34 homepage. The browser's address bar shows `localhost:8080`. The website has a navigation bar with links: Home, Documentation, Configuration, Examples, Wiki, and Mailing Lists. The main content area includes a green banner with a cat logo and the text "If you're seeing this, you've successfully...". Below this, there are sections for "Recommended Reading" (Security Considerations, Manager Application, Clustering/Session Replication), "Developer Quick Start" (Tomcat Setup, First Web Application, Realms & AAA, JDBC DataSources), "Managing Tomcat" (manager.webapp access), "Documentation" (Tomcat 10.1 Documentation, Tomcat 10.1 Configuration, Tomcat Wiki), "Release Notes", "Changelog", "Migration Guide", and "Security Notices".

Overlaid on the right side of the website is a terminal window titled "joselito@kyogre/opt". The terminal shows the following commands and output:

```
Jan 09 18:53:29 kyogre startup.sh[29798]: Tomcat started.  
Jan 09 18:53:29 kyogre systemd[1]: Started tomcat.service.  
Jan 09 18:53:35 kyogre systemd[1]: /etc/systemd/system/tomcat.service:1: As  
signment outside of section. Ignoring.  
Jan 09 18:53:35 kyogre systemd[1]: /etc/systemd/system/tomcat.service:2: As  
signment outside of section. Ignoring.  
Jan 09 18:53:35 kyogre systemd[1]: /etc/systemd/system/tomcat.service:3: As  
signment outside of section. Ignoring.  
  
/opt [1] took 2m 41.4s _  
+ sudo ufw allow 8080  
Skipping adding existing rule (v6)  
The following mailing lists are available:  
tomcat-announce (announcements, releases, security  
updates, releases, new releases)  
tomcat-dev (development, bug reports, patches)  
tomcat-users (general discussion, questions, answers)  
+ sudo ufw allow 8080  
Skipping adding existing rule (v6)  
Skipping adding existing rule (v6)  
/opt [1] _  
+ sudo ufw allow 8080  
Skipping adding existing rule (v6)  
Skipping adding existing rule (v6)
```

Red arrows point from the text "Sorry, le di dos veces por accidente xD" to the repeated `+ sudo ufw allow 8080` commands in the terminal.

Meter el war de ejemplo

Has de logearte, en mi caso, me loguee con el user con el rol de manager-gui.
Y con este, me fui a una sección donde puedo subirlo, el /manager.

The screenshot shows the Tomcat Manager web application interface. The top section is the 'Deploy' tab, which includes fields for 'Context Path', 'Version (for parallel deployment)', 'XML Configuration file path', and 'WAR or Directory path'. A red circle highlights the 'Select WAR file to upload' button, which is labeled 'SampleWebApp.war'. Below this is the 'Configuration' tab, which includes a 'Re-read TLS configuration files' section. The 'Diagnostics' tab is also visible, showing a message about memory leaks.

The bottom section of the screenshot shows the 'Tomcat Web Application Manager' interface. It includes a 'Manager' tab with a 'List Applications' table. The table has columns for 'Path', 'Version', 'Display Name', 'Running', 'Sessions', and 'Commands'. The 'SampleWebApp' is listed as a deployed application. A red line connects the 'SampleWebApp.war' file from the 'Deploy' tab to the 'SampleWebApp' entry in the 'List Applications' table. A green checkmark is visible next to the 'Sample Web Application To Deploy and Test' text.

Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/SampleWebApp	None specified		true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/docs	None specified	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/examples	None specified	Servlet and JSP Examples			Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/host-manager	None specified	Tomcat Host Manager Application			Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/manager	None specified	Tomcat Manager Application			Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes

Sample Web Application To Deploy and Test

click [Click to Invoke a SnoopServlet](#)