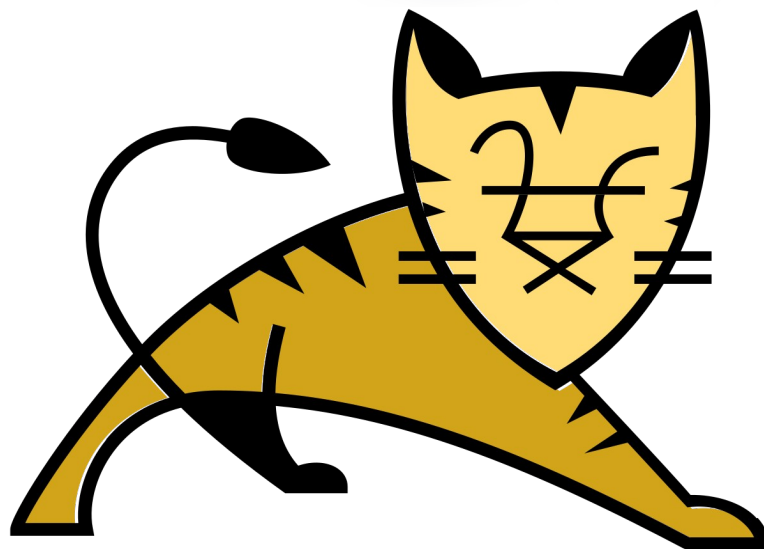


Instalación TomCat y WildFly



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INSTALACION TOMCAT

Primero iniciaremos tomcat

Haremos docker “docker pull tomcat” y seguido escribiremos:

```
Activities Terminal ene 13 09:26
estudiante@DAW1: ~
estudiante@DAW1:~$ docker run -it --rm -p 8888:8080 tomcat:9.0
Using CATALINA_BASE: /usr/local/tomcat
Using CATALINA_HOME: /usr/local/tomcat
Using CATALINA_TMPDIR: /usr/local/tomcat/temp
Using JRE_HOME: /opt/java/openjdk
Using CLASSPATH: /usr/local/tomcat/bin/bootstrap.jar:/usr/local/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
NOTE: Picked up JDK_JAVA_OPTIONS:  --add-opens=java.base/java.lang=ALL-UNNAMED --add-opens=java.base/java.io=ALL-UNNAMED --add-opens=java.base/java.util=ALL-UNNAMED --add-opens=java.base/java.util.concurrent=ALL-UNNAMED --add-opens=java.rmi/sun.rmi.transport=ALL-UNNAMED
13-Jan-2023 08:24:57.630 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Server version name: Apache Tomcat/9.0.70
13-Jan-2023 08:24:57.634 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Server built: Dec 1 2022 14:05:47 UTC
13-Jan-2023 08:24:57.635 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Server version number: 9.0.70.0
13-Jan-2023 08:24:57.635 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log OS Name: Linux
13-Jan-2023 08:24:57.635 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log OS Version: 5.15.0-57-generic
13-Jan-2023 08:24:57.635 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Architecture: amd64
13-Jan-2023 08:24:57.635 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Java Home: /opt/java/openjdk
13-Jan-2023 08:24:57.636 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log JVM Version: 17.0.5+8
13-Jan-2023 08:24:57.636 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log JVM Vendor: Eclipse Adoptium
13-Jan-2023 08:24:57.636 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log CATALINA_BASE: /usr/local/tomcat
13-Jan-2023 08:24:57.636 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log CATALINA_HOME: /usr/local/tomcat
13-Jan-2023 08:24:57.650 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: --add-opens=java.base/java.l
ang=ALL-UNNAMED
13-Jan-2023 08:24:57.650 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: --add-opens=java.base/java.i
o=ALL-UNNAMED
13-Jan-2023 08:24:57.650 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: --add-opens=java.base/java.u
til=ALL-UNNAMED
13-Jan-2023 08:24:57.651 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: --add-opens=java.base/java.u
til.concurrent=ALL-UNNAMED
13-Jan-2023 08:24:57.651 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: --add-opens=java.rmi/sun.rmi
.transport=ALL-UNNAMED
13-Jan-2023 08:24:57.651 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djava.util.logging.config.f
ile=/usr/local/tomcat/conf/logging.properties
13-Jan-2023 08:24:57.651 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djava.util.logging.manager=
org.apache.juli.ClassLoaderLogManager
13-Jan-2023 08:24:57.652 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djdk.tls.ephemeralDHKeySize
=2048
13-Jan-2023 08:24:57.652 INFO [main] org.apache.catalina.startup.VersionLoggerListener.log Command line argument: -Djava.protocol.handler.pkgs
=org.apache.catalina.webresources
```

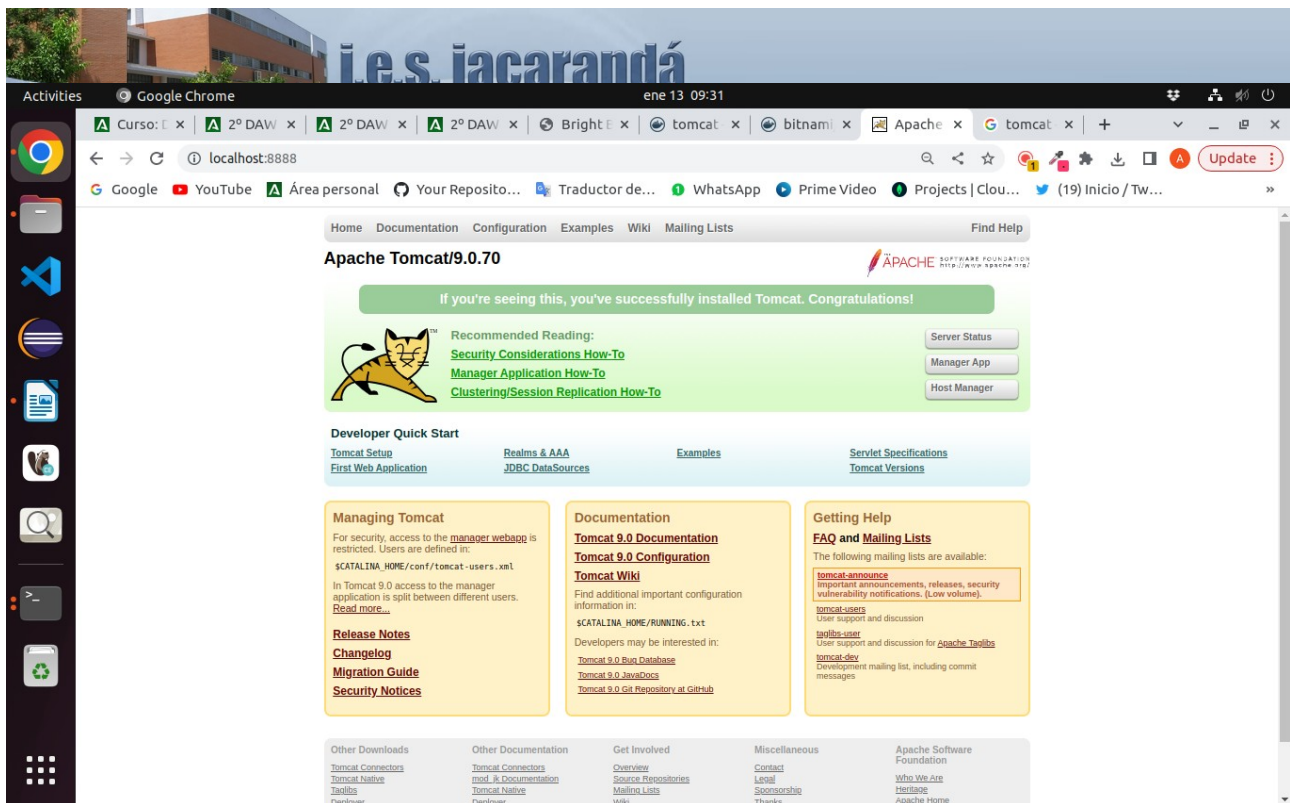
Dejaremos esa terminal iniciado, y abriremos una nueva y escribiremos:

```
estudiante@DAW1:~$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS
c6b8a7f6ec2c   tomcat:9.0     "catalina.sh run"       7 seconds ago Up 6 seconds  0.0.0.0:8888->8080/tcp, :::8888->8080/tcp
b68ebb8b5afe   bitnami/wildfly:27 "/opt/bitnami/script... 10 minutes ago Up 10 minutes  0.0.0.0:9990->9990/tcp, :::9990->9990/tcp, estudiante_wildfly_1
3b553864159c   mysql:5.6      "docker-entrypoint.s..." 5 weeks ago   Up About an hour  3306/tcp
746523d12d2e   phpmyadmin/phpmyadmin "/docker-entrypoint..." 2 months ago  Up About an hour  0.0.0.0:8090->80/tcp, :::8090->80/tcp

estudiante@DAW1:~$ docker exec -it c6b8a7f6ec2c /bin/bash
root@c6b8a7f6ec2c:/usr/local/tomcat# cp -R webapps.dist/* webapps
root@c6b8a7f6ec2c:/usr/local/tomcat#
```

Haremos docker ps para ver el “id”, lo ejecutaremos y copiaremos el archivo indicado, como podemos ver en la captura de arriba.

Por último nos iremos a la web en el puerto 8888 y veremos que funciona correctamente.



Ahora para editar los usuarios e iniciar como administrador tendremos que hacer lo siguiente:

Instalaremos nano

```

Activities Terminal ene 17 10:35
root@8aafb722e04d: /usr/local/tomcat/conf

Get:8 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [99.8 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [17.5 MB]
Get:10 http://archive.ubuntu.com/ubuntu jammy/main amd64 Packages [1,792 kB]
Get:11 http://archive.ubuntu.com/ubuntu jammy/restricted amd64 Packages [164 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [266 kB]
Get:13 http://archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [8,978 B]
Get:14 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [718 kB]
Get:15 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,043 kB]
Get:16 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [990 kB]
Get:17 http://archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [8,738 B]
Get:18 http://archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [3,520 B]
Fetched 25.2 MB in 4s (6,032 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
5 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@8aafb722e04d: /usr/local/tomcat# apt install nano
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
hunspell
The following NEW packages will be installed:
nano
0 upgraded, 1 newly installed, 0 to remove and 5 not upgraded.
Need to get 280 kB of archives.
After this operation, 881 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 nano amd64 6.2-1 [280 kB]
Fetched 280 kB in 1s (431 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package nano.
(Reading database ... 7923 files and directories currently installed.)
Preparing to unpack .../archives/nano_6.2-1_amd64.deb ...
Unpacking nano (6.2-1) ...
Setting up nano (6.2-1) ...
update-alternatives: using /bin/nano to provide /usr/bin/editor (editor) in auto
mode
update-alternatives: warning: skip creation of /usr/share/man/man1/editor.1.gz b
  
```



Entraremos en la carpeta `usr/local/tomcat/conf/Catalina`.

```
Activities Terminal ene 17 10:35
root@8aafb722e04d: /usr/local/tomcat/conf

debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package nano.
(Reading database ... 7923 files and directories currently installed.)
Preparing to unpack .../archives/nano_6.2-1_amd64.deb ...
Unpacking nano (6.2-1) ...
Setting up nano (6.2-1) ...
update-alternatives: using /bin/nano to provide /usr/bin/editor (editor) in auto
mode
update-alternatives: warning: skip creation of /usr/share/man/man1/editor.1.gz b
ecause associated file /usr/share/man/man1/nano.1.gz (of link group editor) does
n't exist
update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mod
e
update-alternatives: warning: skip creation of /usr/share/man/man1/pico.1.gz bec
ause associated file /usr/share/man/man1/nano.1.gz (of link group pico) doesn't
exist
root@8aafb722e04d: /usr/local/tomcat# ls
bin      lib      NOTICE  README.md  webapps
BUILDING.txt  LICENSE  RELEASE-NOTES  webapps.dist
CONTRIBUTING.md  native-jni-lib  RUNNING.txt  webapps
root@8aafb722e04d: /usr/local/tomcat# cd conf
root@8aafb722e04d: /usr/local/tomcat/conf# ls
Catalina  context.xml  logging.properties  tomcat-users.xsd
catalina.policy  jaspic-providers.xml  server.xml  web.xml
catalina.properties  jaspic-providers.xsd  tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf# cd Catalina
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina# cd localhost/
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# ls
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# nano manager.xml
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# cd ..
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina# cd ..
root@8aafb722e04d: /usr/local/tomcat/conf# ls
Catalina  context.xml  logging.properties  tomcat-users.xsd
catalina.policy  jaspic-providers.xml  server.xml  web.xml
catalina.properties  jaspic-providers.xsd  tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf# nano tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf#
```

