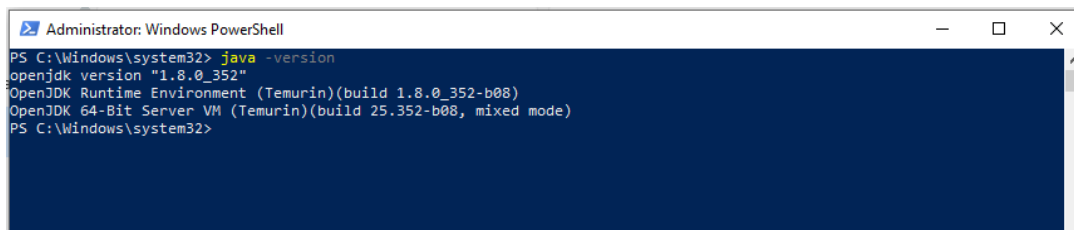


Instrukcja instalacji protokołu HTTPS dla systemu eAuditor

Generowanie certyfikatu:
Niezbędne JDK lub JRE np.
1.8.0_352

KROK 1

Pierwszym krokiem do instalacji protokołu HTTPS dla systemu eAuditor jest pobranie oprogramowania znajdującego się na stronie <https://adoptium.net/download/>

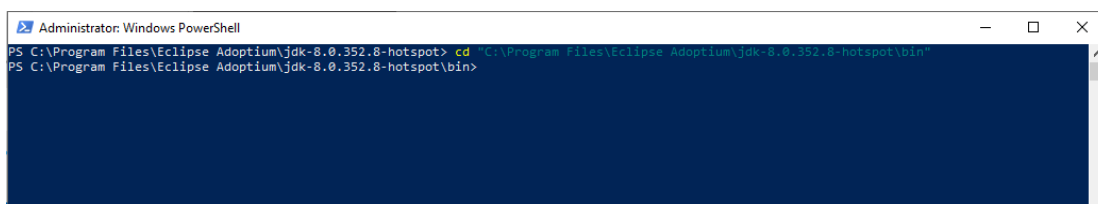


```
Administrator: Windows PowerShell
PS C:\Windows\system32> java -version
openjdk version "1.8.0_352"
OpenJDK Runtime Environment (Temurin)(build 1.8.0_352-b08)
OpenJDK 64-Bit Server VM (Temurin)(build 25.352-b08, mixed mode)
PS C:\Windows\system32>
```

KROK 2

Następnie należy przejść do katalogu "bin". Można wykorzystać do tego polecenie:

```
cd "C:\Program Files\Eclipse Adoptium\jdk-8.0.352.8-hotspot\bin"
```



```
Administrator: Windows PowerShell
PS C:\Program Files\Eclipse Adoptium\jdk-8.0.352.8-hotspot> cd "C:\Program Files\Eclipse Adoptium\jdk-8.0.352.8-hotspot\bin"
PS C:\Program Files\Eclipse Adoptium\jdk-8.0.352.8-hotspot\bin>
```

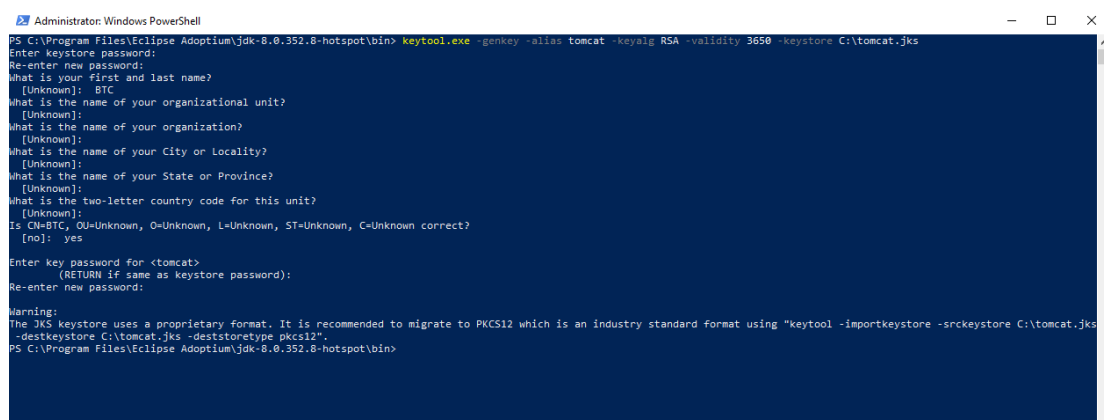
KROK 3

Po wykonaniu tych czynności następuje generowanie certyfikatu za pomocą keytool.

```
keytool.exe -genkey -alias tomcat -keyalg RSA -validity 3650 -keystore C:\tomcat.jks
```

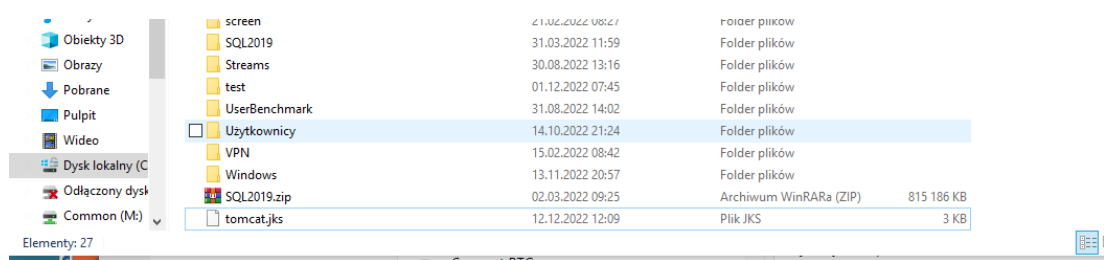
KROK 4

Kolejno należy wprowadzić następujące niezbędne parametry.



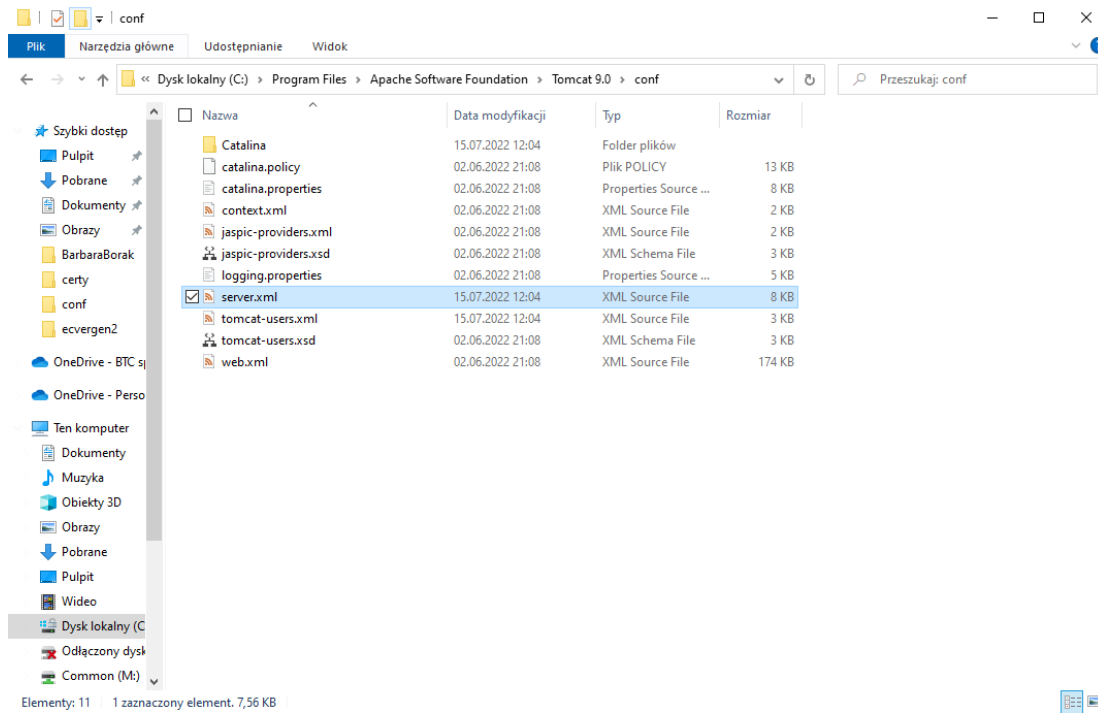
```
Administrator: Windows PowerShell
PS C:\Program Files\Eclipse Adoptium\jdk-8.0.352.8-hotspot\bin> keytool.exe -genkey -alias tomcat -keyalg RSA -validity 3650 -keystore C:\tomcat.jks
Enter keystore password:
Re-enter new password:
What is your first and last name?
[Unknown]: BTC
What is the name of your organizational unit?
[Unknown]:
What is the name of your organization?
[Unknown]:
What is the name of your City or Locality?
[Unknown]:
What is the name of your State or Province?
[Unknown]:
What is the two-letter country code for this unit?
[Unknown]:
Is C=BTC, OU=Unknown, O=Unknown, L=Unknown, ST=Unknown, C=Unknown correct?
[no]: yes
Enter key password for <tomcat>
(RETURN if same as keystore password):
Re-enter new password:
Warning:
The JKS keystore uses a proprietary format. It is recommended to migrate to PKCS12 which is an industry standard format using "keytool -importkeystore -srckeystore C:\tomcat.jks
-desckeystore C:\tomcat.jks -deststoretype pkcs12".
PS C:\Program Files\Eclipse Adoptium\jdk-8.0.352.8-hotspot\bin>
```

W tym momencie certyfikat został wygenerowany:



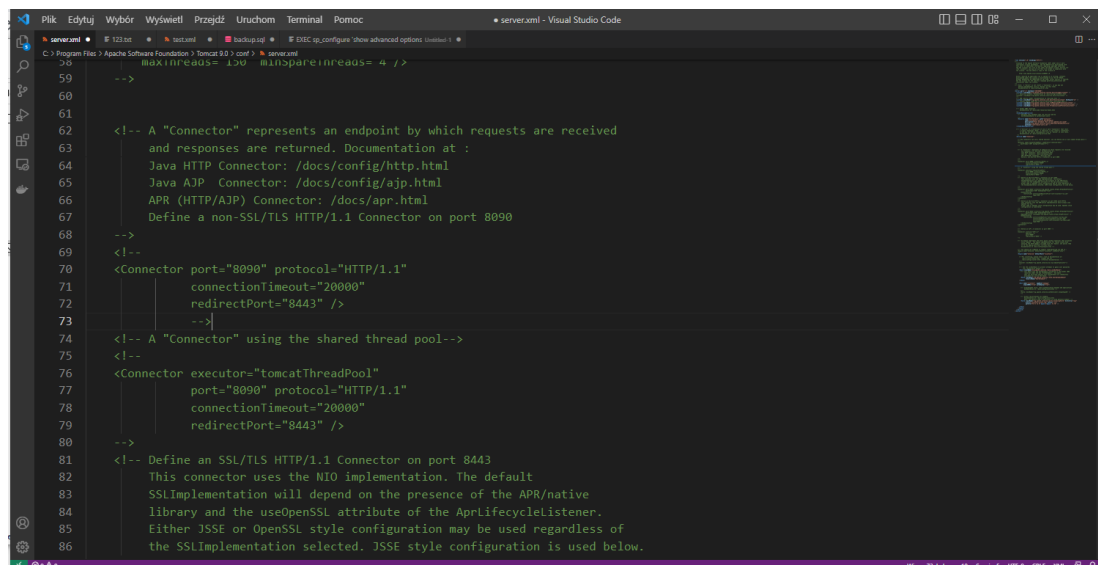
KROK 5

W kroku piątym należy dodać certyfikat w kontenerze webowym:
edytuj plik server.xml



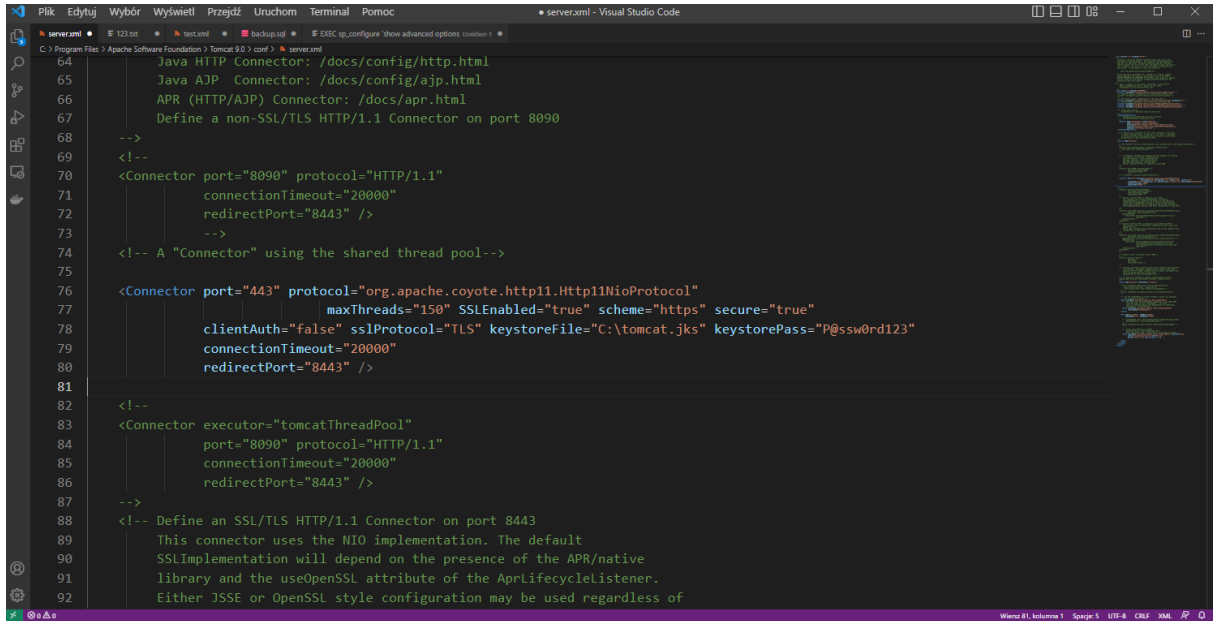
KROK 6

A następnie zakomentować domyślny connector.



KROK 7

Na koniec tego procesu wystarczy jedynie dodać connector, który spowoduje instalację protokołu HTTPS.



```
64 Java HTTP Connector: /docs/config/http.html
65 Java AJP Connector: /docs/config/ajp.html
66 APR (HTTP/AJP) Connector: /docs/apr.html
67 Define a non-SSL/TLS HTTP/1.1 Connector on port 8090
68 -->
69 <!--
70 <Connector port="8090" protocol="HTTP/1.1"
71     connectionTimeout="20000"
72     redirectPort="8443" />
73 -->
74 <!-- A "Connector" using the shared thread pool-->
75
76 <Connector port="443" protocol="org.apache.coyote.http11.Http11NioProtocol"
77     maxThreads="150" SSLEnabled="true" scheme="https" secure="true"
78     clientAuth="false" sslProtocol="TLS" keystoreFile="C:\tomcat.jks" keystorePass="P@ssw0rd123"
79     connectionTimeout="20000"
80     redirectPort="8443" />
81
82 <!--
83 <Connector executor="tomcatThreadPool"
84     port="8090" protocol="HTTP/1.1"
85     connectionTimeout="20000"
86     redirectPort="8443" />
87 -->
88 <!-- Define an SSL/TLS HTTP/1.1 Connector on port 8443
89     This connector uses the NIO implementation. The default
90     SSLImplementation will depend on the presence of the APR/native
91     library and the useOpenSSL attribute of the AprLifecycleListener.
92     Either JSSE or OpenSSL style configuration may be used regardless of
```