
WEB SISTEMAK

2022/2023 IKASTURTEA

Garapen software-aren instalazioa

2023-02-24 M



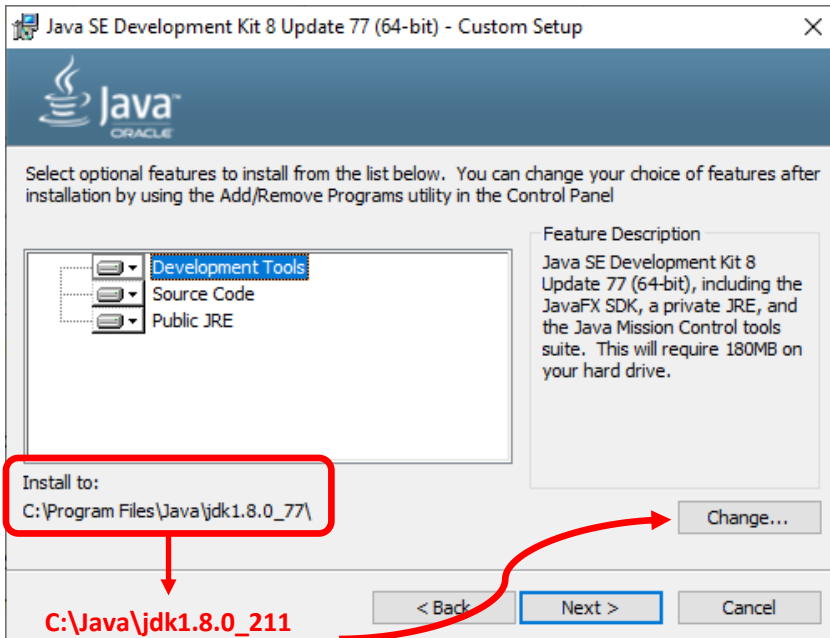
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INSTALATU BEHARREKO SOFTWARE-A

- Java Development Environment (JDK)
 - JDK **C:\Java\jdk1.8.0_211** direktorioan instalatu ezazue
 - JRE **C:\Java\jre1.8.0_211** direktorioan instalatu ezazue
 - **JAVA_HOME** ingurune aldagaia sortu, bere balioa **C:\Java\jdk1.8.0_211** delarik
- IntelliJ
 - Instalatzaileak proposatutako direktorioan instalatu ezazue
- MySQL datu-base kudeatzailea
 - Setup type: *Custom*.
 - MySQL server configuration
 - Erabiltzailea: *root*. Pasahitza: *root*
 - Windows service (datu-basea zerbitzu bezela abiarazi daitela Windows-en abiaraztearekin batera)
 - *Configure MySQL server as a Windows service*
 - *Start MySQL server at system startup*
- Apache Tomcat web zerbitzaria
 - **C:\apache-tomcat-8.5.11** direktorioan instalatu ezazue
 - **CATALINA_HOME** ingurune aldagaia sortu, bere balioa **C:\apache-tomcat-8.5.11** delarik
 - Egiaztapena:
 - cmd → C:\apache_tomcat\bin\startup.bat
 - Nabigatzailean → <http://localhost:8080/>

Windows erabiltzen duzuenontzako,
programak ehubox-en bilduta daude:
<https://ehubox.ehu.eus/s/BkAdfLisipfCNn6>

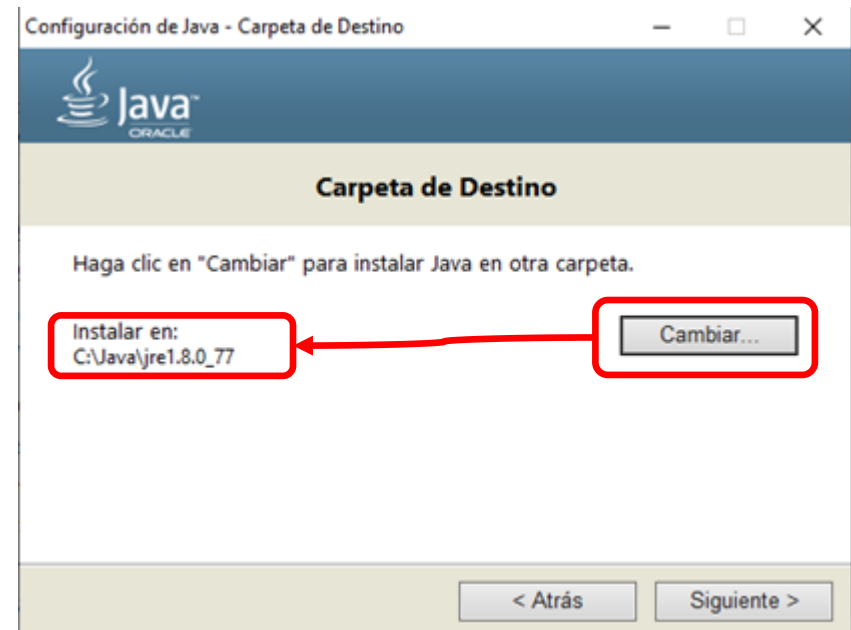
JDK



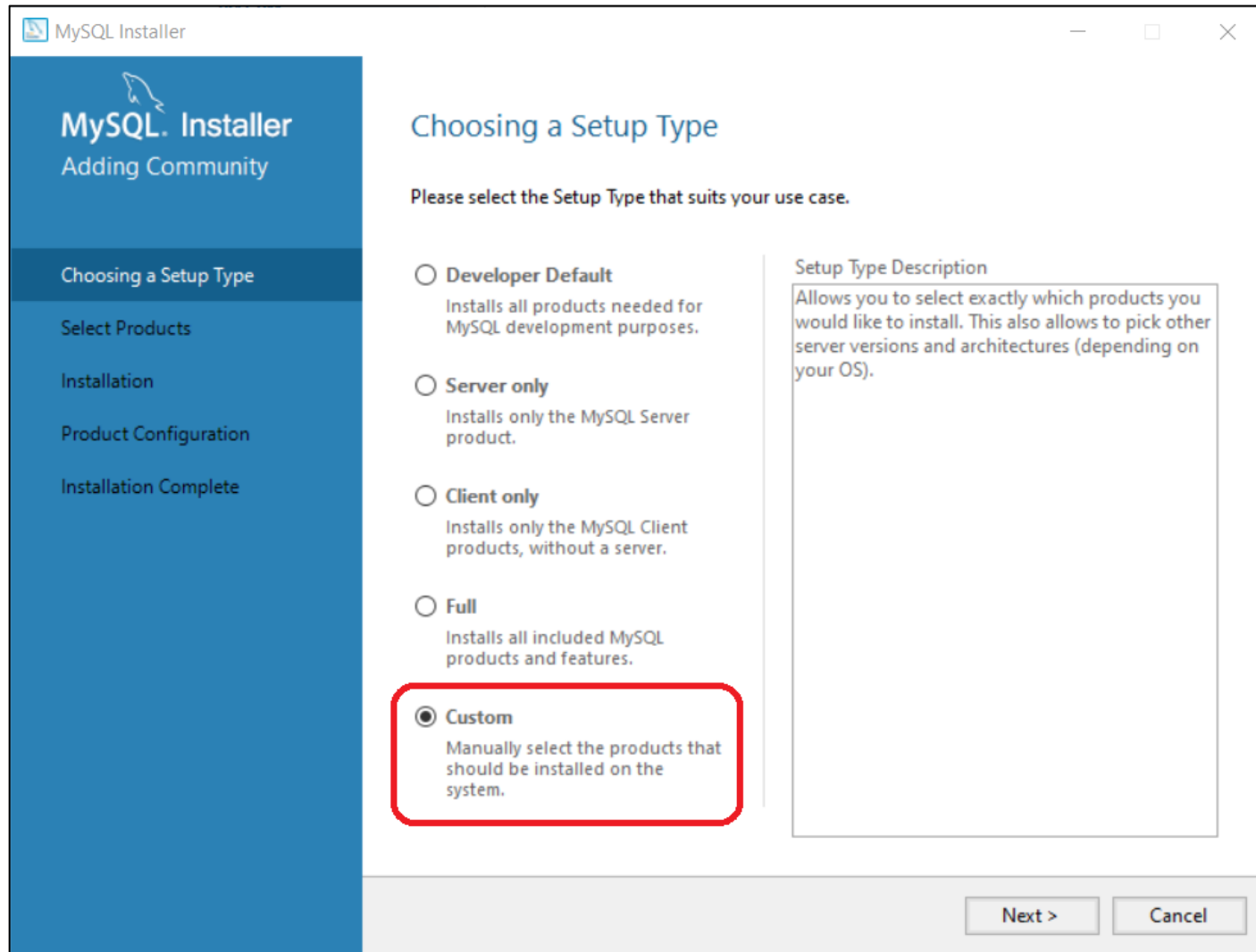
C:\Java\jdk1.8.0_211
balioarengatik ordezkatu

JDK C:\Java\jdk1.8.0_211
direktorioan instalatu

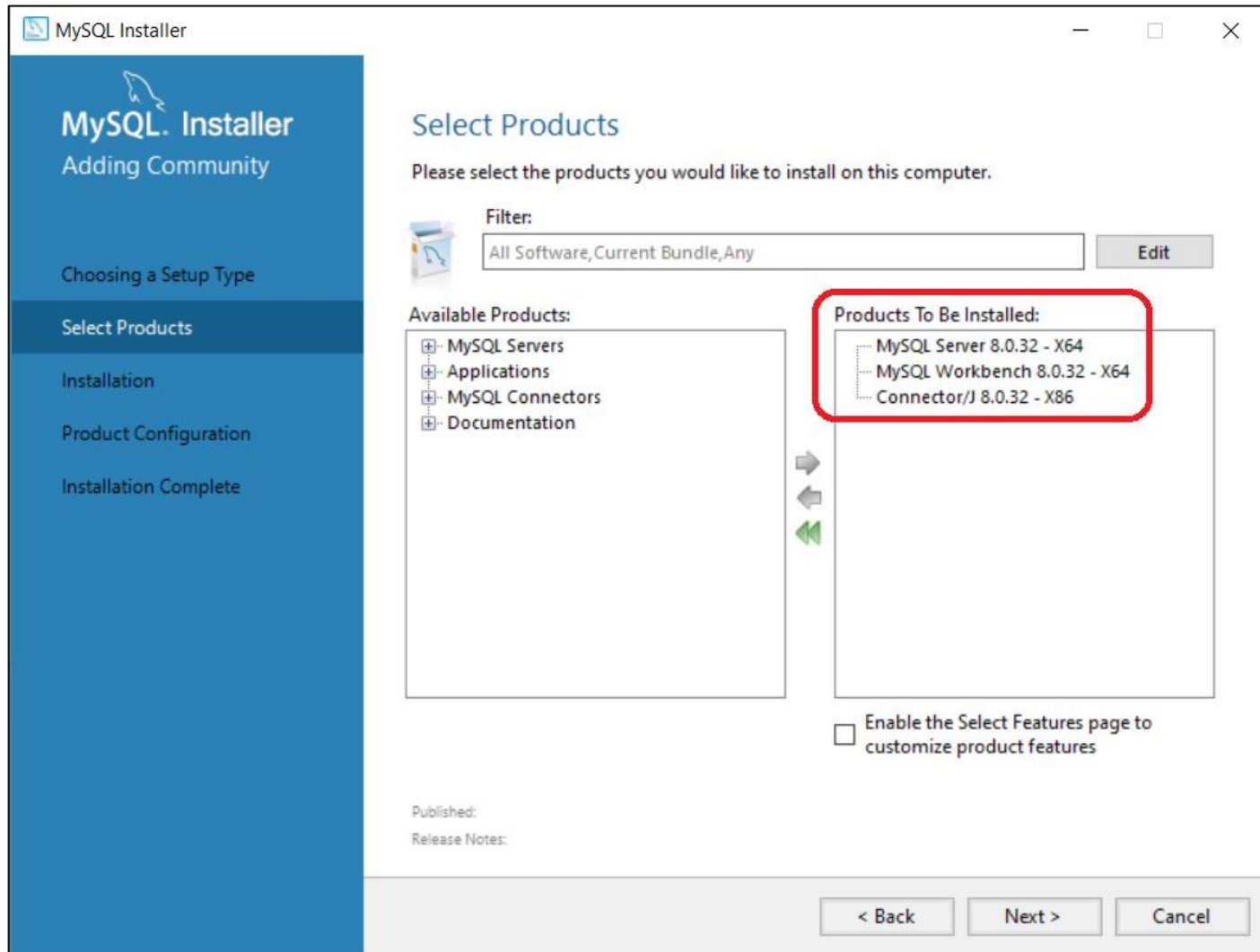
JRE C:\Java\jre1.8.0_211
direktorioan instalatu



MySQL INSTALLER



MySQL INSTALLER



MySQL INSTALLER

MySQL Installer

MySQL. Installer
MySQL Server 8.0.32

Type and Networking

Authentication Method

Accounts and Roles

Windows Service

Server File Permissions

Apply Configuration

Type and Networking

Server Configuration Type

Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.

Config Type: Development Computer

Connectivity

Use the following controls to select how you would like to connect to this server.

☒ TCP/IP Port: 3306 X Protocol Port: 33060

☒ Open Windows Firewall ports for network access

☐ Named Pipe Pipe Name: MYSQL

☐ Shared Memory Memory Name: MYSQL

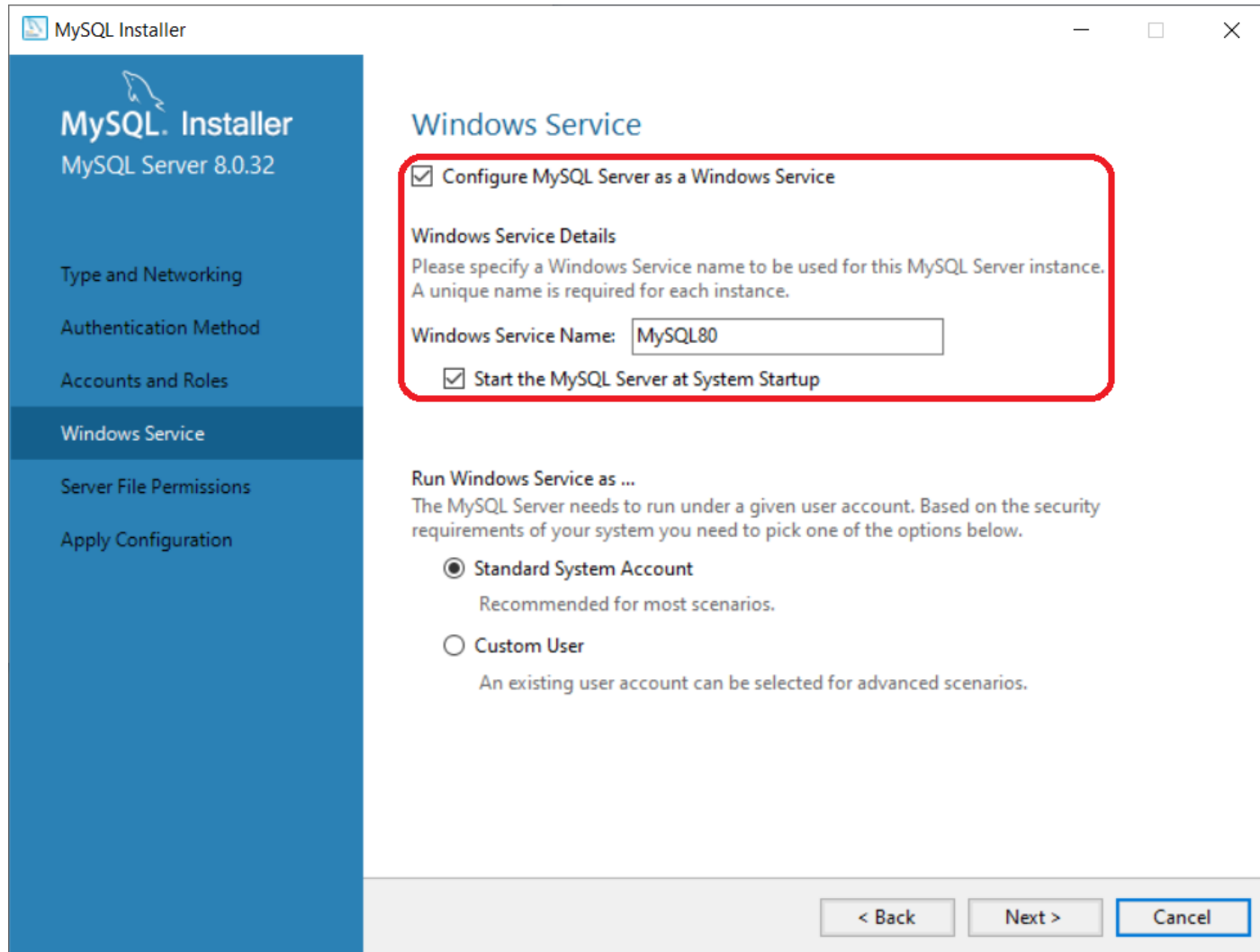
Advanced Configuration

Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.

☐ Show Advanced and Logging Options

Next > Cancel

MySQL INSTALLER



MySQL Installer

MySQL Server 8.0.32

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Windows Service

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Apply Configuration

Windows Service

☒ Configure MySQL Server as a Windows Service

Windows Service Details
Please specify a Windows Service name to be used for this MySQL Server instance. A unique name is required for each instance.

Windows Service Name:

☒ Start the MySQL Server at System Startup

Run Windows Service as ...
The MySQL Server needs to run under a given user account. Based on the security requirements of your system you need to pick one of the options below.

☒ **Standard System Account**
Recommended for most scenarios.

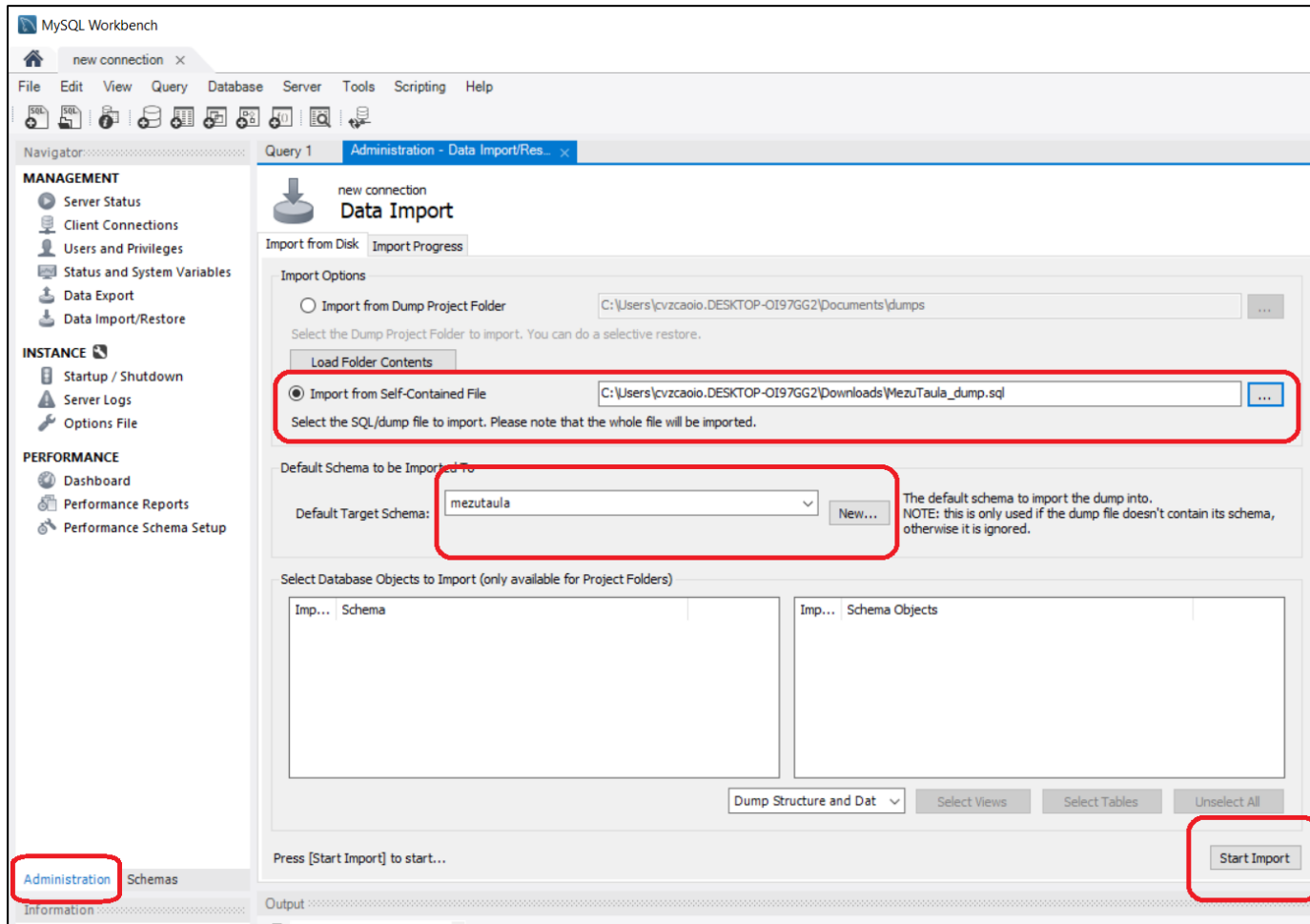
☐ **Custom User**
An existing user account can be selected for advanced scenarios.

< Back Next > Cancel

MySQL ZERBITZARIAREN EGIAZTAPENA:

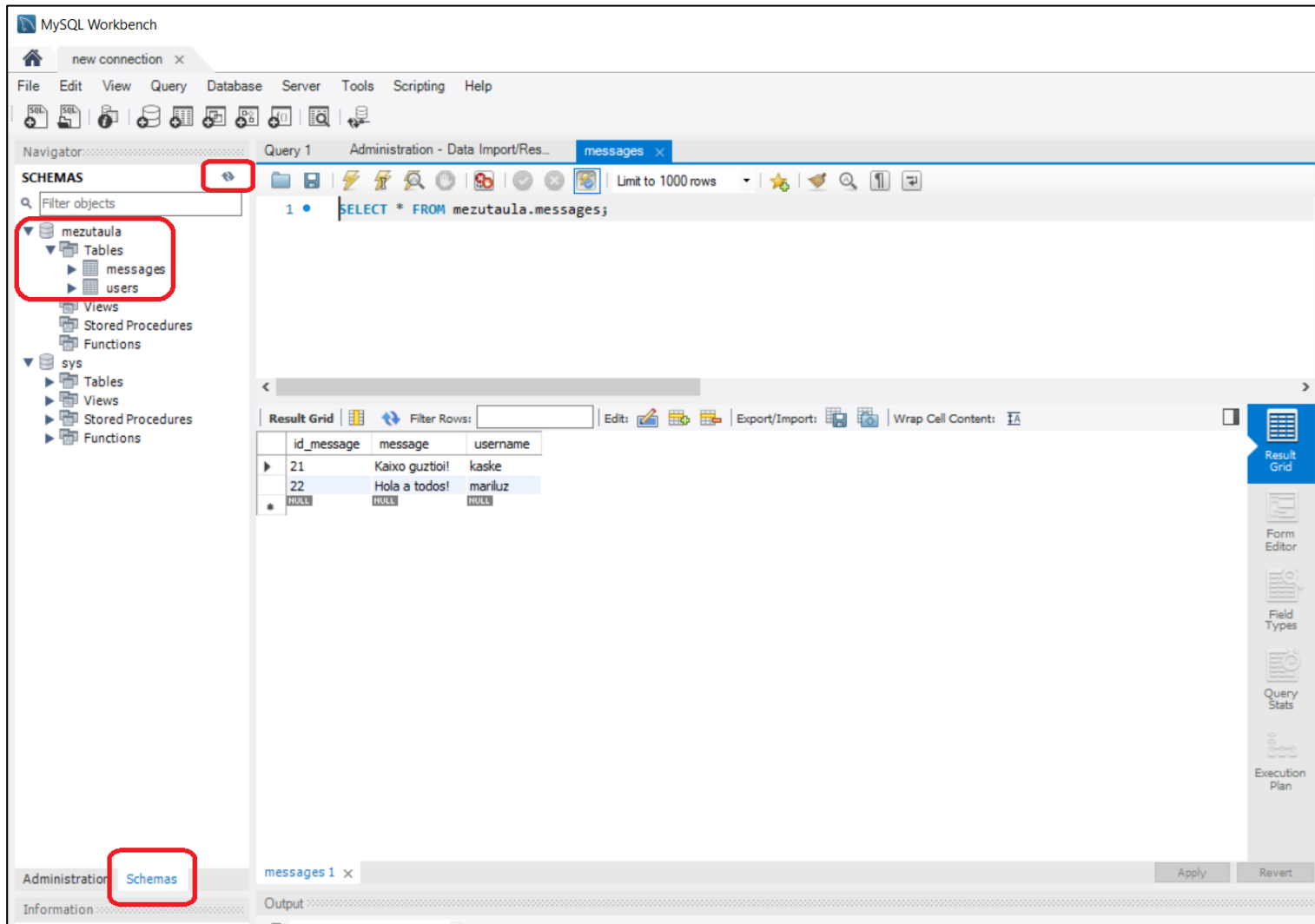
DATABASE BAT INPORTATU

- Datu basearen iraulketa fitxategia eGelan dago.



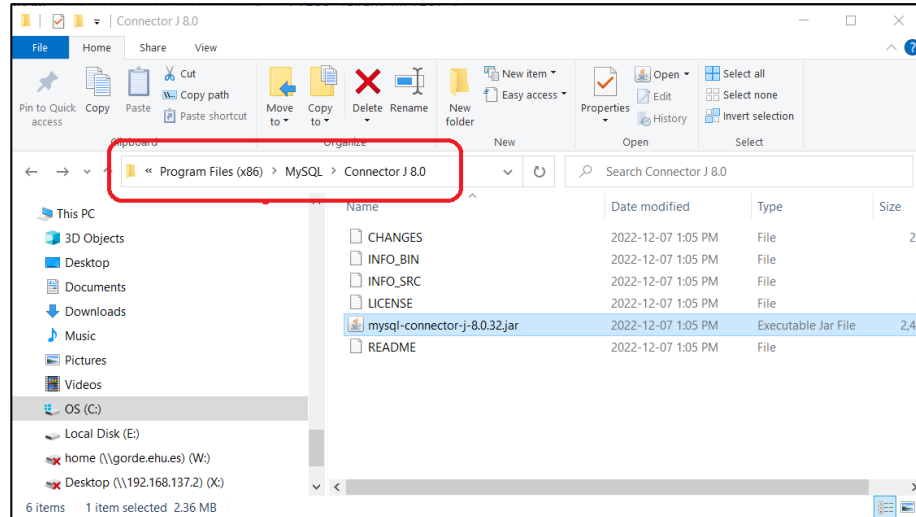
MySQL ZERBITZARIAREN EGIAZTAPENA:

DATUBASE BAT INPORTATU



JAVA ETA MYSQL ARTEKO KONEXIOA EGIAZTATU

- MySQL konektorea C:\Java\lib direktorioan kopiatu:

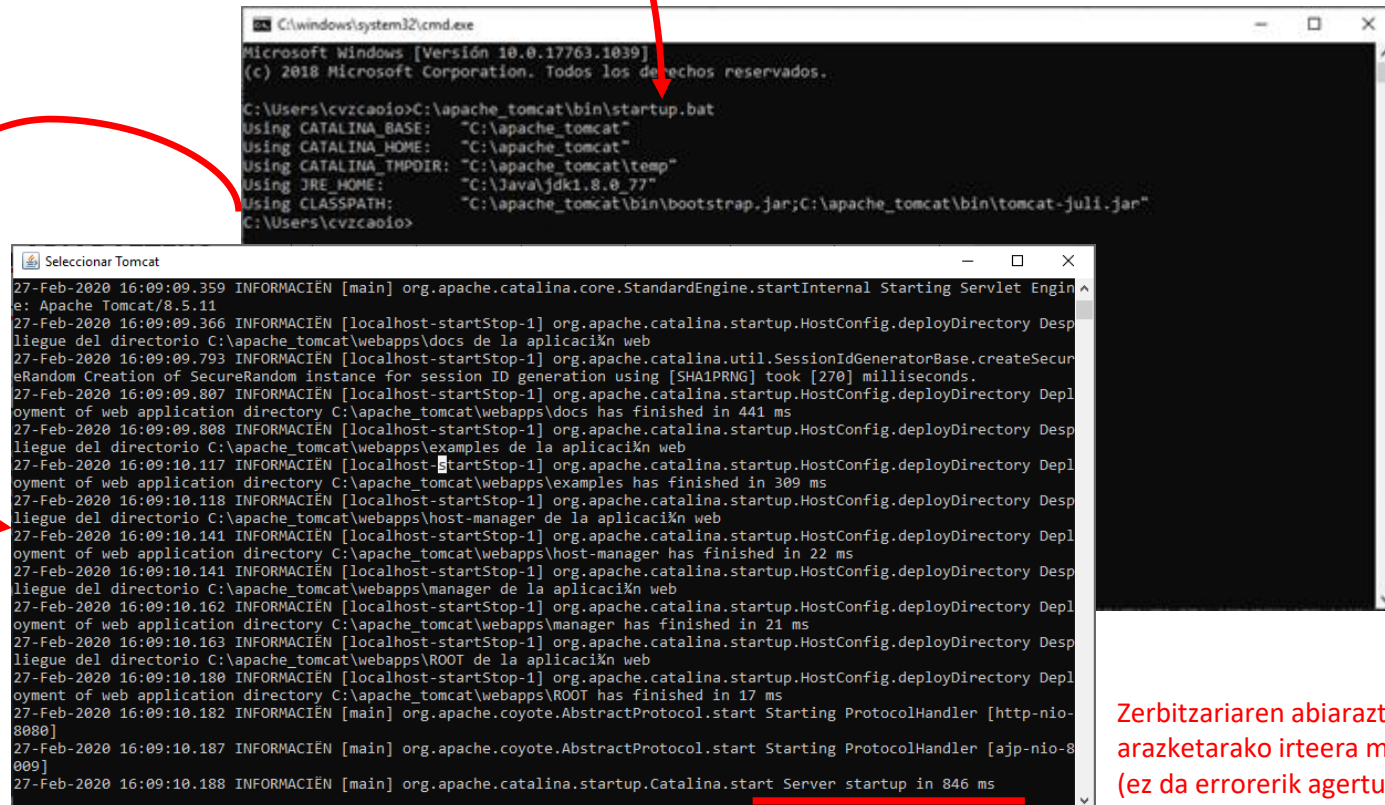


- ARIKETA:** IntelliJ-en datu basera konektatzen den Java main() bat programatu.
 - Java motako proiektu berria sortu
 - src azpidirektorioan *JavaMySQLtest.java* kopiatu (programa eGelan dago).
 - Konpilatu. Konpilazioak errorerik eman al du?
 - Exekutatu. Exekuzioak errorerik eman al du? Zergaitik?
 - Zer egin behar da arazoa konpontzeko?

TOMCAT: ABIARAZTEA

Tomcat web zerbitzaria ABIARAZTEKO:

CMD → \$CATALINA_HOME/bin/**startup**



The image shows two overlapping windows. The top window is a Windows Command Prompt titled 'C:\windows\system32\cmd.exe'. It displays the command 'C:\Users\cvzcaio>C:\apache_tomcat\bin\startup.bat' and its output, which includes environment variables like CATALINA_BASE, CATALINA_HOME, CATALINA_TMPDIR, JRE_HOME, and CLASSPATH. The bottom window is titled 'Seleccionar Tomcat' and shows a log of the Tomcat startup process. The log includes timestamps and messages from the StandardEngine, HostConfig, and Coyote protocols, culminating in the message 'Server startup in 846 ms'.

```
C:\windows\system32\cmd.exe
Microsoft Windows [Versión 10.0.17763.1039]
(c) 2018 Microsoft Corporation. Todos los derechos reservados.

C:\Users\cvzcaio>C:\apache_tomcat\bin\startup.bat
Using CATALINA_BASE: "C:\apache_tomcat"
Using CATALINA_HOME: "C:\apache_tomcat"
Using CATALINA_TMPDIR: "C:\apache_tomcat\temp"
Using JRE_HOME: "C:\Java\jdk1.8.0_77"
Using CLASSPATH: "C:\apache_tomcat\bin\bootstrap.jar;C:\apache_tomcat\bin\tomcat-juli.jar"
C:\Users\cvzcaio>
```

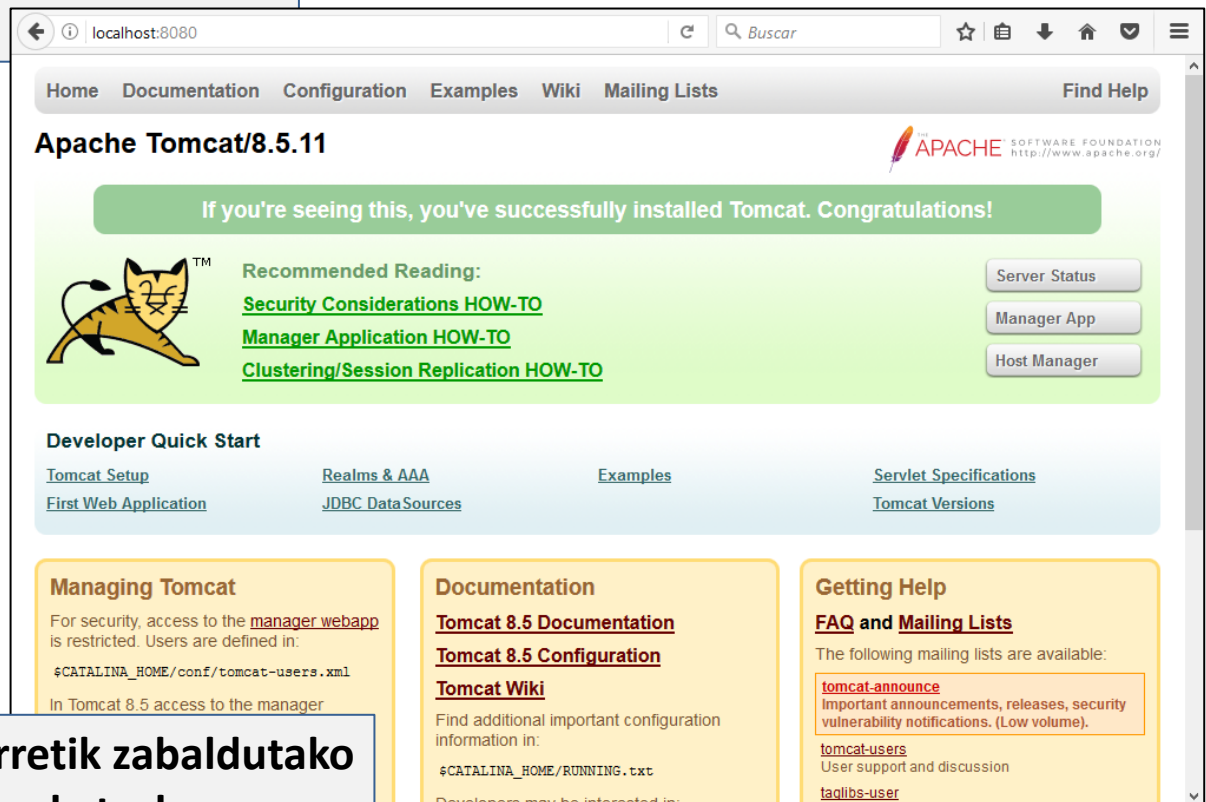
```
Seleccionar Tomcat
27-Feb-2020 16:09:09.359 INFORMACIEN [main] org.apache.catalina.core.StandardEngine.startInternal Starting Servlet Engine
e: Apache Tomcat/8.5.11
27-Feb-2020 16:09:09.366 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Desp
liegue del directorio C:\apache_tomcat\webapps\docs de la aplicaci n web
27-Feb-2020 16:09:09.793 INFORMACIEN [localhost-startStop-1] org.apache.catalina.util.SessionIdGeneratorBase.createSecur
eRandom Creation of SecureRandom instance for session ID generation using [SHA1PRNG] took [270] milliseconds.
27-Feb-2020 16:09:09.807 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Depl
oyment of web application directory C:\apache_tomcat\webapps\docs has finished in 441 ms
27-Feb-2020 16:09:09.808 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Desp
liegue del directorio C:\apache_tomcat\webapps\examples de la aplicaci n web
27-Feb-2020 16:09:10.117 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Depl
oyment of web application directory C:\apache_tomcat\webapps\examples has finished in 309 ms
27-Feb-2020 16:09:10.118 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Desp
liegue del directorio C:\apache_tomcat\webapps\host-manager de la aplicaci n web
27-Feb-2020 16:09:10.141 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Depl
oyment of web application directory C:\apache_tomcat\webapps\host-manager has finished in 22 ms
27-Feb-2020 16:09:10.141 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Desp
liegue del directorio C:\apache_tomcat\webapps\manager de la aplicaci n web
27-Feb-2020 16:09:10.162 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Depl
oyment of web application directory C:\apache_tomcat\webapps\manager has finished in 21 ms
27-Feb-2020 16:09:10.163 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Desp
liegue del directorio C:\apache_tomcat\webapps\ROOT de la aplicaci n web
27-Feb-2020 16:09:10.180 INFORMACIEN [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Depl
oyment of web application directory C:\apache_tomcat\webapps\ROOT has finished in 17 ms
27-Feb-2020 16:09:10.182 INFORMACIEN [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler [http-nio-
8080]
27-Feb-2020 16:09:10.187 INFORMACIEN [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler [ajp-nio-8
009]
27-Feb-2020 16:09:10.188 INFORMACIEN [main] org.apache.catalina.startup.Catalina.start Server startup in 846 ms
```

Zerbitzariaren abiaraztearen arazketarako irteera mezuak (ez da errorerik agertu behar)

TOMCAT: EGIAZTAPENA

Tomcat ondo abiarazi dela egiaztatzeko:

Nabigatzailean <http://localhost:8080> URI-a eskatu eta Tomcat-en ongietorri orria bistaratzen dela egiaztatu.



Egiaztapena egin ostean, aurretik zabaldutako terminalak itxi 8080. portua askatzeko.

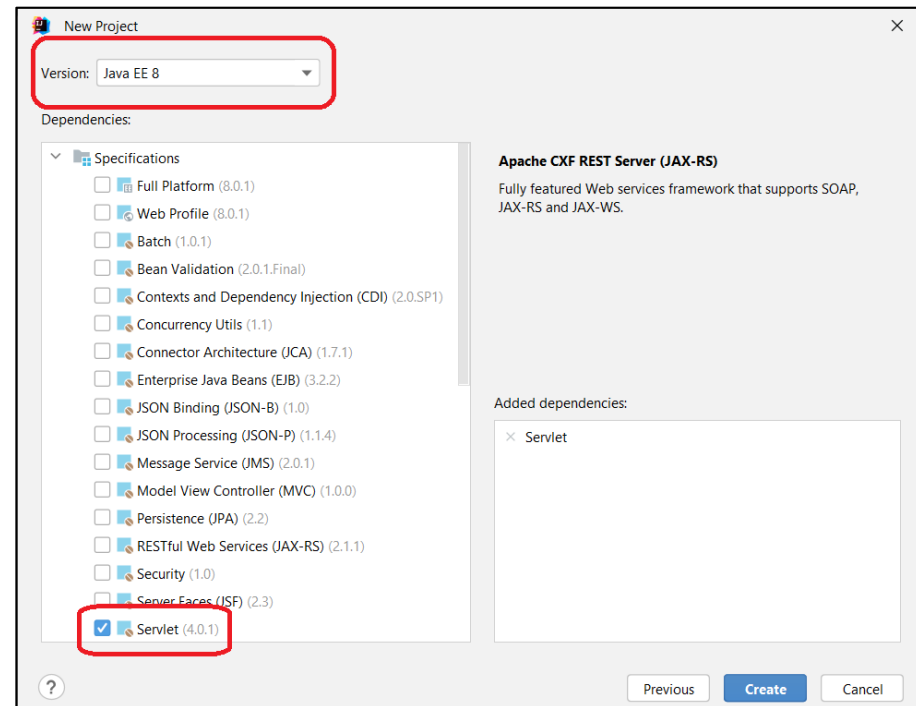
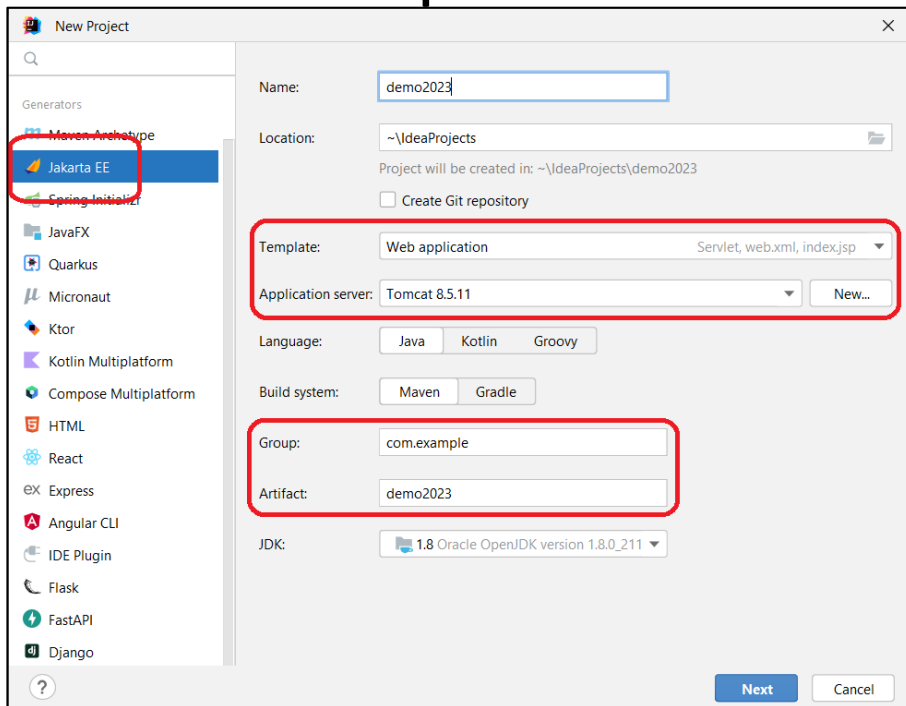
TOMCAT: INTELLIJ-EKIN INTEGRATU

Tomcat IntelliJ-tik zuzenean erabiltzeko:

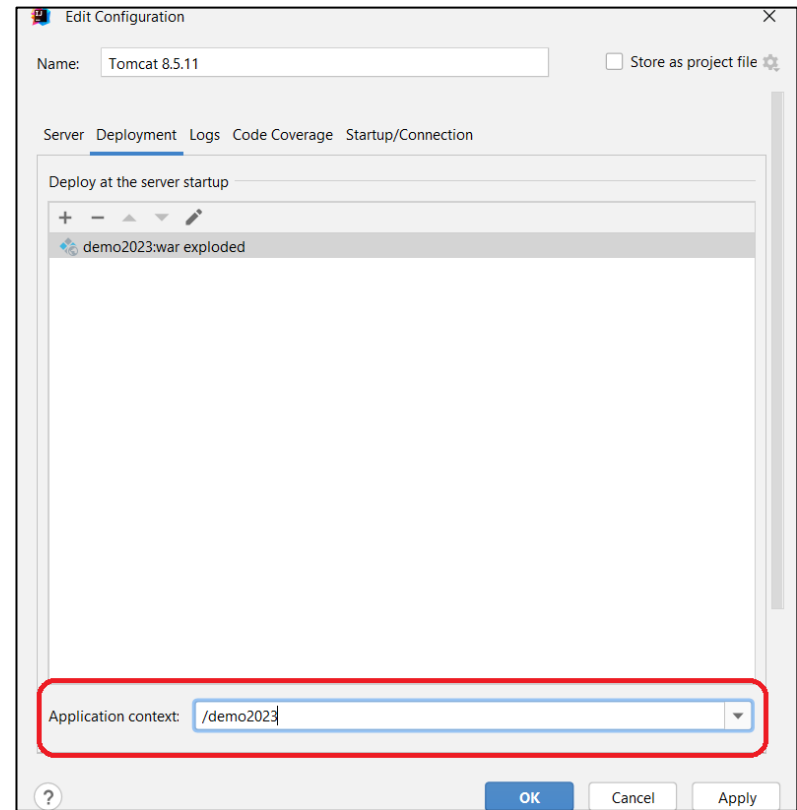
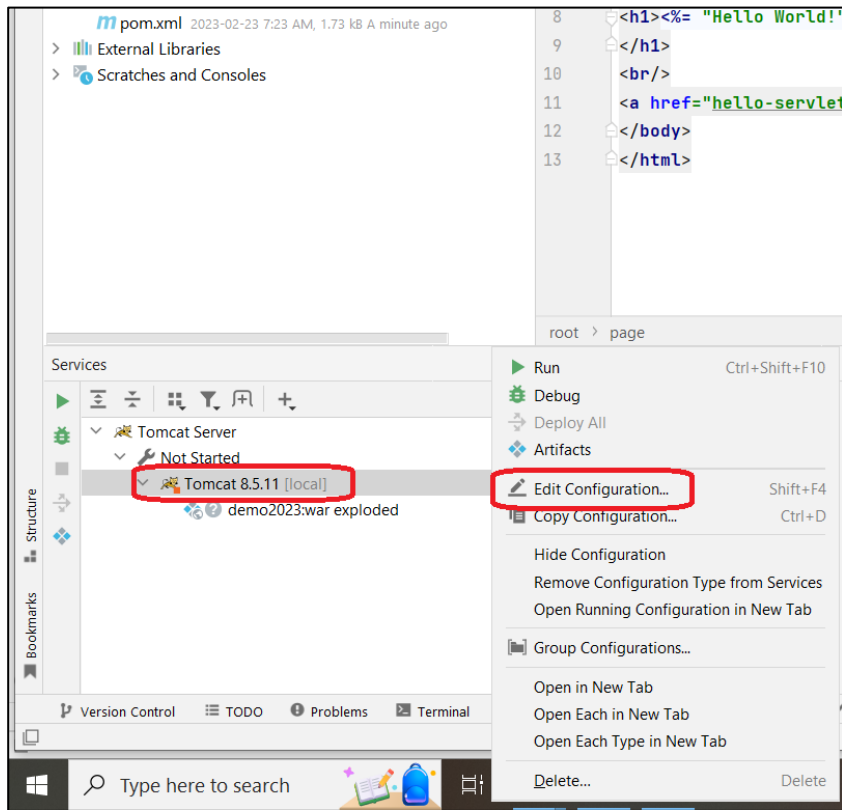
Integration with application servers:

<https://www.jetbrains.com/help/idea/configuring-and-managing-application-server-integration.html>

IntelliJ-en web aplikazioak sortzeko:

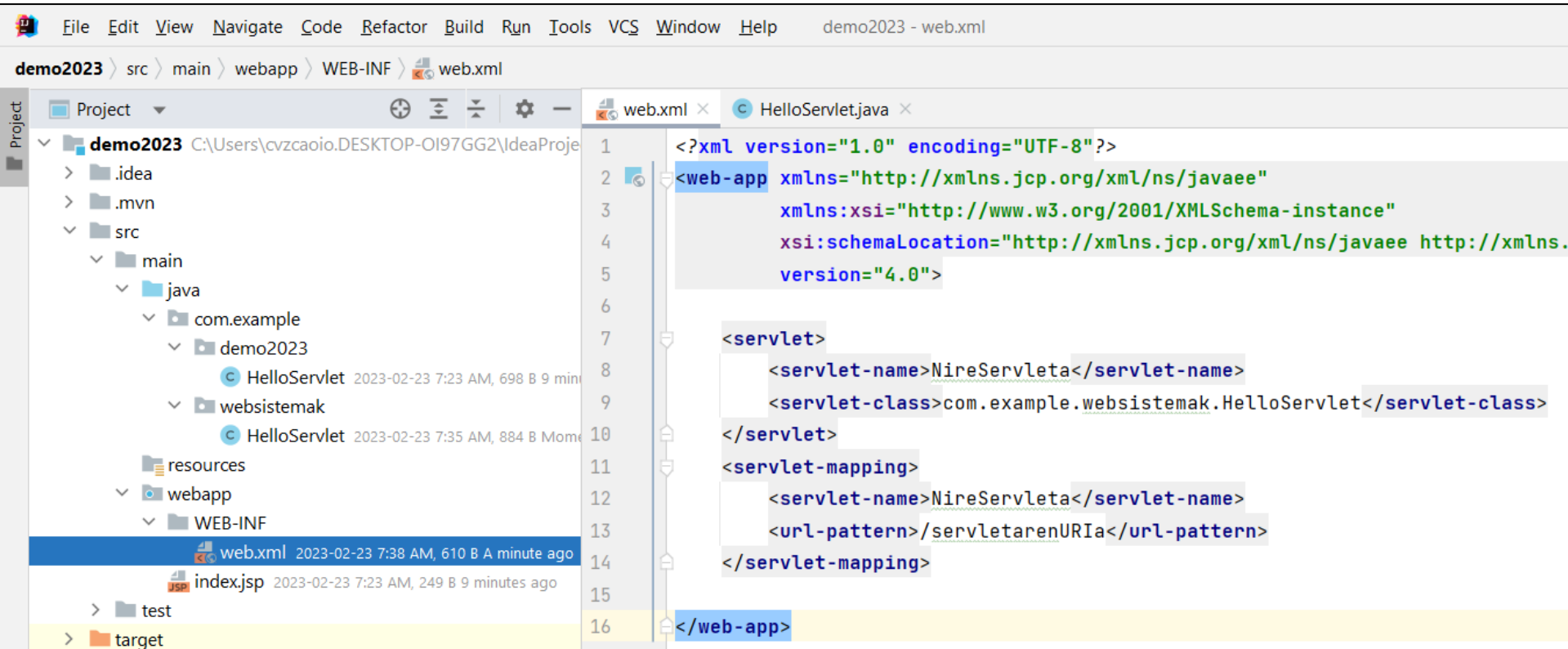


TOMCAT: PROIEKTU BATEN URIAREN EGOKITZAPENA



TOMCAT: PROBA

- Sortutako demo2023 proiektuan:
 - web.xml fitxategian ondorengo edukia gehitu (fitxategia eGelatik hartu):

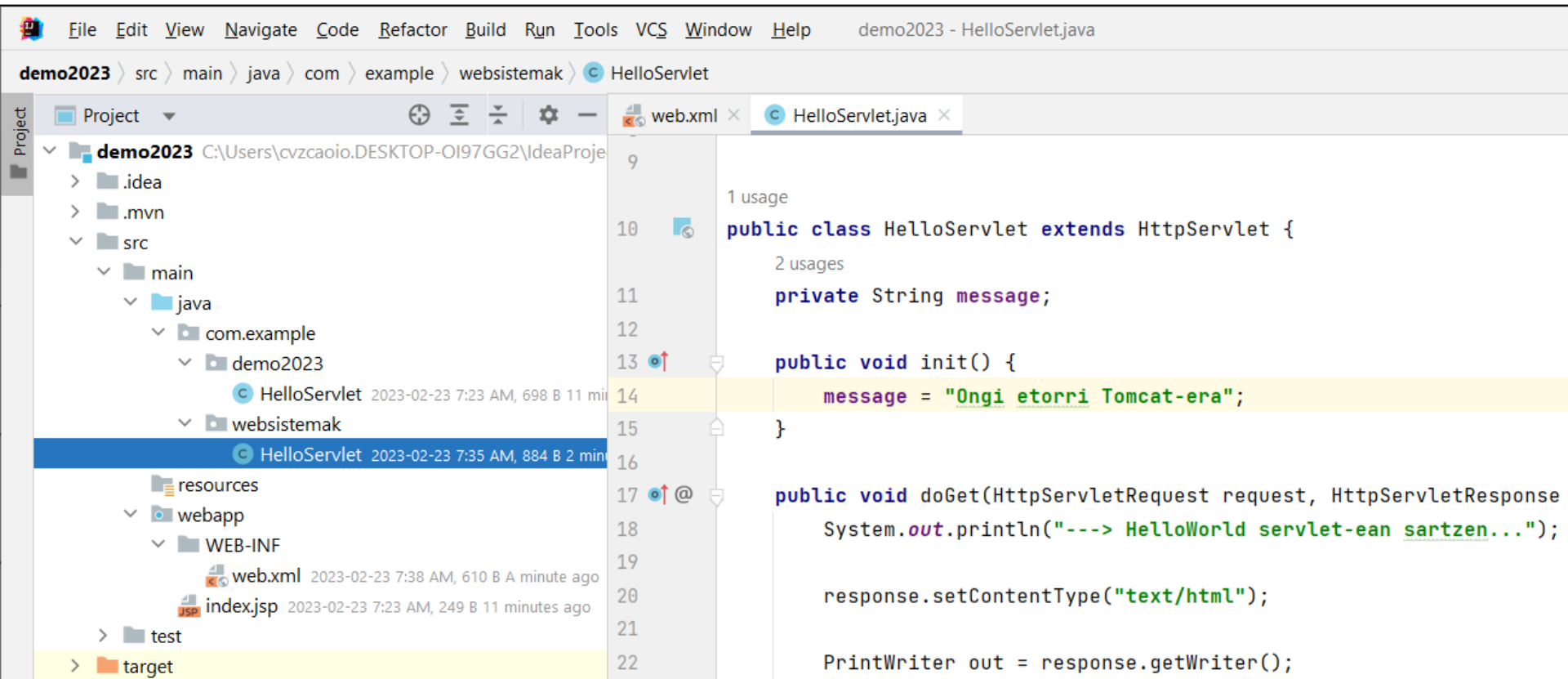


The screenshot shows an IDE window with the file `demo2023 - web.xml` open. The left sidebar displays the project structure for `demo2023`, including folders like `.idea`, `.mvn`, `src`, `main`, `java`, `com.example`, `demo2023`, `websistemak`, `resources`, `webapp`, `WEB-INF`, `test`, and `target`. The `web.xml` file is selected under `WEB-INF`. The main editor area shows the XML content of `web.xml` with line numbers 1 through 16. The XML code is as follows:

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
3         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4         xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.
5         version="4.0">
6
7     <servlet>
8         <servlet-name>NireServleta</servlet-name>
9         <servlet-class>com.example.websistemak.HelloServlet</servlet-class>
10    </servlet>
11    <servlet-mapping>
12        <servlet-name>NireServleta</servlet-name>
13        <url-pattern>/servletarenURIa</url-pattern>
14    </servlet-mapping>
15
16 </web-app>
```

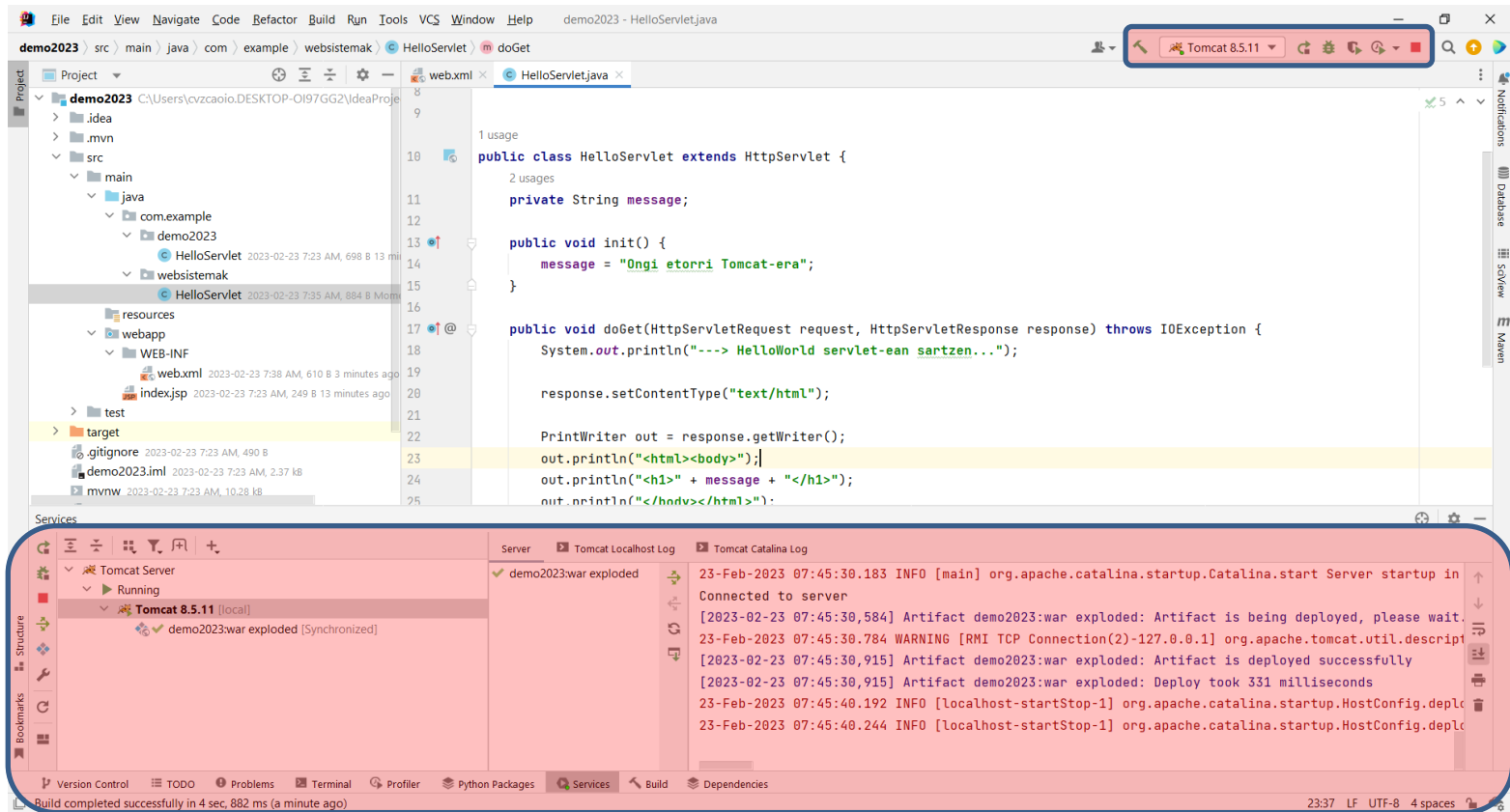
TOMCAT: PROBA

- Sortutako demo2023 proiektuan:
 - Servlet berri bat sortu (fitxategia eGelatik hartu):



TOMCAT: PROBA

- IntelliJ-etik Tomcat abiarazi:



- Nabigatzailean <http://localhost:8080/demo2023/servletarenURLa> zabaldu.