



CONFIGURACIÓN HTTPS

D01

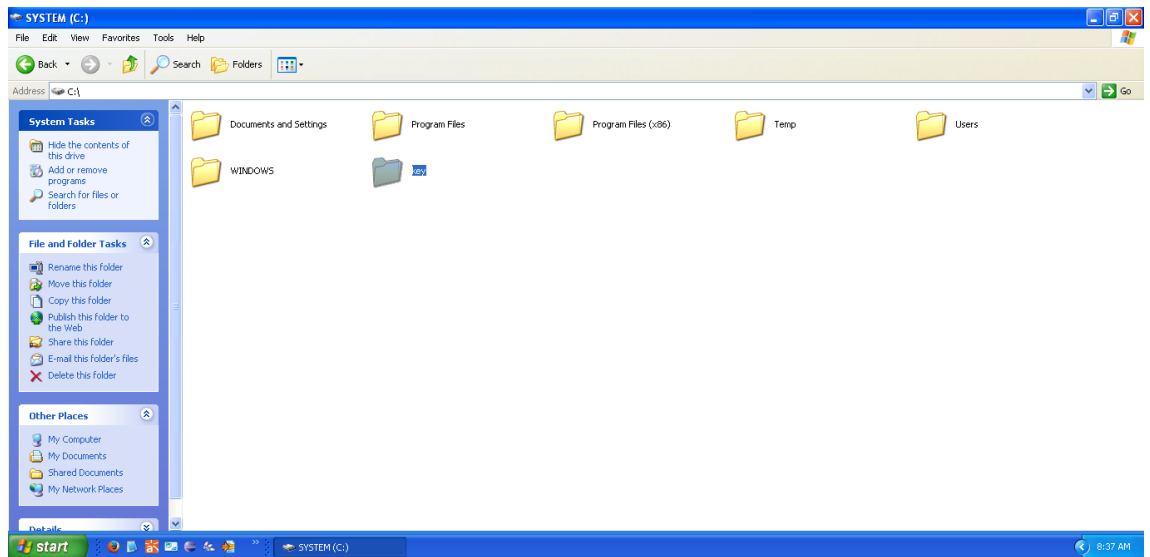


7 DE MARZO DE 2019

GRUPO 11

Configuración en Developer:

1. Creamos una carpeta en "C:\\" llamada key, que será donde generaremos nuestro almacén de claves.



2. Abrimos el terminal cmd y ejecutamos el comando: **keytool -genkey -alias tomcat -keyalg RSA -keystore "C:\key\keys"** y completamos con:
 - Contraseña: acmemadruga
 - localhost
 - localhost
 - localhost
 - ES
 - ES
 - ES
 - Yes
 - acmemadruga

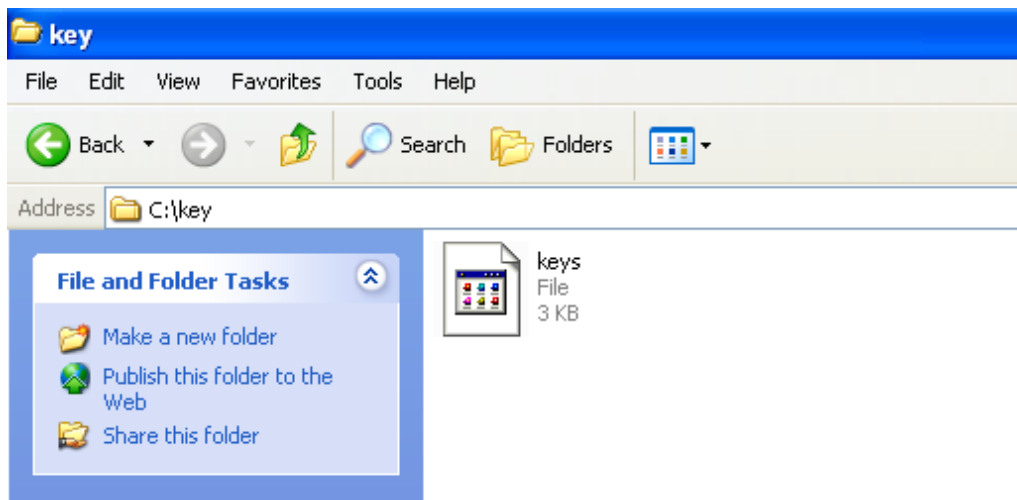
```
C:\> Copyright 1985-2003 Microsoft Corp.

C:\Documents and Settings\Student>keytool -genkey -alias tomcat -keyalg RSA -keystore "C:\key\keys"
Enter keystore password:
Re-enter new password:
What is your first and last name?
[Unknown]: localhost
What is the name of your organizational unit?
[Unknown]: localhost
What is the name of your organization?
[Unknown]: localhost
What is the name of your City or Locality?
[Unknown]: ES
What is the name of your State or Province?
[Unknown]: ES
What is the two-letter country code for this unit?
[Unknown]: ES
Is CN=localhost, OU=localhost, O=localhost, L=ES, ST=ES, C=ES correct?
[no]: yes

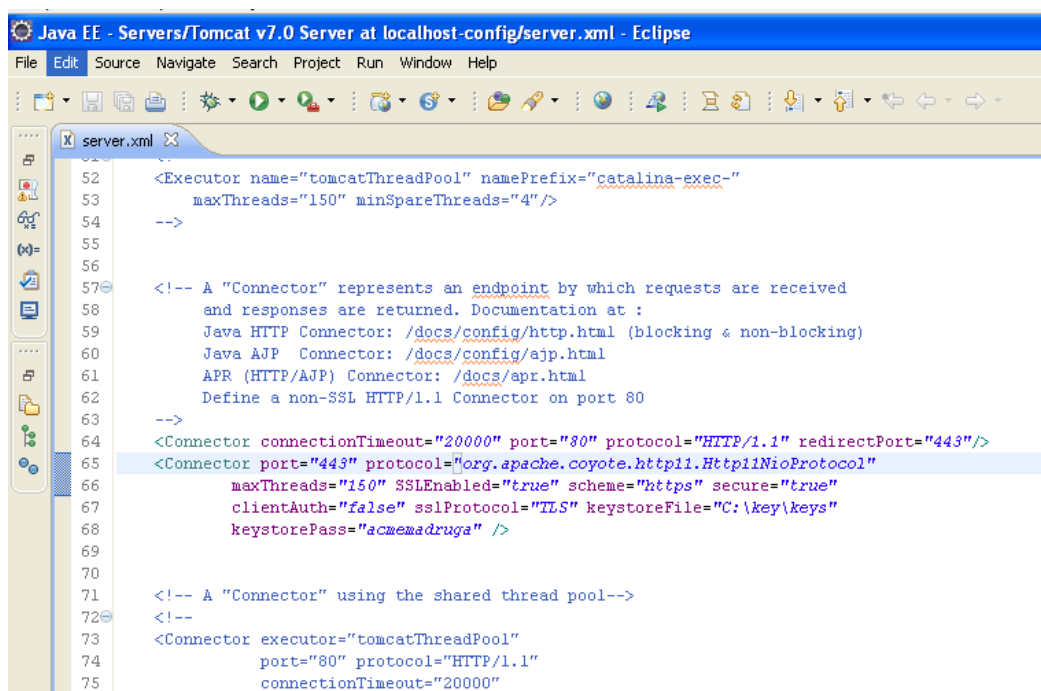
Enter key password for <tomcat>
(RETURN if same as keystore password):
Re-enter new password:

C:\Documents and Settings\Student>
```

Y se generará nuestro almacén de claves:



3. Ahora procederemos a configurar el tomcat por lo que nos vamos a server.xml y añadimos:
- **`<Connector port="443" protocol="org.apache.coyote.http11.Http11NioProtocol" maxThreads="150" SSLEnabled="true" scheme="https" secure="true" clientAuth="false" sslProtocol="TLS" keystoreFile="C:\key\keys" keystorePass="acmemadruga" />`**

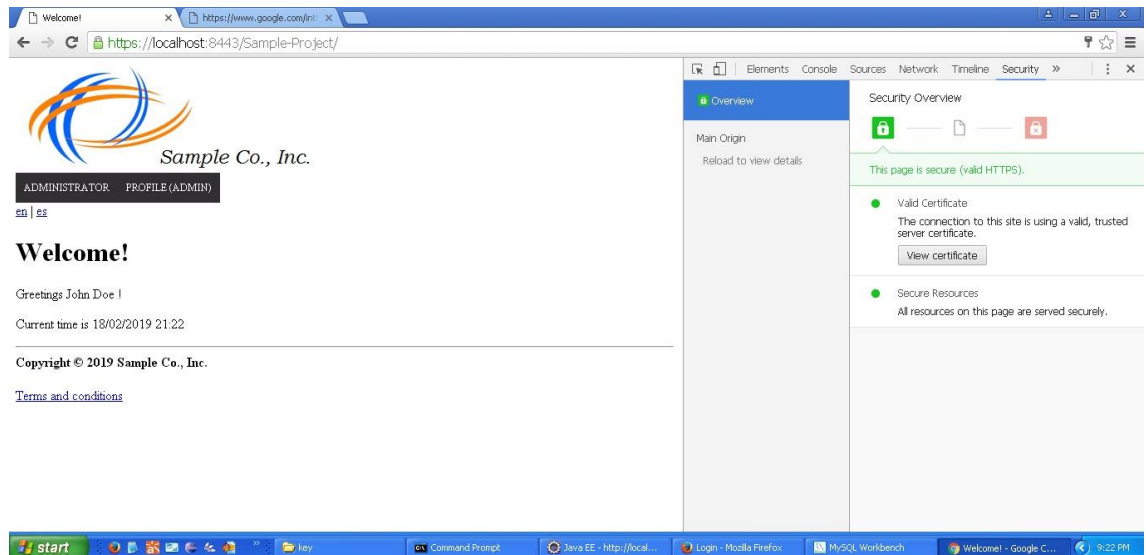


Teniendo en cuenta que ambos puertos sean "443" ya que con el puerto "8443" hemos tenido problemas.

4. El siguiente paso sería irnos a security.xml y añadir **requires-channel="https"**.

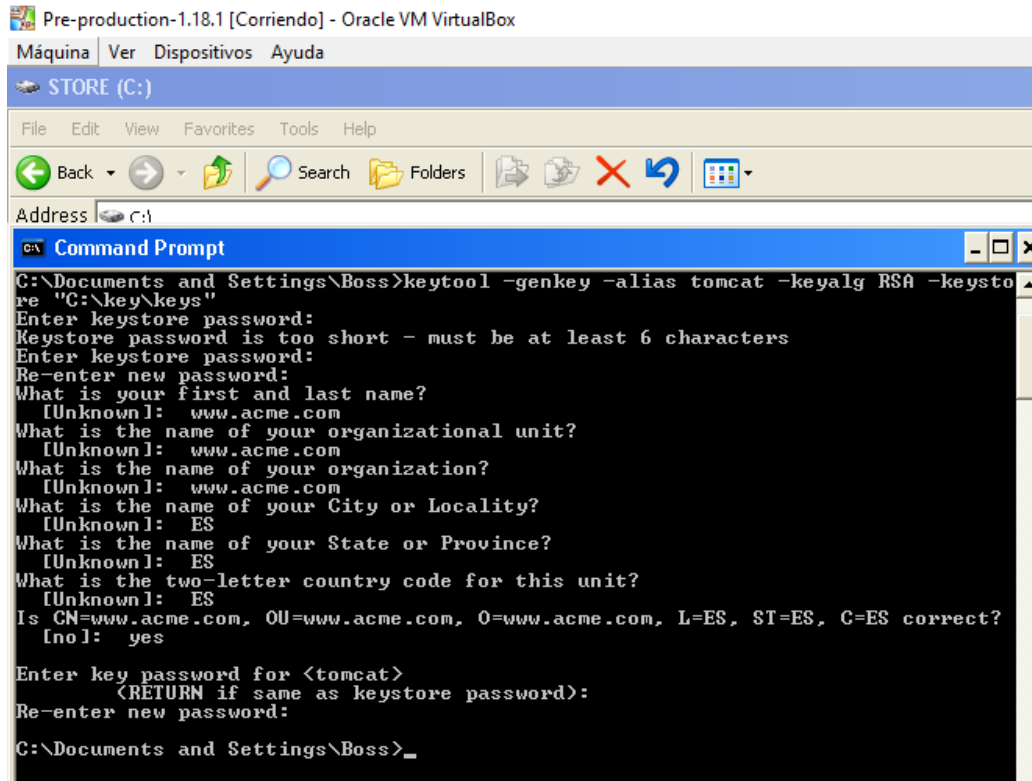
```
server.xml security.xml
31
32 <security:intercept-url pattern="/favicon.ico" access="permitAll" />
33 <security:intercept-url pattern="/images/**" access="permitAll" />
34 <security:intercept-url pattern="/scripts/**" access="permitAll" />
35 <security:intercept-url pattern="/styles/**" access="permitAll" />
36
37 <security:intercept-url pattern="/views/misc/index.jsp" access="permitAll" requires-channel="https"/>
38
39 <security:intercept-url pattern="/security/login.do" access="permitAll" requires-channel="https"/>
40 <security:intercept-url pattern="/security/loginFailure.do" access="permitAll" />
41
42 <security:intercept-url pattern="/welcome/index.do" access="permitAll" requires-channel="https"/>
43 <security:intercept-url pattern="/welcome/terms.do" access="permitAll" requires-channel="https"/>
44
45 <security:intercept-url pattern="/error.do" access="permitAll" requires-channel="https"/>
46
47 <security:intercept-url pattern="/actor/registerBrotherhood.do" access="isAnonymous()" requires-channel="https"/>
48 <security:intercept-url pattern="/actor/registerMember.do" access="isAnonymous()" requires-channel="https"/>
49
50 <security:intercept-url pattern="/actor/administrator/brotherhood/member/**" access="isAuthenticated()" />
51 <security:intercept-url pattern="/actor/administrator/**" access="hasRole('ADMIN')"/>
52 <security:intercept-url pattern="/actor/display.do**" access="permitAll" requires-channel="https"/>
53 <security:intercept-url pattern="/actor/display.do" access="hasAnyRole('ADMIN','BROTHERHOOD','MEMBER') requires-channel="https"/>
54
55 <security:intercept-url pattern="/area/administrator/**" access="hasRole('ADMIN')"/>
56 <security:intercept-url pattern="/area/display.do**" access="permitAll" />
57 <security:intercept-url pattern="/brotherhood/brotherhood/selectArea.do"
58     access="hasRole('BROTHERHOOD')"/>
59
```

5. Por último, arrancamos tomcat y comprobamos que use protocolo https.



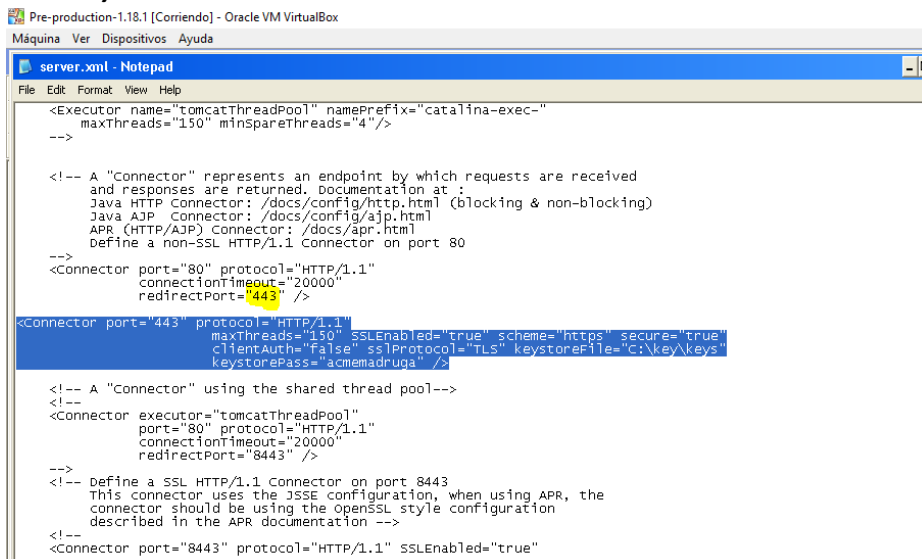
Configuración en Pre-Production:

1. Creamos la carpeta key al igual que en developer.
2. Generamos las claves en la carpeta key de la misma forma que en developer con la diferencia de que en vez de localhost pondremos www.acme.com



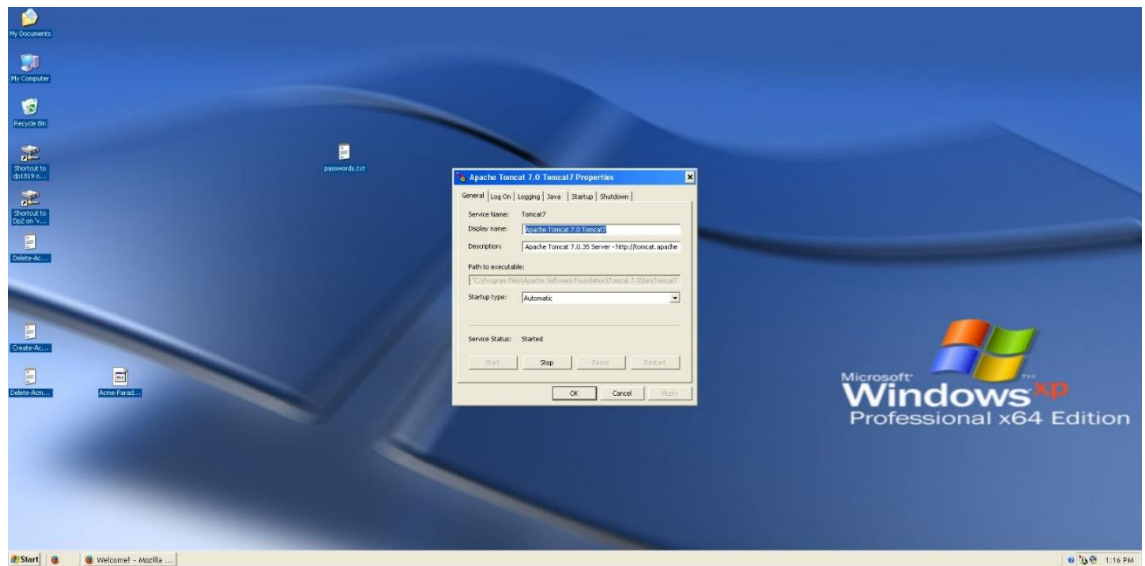
```
Pre-production-1.18.1 [Corriendo] - Oracle VM VirtualBox
Máquina Ver Dispositivos Ayuda
STORE (C:)
File Edit View Favorites Tools Help
Back Search Folders
Address C:\
C:\Documents and Settings\Boss>keytool -genkey -alias tomcat -keyalg RSA -keystore "C:\key\keys"
Enter keystore password:
Keystore password is too short - must be at least 6 characters
Enter keystore password:
Re-enter new password:
What is your first and last name?
[Unknown]: www.acme.com
What is the name of your organizational unit?
[Unknown]: www.acme.com
What is the name of your organization?
[Unknown]: www.acme.com
What is the name of your City or Locality?
[Unknown]: ES
What is the name of your State or Province?
[Unknown]: ES
What is the two-letter country code for this unit?
[Unknown]: ES
Is CN=www.acme.com, OU=www.acme.com, O=www.acme.com, L=ES, ST=ES, C=ES correct?
[no]: yes
Enter key password for <tomcat>
(RETURN if same as keystore password):
Re-enter new password:
C:\Documents and Settings\Boss>
```

3. Para configurar Tomcat nos iremos al archivo server.xml que se encuentra en **C:\Program Files\Apache Software Foundation\Tomcat 7.0\conf** y añadiremos la siguiente información, cambiando de nuevo el puerto a "443" para evitar errores:
- **<Connector port="443" protocol="HTTP/1.1" maxThreads="150" SSLEnabled="true" scheme="https" secure="true" clientAuth="false" sslProtocol="TLS" keystoreFile="C:\key\keys" keystorePass="acmemadruga" />**



```
Pre-production-1.18.1 [Corriendo] - Oracle VM VirtualBox
Máquina Ver Dispositivos Ayuda
server.xml - Notepad
File Edit Format View Help
<Executor name="tomcatThreadPool" namePrefix="catalina-exec-"
maxThreads="150" minSpareThreads="4"/>
-->
<!-- A "Connector" represents an endpoint by which requests are received
and responses are returned. Documentation at :
Java HTTP Connector: /docs/config/http.html (blocking & non-blocking)
Java AJP Connector: /docs/config/ajp.html
APR (HTTP/AJP) Connector: /docs/apr.html
Define a non-SSL HTTP/1.1 Connector on port 80
-->
<Connector port="80" protocol="HTTP/1.1"
connectionTimeout="20000"
redirectPort="443" />
<Connector port="443" protocol="HTTP/1.1"
maxThreads="150" SSLEnabled="true" scheme="https" secure="true"
clientAuth="false" sslProtocol="TLS" keystoreFile="C:\key\keys"
keystorePass="acmemadruga" />
<!-- A "Connector" using the shared thread pool-->
<!--
<Connector executor="tomcatThreadPool"
port="80" protocol="HTTP/1.1"
connectionTimeout="20000"
redirectPort="8443" />
-->
<!-- Define a SSL HTTP/1.1 Connector on port 8443
This connector uses the JSSE configuration, when using APR, the
connector should be using the openssl style configuration
described in the APR documentation -->
<!--
<Connector port="8443" protocol="HTTP/1.1" SSLEnabled="true"
-->
```

4. Por último, reiniciamos el servidor Tomcat desde la aplicación “Monitor Tomcat”



5. Y desplegamos nuestro proyecto como se indicó en la última lección de la asignatura DP1 y accedemos con la url www.acme.com:

