23 DE AGOSTO DE 2023

MANUAL DE INSTALACIÓN

MATERIA: APLICACIONES WEB

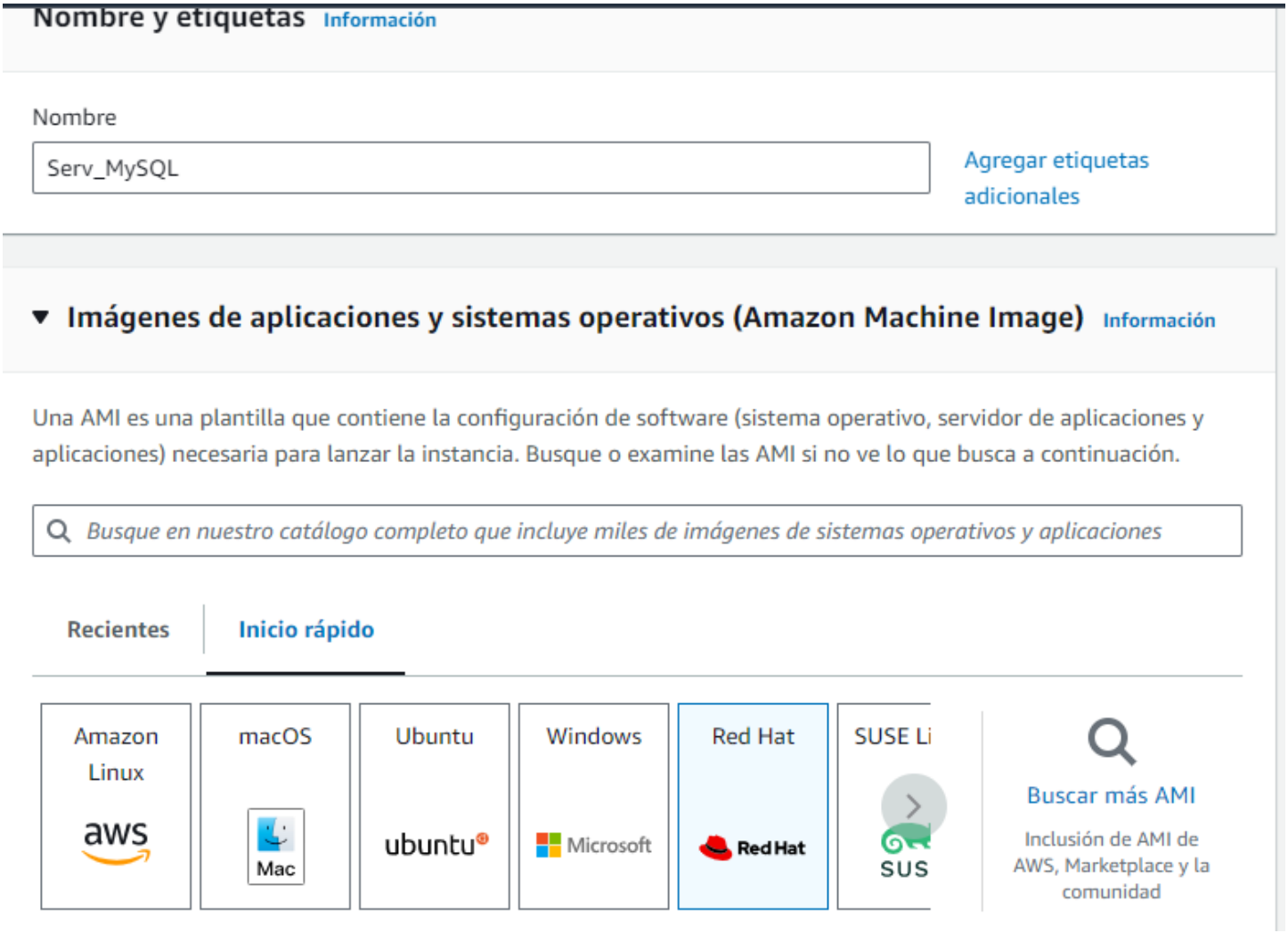
PROYECTO: SISTEMA PERSONAL CONTABLE

UNIVERSIDAD TECNOLOGICA EMILIANO ZAPATA

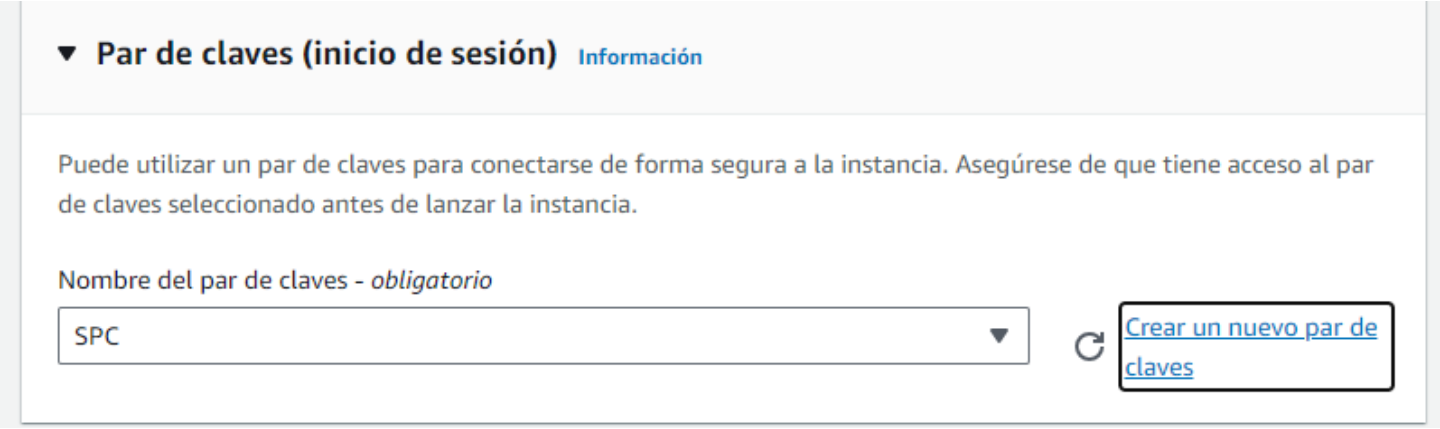
Creación de instancia para MySQL

Ambas instancias será de tipo t2.medium.

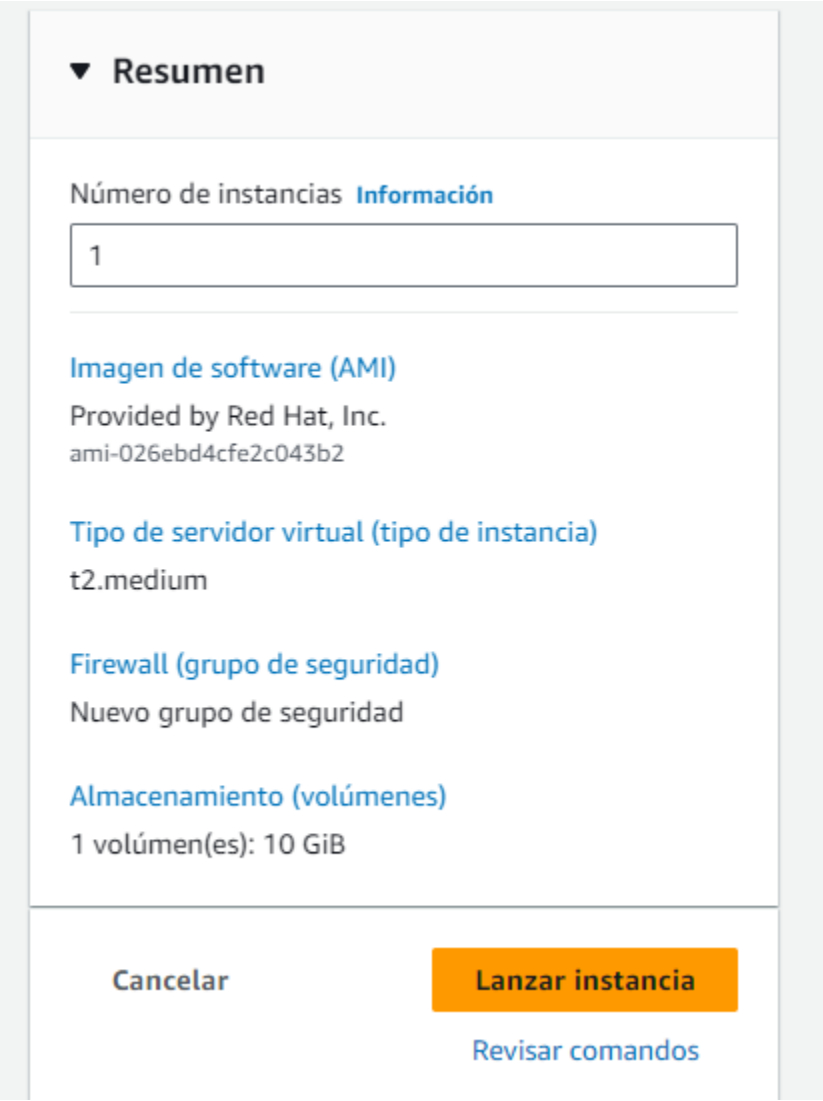
Configuración de servidor para MySQL



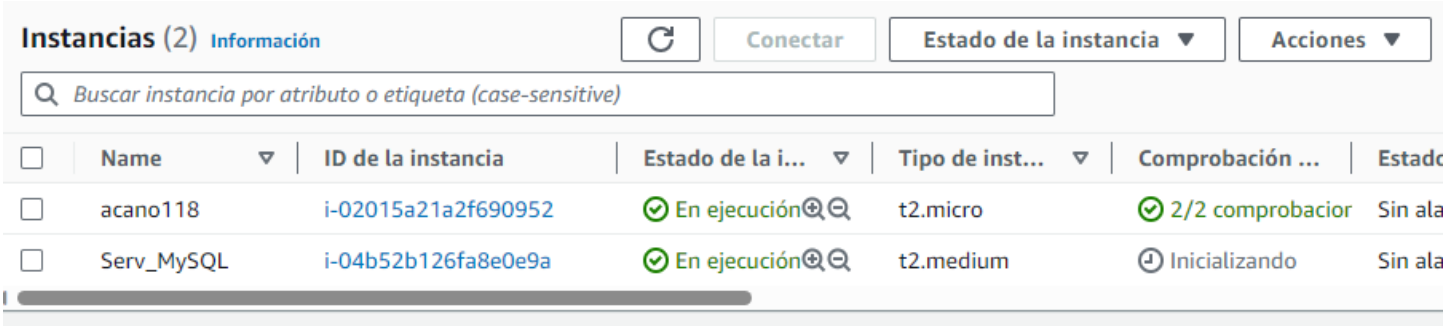
Creación de par de llaves para el inicio de sesión.



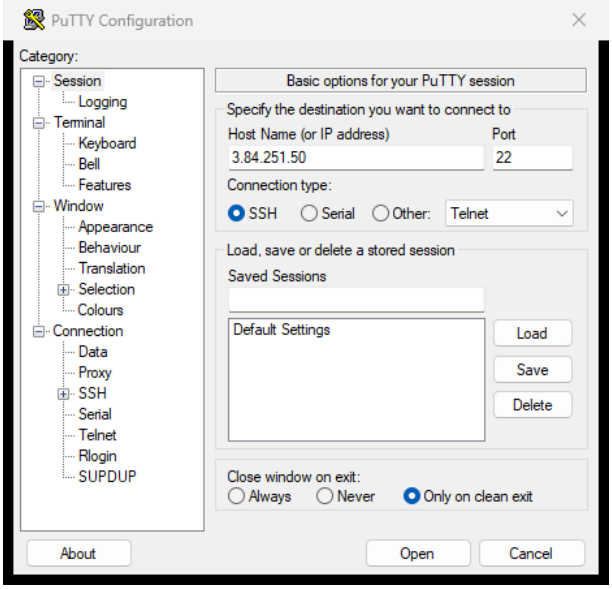
Lanzar instancia



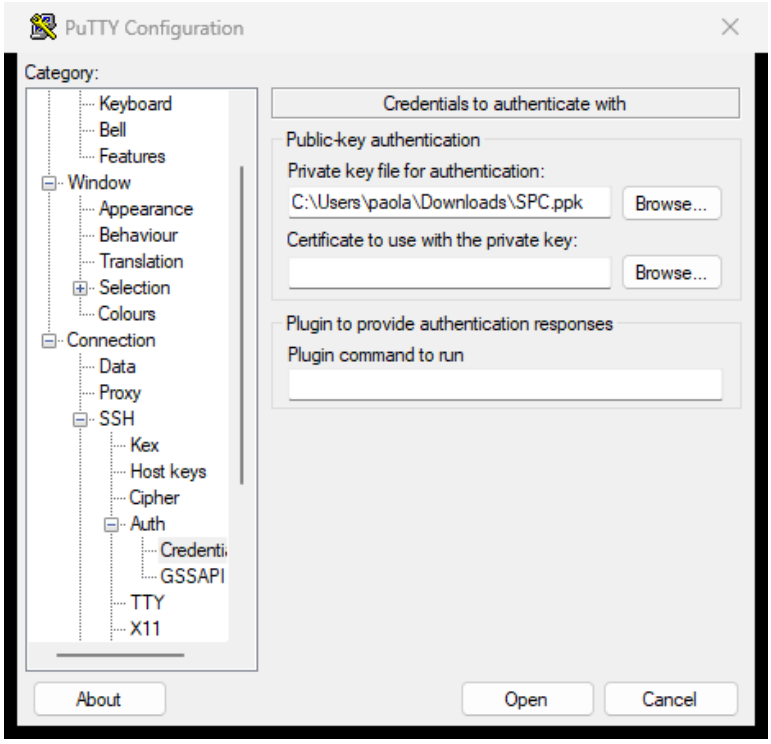
Entrar a la ejecución de instancias



Tomar IPv4 pública de la instancia y abrir la aplicación de PuTTY



Abrir en la barra lateral el SSH, seleccionar dentro AUTH y seleccionar credentials y subir el archivo de las llaves encriptadas.



Entrar a la instancia

```
3.84.251.50 - PuTTY
login as: ec2-user
```

Crear usuario con atributos de administrador

Con el comando: sudo visudo y encontrando el root donde debajo de este se colocará el nuevo usuario y colocando los mismos atributos que al root.

```
## Allow root to run any commands anywhere
root    ALL=(ALL)       ALL
admin   ALL=(ALL)       ALL
```

Después de esto se guardará el archivo.