Eeditaremos el archivo “manager.xml”

```
Activities Terminal ene 17 10:36
root@8aafb722e04d: /usr/local/tomcat/conf

debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package nano.
(Reading database ... 7923 files and directories currently installed.)
Preparing to unpack .../archives/nano_6.2-1_amd64.deb ...
Unpacking nano (6.2-1) ...
Setting up nano (6.2-1) ...
update-alternatives: using /bin/nano to provide /usr/bin/editor (editor) in auto
mode
update-alternatives: warning: skip creation of /usr/share/man/man1/editor.1.gz b
ecause associated file /usr/share/man/man1/nano.1.gz (of link group editor) does
n't exist
update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mod
e
update-alternatives: warning: skip creation of /usr/share/man/man1/pico.1.gz bec
ause associated file /usr/share/man/man1/nano.1.gz (of link group pico) doesn't
exist
root@8aafb722e04d: /usr/local/tomcat# ls
bin      lib      NOTICE  README.md  webapps
BUILDING.txt  LICENSE  RELEASE-NOTES  webapps.dist
CONTRIBUTING.md  native-jni-lib  RUNNING.txt  webapps
root@8aafb722e04d: /usr/local/tomcat# cd conf
root@8aafb722e04d: /usr/local/tomcat/conf# ls
Catalina  context.xml  logging.properties  tomcat-users.xsd
catalina.policy  jaspic-providers.xml  server.xml  web.xml
catalina.properties  jaspic-providers.xsd  tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf# cd Catalina
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina# cd localhost/
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# ls
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# nano manager.xml
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# cd ..
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina# cd ..
root@8aafb722e04d: /usr/local/tomcat/conf# ls
Catalina  context.xml  logging.properties  tomcat-users.xsd
catalina.policy  jaspic-providers.xml  server.xml  web.xml
catalina.properties  jaspic-providers.xsd  tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf# nano tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf#
```




Y le añadiremos lo siguiente:

```
Activities Google Chrome ene 17 10:36
Curso: Despliegue de x Bright Blue x https://educacionad... x Your Repositories x /manager x
educaciondistancia.juntadeandalucia.es/centros/sevilla/pluginfile.php/307341/mod_resource/content/0/context.xml
Google YouTube Área personal Your Reposito... Traductor de... WhatsApp Prime Video Projects | Clou... (19) Inicio / Tw...
This XML file does not appear to have any style information associated with it. The document tree is shown below.
<!-- Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the license is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. -->
<!-- The contents of this file will be loaded for each web application -->
<Context private="true" antiResourceLocking="false" docBase="${catalina.home}/webapps/manager"
<!-- Default set of monitored resources. If one of these changes, the
<!-- web application will be reloaded. -->
<WatchedResource>WEB-INF/web.xml</WatchedResource>
<WatchedResource>WEB-INF/tomcat-web.xml</WatchedResource>
<WatchedResource>${catalina.base}/conf/web.xml</WatchedResource>
<Valve className="org.apache.catalina.valves.RemoteAddrValve" allow="*">${/}
</Context>
<!-- Uncomment this to disable session persistence across Tomcat restarts -->
<!--
<Manager pathname="" />
-->
```

Después no dirigiremos a `usr/local/tomcat/conf` y editaremos “tomcat-users.xml”

```
Activities Terminal ene 17 10:36
root@8aafb722e04d: /usr/local/tomcat/conf
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package nano.
(Reading database ... 7923 files and directories currently installed.)
Preparing to unpack .../archives/nano_6.2-1_amd64.deb ...
Unpacking nano (6.2-1) ...
Setting up nano (6.2-1) ...
update-alternatives: using /bin/nano to provide /usr/bin/editor (editor) in auto mode
update-alternatives: warning: skip creation of /usr/share/man/man1/editor.1.gz because associated file /usr/share/man/man1/nano.1.gz (of link group editor) does n't exist
update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mode
update-alternatives: warning: skip creation of /usr/share/man/man1/pico.1.gz because associated file /usr/share/man/man1/nano.1.gz (of link group pico) doesn't exist
root@8aafb722e04d: /usr/local/tomcat# ls
bin          lib          NOTICE      README.md    webapps
BUILDING.txt LICENSE      RELEASE-NOTES webapps.dist
CONTRIBUTING.md native-jni-lib RUNNING.txt  tomcat
root@8aafb722e04d: /usr/local/tomcat# cd conf
root@8aafb722e04d: /usr/local/tomcat/conf# ls
Catalina      context.xml  logging.properties  tomcat-users.xsd
catalina.policy  jaspic-providers.xml  server.xml           web.xml
catalina.properties  jaspic-providers.xsd  tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf# cd Catalina
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina# cd localhost/
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# ls
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# nano manager.xml
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina/localhost# cd ..
root@8aafb722e04d: /usr/local/tomcat/conf/Catalina# cd ..
root@8aafb722e04d: /usr/local/tomcat/conf# ls
Catalina      context.xml  logging.properties  tomcat-users.xsd
catalina.policy  jaspic-providers.xml  server.xml           web.xml
catalina.properties  jaspic-providers.xsd  tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf# nano tomcat-users.xml
root@8aafb722e04d: /usr/local/tomcat/conf#
```



Y añadiremos esto:

```

root@8aaf722e04d: /usr/local/tomcat/conf
GNU nano 6.2      tomcat-users.xml *
<!--
<user username="admin" password="<must-be-changed>" roles="manager-gui"/>
<user username="robot" password="<must-be-changed>" roles="manager-script"/>
-->
<!--
The sample user and role entries below are intended for use with the
examples web application. They are wrapped in a comment and thus are ignored
when reading this file. If you wish to configure these users for use with the
examples web application, do not forget to remove the <!-- ... --> that surrounds
them. You will also need to set the passwords to something appropriate.
-->
<!--
<role rolename="tomcat"/>
<role rolename="role1"/>
<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="tomcat" password="tomcat" roles="manager-gui" />
</tomcat-users>
  
```

Y como podemos ver ya podemos iniciar como administrador:

Gestor de Aplicaciones Web de Tomcat

Mensaje: OK

Gestor

[Listar Aplicaciones](#) [Ayuda HTML de Gestor](#) [Ayuda de Gestor](#) [Estado de Servidor](#)

Ruta	Versión	Nombre a Mostrar	Ejecutándose	Sesiones	Comandos
/	Ninguno especificado	Welcome to Tomcat	true	0	Arrancar <input type="button" value="Parar"/> <input type="button" value="Recargar"/> <input type="button" value="Replegar"/> <input type="button" value="Expirar sesiones"/> sin trabajar ≥ 30 minutos
/docs	Ninguno especificado	Tomcat Documentation	true	0	Arrancar <input type="button" value="Parar"/> <input type="button" value="Recargar"/> <input type="button" value="Replegar"/> <input type="button" value="Expirar sesiones"/> sin trabajar ≥ 30 minutos
/examples	Ninguno especificado	Servlet and JSP Examples	true	0	Arrancar <input type="button" value="Parar"/> <input type="button" value="Recargar"/> <input type="button" value="Replegar"/> <input type="button" value="Expirar sesiones"/> sin trabajar ≥ 30 minutos
/host-manager	Ninguno especificado	Tomcat Host Manager Application	true	0	Arrancar <input type="button" value="Parar"/> <input type="button" value="Recargar"/> <input type="button" value="Replegar"/> <input type="button" value="Expirar sesiones"/> sin trabajar ≥ 30 minutos
/manager	Ninguno especificado	Tomcat Manager Application	true	1	Arrancar <input type="button" value="Parar"/> <input type="button" value="Recargar"/> <input type="button" value="Replegar"/> <input type="button" value="Expirar sesiones"/> sin trabajar ≥ 30 minutos

Desplegar

Desplegar directorio o archivo WAR localizado en servidor

Trayectoria de Contexto (opcional):
 Version (for parallel deployment):
 URL de archivo de Configuración XML:
 URL de WAR o Directorio:



INSTALACIÓN WILDFLY

Haremos un docker pull: “docker pull bitnami/wildfly” seguido de:

```
ene 13 09:15
estudiante@DAW1: ~
$ docker pull bitnami/wildfly
Using default tag: latest
latest: Pulling from bitnami/wildfly
dc7f5a1b7281: Pull complete
64a0dced5e15: Pull complete
Digest: sha256:c18c574dd81077611030a00b5293d434d9a70036732d8df0b899633e1b2cdcaa
Status: Downloaded newer image for bitnami/wildfly:latest
estudiante@DAW1:~$ curl -sSL https://raw.githubusercontent.com/bitnami/containers/main/bitnami/wildfly/docker-compose.yml > docker-compose.yml
$: command not found
estudiante@DAW1:~$ curl -sSL https://raw.githubusercontent.com/bitnami/containers/main/bitnami/wildfly/docker-compose.yml > docker-compose.yml
estudiante@DAW1:~$ docker-compose up -d
Creating volume "estudiante_wildfly_data" with local driver
WARNING: Found orphan containers (estudiante_moodle_1, estudiante_mariadb_1) for this project. If you removed or renamed this service in your compose file, you can run this command with the --remove-orphans flag to clean it up.
Pulling wildfly (docker.io/bitnami/wildfly:27)...
27: Pulling from bitnami/wildfly
Digest: sha256:c18c574dd81077611030a00b5293d434d9a70036732d8df0b899633e1b2cdcaa
Status: Downloaded newer image for bitnami/wildfly:27
Creating estudiante_wildfly_1 ... done
estudiante@DAW1:~$
```

Y si nos vamos a la web veremos que funciona correctamente:

