

## 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'?>
<!--
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-->

<!-- 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="alias_of_your_privateKeyEntry"
/>

<!-- 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 &quot;%r&quot; %s %b" />

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