Crear el usuario y se le asigna contraseña

```
[ec2-user@ip-172-31-86-5 ~]$ sudo useradd admin
```

```
[ec2-user@ip-172-31-86-5 ~]$ sudo passwd admin
Changing password for user admin.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-172-31-86-5 ~]$
```

Ingresar al usuario creado y a la carpeta de home

```
[ec2-user@ip-172-31-86-5 ~]$ su admin
Password:
[admin@ip-172-31-86-5 ec2-user]$ cd /home/admin
[admin@ip-172-31-86-5 ~]$
```

Instalación de MySQL

Descargar el wget

```
[admin@ip-172-31-86-5 ~]$ sudo yum install wget
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscripti
on-manager to register.

Red Hat Enterprise Linux 9 for x86_64 - AppStre  22 MB/s |  24 MB     00:01
Red Hat Enterprise Linux 9 for x86_64 - BaseOS   19 MB/s |  13 MB     00:00
Red Hat Enterprise Linux 9 Client Configuration  28 kB/s | 3.2 kB     00:00
Dependencies resolved.
================================================================================
```

Descargar el mysql copiando el link https://dev.mysql.com/downloads/repo/yum/ tomando el red hat de 9.

```
[admin@ip-172-31-86-5 ~]$ sudo wget http://repo.mysql.com/mysql80-community-rele
ase-el9-3.noarch.rpm
--2023-08-03 01:28:10--  http://repo.mysql.com/mysql80-community-release-el9-3.n
oarch.rpm
Resolving repo.mysql.com (repo.mysql.com)... 23.196.180.238
Connecting to repo.mysql.com (repo.mysql.com)|23.196.180.238|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 10715 (10K) [application/x-redhat-package-manager]
Saving to: 'mysql80-community-release-el9-3.noarch.rpm'

mysql80-community-r 100%[===================>]  10.46K  --.-KB/s    in 0.001s

2023-08-03 01:28:10 (16.7 MB/s) - 'mysql80-community-release-el9-3.noarch.rpm' s
aved [10715/10715]
```

Descomprimir el archivo descargado

```
[admin@ip-172-31-86-5 ~]$ sudo rpm -ivh mysql80-community-release-el9-3.noarch.r
pm
warning: mysql80-community-release-el9-3.noarch.rpm: Header V4 RSA/SHA256 Signat
ure, key ID 3a79bd29: NOKEY
Verifying...                          ################################# [100%]
Preparing...                          ################################# [100%]
Updating / installing...
   1:mysql80-community-release-el9-3  ################################# [100%]
```

Instalar MySQL

```
admin@ip-172-31-86-5:~
[admin@ip-172-31-86-5 ~]$ sudo yum install mysql-server
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscripti
on-manager to register.

MySQL 8.0 Community Server                      4.9 MB/s | 1.0 MB     00:00
MySQL Connectors Community                      598 kB/s |  27 kB     00:00
MySQL Tools Community                           1.9 MB/s | 366 kB     00:00
Dependencies resolved.
================================================================================
 Package              Arch   Version           Repository                  Size
================================================================================
Installing:
 mysql-community-server
                      x86_64 8.0.34-1.el9      mysql80-community           49 M
Installing dependencies:
 libaio               x86_64 0.3.111-13.el9    rhel-9-baseos-rhui-rpms     26 k
 libtirpc             x86_64 1.3.3-1.el9       rhel-9-baseos-rhui-rpms     96 k
 mysql-community-client
                      x86_64 8.0.34-1.el9      mysql80-community          3.5 M
 mysql-community-client-plugins
```

Inicializar el programa de MySQL y verificar el status

```
admin@ip-172-31-86-5:~

Complete!
[admin@ip-172-31-86-5 ~]$ sudo systemctl start mysqld

[admin@ip-172-31-86-5 ~]$
[admin@ip-172-31-86-5 ~]$ sudo systemctl status mysqld
● mysqld.service - MySQL Server
     Loaded: loaded (/usr/lib/systemd/system/mysqld.service; enabled; preset: d>
     Active: active (running) since Thu 2023-08-03 01:34:26 UTC; 17s ago
       Docs: man:mysqld(8)
             http://dev.mysql.com/doc/refman/en/using-systemd.html
    Process: 15073 ExecStartPre=/usr/bin/mysqld_pre_systemd (code=exited, statu>
   Main PID: 15144 (mysqld)
     Status: "Server is operational"
      Tasks: 38 (limit: 22922)
     Memory: 476.9M
        CPU: 5.226s
     CGroup: /system.slice/mysqld.service
             └─15144 /usr/sbin/mysqld

Aug 03 01:34:12 ip-172-31-86-5.ec2.internal systemd[1]: Starting MySQL Server...
Aug 03 01:34:26 ip-172-31-86-5.ec2.internal systemd[1]: Started MySQL Server.
lines 1-16/16 (END)
```

Permitir que MySQL se active cada que se inicie el S.O

```
[admin@ip-172-31-86-5 ~]$ sudo systemctl enable mysqld
[admin@ip-172-31-86-5 ~]$
```

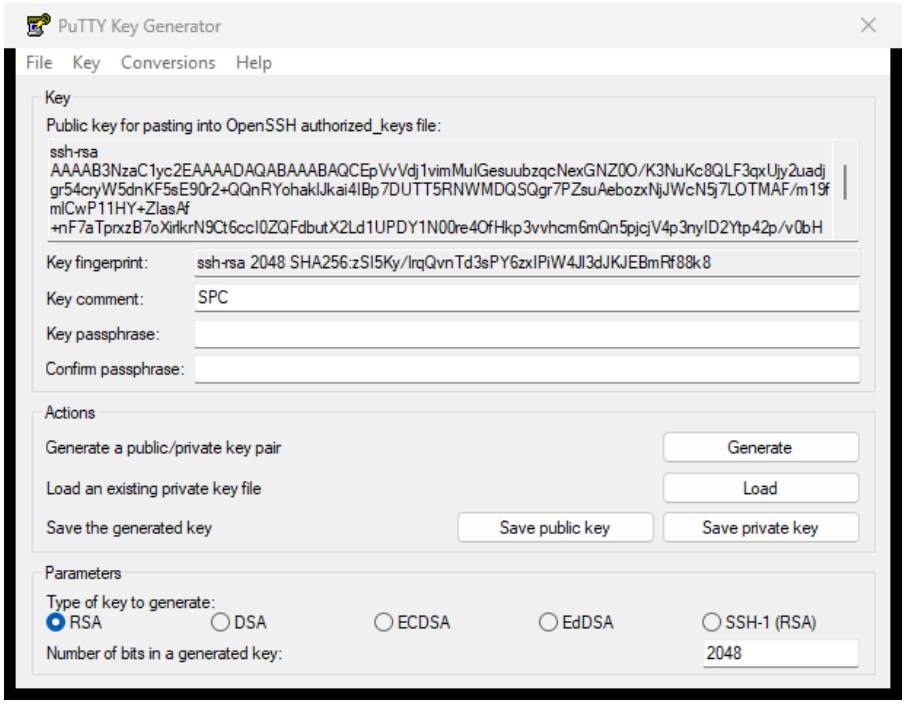
Visualizar la contraseña temporal de MySQL

```
[admin@ip-172-31-86-5 ~]$ sudo systemctl enable mysqld
[admin@ip-172-31-86-5 ~]$ sudo grep 'temporary password' /var/log/mysqld.log
2023-08-03T01:34:20.758292Z 6 [Note] [MY-010454] [Server] A temporary password i
s generated for root@localhost: !>Blj/fsv:#8
```

Ejecutar el script de seguridad

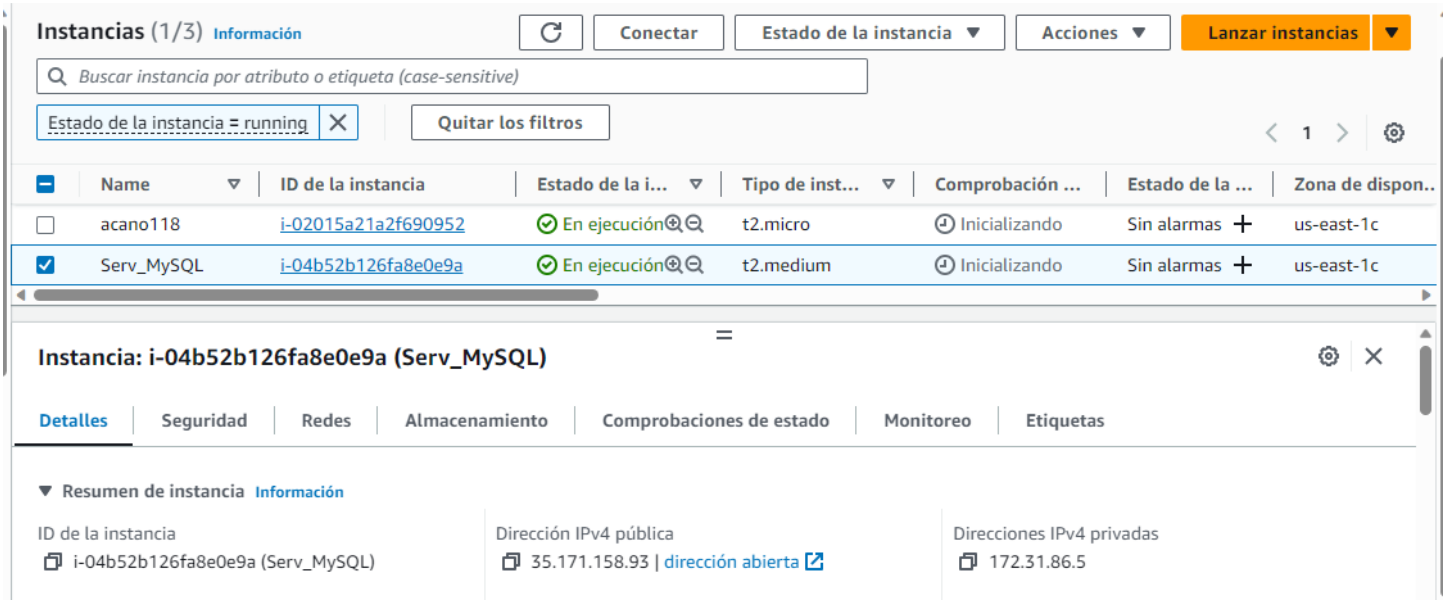
```
admin@ip-172-31-86-5:~
'localhost'. This ensures that someone cannot guess at
the root password from the network.

Disallow root login remotely? (Press y|Y for Yes, any other key for No) : n

 ... skipping.
By default, MySQL comes with a database named 'test' that
anyone can access. This is also intended only for testing,
and should be removed before moving into a production
environment.


Remove test database and access to it? (Press y|Y for Yes, any other key for No)
 : n

 ... skipping.
Reloading the privilege tables will ensure that all changes
made so far will take effect immediately.

Reload privilege tables now? (Press y|Y for Yes, any other key for No) : y
Success.

All done!
[admin@ip-172-31-86-5 ~]$
```

Conectarse a PuTTYgen y convertir la llave en .pem

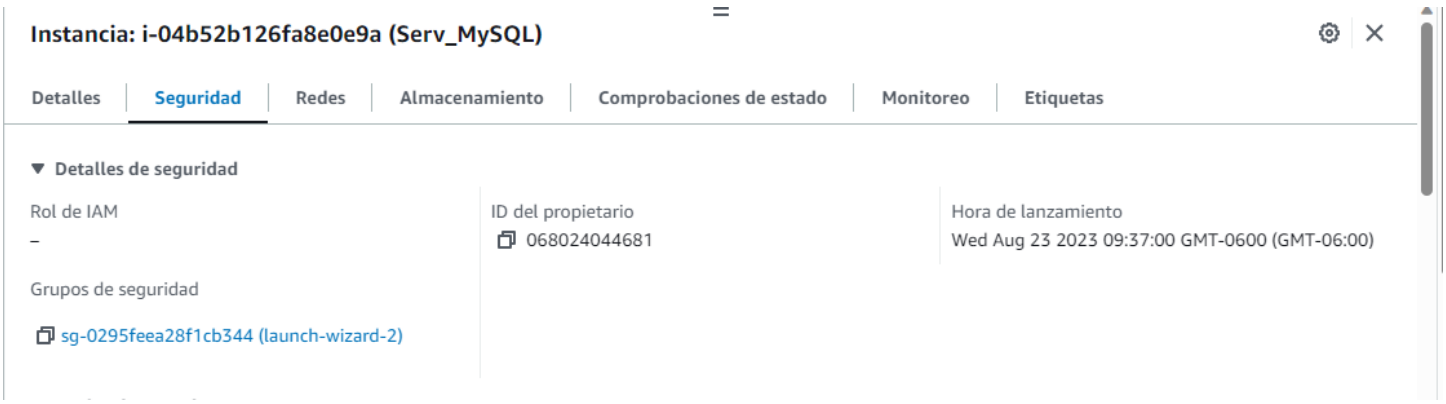


Activar el puerto 3306

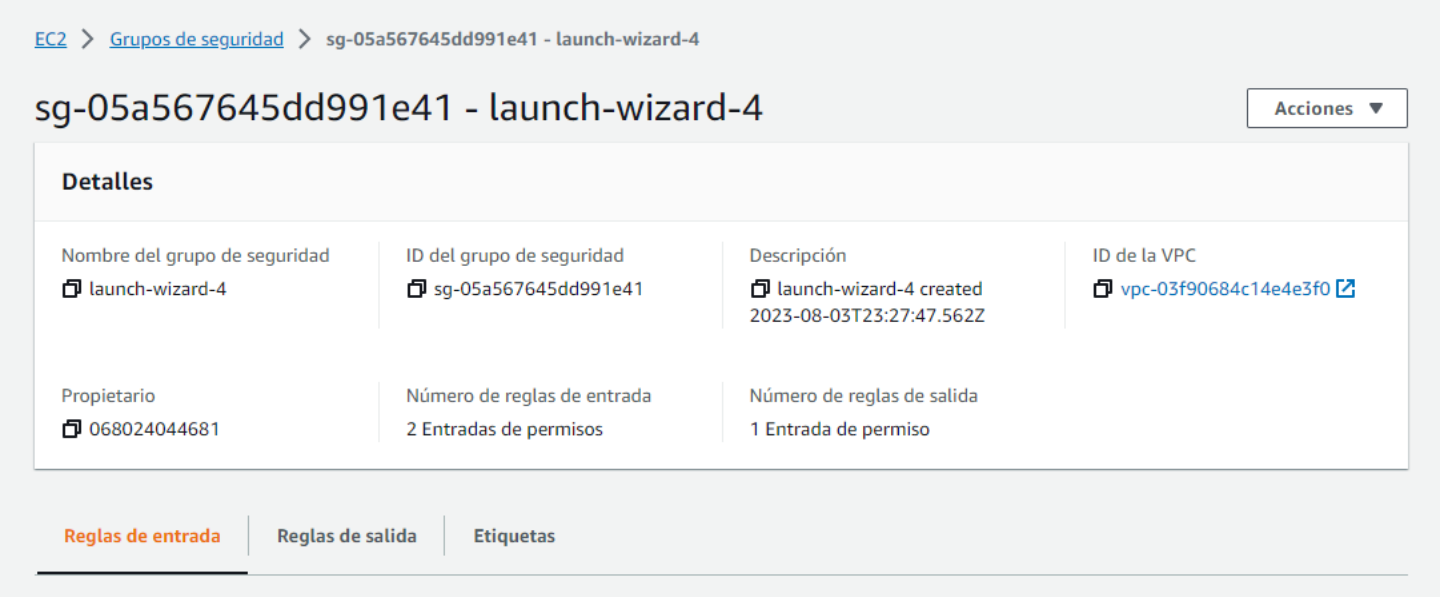
Seleccionamos la instancia



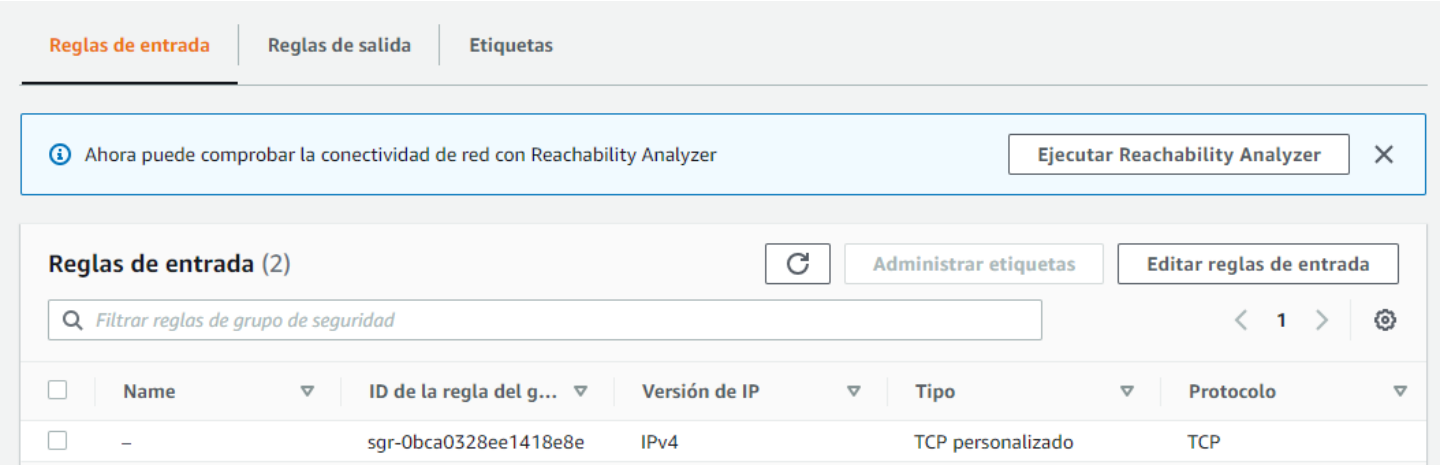
En el panel que aparece, seleccionamos seguridad y bajamos hasta grupos de seguridad



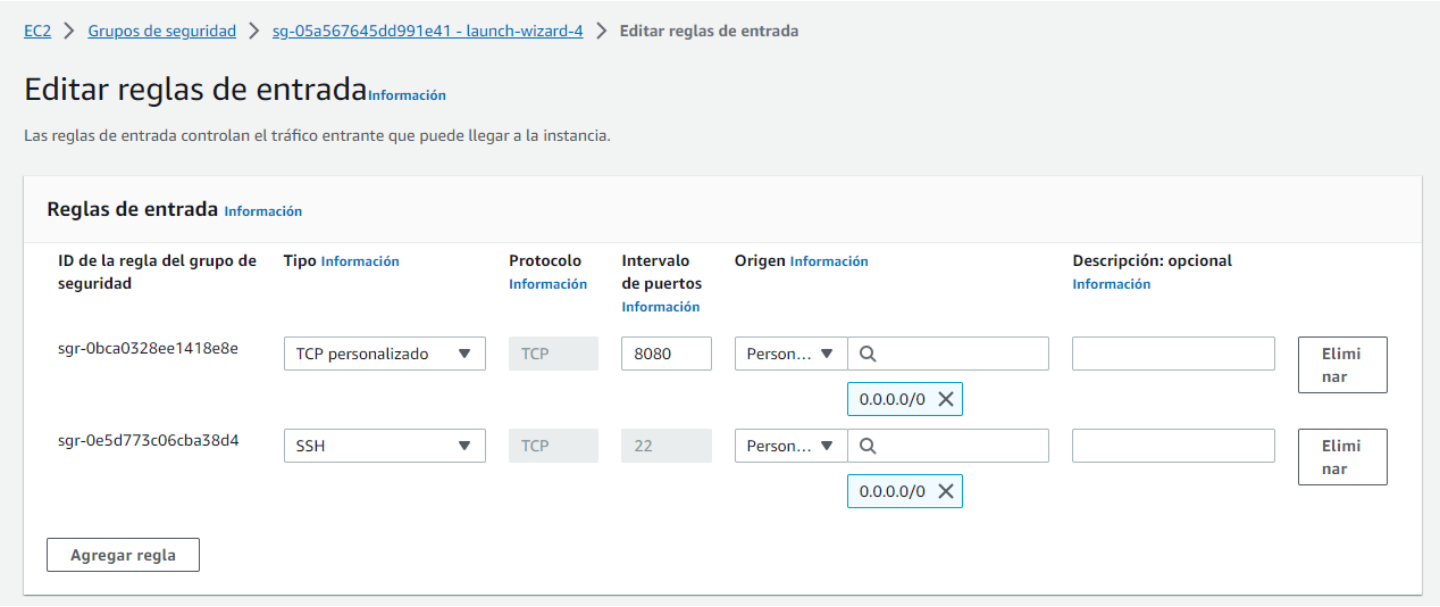
Damos click en que aparece



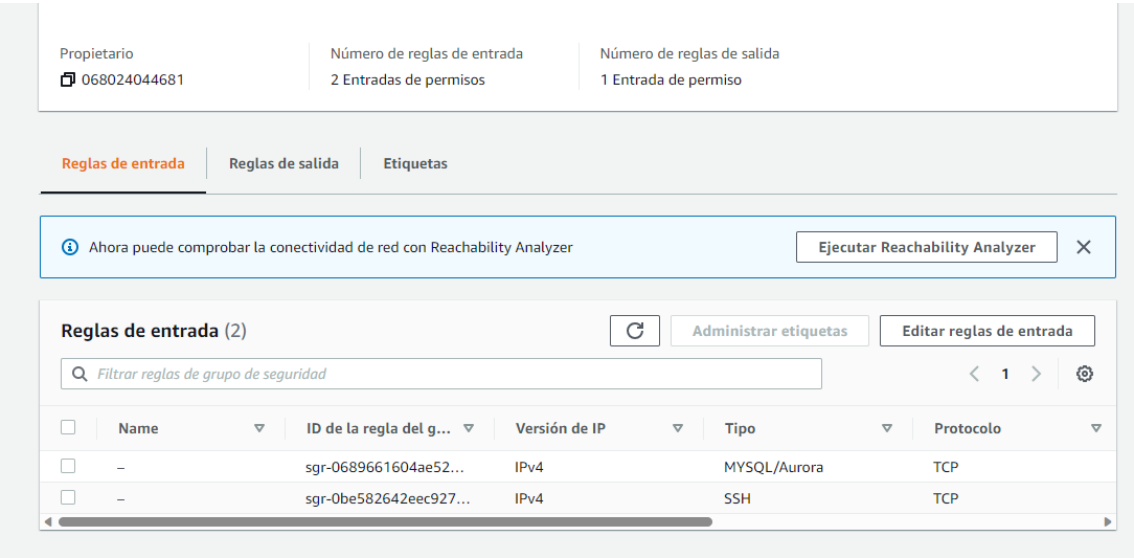
Bajar hasta reglas de entrada



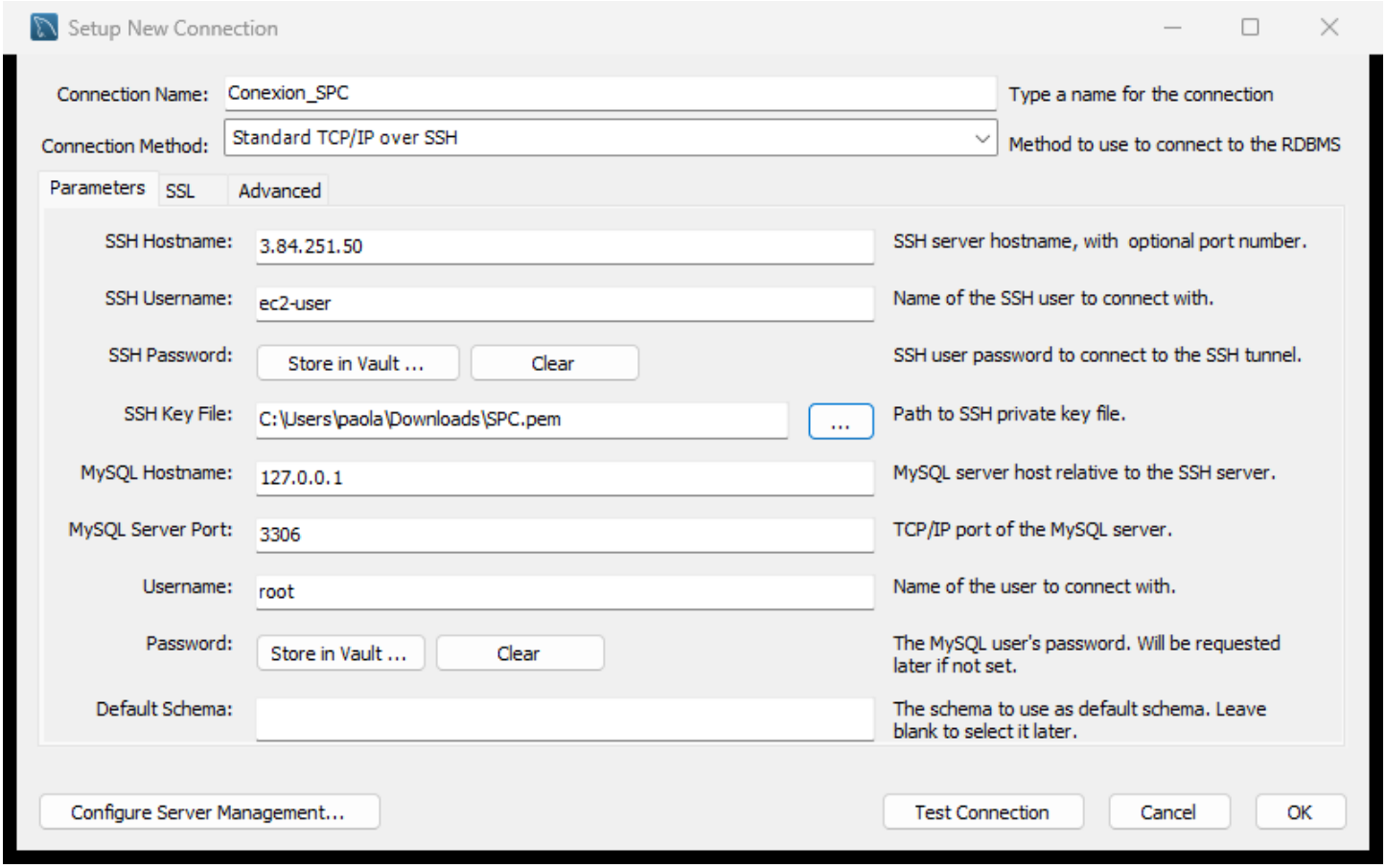
Seleccionamos editar reglas de instancia



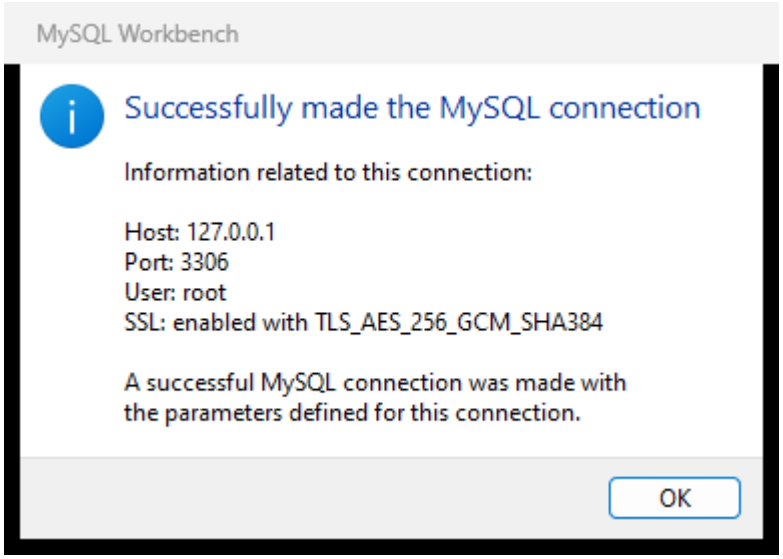
En la instancia activar el puerto 3306



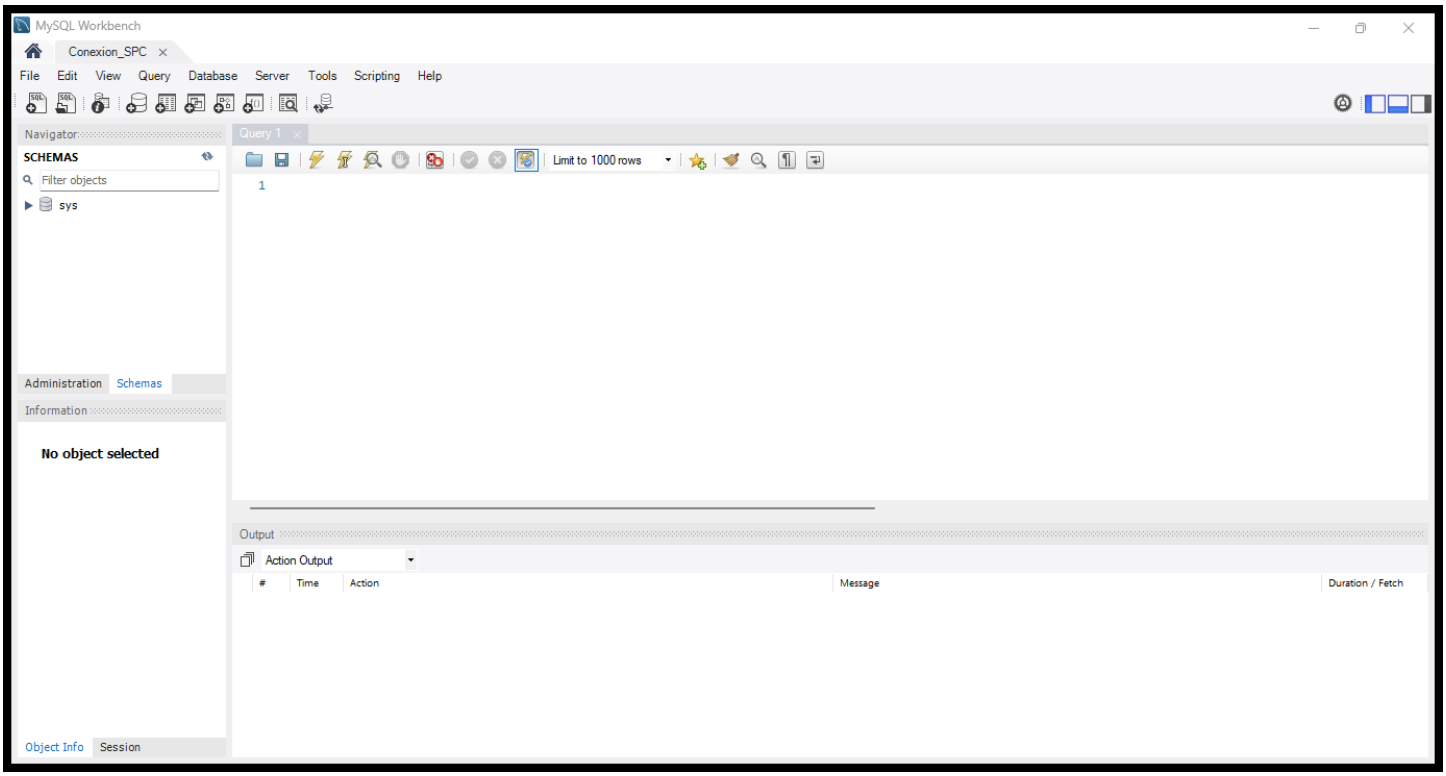
Configurar nueva conexión en MySQL Workbench



Terminación de instalación

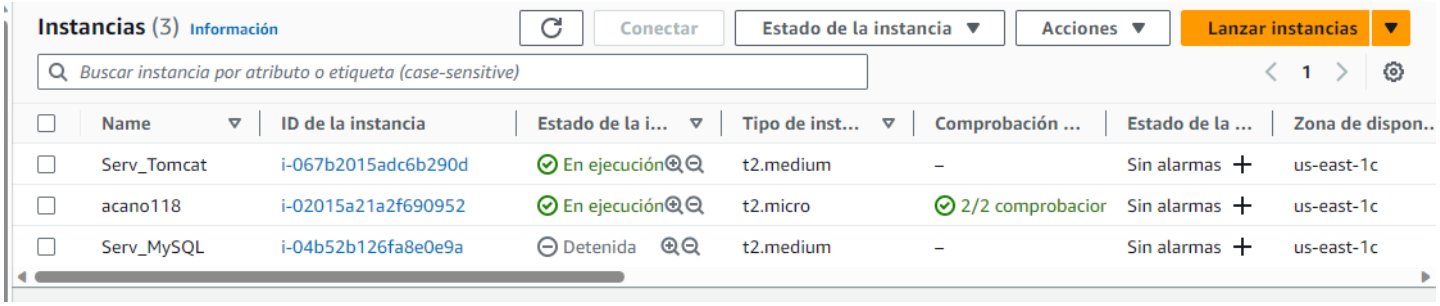


verificación de funcionamiento

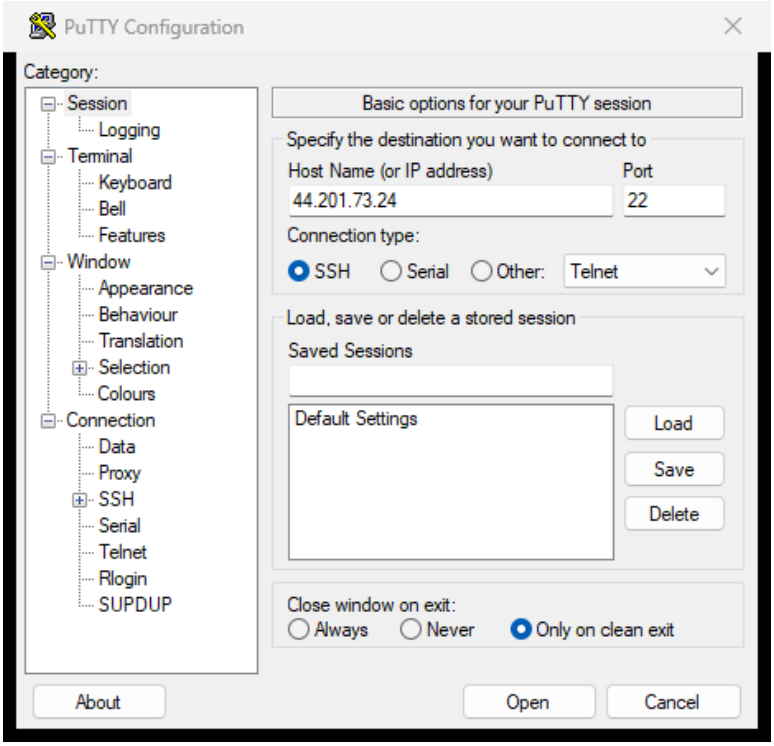


Creación de instancia para Tomcat

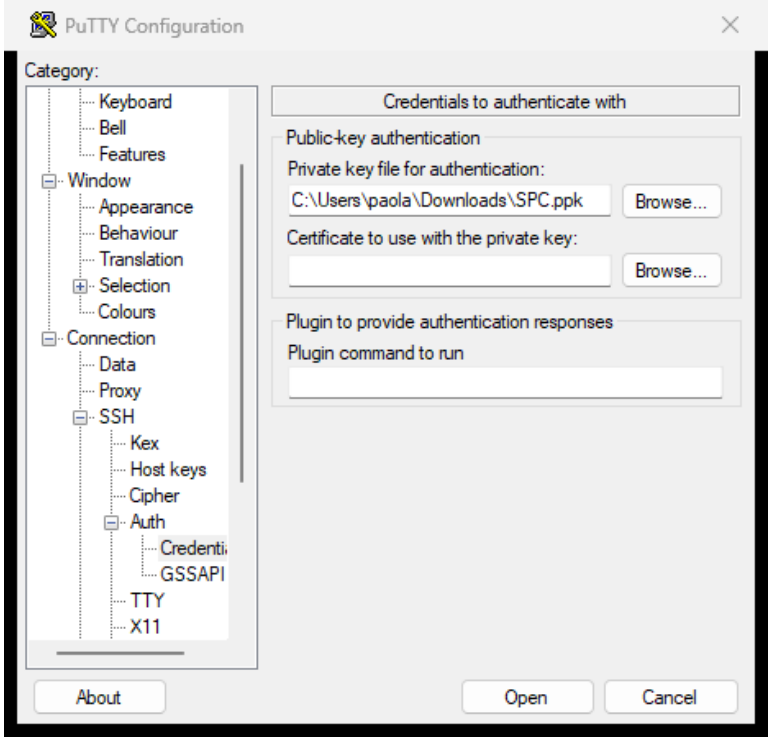
Una vez creada con las mismas especificaciones que con la de MySQL



Tomar IPv4 pública de la instancia y abrir la aplicación de PuTTY



Abrir en la barra lateral el SSH, seleccionar dentro AUTH y seleccionar credentials y subir el archivo de las llaves encriptadas.



Entrar a la instancia

Crear usuario con atributos de administrador

Con el comando: sudo visudo y encontrando el root donde debajo de este se colocará el nuevo usuario y colocando los mismos atributos que al root.

```
## Allow root to run any commands anywhere
root    ALL=(ALL)       ALL
admin   ALL=(ALL)       ALL
```

Después de esto se guardará el archivo.

Crear el usuario y se le asigna contraseña

```
[ec2-user@ip-172-31-86-5 ~]$ sudo useradd admin
```

```
[ec2-user@ip-172-31-86-5 ~]$ sudo passwd admin
Changing password for user admin.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-172-31-86-5 ~]$
```

Ingresar al usuario creado y a la carpeta de home

```
[ec2-user@ip-172-31-86-5 ~]$ su admin
Password:
[admin@ip-172-31-86-5 ec2-user]$ cd /home/admin
[admin@ip-172-31-86-5 ~]$
```

Instalación de Java

```
[admin@ip-172-31-84-15 ~]$ sudo yum install java-1.8.0-openjdk-devel

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

    #1) Respect the privacy of others.
    #2) Think before you type.
    #3) With great power comes great responsibility.

[sudo] password for admin:
```

Se aceptan las descargas y se termina de instalar

```
admin@ip-172-31-84-15:~
abattis-cantarell-fonts
                        noarch 0.301-4.el9      rhel-9-appstream-rhui-rpms 368 k
dconf                   x86_64 0.40.0-6.el9     rhel-9-appstream-rhui-rpms 117 k
exiv2                   x86_64 0.27.5-2.el9     rhel-9-appstream-rhui-rpms 984 k
flatpak                 x86_64 1.12.7-2.el9     rhel-9-appstream-rhui-rpms 1.7 M
gtk2                    x86_64 2.24.33-8.el9    rhel-9-appstream-rhui-rpms 3.5 M
libcanberra-gtk2        x86_64 0.30-26.el9      rhel-9-appstream-rhui-rpms  28 k
libproxy-webkitgtk4     x86_64 0.4.15-35.el9    rhel-9-appstream-rhui-rpms  22 k
p11-kit-server          x86_64 0.24.1-2.el9     rhel-9-appstream-rhui-rpms 200 k
pipewire                x86_64 0.3.47-3.el9_2   rhel-9-appstream-rhui-rpms  36 k
pipewire-alsa           x86_64 0.3.47-3.el9_2   rhel-9-appstream-rhui-rpms  56 k
pipewire-jack-audio-connection-kit
                        x86_64 0.3.47-3.el9_2   rhel-9-appstream-rhui-rpms 130 k
pipewire-pulseaudio     x86_64 0.3.47-3.el9_2   rhel-9-appstream-rhui-rpms  21 k
tracker-miners          x86_64 3.1.2-3.el9      rhel-9-appstream-rhui-rpms 943 k
xdg-desktop-portal-gtk  x86_64 1.12.0-3.el9     rhel-9-appstream-rhui-rpms 139 k

Transaction Summary
================================================================================
Install  180 Packages

Total download size: 152 M
Installed size: 555 M
Is this ok [y/N]:
```

Crear el grupo de tomcat

```
[admin@ip-172-31-84-15 ~]$ sudo groupadd tomcat
[admin@ip-172-31-84-15 ~]$
```

Crear usuario

```
[admin@ip-172-31-84-15 ~]$ sudo useradd -M -s /bin/nologin -g tomcat -d /opt/tom
cat tomcat
useradd: Warning: missing or non-executable shell '/bin/nologin'
[admin@ip-172-31-84-15 ~]$
```

Instalar el comando wget

```
[admin@ip-172-31-84-15 ~]$ sudo yum install wget
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscripti
on-manager to register.

Last metadata expiration check: 0:05:04 ago on Thu 03 Aug 2023 02:12:14 AM UTC.
Dependencies resolved.
================================================================================
 Package   Arch        Version            Repository                      Size
================================================================================
Installing:
 wget      x86_64      1.21.1-7.el9       rhel-9-appstream-rhui-rpms      794 k

Transaction Summary
================================================================================
Install  1 Package

Total download size: 794 k
Installed size: 3.1 M
Is this ok [y/N]:
```

Instalar tomcat

```
[admin@ip-172-31-84-15 ~]$ sudo wget https://dlcdn.apache.org/tomcat/tomcat-10/v
10.1.11/bin/apache-tomcat-10.1.11.tar.gz
--2023-08-03 02:19:55--  https://dlcdn.apache.org/tomcat/tomcat-10/v10.1.11/bin/
apache-tomcat-10.1.11.tar.gz
Resolving dlcdn.apache.org (dlcdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to dlcdn.apache.org (dlcdn.apache.org)|151.101.2.132|:443... connecte
d.
HTTP request sent, awaiting response... 200 OK
Length: 12146928 (12M) [application/x-gzip]
Saving to: 'apache-tomcat-10.1.11.tar.gz'

apache-tomcat-10.1. 100%[===================>]  11.58M  --.-KB/s    in 0.08s

2023-08-03 02:19:56 (138 MB/s) - 'apache-tomcat-10.1.11.tar.gz' saved [12146928/
12146928]
```

Verificar si se instalo

```
[admin@ip-172-31-84-15 ~]$ ls
apache-tomcat-10.1.11.tar.gz
[admin@ip-172-31-84-15 ~]$
```

Extraer el paquete

```
admin@ip-172-31-81-89:~
useradd: Warning: missing or non-executable shell '/bin/nologin'
[admin@ip-172-31-81-89 ~]$ sudo mkdir /opt/tomcat
[admin@ip-172-31-81-89 ~]$ ls
apache-tomcat-10.1.11.tar.gz  opt
[admin@ip-172-31-81-89 ~]$ sudo tar -xvf apache-tomcat-10*tar.gz -C /opt/tomcat
--strip-components=1
apache-tomcat-10.1.11/conf/
apache-tomcat-10.1.11/conf/catalina.policy
apache-tomcat-10.1.11/conf/catalina.properties
apache-tomcat-10.1.11/conf/context.xml
apache-tomcat-10.1.11/conf/jaspic-providers.xml
apache-tomcat-10.1.11/conf/jaspic-providers.xsd
apache-tomcat-10.1.11/conf/logging.properties
apache-tomcat-10.1.11/conf/server.xml
apache-tomcat-10.1.11/conf/tomcat-users.xml
apache-tomcat-10.1.11/conf/tomcat-users.xsd
apache-tomcat-10.1.11/conf/web.xml
apache-tomcat-10.1.11/bin/
apache-tomcat-10.1.11/lib/
apache-tomcat-10.1.11/logs/
apache-tomcat-10.1.11/temp/
apache-tomcat-10.1.11/webapps/
apache-tomcat-10.1.11/webapps/ROOT/
apache-tomcat-10.1.11/webapps/ROOT/WEB-INF/
```

Cambiar los archivos de root a tomcat

```
[admin@ip-172-31-81-89 tomcat]$ sudo chgrp -R tomcat /opt/tomcat
[admin@ip-172-31-81-89 tomcat]$ ls -l
total 132
drwxr-x---. 2 root tomcat  4096 Aug  4 00:16 bin
-rw-r-----. 1 root tomcat 20123 Jul  6 13:45 BUILDING.txt
drwx------. 2 root tomcat  4096 Jul  6 13:45 conf
-rw-r-----. 1 root tomcat  6210 Jul  6 13:45 CONTRIBUTING.md
drwxr-x---. 2 root tomcat  4096 Aug  4 00:16 lib
-rw-r-----. 1 root tomcat 60393 Jul  6 13:45 LICENSE
drwxr-x---. 2 root tomcat     6 Jul  6 13:45 logs
-rw-r-----. 1 root tomcat  2333 Jul  6 13:45 NOTICE
-rw-r-----. 1 root tomcat  3398 Jul  6 13:45 README.md
-rw-r-----. 1 root tomcat  6776 Jul  6 13:45 RELEASE-NOTES
-rw-r-----. 1 root tomcat 16076 Jul  6 13:45 RUNNING.txt
drwxr-x---. 2 root tomcat    30 Aug  4 00:16 temp
drwxr-x---. 7 root tomcat    81 Jul  6 13:45 webapps
drwxr-x---. 2 root tomcat     6 Jul  6 13:45 work
[admin@ip-172-31-81-89 tomcat]$
```

Cambiar los permisos

```
[admin@ip-172-31-81-89 tomcat]$ sudo chmod -R g+r conf
[admin@ip-172-31-81-89 tomcat]$ sudo chmod g+x conf
```

```
[admin@ip-172-31-81-89 tomcat]$ sudo chown -R tomcat webapps/ work/ temp/ lo
gs/
[admin@ip-172-31-81-89 tomcat]$
```

Crear el archivo

```
[admin@ip-172-31-81-89 ~]$ sudo vi /etc/systemd/system/tomcat.service
[admin@ip-172-31-81-89 ~]$
```

```
Environment=JAVA_HOME=/usr/lib/jvm/jre
Environment=CATALINA_PID=/opt/tomcat/temp/tomcat.pid
Environment=CATALINA_HOME=/opt/tomcat
Environment=CATALINA_BASE=/opt/tomcat
Environment='CATALINA_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC'
Environment='JAVA_OPTS=-Djava.awt.headless=true -Djava.security.egd=file:/de
v/./urandom'

ExecStart=/opt/tomcat/bin/startup.sh
ExecStop=/bin/kill -15 $MAINPID

User=tomcat
Group=tomcat
UMask=0007
RestartSec=10
Restart=always

[Install]
WantedBy=multi-user.target
:wq!
```

Reiniciar los servicios

```
[admin@ip-172-31-81-89 ~]$ sudo systemctl daemon-reload
[sudo] password for admin:
[admin@ip-172-31-81-89 ~]$
```

Iniciar los servicios de tomcat y verificar el estatus

```
[admin@ip-172-31-81-89 ~]$ sudo systemctl start tomcat
[admin@ip-172-31-81-89 ~]$ sudo systemctl status tomcat
● tomcat.service - Apache Tomcat Web Application Container
     Loaded: loaded (/etc/systemd/system/tomcat.service; disabled; preset: >
     Active: activating (auto-restart) (Result: exit-code) since Fri 2023-0>
    Process: 1656 ExecStart=/opt/tomcat/bin/startup.sh (code=exited, status>
   Main PID: 1666 (code=exited, status=1/FAILURE)
        CPU: 29ms
lines 1-6/6 (END)
```

Sale este error y esto se debe por la versión de java

Se volverá a instalar en la versión más reciente

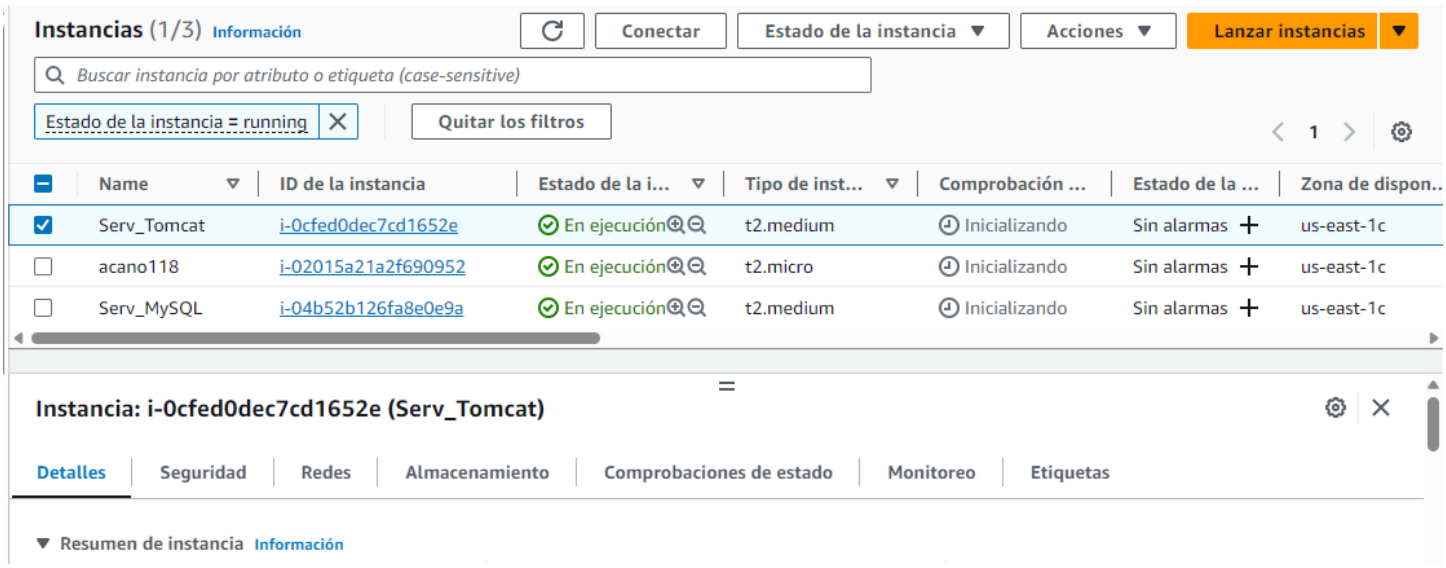
```
[admin@ip-172-31-81-89 ~]$ sudo yum install java-11-openjdk-devel
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscr
iption-manager to register.

Red Hat Enterprise Linux 9 for x86_64 - App  53 kB/s | 4.5 kB     00:00
Red Hat Enterprise Linux 9 for x86_64 - Bas  69 kB/s | 4.1 kB     00:00
Red Hat Enterprise Linux 9 Client Configura  32 kB/s | 2.0 kB     00:00
Dependencies resolved.
================================================================================
 Package        Arch   Version             Repository                  Size
================================================================================
Installing:
 java-11-openjdk-devel
                x86_64 1:11.0.20.0.8-3.el9 rhel-9-appstream-rhui-rpms 3.3 M
Installing dependencies:
 java-11-openjdk
                x86_64 1:11.0.20.0.8-3.el9 rhel-9-appstream-rhui-rpms 441 k
```

Volvemos a ejecutar los servicios de tomcat

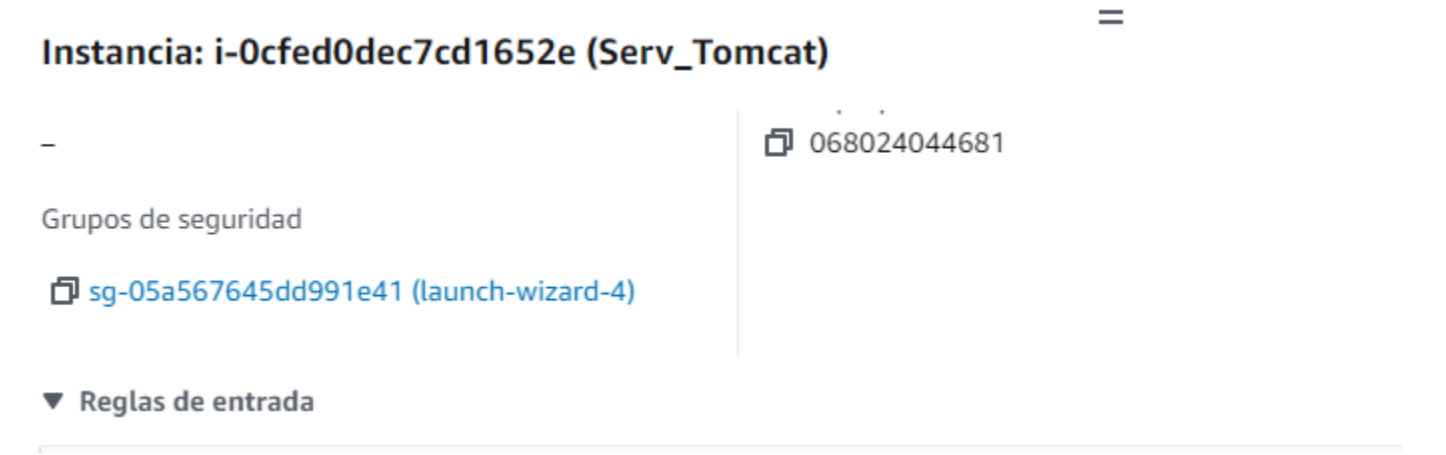
```
[admin@ip-172-31-81-89 ~]$ sudo systemctl start tomcat
[admin@ip-172-31-81-89 ~]$ sudo systemctl status tomcat
● tomcat.service - Apache Tomcat Web Application Container
     Loaded: loaded (/etc/systemd/system/tomcat.service; disabled; preset: >
     Active: active (running) since Fri 2023-08-04 00:38:36 UTC; 30s ago
    Process: 2267 ExecStart=/opt/tomcat/bin/startup.sh (code=exited, status>
   Main PID: 2277 (java)
      Tasks: 29 (limit: 22922)
     Memory: 166.8M
        CPU: 4.066s
     CGroup: /system.slice/tomcat.service
             └─2277 /usr/lib/jvm/jre/bin/java -Djava.util.logging.config.fi>

Aug 04 00:38:36 ip-172-31-81-89.ec2.internal systemd[1]: Starting Apache To>
Aug 04 00:38:36 ip-172-31-81-89.ec2.internal startup.sh[2267]: Existing PID>
Aug 04 00:38:36 ip-172-31-81-89.ec2.internal startup.sh[2267]: Removing/cle>
Aug 04 00:38:36 ip-172-31-81-89.ec2.internal startup.sh[2267]: Tomcat start>
Aug 04 00:38:36 ip-172-31-81-89.ec2.internal systemd[1]: Started Apache Tom>
lines 1-16/16 (END)
```

Activar el puerto 8080

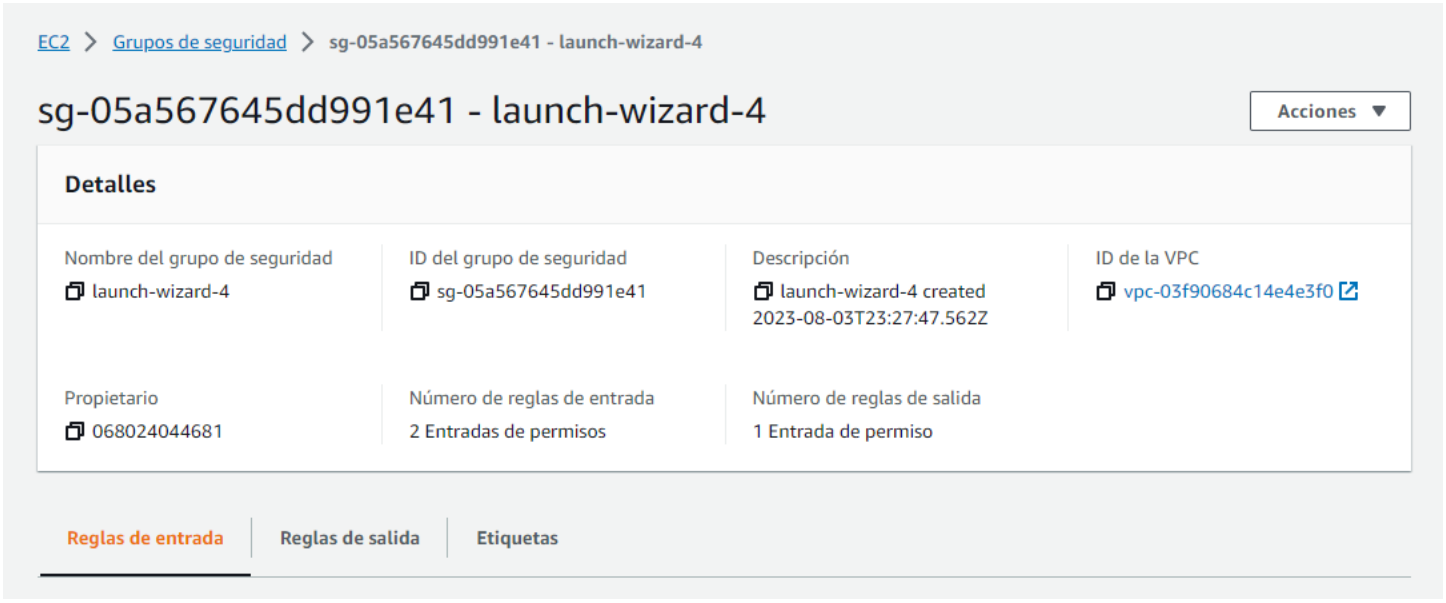
Seleccionamos la instancia



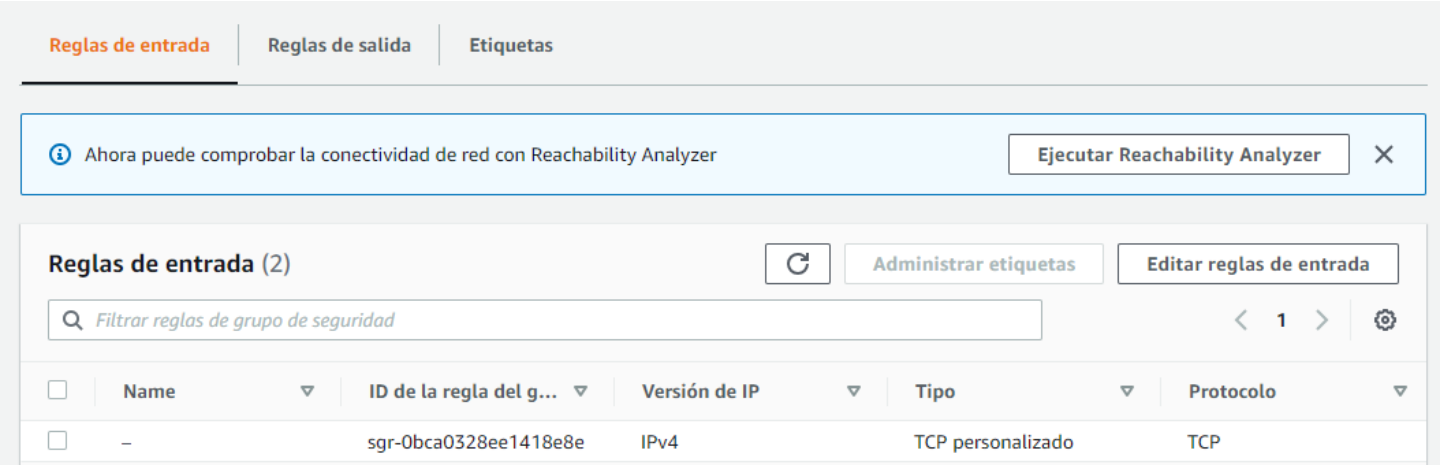
En el panel que aparece, seleccionamos seguridad y bajamos hasta grupos de seguridad



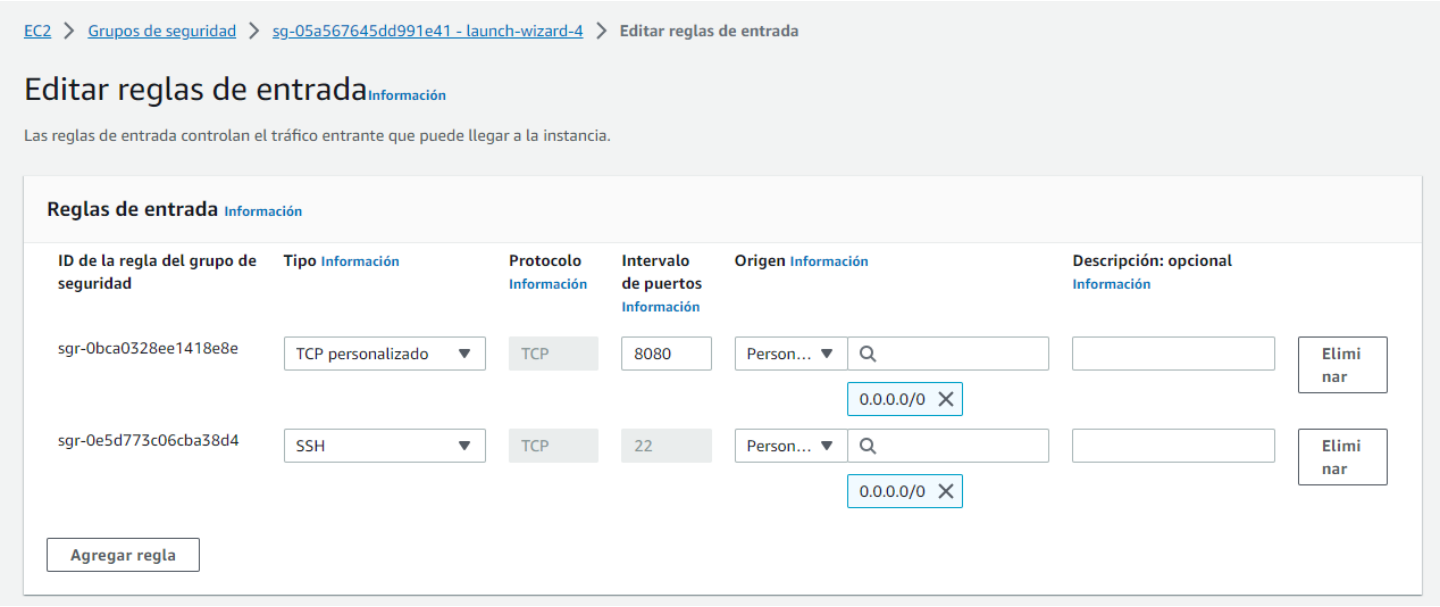
Damos click en que aparece



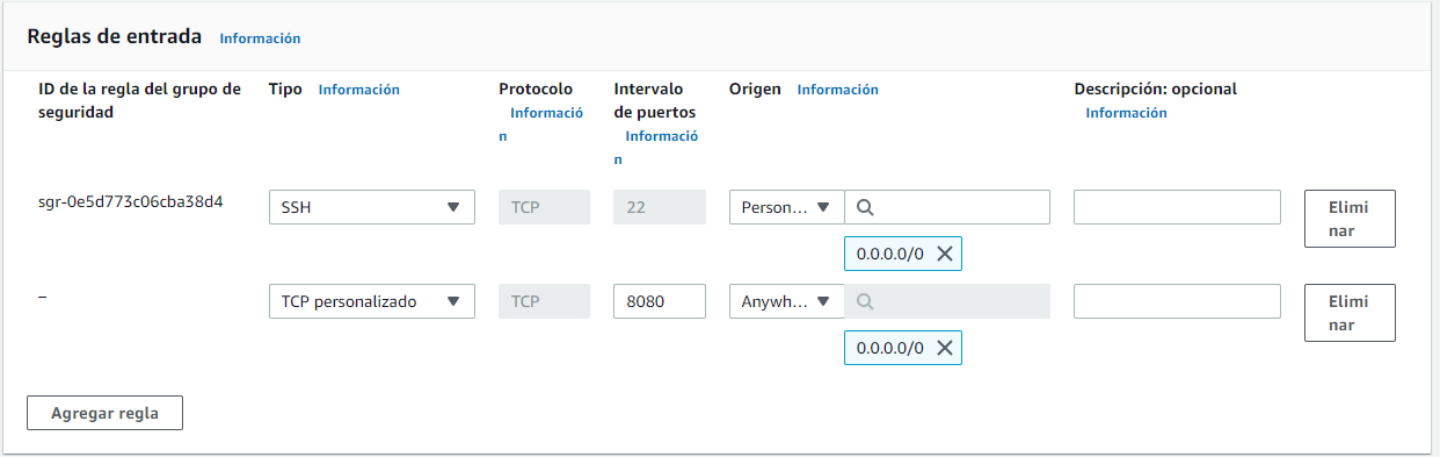
Bajar hasta reglas de entrada



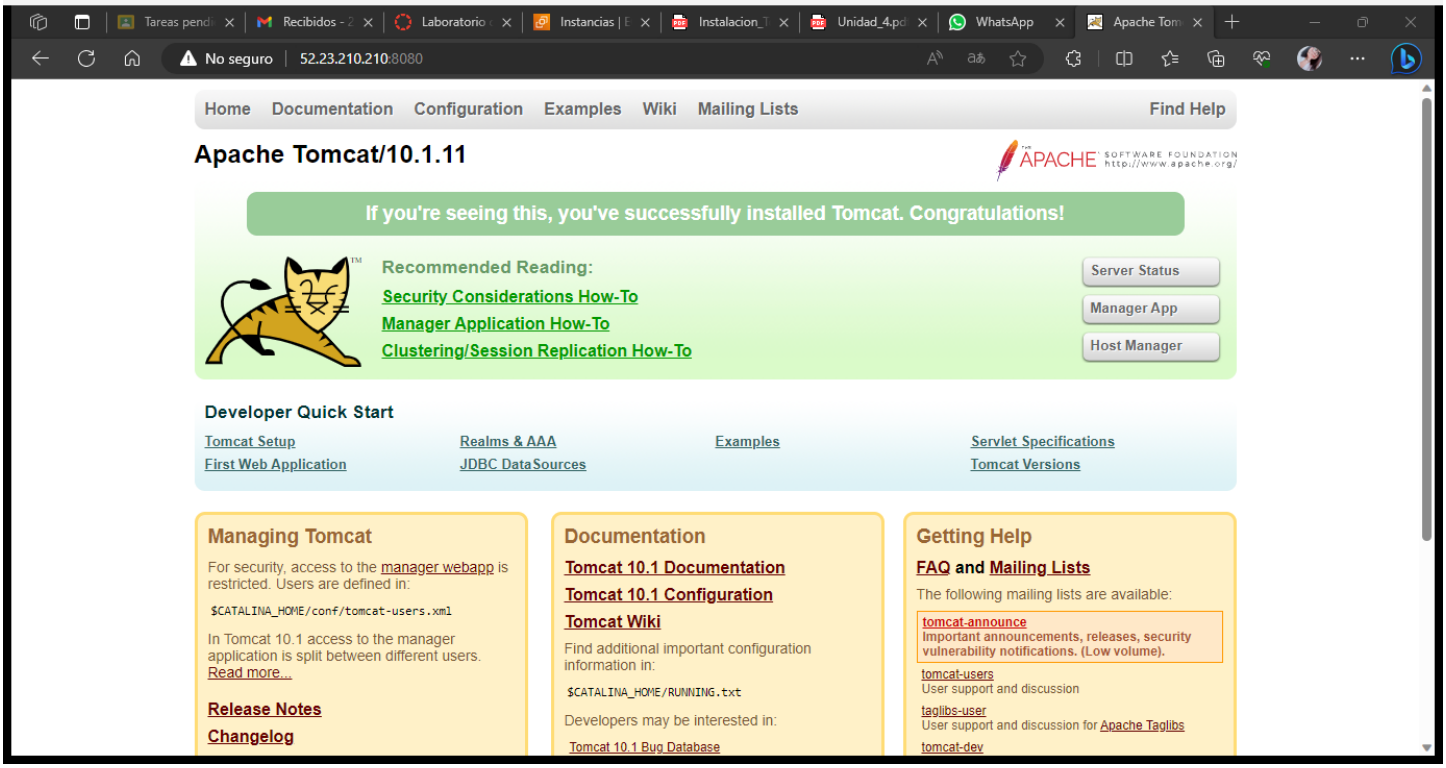
Seleccionamos editar reglas de instancia



Activar el puerto 8080 en la instancia



En el navegador colocar la ip de la instancia



Habilitar los botones de tomcat

Esto habilita la interfaz grafica

```
<!--
  <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"/>
-->
<user username="admin" password="password" roles="manager-gui,admin-gui"/>
</tomcat-users>
~
```

Se restringe el acceso a manager y host manager, debemos cambiar las restricciones con el comando

```
[admin@ip-172-31-81-89 ~]$ sudo vi /opt/tomcat/webapps/manager/META-INF/cont
ext.xml
[admin@ip-172-31-81-89 ~]$ sudo vi /opt/tomcat/webapps/host-manager/META-INF
/context.xml
```

En ambos archivos se modifica la misma línea y se comenta

```
      http://www.apache.org/licenses/LICENSE-2.0

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  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.
-->
<Context antiResourceLocking="false" privileged="true" >
  <CookieProcessor className="org.apache.tomcat.util.http.Rfc6265CookieProce
ssor"
                   sameSiteCookies="strict" />
<!--  <Valve className="org.apache.catalina.valves.RemoteAddrValve"
         allow="127\.\d+\.\d+\.\d+|::1|0:0:0:0:0:0:0:1" />-->
  <Manager sessionAttributeValueClassNameFilter="java\.lang\.(?:Boolean|Inte
ger|Long|Number|String)|org\.apache\.catalina\.filters\.CsrfPreventionFilter
```
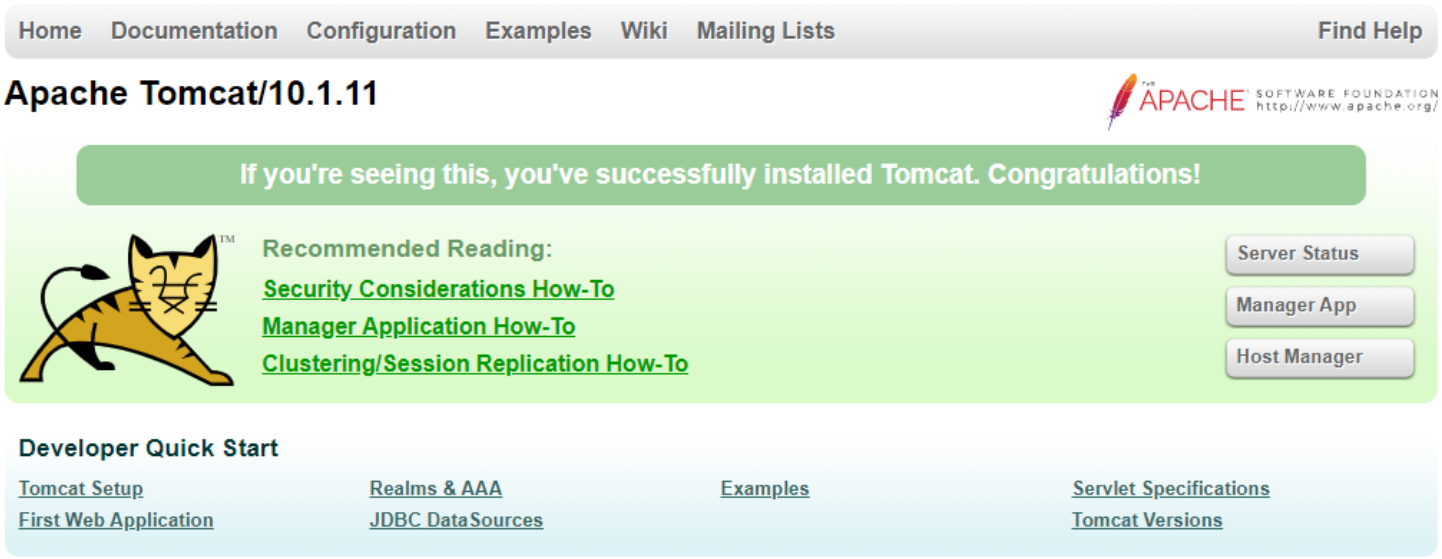
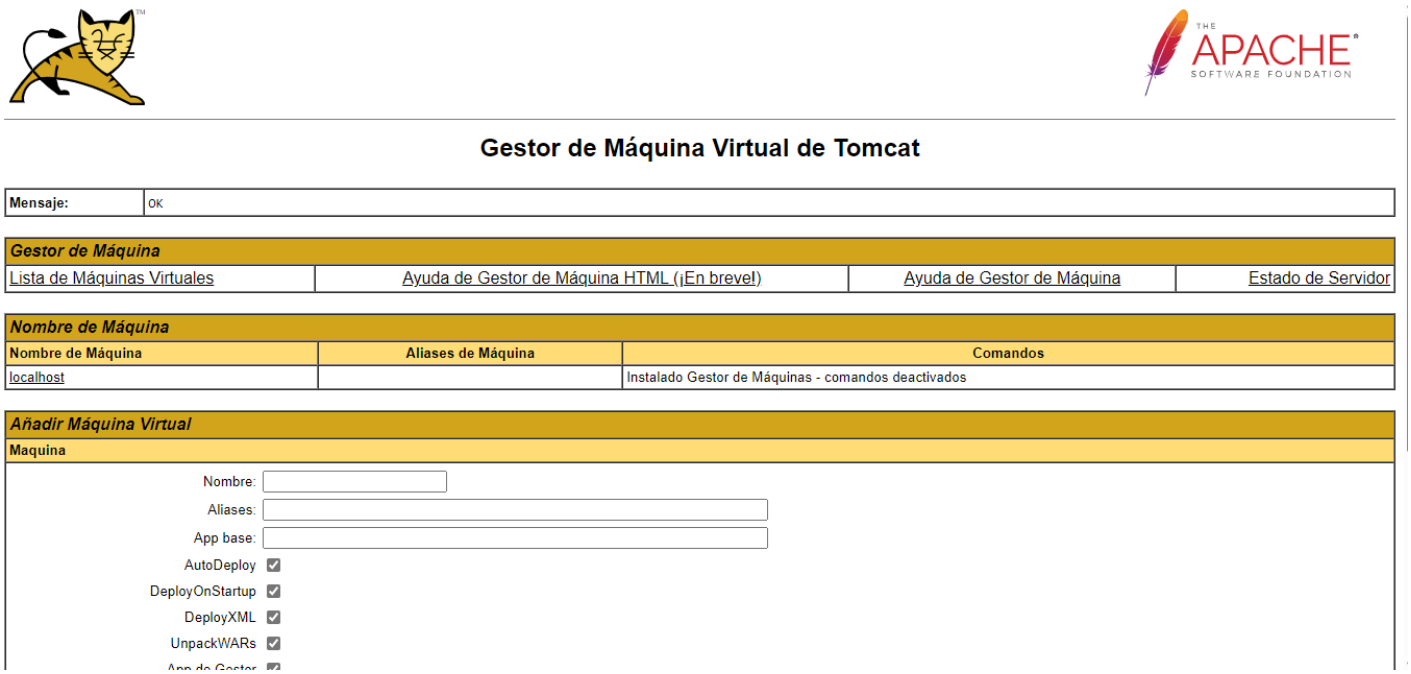

Se reinicia el servicio

```
[admin@ip-172-31-81-89 ~]$ sudo systemctl restart tomcat
[admin@ip-172-31-81-89 ~]$
```

Se reinicia la página del navegador



Dar clic en el botón de host manager poner el usuario y contraseña del admin



Gestor de Máquina Virtual de Tomcat

Mensaje:	OK

Gestor de Máquina			
Lista de Máquinas Virtuales	Ayuda de Gestor de Máquina HTML (¡En breve!)	Ayuda de Gestor de Máquina	Estado de Servidor

Nombre de Máquina

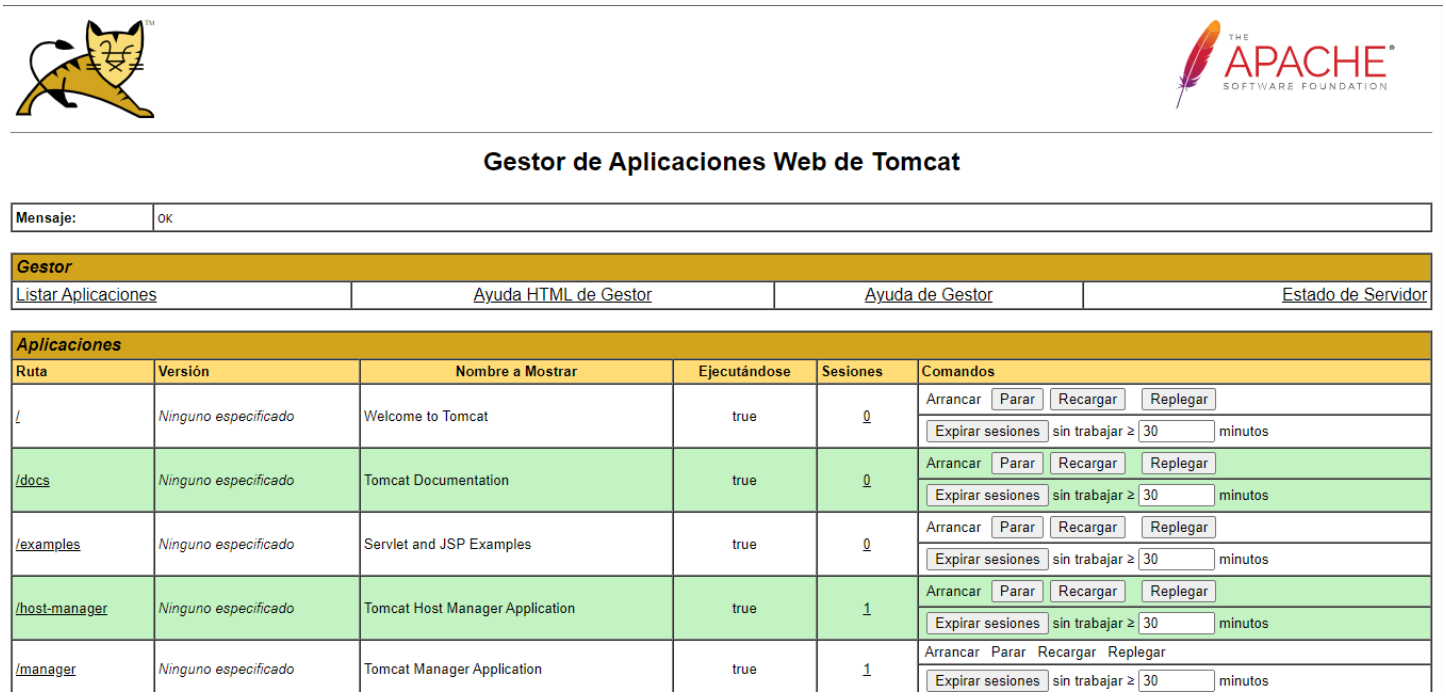
Nombre de Máquina	Aliases de Máquina	Comandos
localhost		Instalado Gestor de Máquinas - comandos deactivados

Añadir Máquina Virtual

Maquina

Nombre:
Aliases:
App base:
AutoDeploy ☑
DeployOnStartup ☑
DeployXML ☑
UnpackWARs ☑

Salir y dar clic en el botón de manager poner el usuario y contraseña del admin



Gestor de Aplicaciones Web de Tomcat

Mensaje:	OK

Gestor			
Listar Aplicaciones	Ayuda HTML de Gestor	Ayuda de Gestor	Estado de Servidor

Aplicaciones

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

Modificar el tamaño de los archivos a manejar dentro de tomcat

```
[admin@ip-172-31-81-89 ~]$ sudo vi /opt/tomcat/conf/server.xml
[sudo] password for admin:
```

Modificar este bloque

```
<Connector port="8080" protocol="HTTP/1.1"
           connectionTimeout="20000"
           maxPostSize="209715200"
           redirectPort="8443"
           maxParameterCount="1000"
           />
```

Y también modificar el siguiente comando

```
[admin@ip-172-31-81-89 ~]$ sudo vi /opt/tomcat/webapps/manager/WEB-INF/web.xml
[admin@ip-172-31-81-89 ~]$
```

Modificar este bloque

```
<multipart-config>
  <!-- 200MB max -->
  <max-file-size>209715200</max-file-size>
  <max-request-size>209715200</max-request-size>
  <file-size-threshold>0</file-size-threshold>
</multipart-config>
```

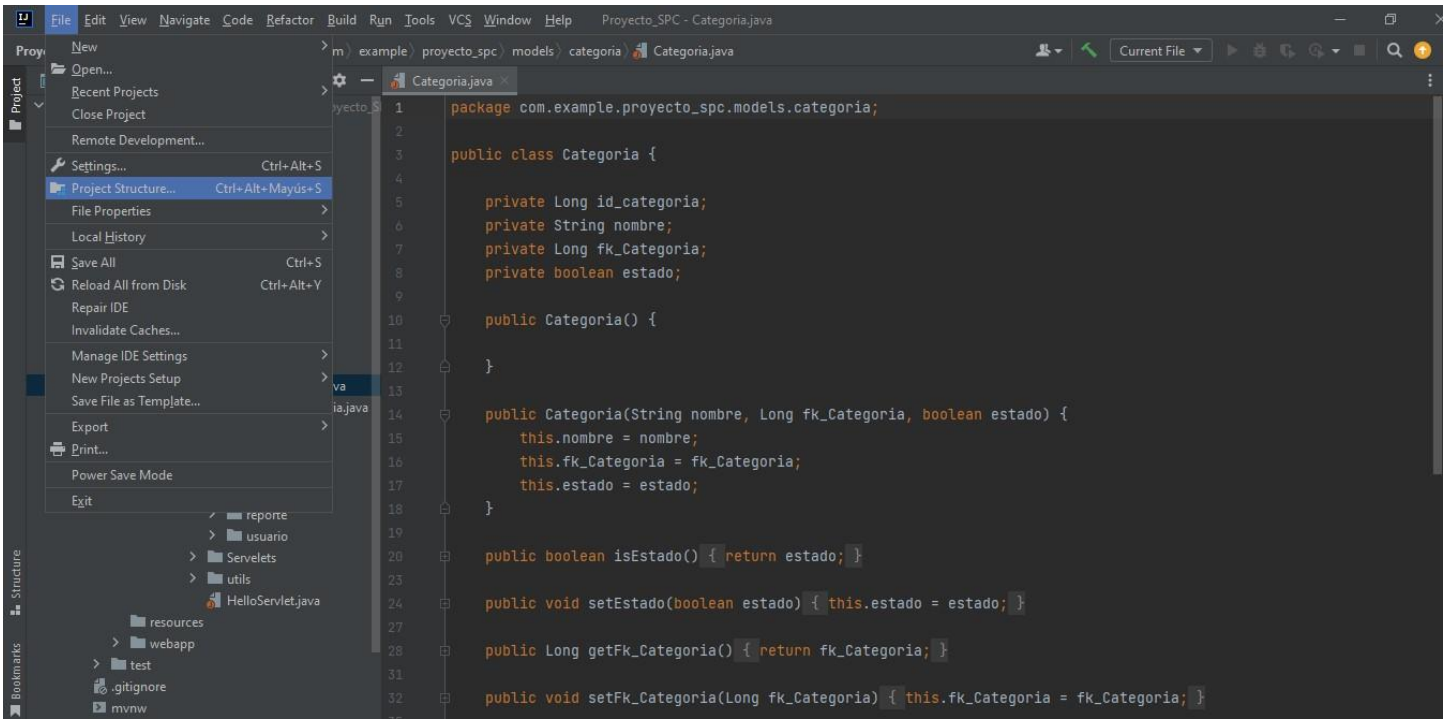
Reiniciar tomcat

```
[admin@ip-172-31-81-89 ~]$ sudo systemctl restart tomcat
[admin@ip-172-31-81-89 ~]$ sudo systemctl start tomcat
[admin@ip-172-31-81-89 ~]$ sudo systemctl status tomcat
● tomcat.service - Apache Tomcat Web Application Container
     Loaded: loaded (/etc/systemd/system/tomcat.service; disabled; preset: disabled)
     Active: active (running) since Fri 2023-08-04 01:08:59 UTC; 14s ago
    Process: 2460 ExecStart=/opt/tomcat/bin/startup.sh (code=exited, status=0/SUCCESS)
   Main PID: 2470 (java)
      Tasks: 29 (limit: 22922)
     Memory: 166.1M
        CPU: 4.101s
     CGroup: /system.slice/tomcat.service
             └─2470 /usr/lib/jvm/jre/bin/java -Djava.util.logging.config.file=/opt/tom>

Aug 04 01:08:59 ip-172-31-81-89.ec2.internal systemd[1]: Starting Apache Tomcat Web Ap>
Aug 04 01:08:59 ip-172-31-81-89.ec2.internal startup.sh[2460]: Existing PID file found>
Aug 04 01:08:59 ip-172-31-81-89.ec2.internal startup.sh[2460]: Removing/clearing stale>
Aug 04 01:08:59 ip-172-31-81-89.ec2.internal startup.sh[2460]: Tomcat started.
Aug 04 01:08:59 ip-172-31-81-89.ec2.internal systemd[1]: Started Apache Tomcat Web App>
lines 1-16/16 (END)
```

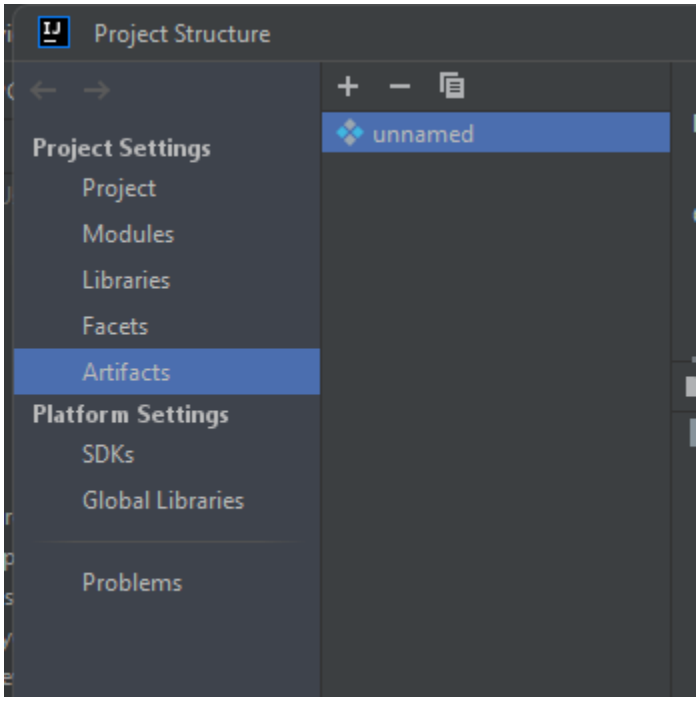
Descarga del WAR

Abrir el proyecto en el programa intellij

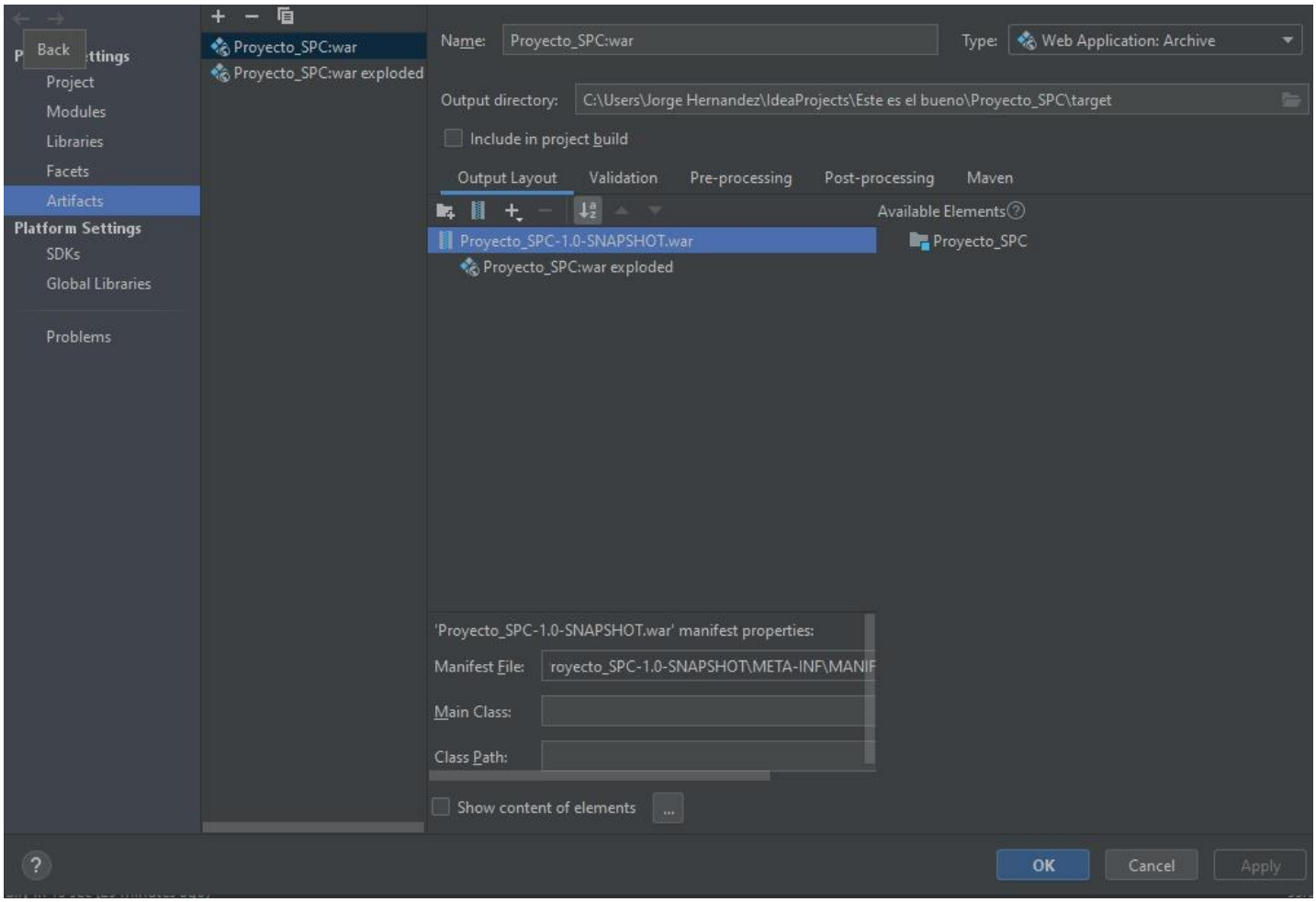
Seleccionar en el menú superior de File, la opción de Project Structure



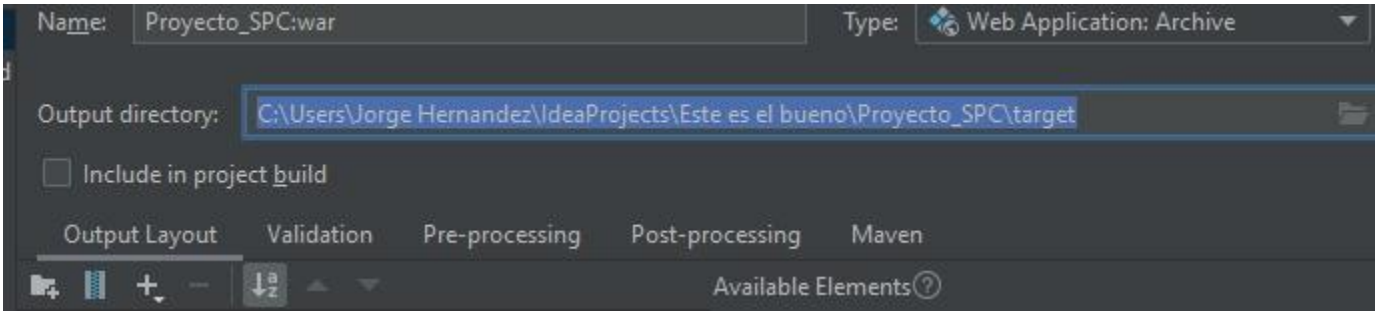
Dentro del mismo Project Structure, seleccionar el menú de articfacts



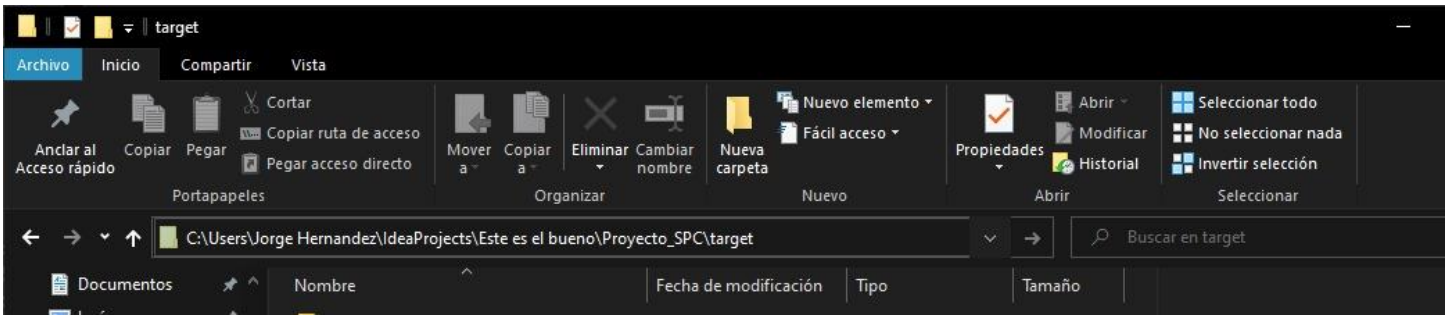
Seleccionamos el archivo de proyecto



Copiamos el link de donde se encuentra el .war

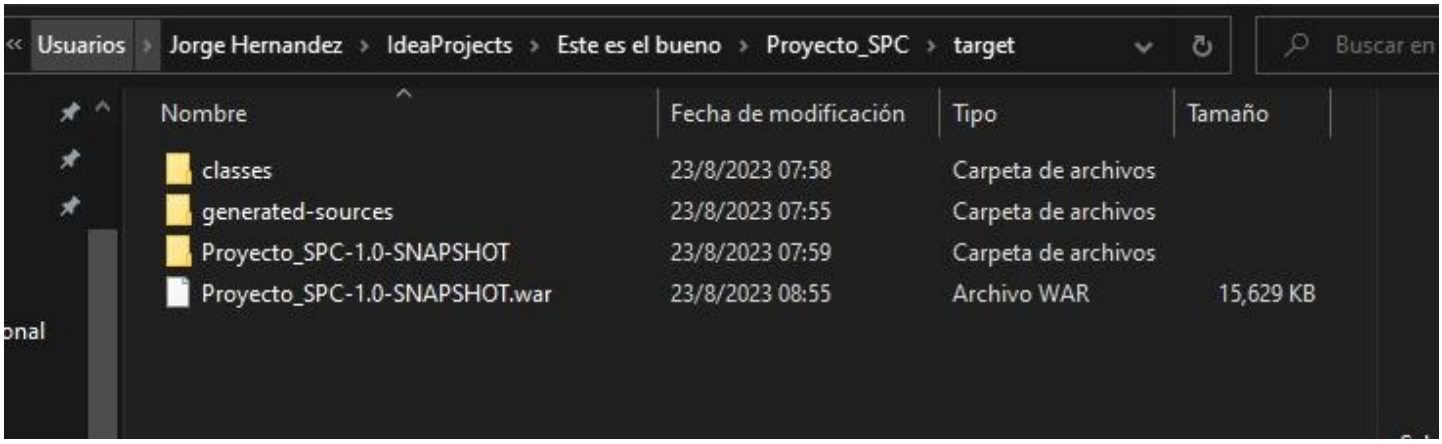


Pegamos la dirección en la barra de administrador de archivos



Descargamos el archivo que indica tipo: Archivo WAR

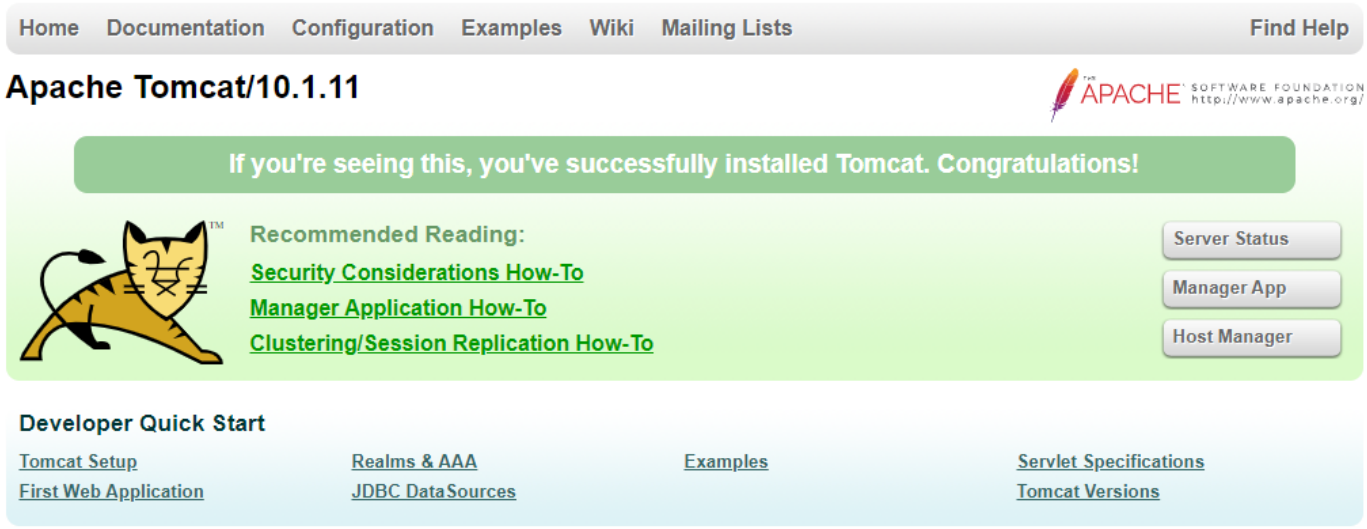
Ese archivo será el que subamos al servidor



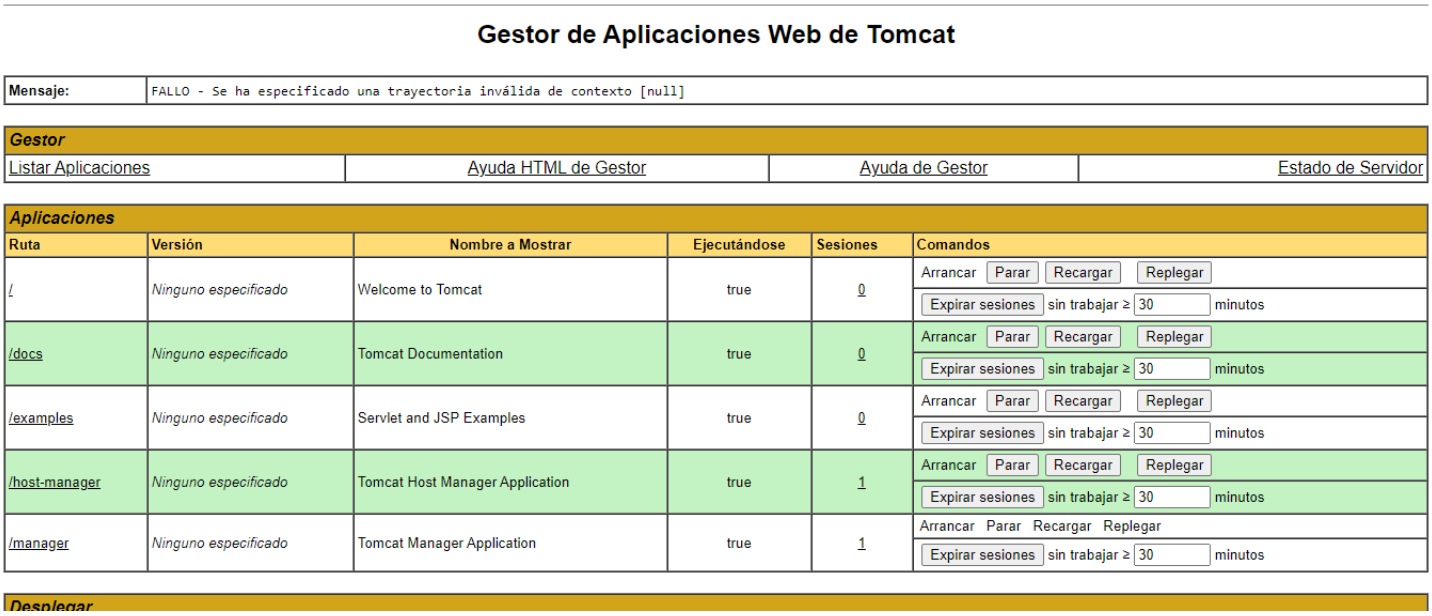
Subida de la aplicación al servidor

Subida de archivo

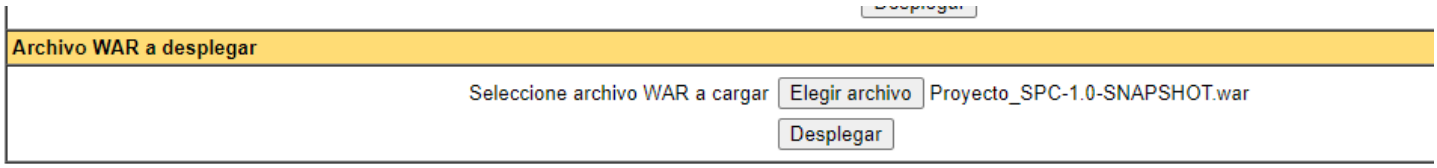
Abrimos el servidor de tomcat



Seleccionamos manager app



Bajamos y en WAR a desplegar subimos el archivo war que previamente descargamos



Se sube y en cuanto termine aparece en el panel del inicio

Aplicaciones					
Ruta	Versión	Nombre a Mostrar	Ejecutándose	Sesiones	Comandos
/	*Ninguno especificado*	Welcome to Tomcat	true	0	Arrancar Parar Recargar Replegar Expirar sesiones sin trabajar ≥ 30 minutos
/Proyecto_SPC-1.0-SNAPSHOT	*Ninguno especificado*		true	0	Arrancar Parar Recargar Replegar Expirar sesiones sin trabajar ≥ 30 minutos
/docs	*Ninguno especificado*	Tomcat Documentation	true	0	Arrancar Parar Recargar Replegar Expirar sesiones sin trabajar ≥ 30 minutos
/examples	*Ninguno especificado*	Servlet and JSP Examples	true	0	Arrancar Parar Recargar Replegar Expirar sesiones sin trabajar ≥ 30 minutos
/host-manager	*Ninguno especificado*	Tomcat Host Manager Application	true	1	Arrancar Parar Recargar Replegar Expirar sesiones sin trabajar ≥ 30 minutos

Se selecciona el archivo con el nombre de nuestro proyecto y abrirá la aplicación de esta manera se finaliza la instalación en el servidor.