

## 12.4 - Sample server.xml file

After importing the signed certificates in addition to the Hub CA and HTTPS certificate, you will need to configure your Tomcat server.xml file in order for Tomcat to utilize the correct certificate to serve SHRINE traffic. By default, Tomcat uses port 6443 to serve SHRINE.

Here's a sample server.xml file (note the 'Connector port = "6443"' section):

```
<?xml version='1.0' encoding='utf-8'?>
<!--
 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.
-->

<!-- Note: A "Server" is not itself a "Container", so you may not
 define subcomponents such as "Valves" at this level.
 Documentation at /docs/config/server.html
-->

<Server port="8005" shutdown="SHUTDOWN">
<Listener className="org.apache.catalina.startup.VersionLoggerListener" />
<!-- Security listener. Documentation at /docs/config/listeners.html
<Listener className="org.apache.catalina.security.SecurityListener" />
-->

<!--APR library loader. Documentation at /docs/apr.html -->
<Listener className="org.apache.catalina.core.AprLifecycleListener" SSLEngine="on" />
<!-- Prevent memory leaks due to use of particular java/javax APIs-->
<Listener className="org.apache.catalina.core.JreMemoryLeakPreventionListener" />
<Listener className="org.apache.catalina.mbeans.GlobalResourcesLifecycleListener" />
<Listener className="org.apache.catalina.core.ThreadLocalLeakPreventionListener" />

<!-- Global JNDI resources
 Documentation at /docs/jndi-resources-howto.html
-->

<GlobalNamingResources>
<!-- Editable user database that can also be used by
 UserDatabaseRealm to authenticate users
-->

<Resource name="UserDatabase" auth="Container"
 type="org.apache.catalina.UserDatabase"
 description="User database that can be updated and saved"
 factory="org.apache.catalina.users.MemoryUserDatabaseFactory"
 pathname="conf/tomcat-users.xml" />
</GlobalNamingResources>

<!-- A "Service" is a collection of one or more "Connectors" that share
 a single "Container". Note: A "Service" is not itself a "Container",
 so you may not define subcomponents such as "Valves" at this level.
 Documentation at /docs/config/service.html
-->

<Service name="Catalina">
<!--The connectors can use a shared executor, you can define one or more named thread pools-->
```

```

<!--
<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/TLS HTTP/1.1 Connector on port 8080
-->

<Connector port="6060" protocol="HTTP/1.1"
           connectionTimeout="20000"
           redirectPort="6443" />

<!-- A "Connector" using the shared thread pool-->
<!--
<Connector executor="tomcatThreadPool"
            port="8080" protocol="HTTP/1.1"
            connectionTimeout="20000"
            redirectPort="8443" />
-->

<!-- Define a SSL/TLS HTTP/1.1 Connector on port 8443
     This connector uses the NIO implementation that requires the JSSE
     style configuration. When using the APR/native implementation, the
     OpenSSL style configuration is required as described in the APR/native
     documentation -->

<Connector port="6443" protocol="org.apache.coyote.http11.Http11NioProtocol"
           maxThreads="150" SSLEnabled="true" scheme="https" secure="true"
           clientAuth="false" sslProtocol="TLS"
           keystoreFile="/opt/shrine/shrine.keystore"
           keystorePass="password"
           keyAlias=""
/>

<!-- Define an AJP 1.3 Connector on port 8009 -->
<Connector port="6009" protocol="AJP/1.3" redirectPort="8443" />

<!-- An Engine represents the entry point (within Catalina) that processes
     every request. The Engine implementation for Tomcat stand alone
     analyzes the HTTP headers included with the request, and passes them
     on to the appropriate Host (virtual host).
     Documentation at /docs/config/engine.html -->

<!-- You should set jvmRoute to support load-balancing via AJP ie :
<Engine name="Catalina" defaultHost="localhost" jvmRoute="jvm1">
-->

<Engine name="Catalina" defaultHost="localhost">

  <!--For clustering, please take a look at documentation at:
      /docs/cluster-howto.html (simple how to)
      /docs/config/cluster.html (reference documentation) -->
  <!--
  <Cluster className="org.apache.catalina.ha.tcp.SimpleTcpCluster"/>
  -->

  <!-- Use the LockOutRealm to prevent attempts to guess user passwords
       via a brute-force attack -->

  <Realm className="org.apache.catalina.realm.LockOutRealm">
    <!-- This Realm uses the UserDatabase configured in the global JNDI
        resources under the key "UserDatabase". Any edits

```

```
that are performed against this UserDatabase are immediately
available for use by the Realm. -->

<Realm className="org.apache.catalina.realm.UserDatabaseRealm"
      resourceName="UserDatabase"/>
</Realm>

<Host name="localhost"  appBase="webapps"
      unpackWARs="true"  autoDeploy="true">

    <!-- SingleSignOn valve, share authentication between web applications
        Documentation at: /docs/config/valve.html -->
    <!--
    <Valve className="org.apache.catalina.authenticator.SingleSignOn" />
    -->

    <!-- Access log processes all example.
        Documentation at: /docs/config/valve.html
        Note: The pattern used is equivalent to using pattern="common" -->

    <Valve className="org.apache.catalina.valves.AccessLogValve" directory="logs"
          prefix="localhost_access_log" suffix=".txt"
          pattern="%h %l %u %t "%r" %s %b" />

</Host>
</Engine>
</Service>
</Server>
```