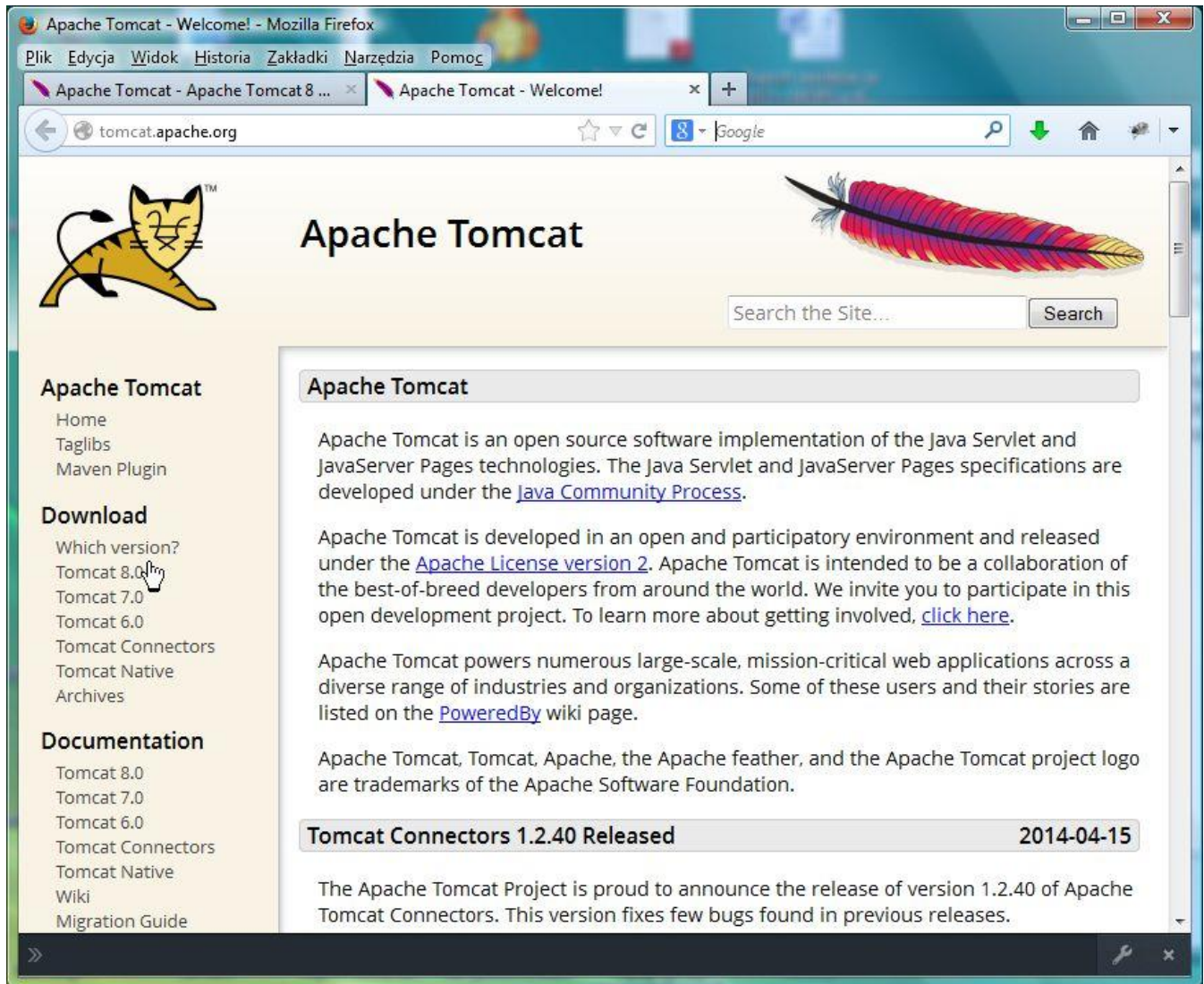


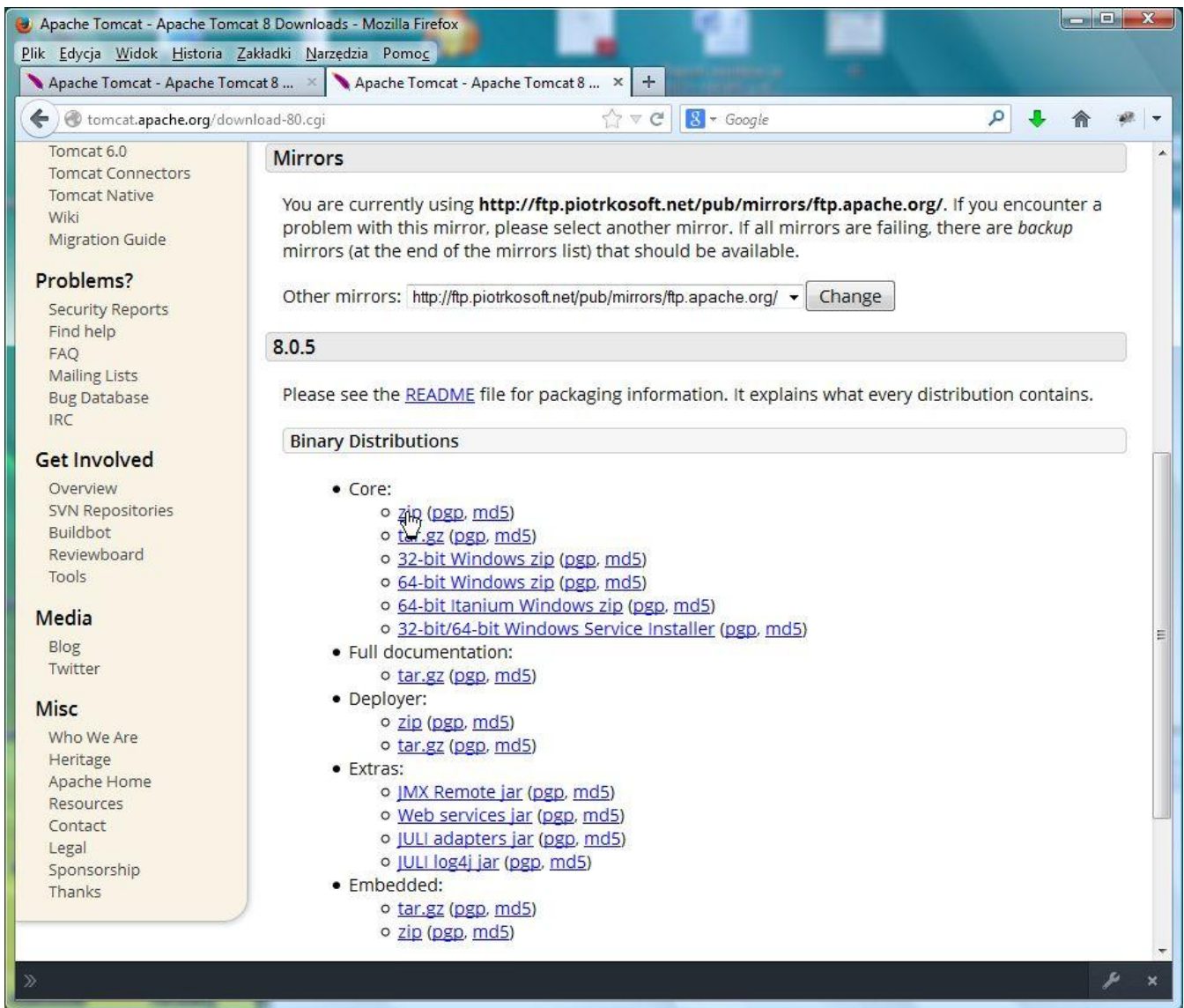
How install and configure Tomcat 8 on windows ?

First You may go to **<http://tomcat.apache.org>** website.

Click on **Tomcat 8.0** link in **Download** section on the left the website.

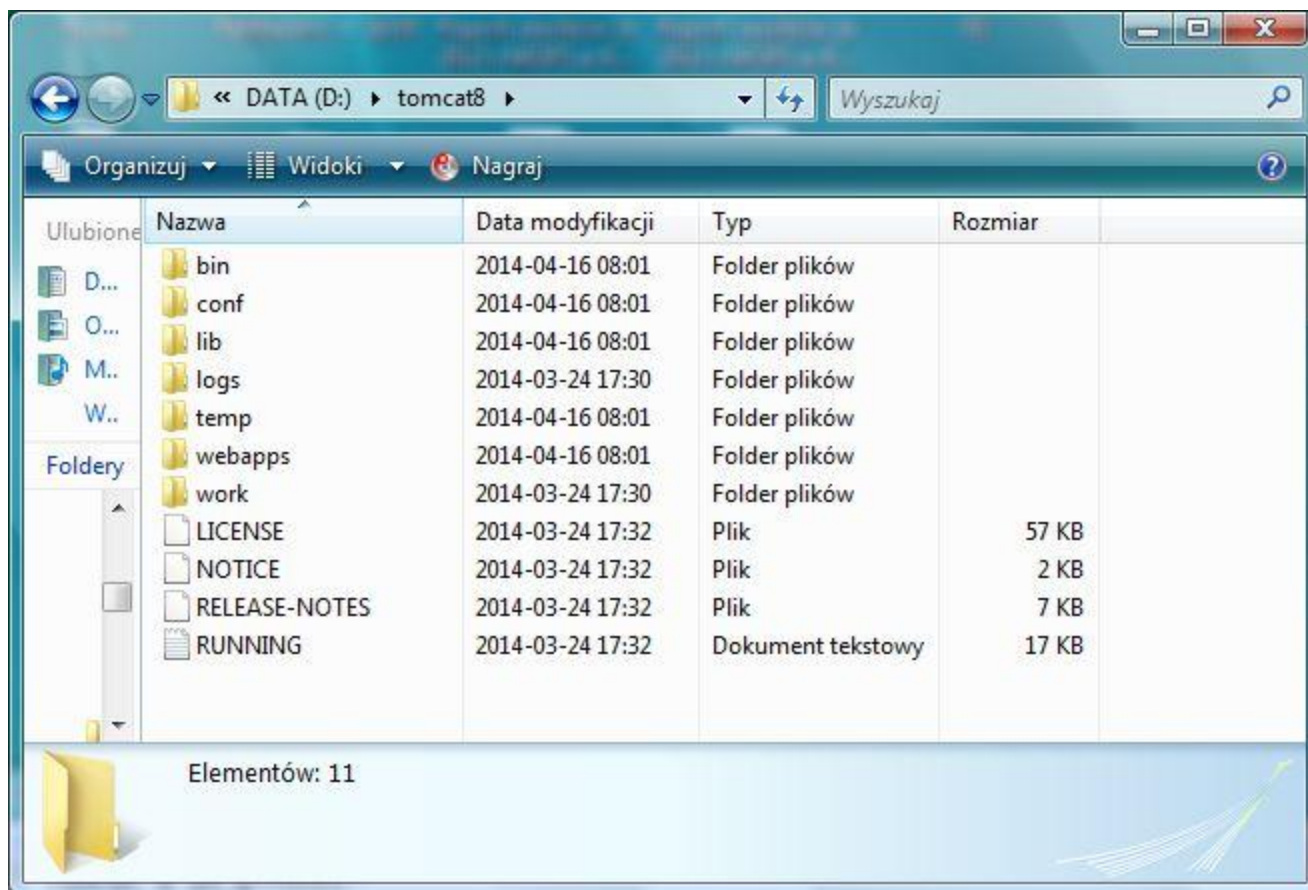


Choose **zip** in **Cores** section.



When your file is downloading, copy it into any path. I copy it into **D** disc.

Unzipp it and change name for **tomcat8**. It will be shorter name.

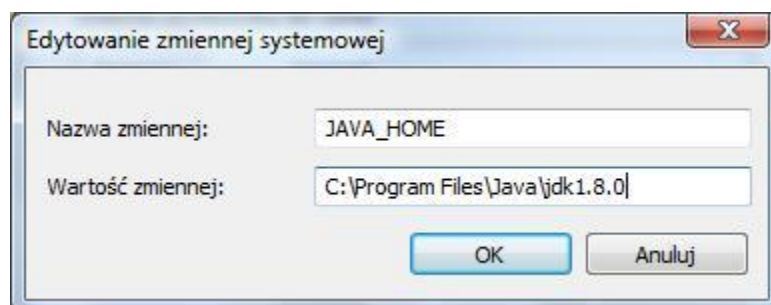
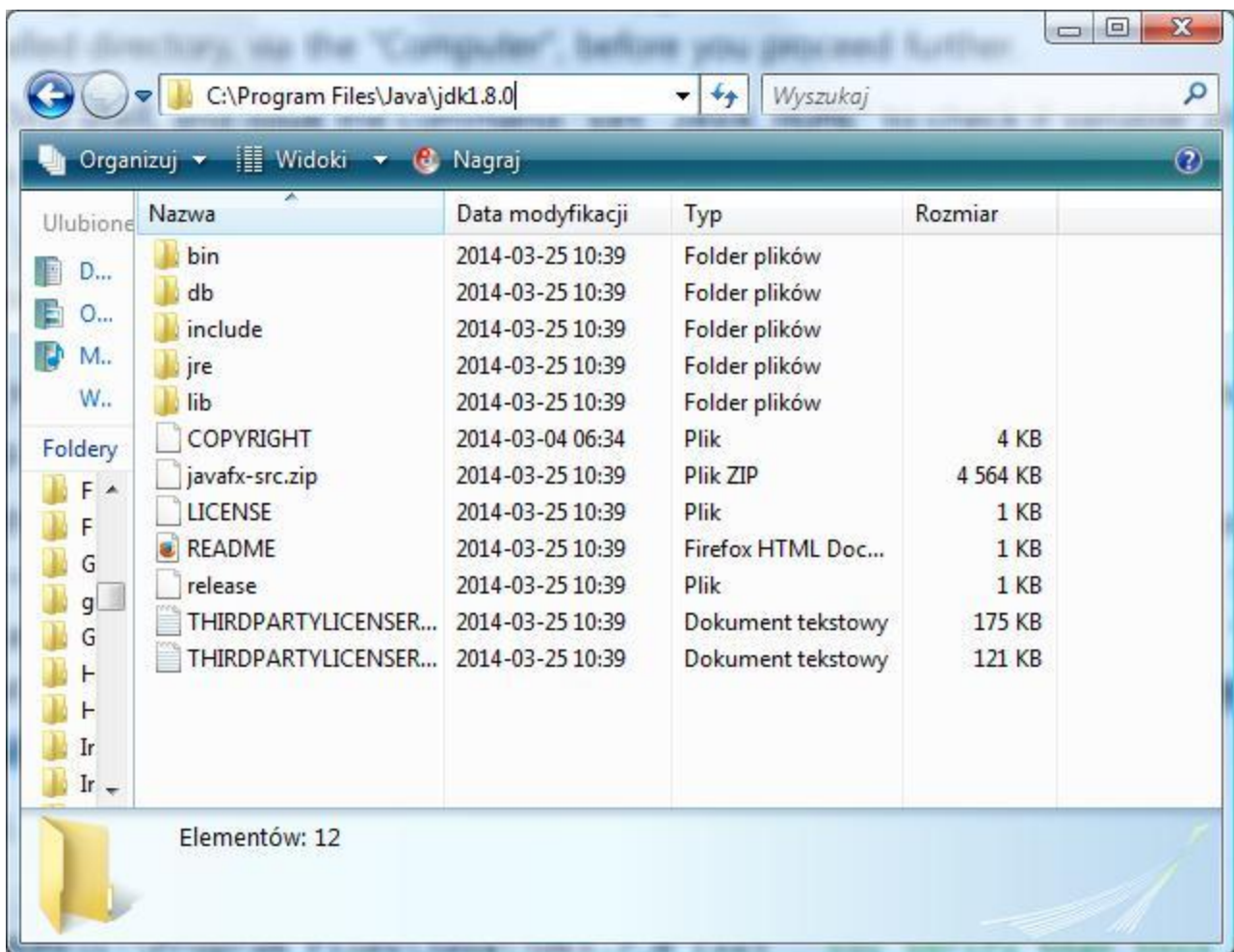


In this moment your **tomcat** server is installed. But it is time configure it.

If you want to work in tomcat server you must install java **jdk** environment. Last version java is in this time **java 8**. After instalation java set **JAVA_HOME** and **JRE_HOME** path.

So go to **Start -> Control Panel -> System -> Advanced system settings**. Switch to **Advanced** tab -> **Environment Variables**. In **System Variables** section click the **New** buton.

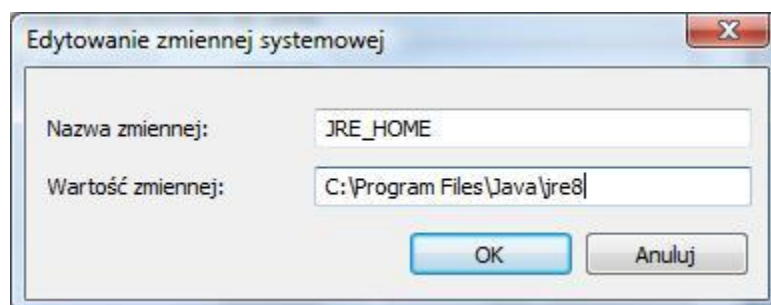
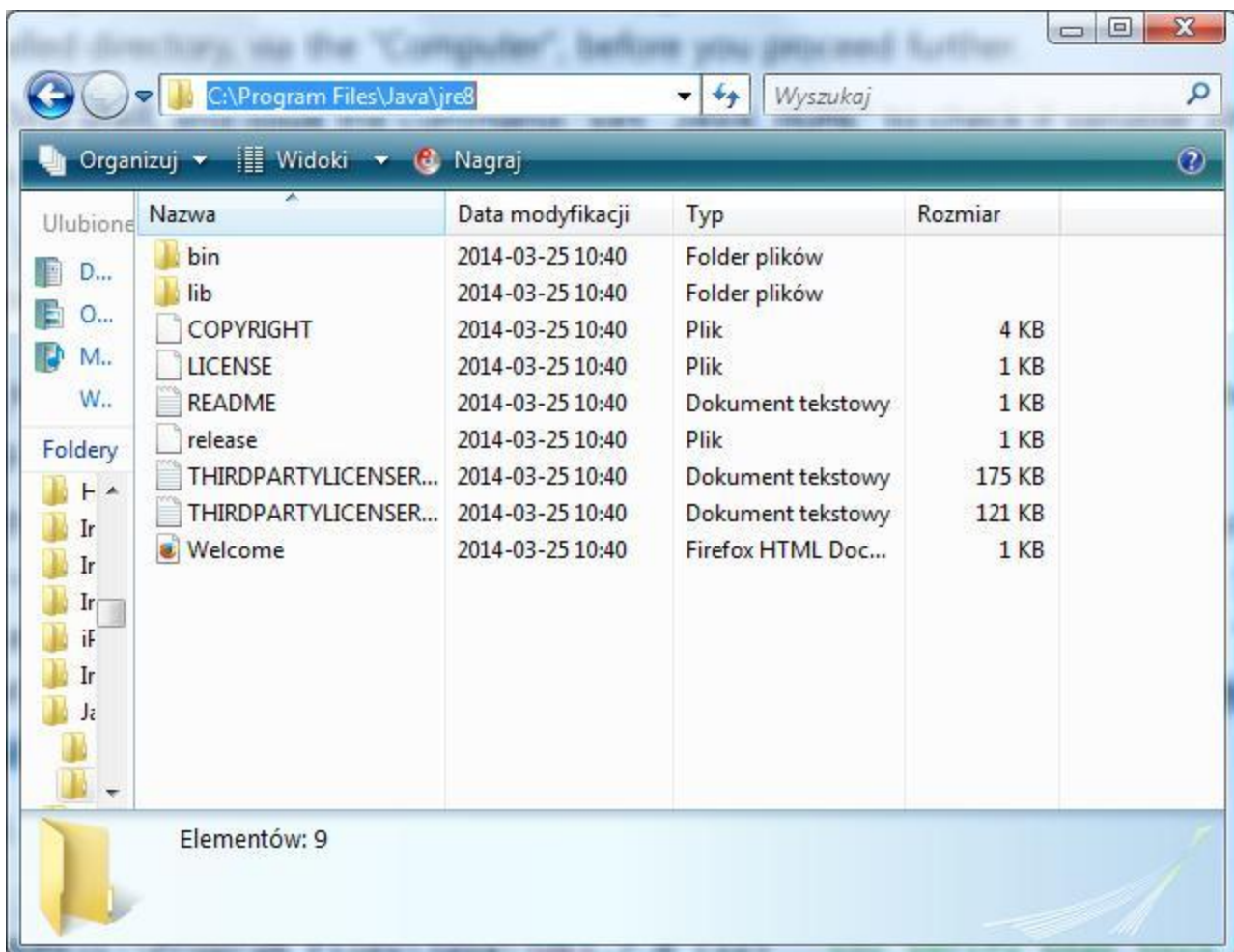
In **Variable Name** field write **JAVA_HOME** and in **Variable Value** write your JDK installed directory. In my it is **C:\Program Files\Java\jdk1.8.0**



Click the **OK** button.

In **System Variables** section another time click the **New** button.

In **Variable Name** field write **JAVA_JRE** and in **Variable Value** write your JRE installed directory. In my it is **C:\Program Files\Java\jre8**

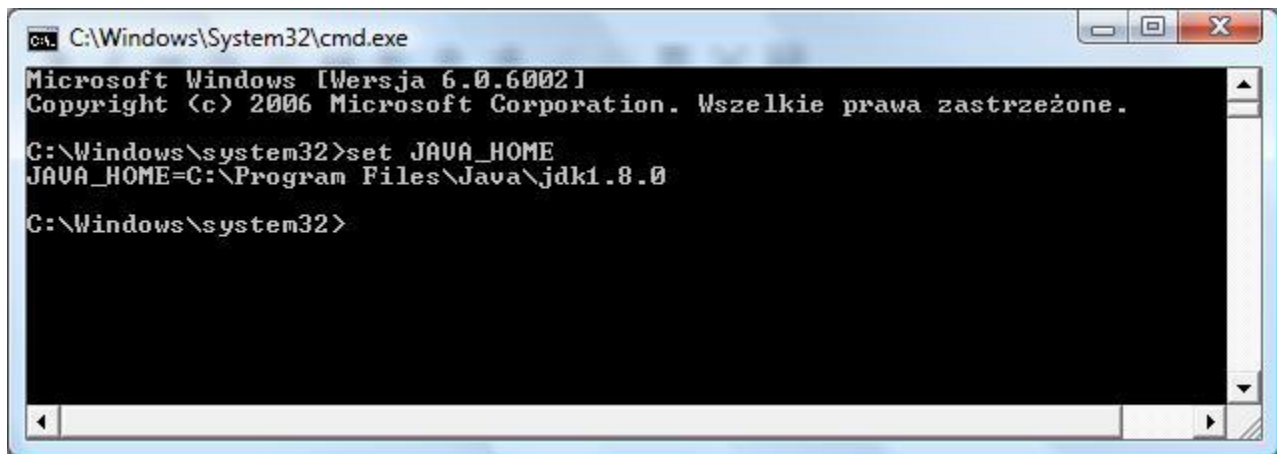


Click the **OK** button.

Check your JDK and JRE settings. Open CMD console and type:

set JAVA_HOME

Type Enter.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Wersja 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. Wszelkie prawa zastrzeżone.

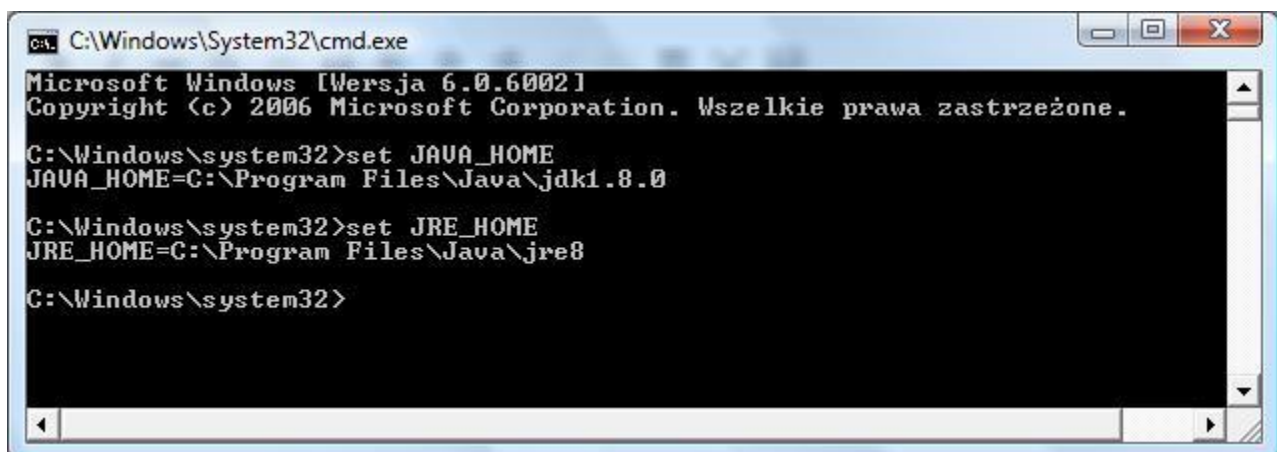
C:\Windows\system32>set JAVA_HOME
JAVA_HOME=C:\Program Files\Java\jdk1.8.0

C:\Windows\system32>
```

In the same way type in the console:

set JRE_HOME

and type Enter.



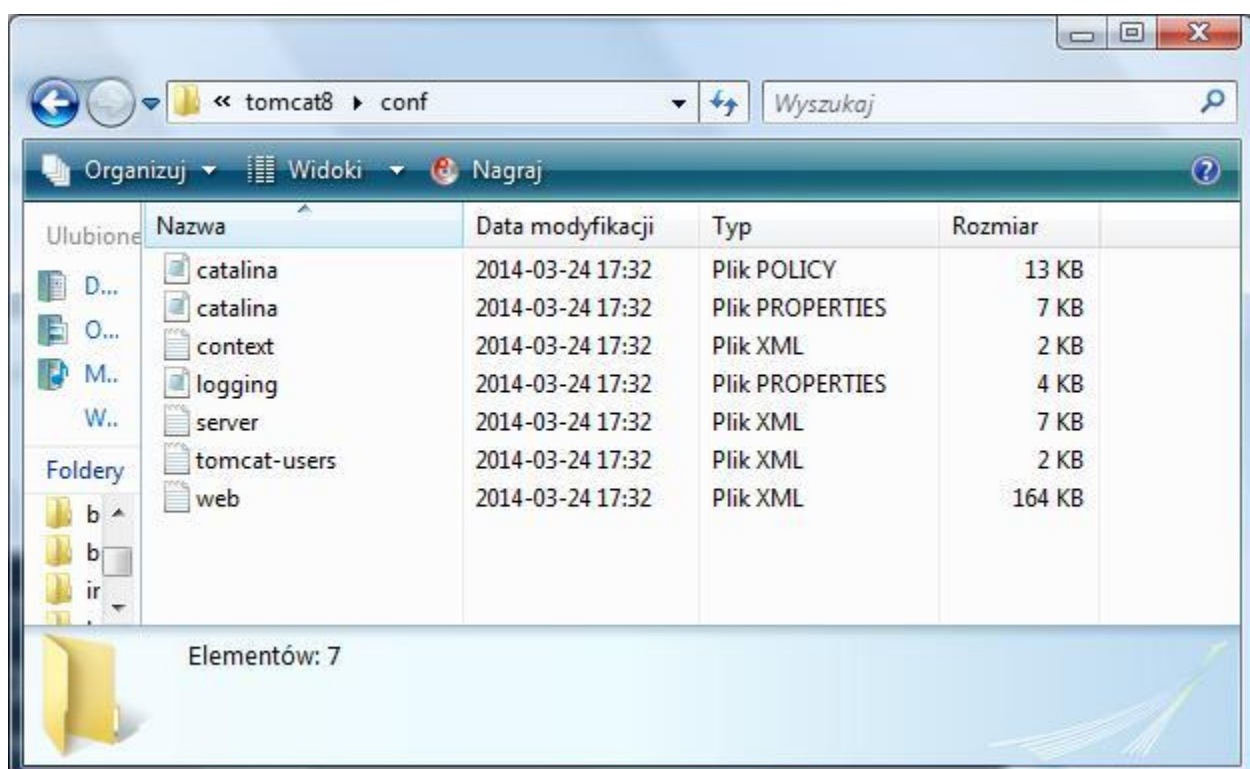
```
C:\Windows\System32\cmd.exe
Microsoft Windows [Wersja 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. Wszelkie prawa zastrzeżone.

C:\Windows\system32>set JAVA_HOME
JAVA_HOME=C:\Program Files\Java\jdk1.8.0

C:\Windows\system32>set JRE_HOME
JRE_HOME=C:\Program Files\Java\jre8

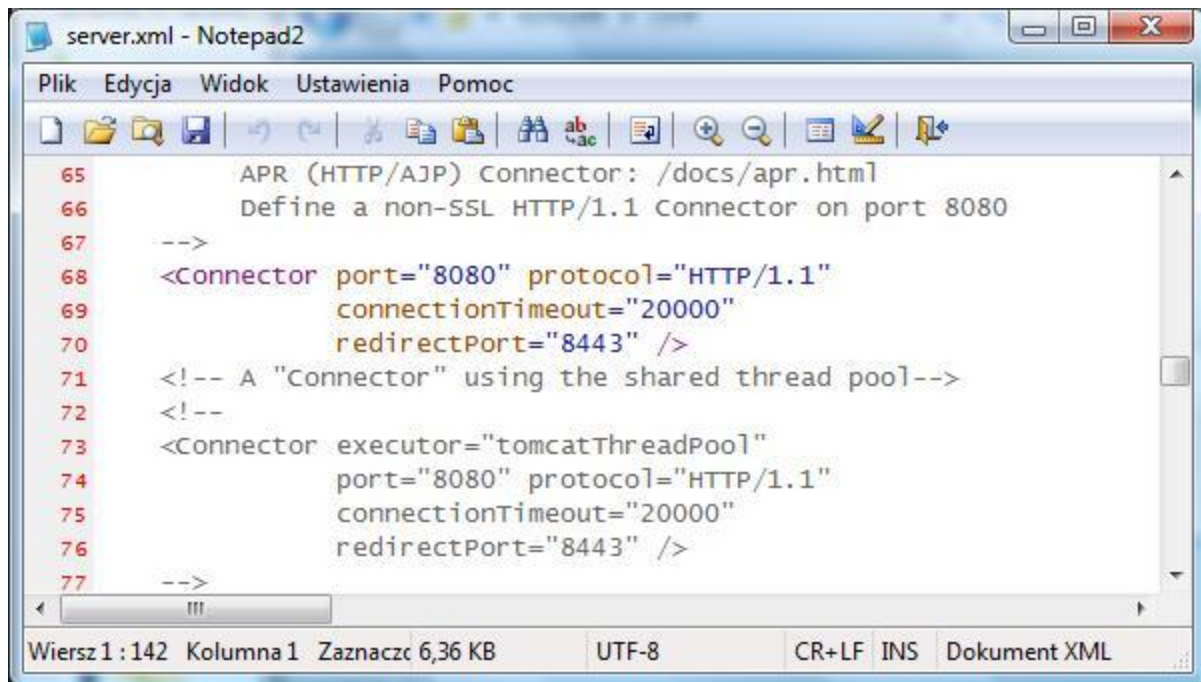
C:\Windows\system32>
```

Tomcat configuration files are in **conf** folder.



Tomcat has configured TCP port as **8080**. You may change it on another between 1024 and 65535. I change it to **9090**. Open **server.xml** file and change port in **connector** element.

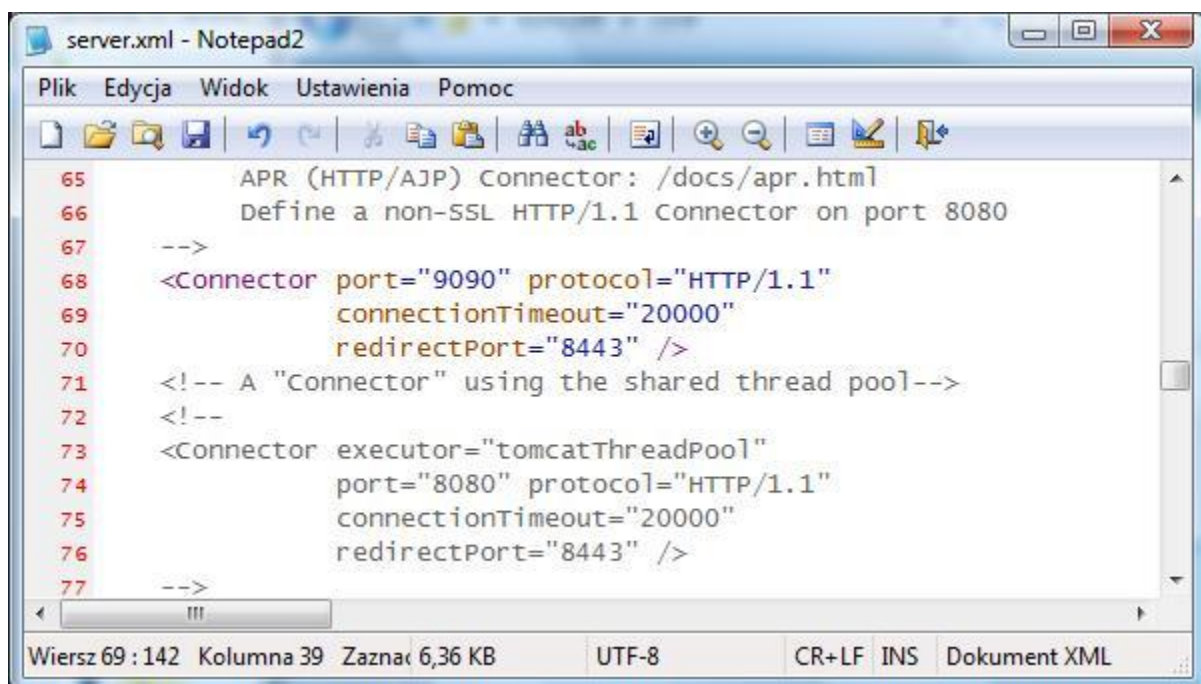
Before change:



```
65      APR (HTTP/AJP) Connector: /docs/apr.html
66      Define a non-SSL HTTP/1.1 Connector on port 8080
67      -->
68      <Connector port="8080" protocol="HTTP/1.1"
69                connectionTimeout="20000"
70                redirectPort="8443" />
71      <!-- A "Connector" using the shared thread pool-->
72      <!--
73      <Connector executor="tomcatThreadPool"
74                port="8080" protocol="HTTP/1.1"
75                connectionTimeout="20000"
76                redirectPort="8443" />
77      -->
```

Wiersz 1 : 142 Kolumna 1 Zaznacz 6,36 KB UTF-8 CR+LF INS Dokument XML

After change:

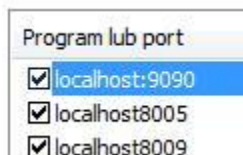


```
65      APR (HTTP/AJP) Connector: /docs/apr.html
66      Define a non-SSL HTTP/1.1 Connector on port 8080
67      -->
68      <Connector port="9090" protocol="HTTP/1.1"
69                connectionTimeout="20000"
70                redirectPort="8443" />
71      <!-- A "Connector" using the shared thread pool-->
72      <!--
73      <Connector executor="tomcatThreadPool"
74                port="8080" protocol="HTTP/1.1"
75                connectionTimeout="20000"
76                redirectPort="8443" />
77      -->
```

Wiersz 69 : 142 Kolumna 39 Zaznacz 6,36 KB UTF-8 CR+LF INS Dokument XML

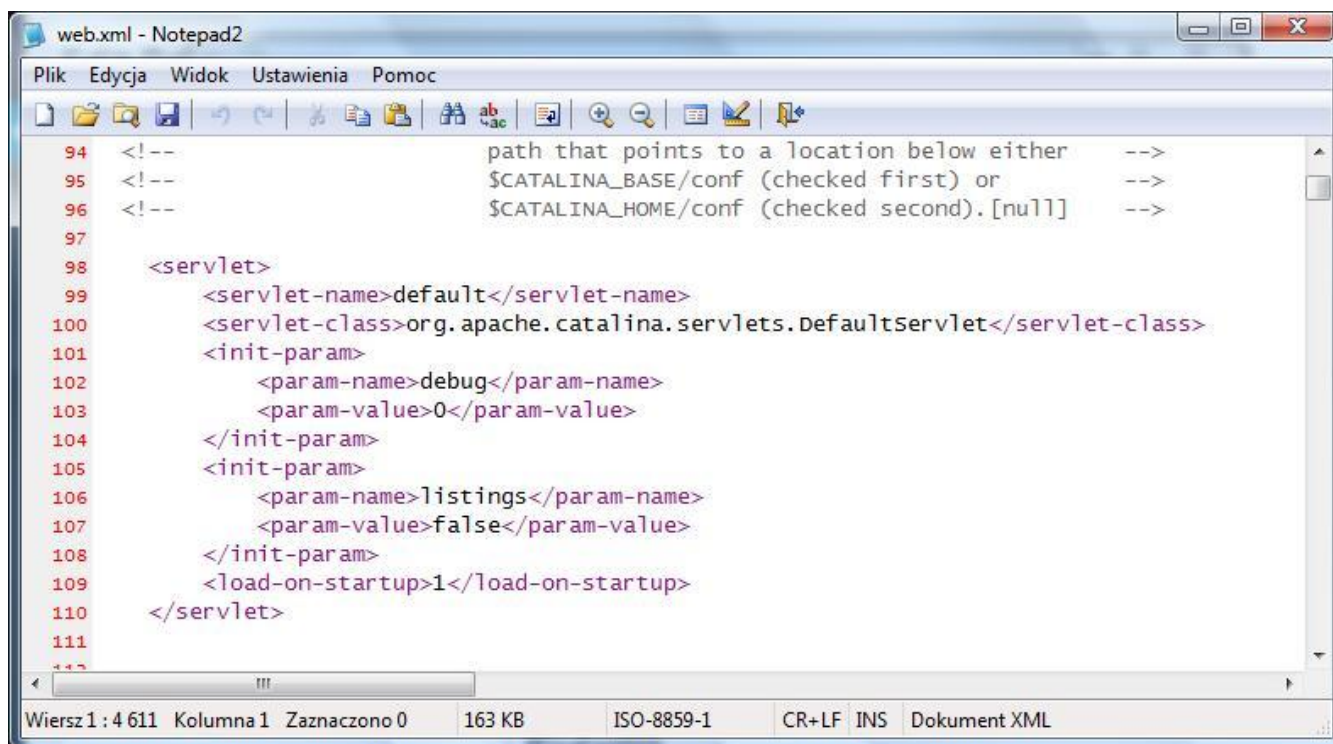
You must either open this port on windows firewall.

So go to **Start -> Control Panel -> Windows Firewall**. Click on **change settings**. Switch to **Exceptions** tab. Click **Add port**. In the window in **Name** field write name of port, example: **localhost:9090** and in **Number of port** field write **9090**. Select **TCP** protocol and click the **OK** button. You see this name on the list. Click **OK** button in another window.



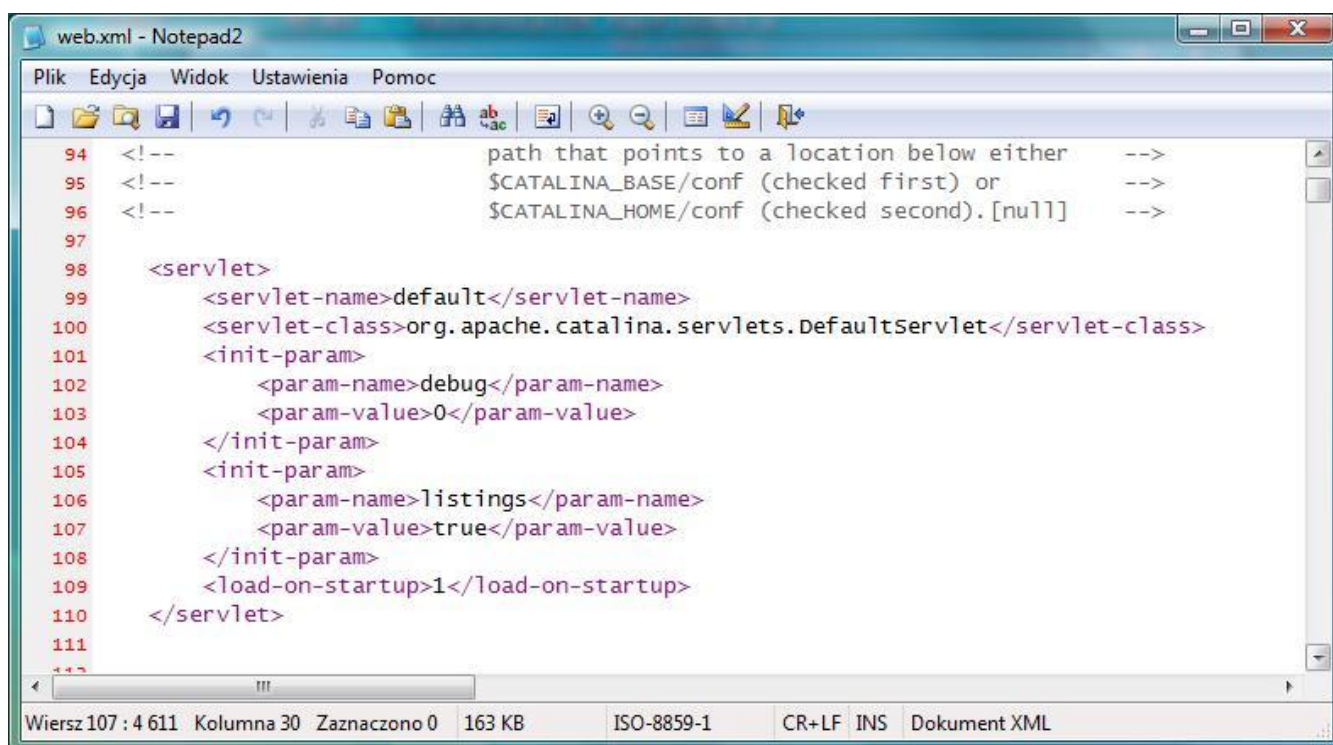
If you have installed another firewall you must unblock this port.

In the next step I must configure running default servlets. Open **web.xml** file and find part with default servlet.



```
94 <!-- path that points to a location below either -->
95 <!-- $CATALINA_BASE/conf (checked first) or -->
96 <!-- $CATALINA_HOME/conf (checked second).[null] -->
97
98 <servlet>
99     <servlet-name>default</servlet-name>
100     <servlet-class>org.apache.catalina.servlets.DefaultServlet</servlet-class>
101     <init-param>
102         <param-name>debug</param-name>
103         <param-value>0</param-value>
104     </init-param>
105     <init-param>
106         <param-name>listings</param-name>
107         <param-value>>false</param-value>
108     </init-param>
109     <load-on-startup>1</load-on-startup>
110 </servlet>
111
```

Change value in **listings** parameter from false to **true**.

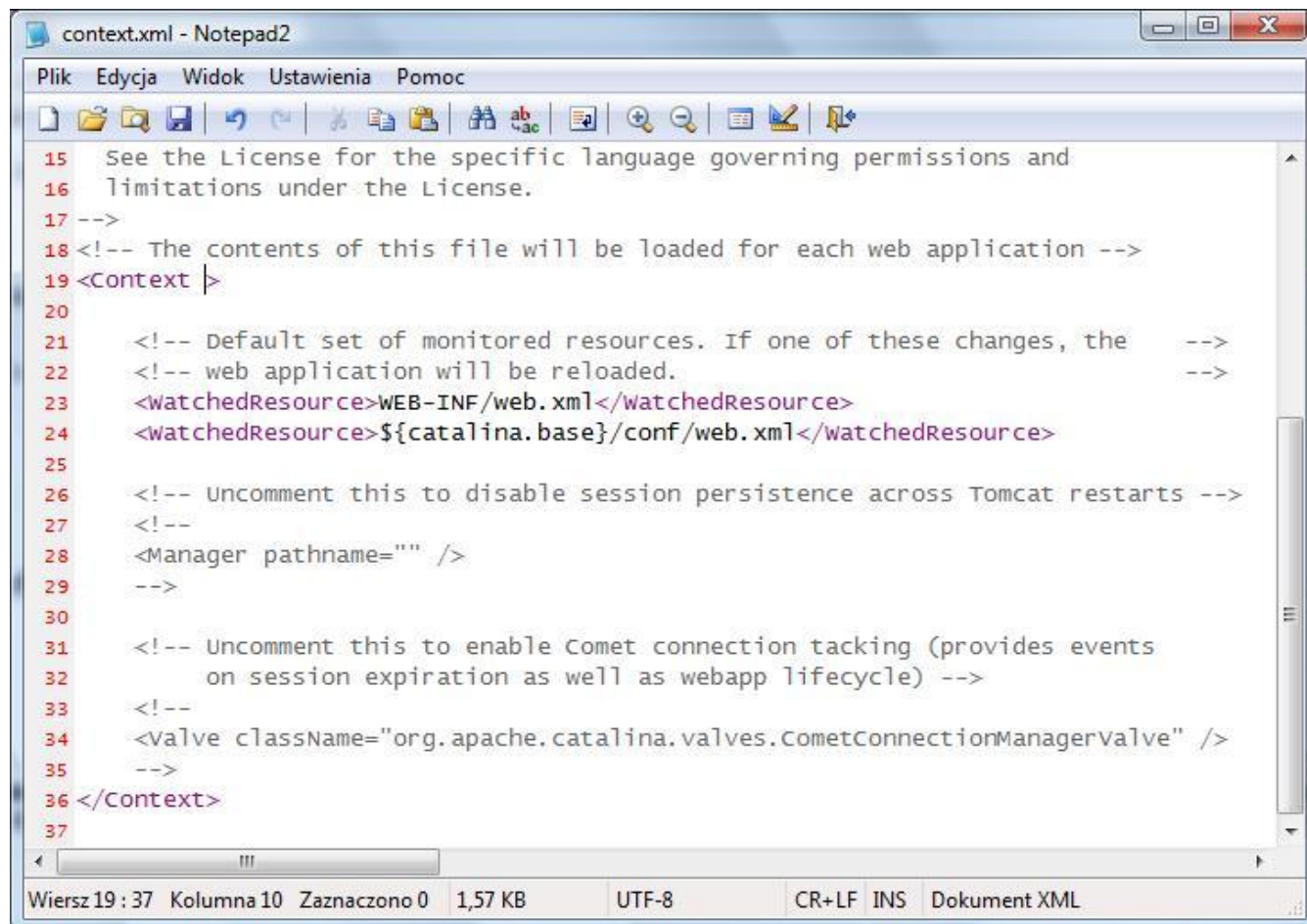


```
94 <!-- path that points to a location below either -->
95 <!-- $CATALINA_BASE/conf (checked first) or -->
96 <!-- $CATALINA_HOME/conf (checked second).[null] -->
97
98 <servlet>
99     <servlet-name>default</servlet-name>
100     <servlet-class>org.apache.catalina.servlets.DefaultServlet</servlet-class>
101     <init-param>
102         <param-name>debug</param-name>
103         <param-value>0</param-value>
104     </init-param>
105     <init-param>
106         <param-name>listings</param-name>
107         <param-value>true</param-value>
108     </init-param>
109     <load-on-startup>1</load-on-startup>
110 </servlet>
111
```

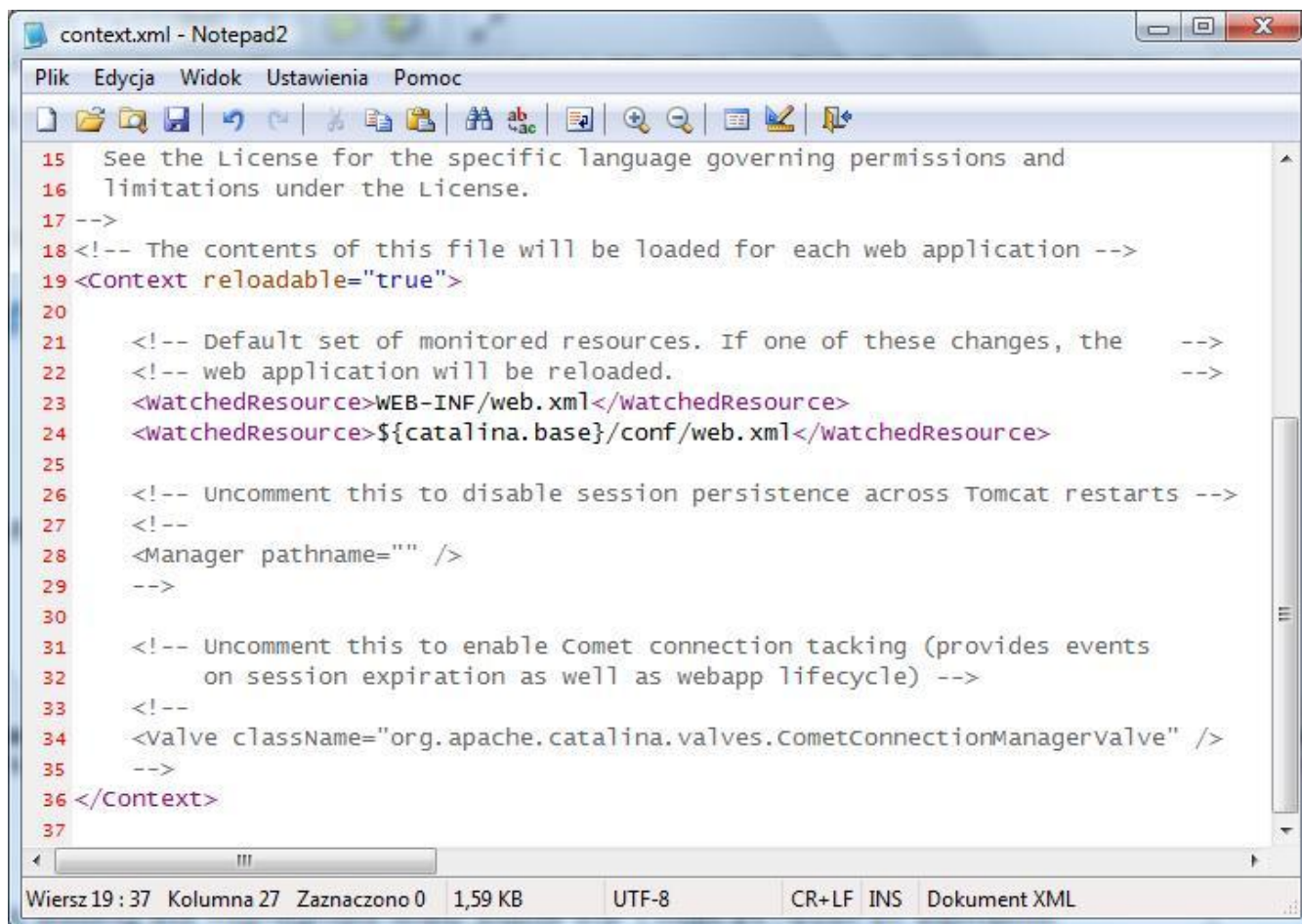

Save this file.

This configuration **listings** is handy for test.

Open **context.xml** configuration file and add **reloadable** attribute with **true** value. It is handy for test. Changes in code will be automatic reload on the server.

A screenshot of a Notepad2 window titled 'context.xml - Notepad2'. The window has a menu bar with 'Plik', 'Edycja', 'Widok', 'Ustawienia', and 'Pomoc'. Below the menu is a toolbar with various icons. The main text area contains XML code for a context configuration. The code includes comments about licensing, a context element with watched resources, and session management settings. The status bar at the bottom shows 'Wiersz 19 : 37', 'Kolumna 10', 'Zaznaczono 0', '1,57 KB', 'UTF-8', 'CR+LF', 'INS', and 'Dokument XML'.

```
15 See the License for the specific language governing permissions and
16 limitations under the License.
17 -->
18 <!-- The contents of this file will be loaded for each web application -->
19 <Context >
20
21     <!-- Default set of monitored resources. If one of these changes, the    -->
22     <!-- web application will be reloaded.                                -->
23     <watchedResource>WEB-INF/web.xml</watchedResource>
24     <watchedResource>${catalina.base}/conf/web.xml</watchedResource>
25
26     <!-- Uncomment this to disable session persistence across Tomcat restarts -->
27     <!--
28     <Manager pathname="" />
29     -->
30
31     <!-- Uncomment this to enable Comet connection tacking (provides events
32     on session expiration as well as webapp lifecycle) -->
33     <!--
34     <Valve className="org.apache.catalina.valves.CometConnectionManagerValve" />
35     -->
36 </Context>
37
```

A screenshot of a Notepad2 window titled 'context.xml - Notepad2'. The window has a menu bar with 'Plik', 'Edycja', 'Widok', 'Ustawienia', and 'Pomoc'. Below the menu is a toolbar with various icons. The main text area contains XML code for a Context element. The code includes comments about the license, the purpose of the file, and configuration for monitored resources, session persistence, and Comet connection tracking. The status bar at the bottom shows 'Wiersz 19 : 37', 'Kolumna 27', 'Zaznaczono 0', '1,59 KB', 'UTF-8', 'CR+LF', 'INS', and 'Dokument XML'.

```
15 See the License for the specific language governing permissions and
16 limitations under the License.
17 -->
18 <!-- The contents of this file will be loaded for each web application -->
19 <Context reloadable="true">
20
21     <!-- Default set of monitored resources. If one of these changes, the -->
22     <!-- web application will be reloaded. -->
23     <watchedResource>WEB-INF/web.xml</watchedResource>
24     <watchedResource>${catalina.base}/conf/web.xml</watchedResource>
25
26     <!-- Uncomment this to disable session persistence across Tomcat restarts -->
27     <!--
28     <Manager pathname="" />
29     -->
30
31     <!-- Uncomment this to enable Comet connection tacking (provides events
32     on session expiration as well as webapp lifecycle) -->
33     <!--
34     <Valve className="org.apache.catalina.valves.CometConnectionManagerValve" />
35     -->
36 </Context>
37
```

And you may add user for manage tomcat server. So open **tomcat-users.xml** file.

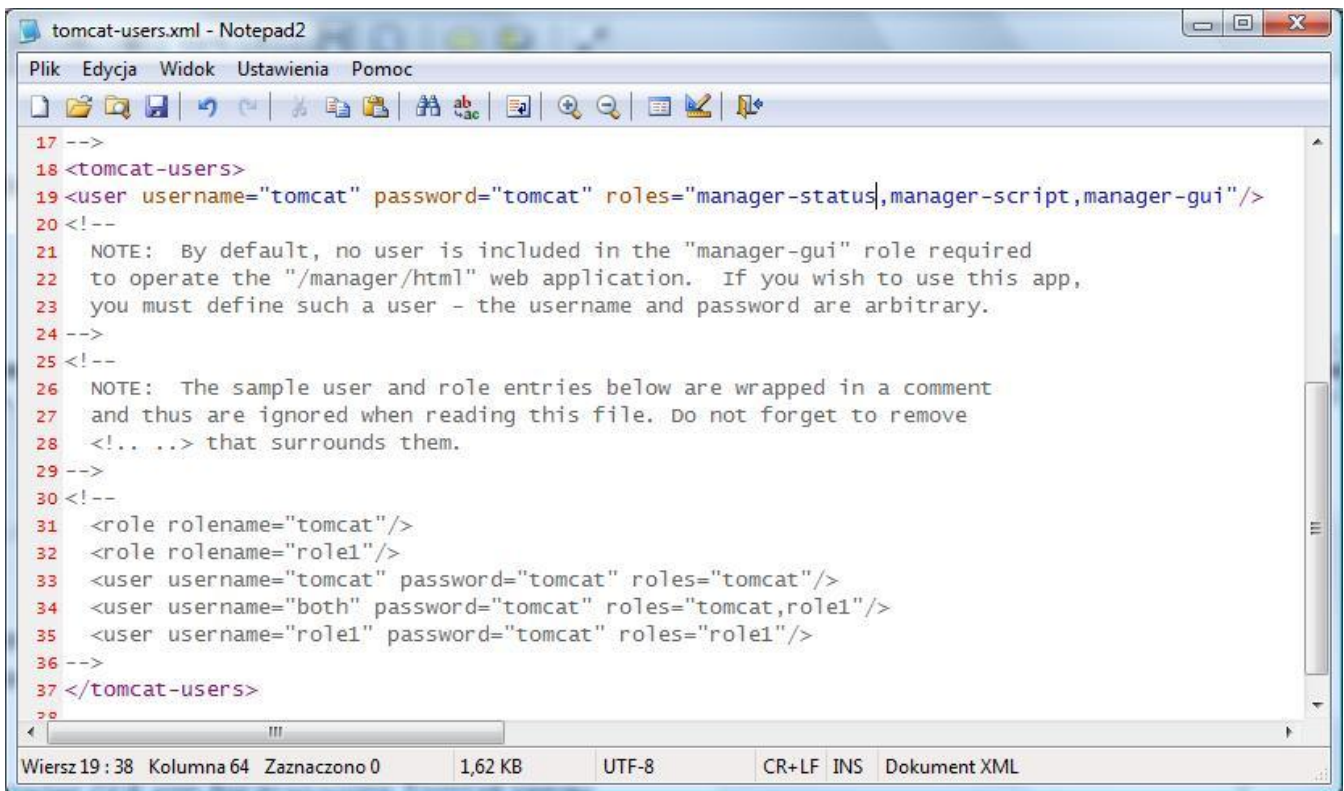
```

1 <?xml version='1.0' encoding='utf-8'?>
2 <!--
3 Licensed to the Apache Software Foundation (ASF) under one or more
4 contributor license agreements. See the NOTICE file distributed with
5 this work for additional information regarding copyright ownership.
6 The ASF licenses this file to You under the Apache License, Version 2.0
7 (the "License"); you may not use this file except in compliance with
8 the License. You may obtain a copy of the License at
9
10 http://www.apache.org/licenses/LICENSE-2.0
11
12 Unless required by applicable law or agreed to in writing, software
13 distributed under the License is distributed on an "AS IS" BASIS,
14 WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
15 See the License for the specific language governing permissions and
16 limitations under the License.
17 -->
18 <tomcat-users>
19 <!--
20 NOTE: By default, no user is included in the "manager-gui" role required
21 to operate the "/manager/html" web application. If you wish to use this app,
22 you must define such a user - the username and password are arbitrary.
23 -->
24 <!--
25 NOTE: The sample user and role entries below are wrapped in a comment
26 and thus are ignored when reading this file. Do not forget to remove
27 <!-- ... --> that surrounds them.
28 -->
29 <!--
30 <role rolename="tomcat"/>
31 <role rolename="role1"/>
32 <user username="tomcat" password="tomcat" roles="tomcat"/>
33 <user username="both" password="tomcat" roles="tomcat,role1"/>
34 <user username="role1" password="tomcat" roles="role1"/>
35 -->
36 </tomcat-users>
37

```

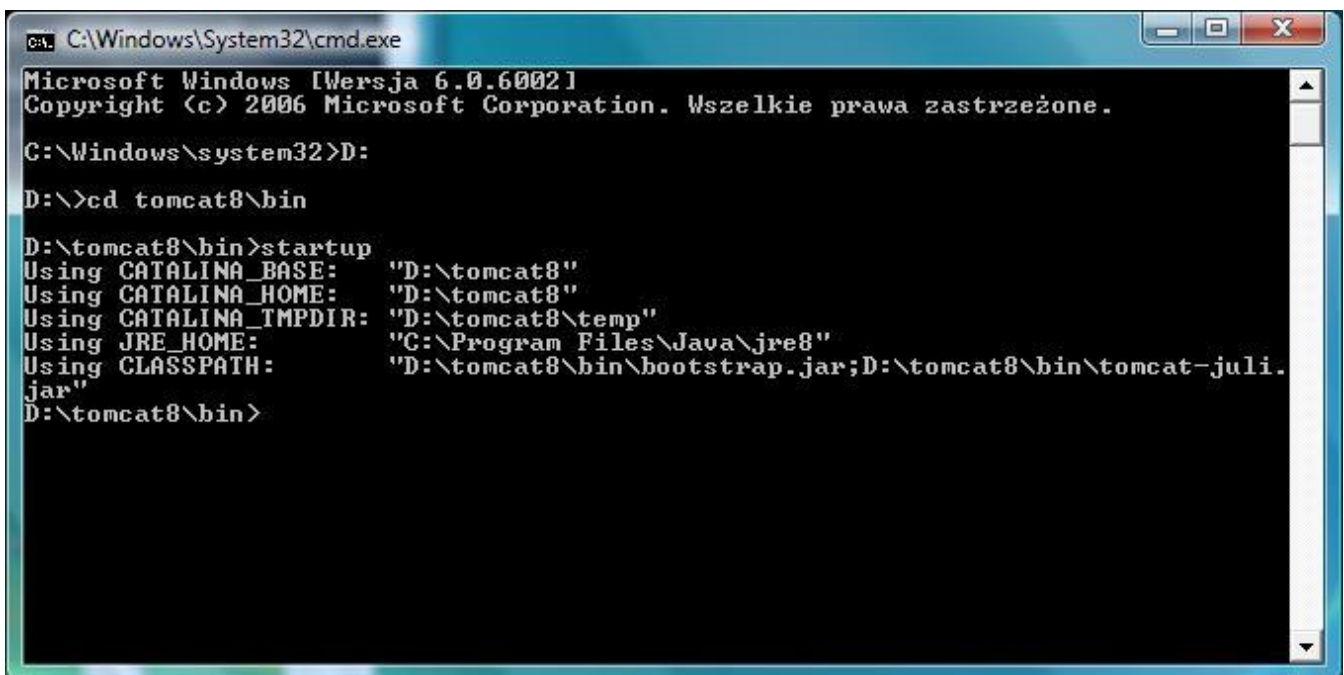
Uncomment user element and in username write any name and in password write any pass. In role write several roles: manager-status, manager-gui, manager-script. All roles write without space.

```
<user username="tomcat" password="tomcat" roles="manager-status,manager-script,manager-gui"/>
```

```
17 -->
18 <tomcat-users>
19 <user username="tomcat" password="tomcat" roles="manager-status,manager-script,manager-gui"/>
20 <!--
21 NOTE: By default, no user is included in the "manager-gui" role required
22 to operate the "/manager/html" web application. If you wish to use this app,
23 you must define such a user - the username and password are arbitrary.
24 -->
25 <!--
26 NOTE: The sample user and role entries below are wrapped in a comment
27 and thus are ignored when reading this file. Do not forget to remove
28 <!-- ... --> that surrounds them.
29 -->
30 <!--
31 <role rolename="tomcat"/>
32 <role rolename="role1"/>
33 <user username="tomcat" password="tomcat" roles="tomcat"/>
34 <user username="both" password="tomcat" roles="tomcat,role1"/>
35 <user username="role1" password="tomcat" roles="role1"/>
36 -->
37 </tomcat-users>
```

Next step you may start tomcat server. Open CMD console and go to the bin folder in tomcat. Mine is **D:\tomcat8\bin** . Write command **startup**.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Wersja 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. Wszelkie prawa zastrzeżone.

C:\Windows\system32>D:

D:\>cd tomcat8\bin

D:\tomcat8\bin>startup
Using CATALINA_BASE:   "D:\tomcat8"
Using CATALINA_HOME:   "D:\tomcat8"
Using CATALINA_TMPDIR: "D:\tomcat8\temp"
Using JRE_HOME:         "C:\Program Files\Java\jre8"
Using CLASSPATH:        "D:\tomcat8\bin\bootstrap.jar;D:\tomcat8\bin\tomcat-juli.jar"
D:\tomcat8\bin>
```

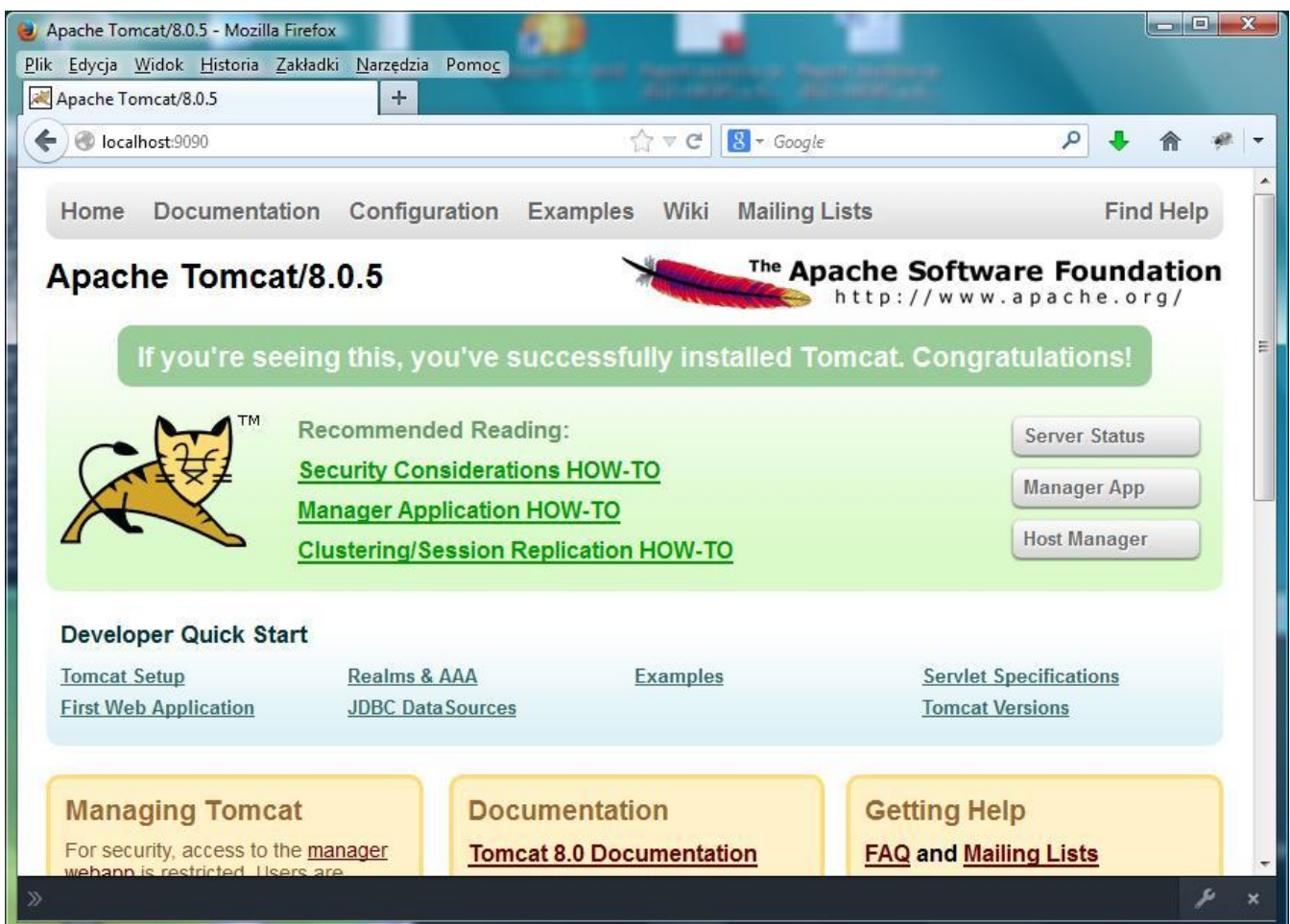
It command start tomcat server.

```
Tomcat
artInternal Starting service Catalina
16-Apr-2014 10:50:42.268 INFO [main] org.apache.catalina.core.StandardEngine.startInternal Starting Servlet Engine: Apache Tomcat/8.0.5
16-Apr-2014 10:50:42.313 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory D:\tomcat8\webapps\docs
16-Apr-2014 10:50:42.743 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory D:\tomcat8\webapps\examples
16-Apr-2014 10:50:43.585 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory D:\tomcat8\webapps\host-manager
16-Apr-2014 10:50:43.647 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory D:\tomcat8\webapps\manager
16-Apr-2014 10:50:43.702 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory D:\tomcat8\webapps\ROOT
16-Apr-2014 10:50:43.732 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-nio-9090"]
16-Apr-2014 10:50:43.743 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["ajp-nio-8009"]
16-Apr-2014 10:50:43.748 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in 1520 ms
```

In browser write address:

http://localhost:9090

If you see this website:



Stopping tomcat in console write **shutdown**.

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Wersja 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. Wszelkie prawa zastrzeżone.

C:\Windows\system32>D:

D:\>cd tomcat8\bin

D:\tomcat8\bin>startup
Using CATALINA_BASE:   "D:\tomcat8"
Using CATALINA_HOME:   "D:\tomcat8"
Using CATALINA_TMPDIR: "D:\tomcat8\temp"
Using JRE_HOME:        "C:\Program Files\Java\jre8"
Using CLASSPATH:       "D:\tomcat8\bin\bootstrap.jar;D:\tomcat8\bin\tomcat-juli.jar"
D:\tomcat8\bin>shutdown
```

```
C:\Windows\System32\cmd.exe
C:\Windows\system32>D:

D:\>cd tomcat8\bin

D:\tomcat8\bin>startup
Using CATALINA_BASE:   "D:\tomcat8"
Using CATALINA_HOME:   "D:\tomcat8"
Using CATALINA_TMPDIR: "D:\tomcat8\temp"
Using JRE_HOME:        "C:\Program Files\Java\jre8"
Using CLASSPATH:       "D:\tomcat8\bin\bootstrap.jar;D:\tomcat8\bin\tomcat-juli.jar"
D:\tomcat8\bin>shutdown
Using CATALINA_BASE:   "D:\tomcat8"
Using CATALINA_HOME:   "D:\tomcat8"
Using CATALINA_TMPDIR: "D:\tomcat8\temp"
Using JRE_HOME:        "C:\Program Files\Java\jre8"
Using CLASSPATH:       "D:\tomcat8\bin\bootstrap.jar;D:\tomcat8\bin\tomcat-juli.jar"
D:\tomcat8\bin>
```

This entry was posted in JAVA, Servers, Tomcat and tagged how configure tomcat, java, server, tomcat, tomcat 8 on April 16, 2014 [<http://doraprojects.net/blog/?p=1109>] .

Barcelona, ES

20°

10:10 am CEST

Partly sunny