# E-Business Technologies Lab – Summer Term 2018

## Software Installation Guide

**Fabian Stiehle, Jürgen Wäsch**

**Hochschule Konstanz** Technik, Wirtschaft und Gestaltung
University of Applied Sciences, Konstanz

# Preface

- **Usage of private computers for this assignment is highly recommended** because of
  - administrative restrictions of PCs in WI-Labs
  - space restrictions of your "Z:-Drive"
  - local installations of MySQL servers on WI-Lab-PCs
  - possibly difficult porting to private computers or other WI-Lab-PCs
  - …

  **but software runs also on PCs in WI-Labs (O-107 etc.)**
  - if everything is properly configured
  - all necessary setup steps are properly taken

# DISCLAIMER

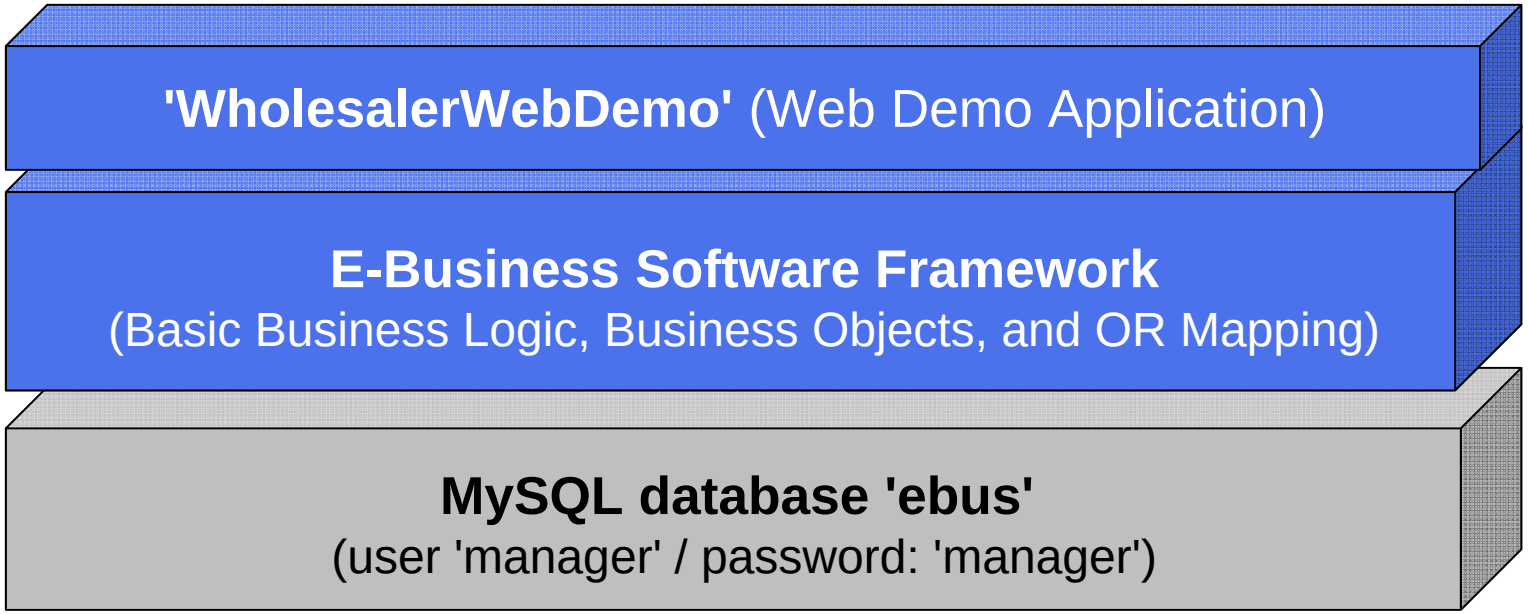
- Dependent on
  - your personal systems environment (e.g., operating system, already installed software components)
  - exact version of software to be installed

  installation details may differ from the following slides!

- **Unfortunately, no guarantees can be given for the completeness and the correctness of the following slides!**

- Base for the following slides is **Microsoft Windows 10**

# System Landscape / Architecture




**Web / Application Server (Servlet-Container): Apache Tomcat 6 / 7**

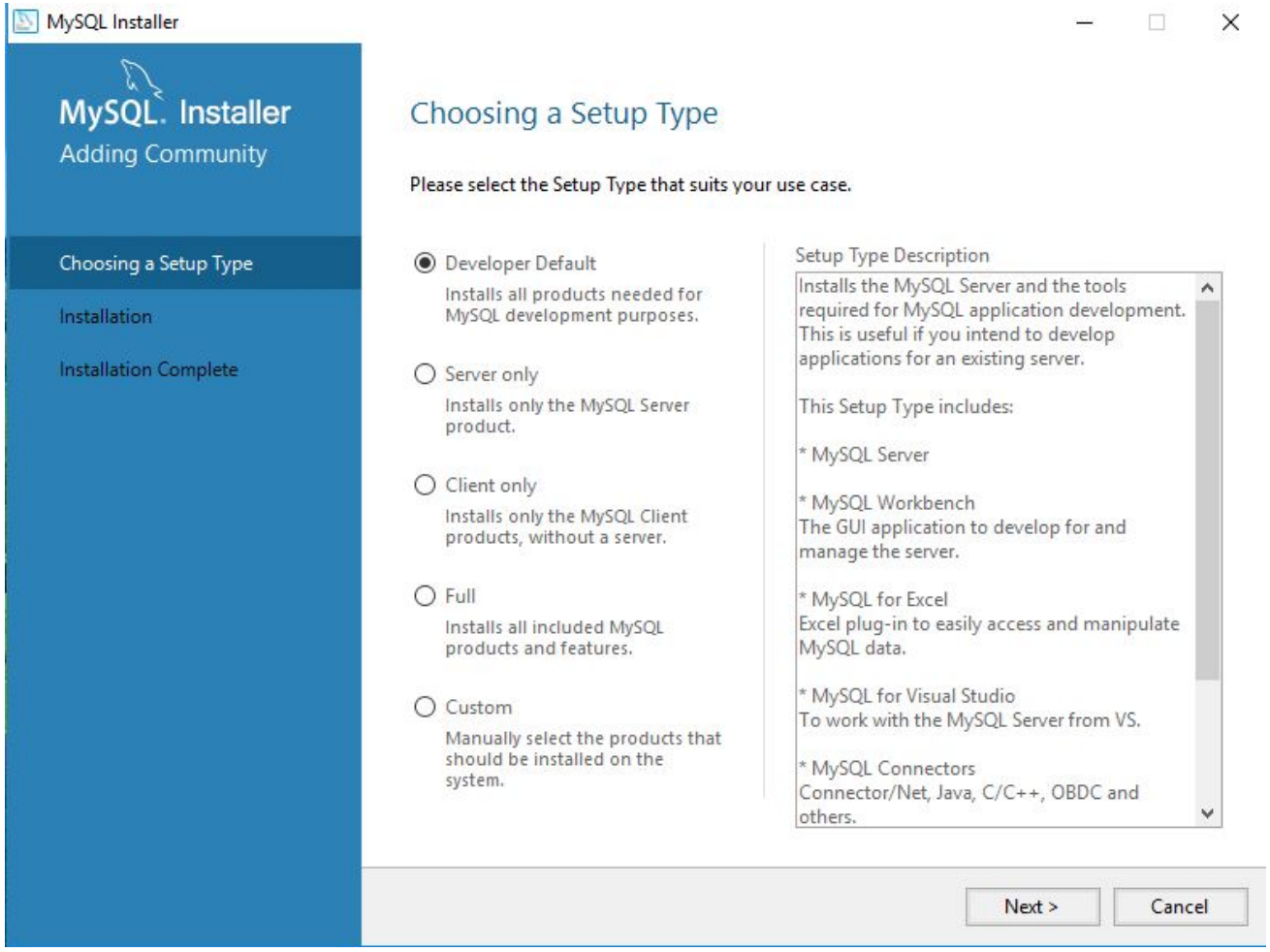
**DBS Server: MySQL 5.x**

# Software Requirements for Running the E-Business Software Framework (EBSF)

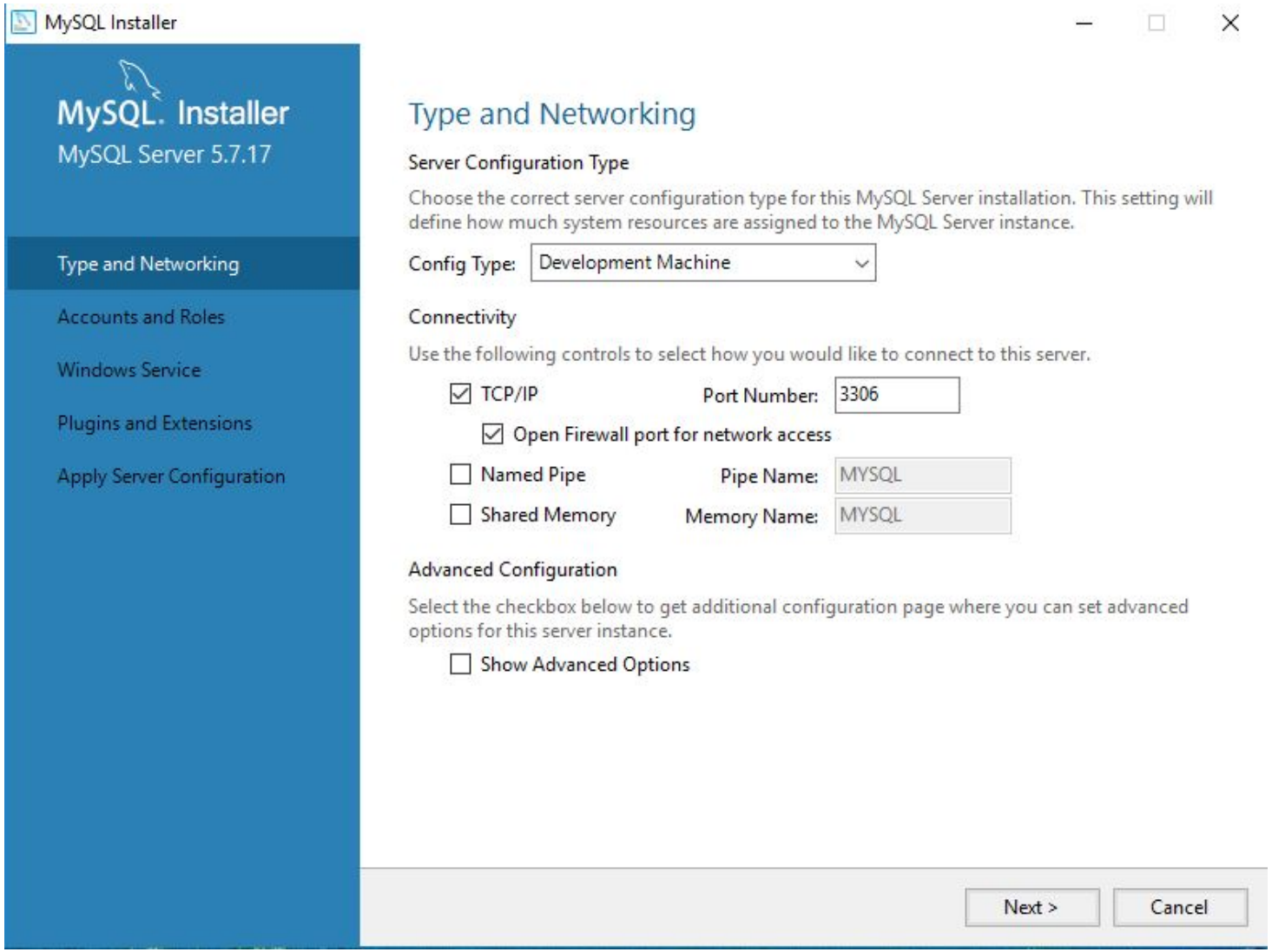
- Java JDK 1.8
  (Java 8 SE Download)
- Eclipse IDE for Java EE Developers (or another IDE)
  (http://www.eclipse.org/downloads/)
  - Note: IntelliJ IDEA Community Edition doesn't support JEE
- MySQL Community Server 5.x
  (http://www.mysql.de/downloads/mysql/)
- HeidiSQL (or another MySQL GUI-Client/Frontend)
  (http://www.heidisql.com/download.php)
- Apache Tomcat 6 / 7 (8 not tested/supported!)
  (http://tomcat.apache.org/whichversion.html / Mac)
- Apache Ant (if not included in the above)
  (http://ant.apache.org/)

# MySQL Community Server Installation (1 / 5)

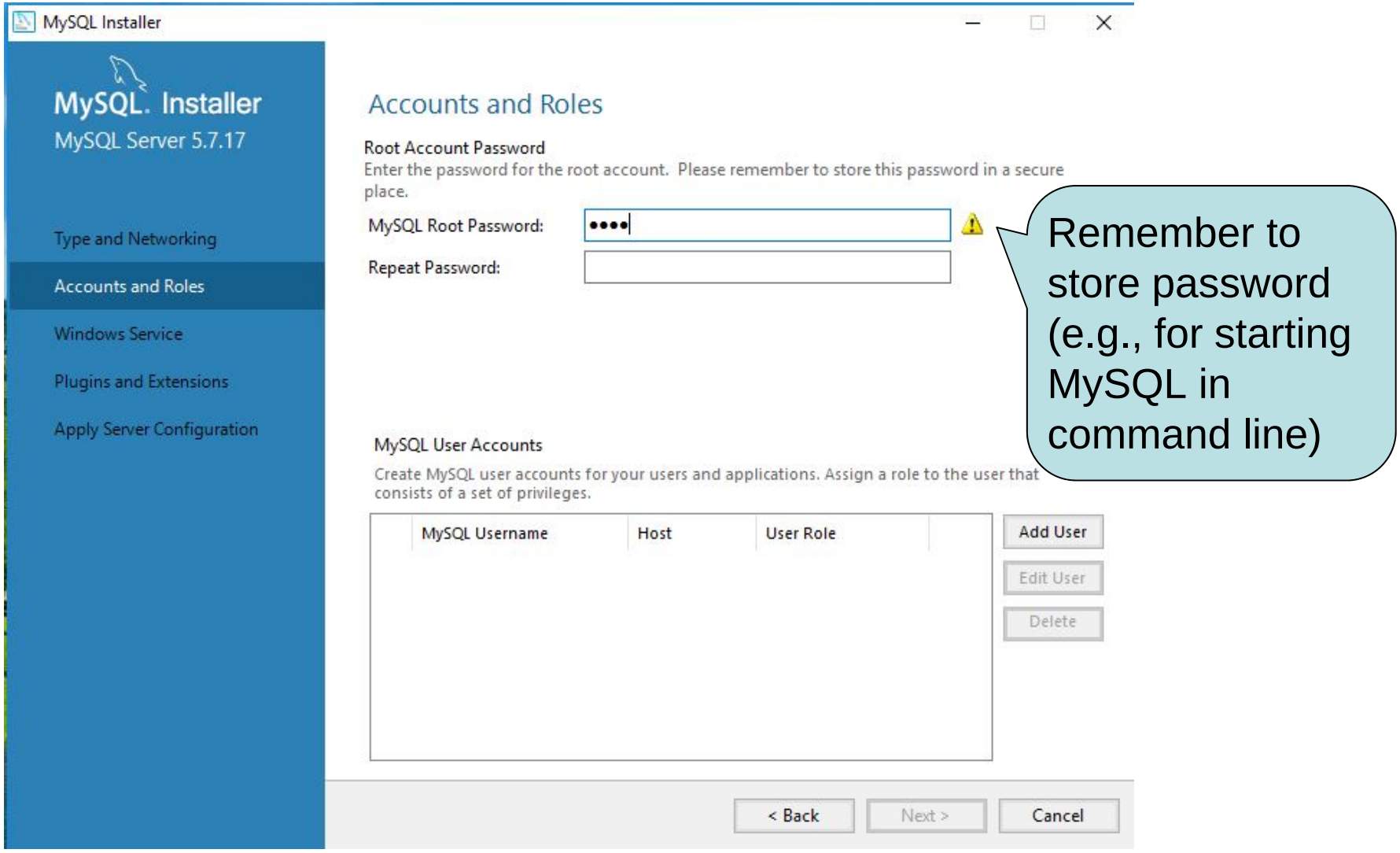
## Start the installation



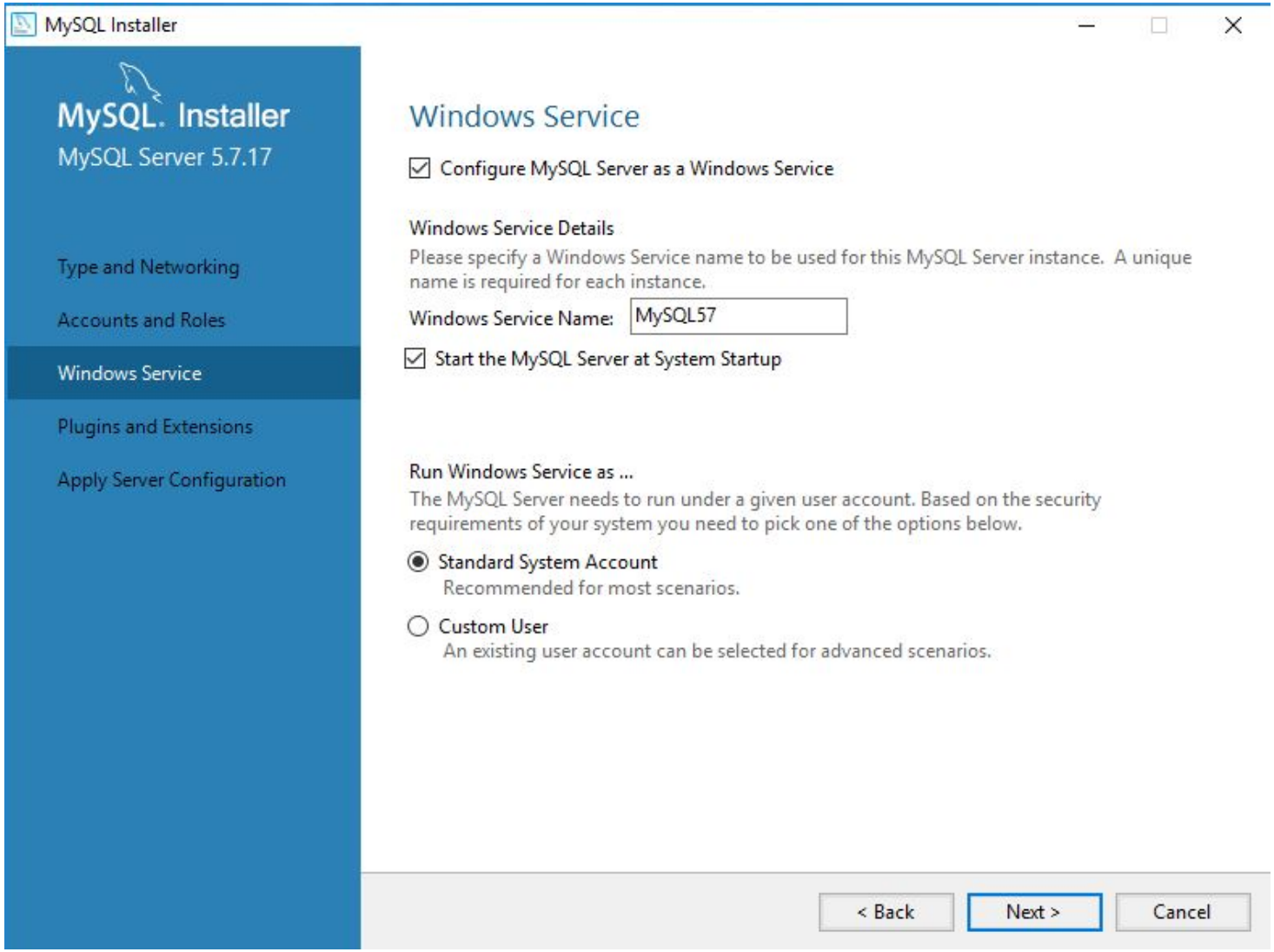
# MySQL Community Server Installation (2 / 5)



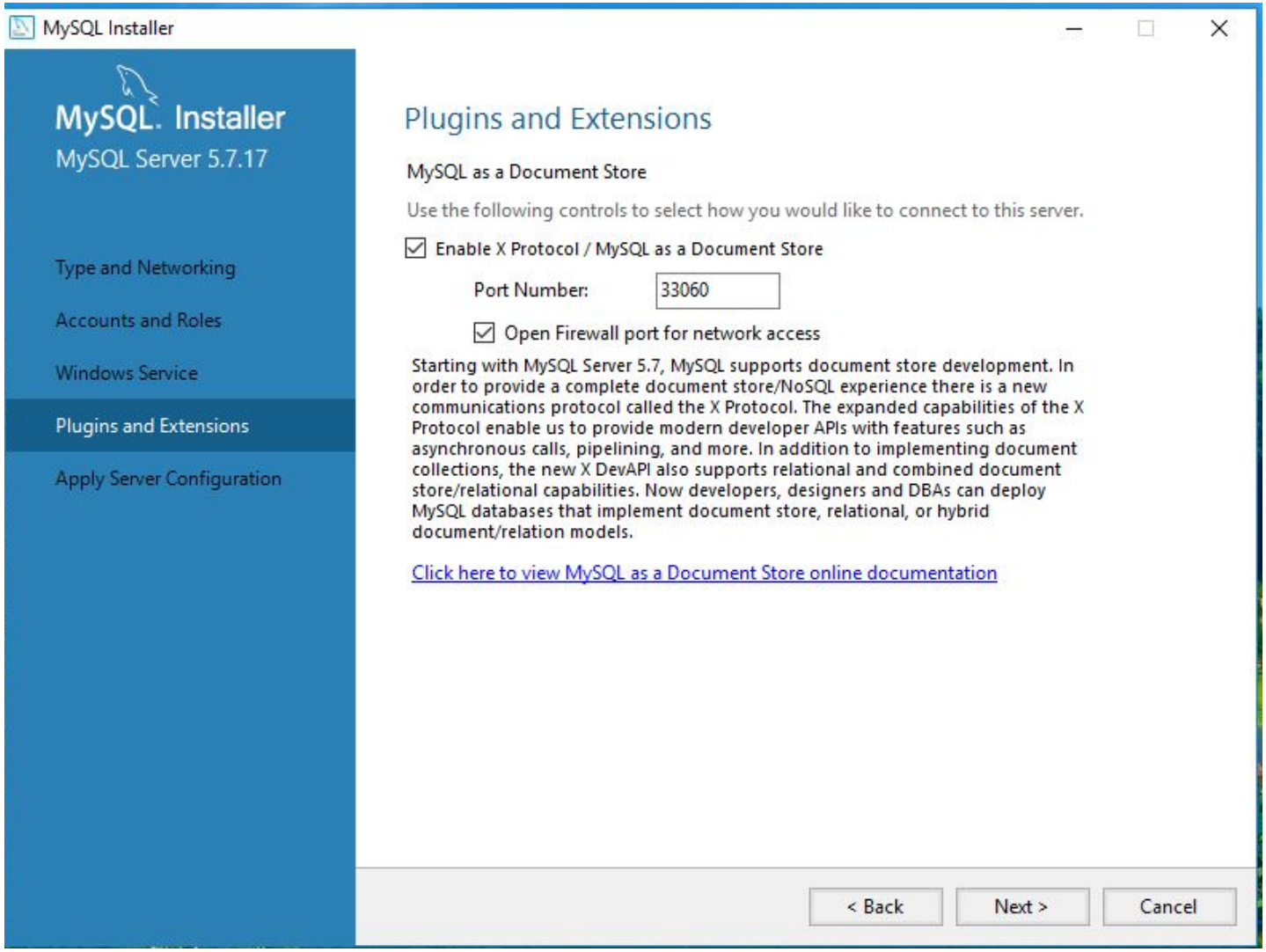
# MySQL Community Server Installation (3 / 5)



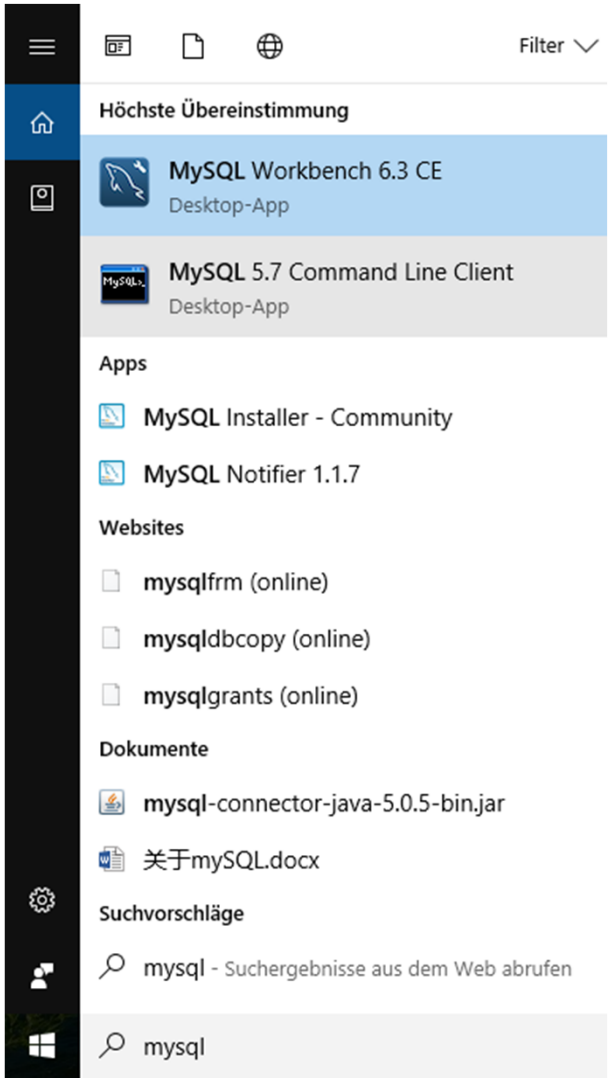
# MySQL Community Server Installation (4 / 5)



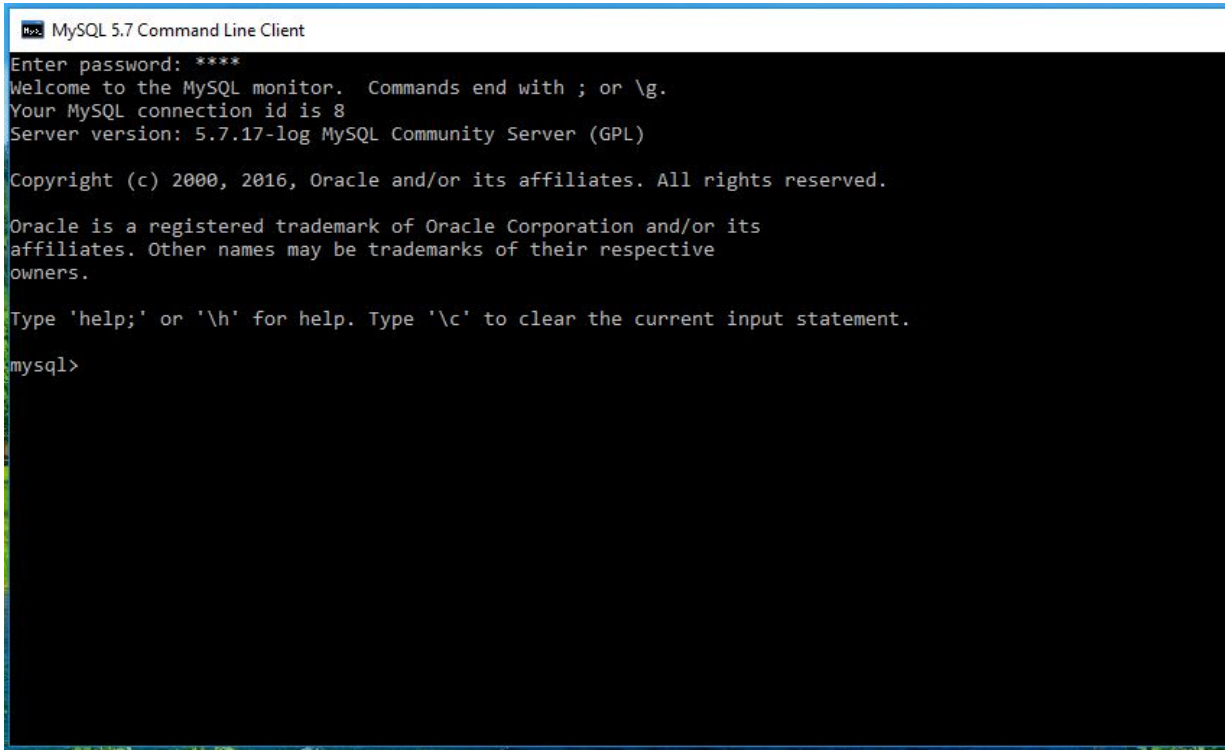
# MySQL Community Server Installation (5 / 5)



# Start MySQL Command Line Client

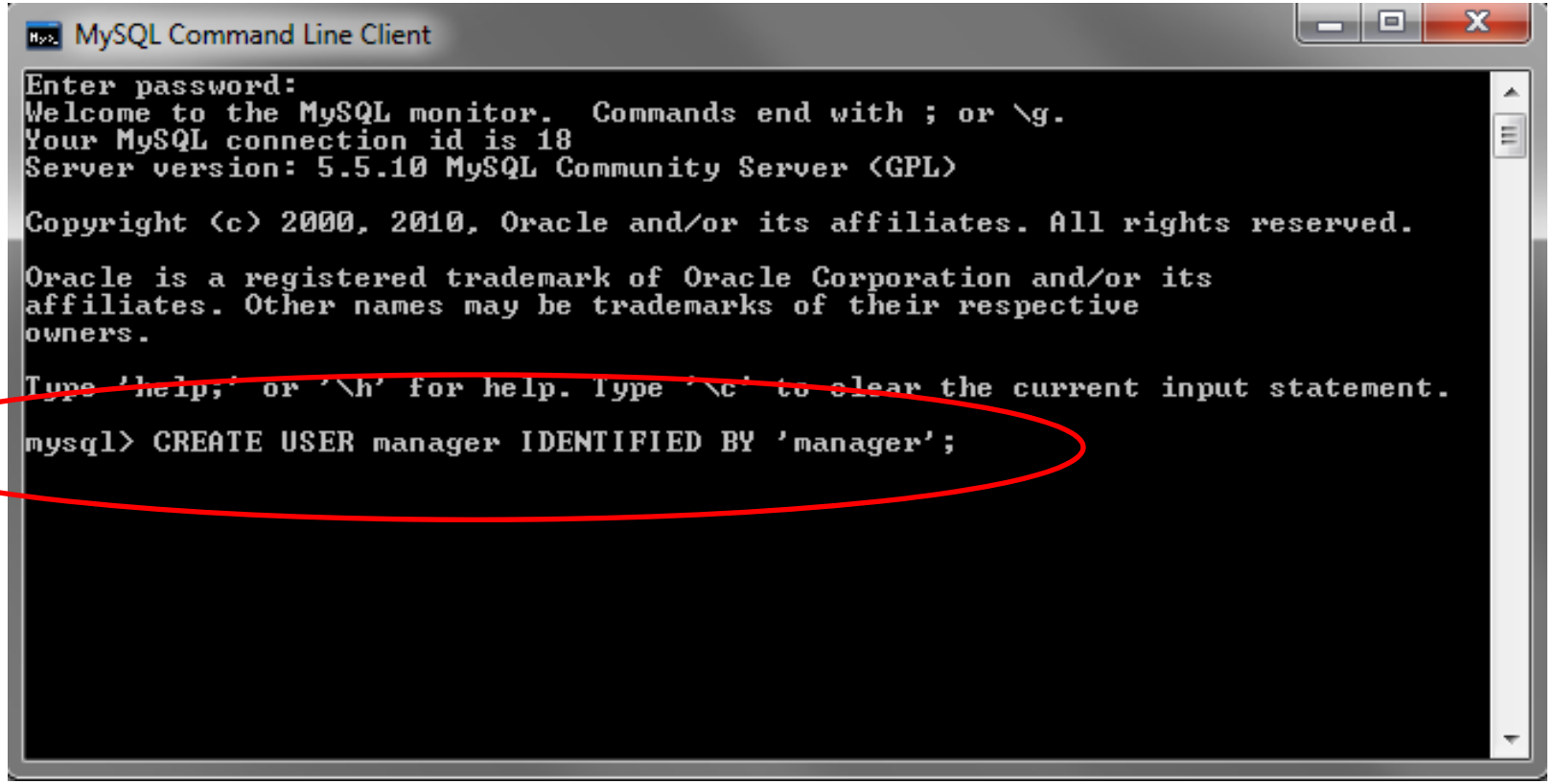



Find the MySQL 5.7 Command Line Client (in Start Menu) and enter your password

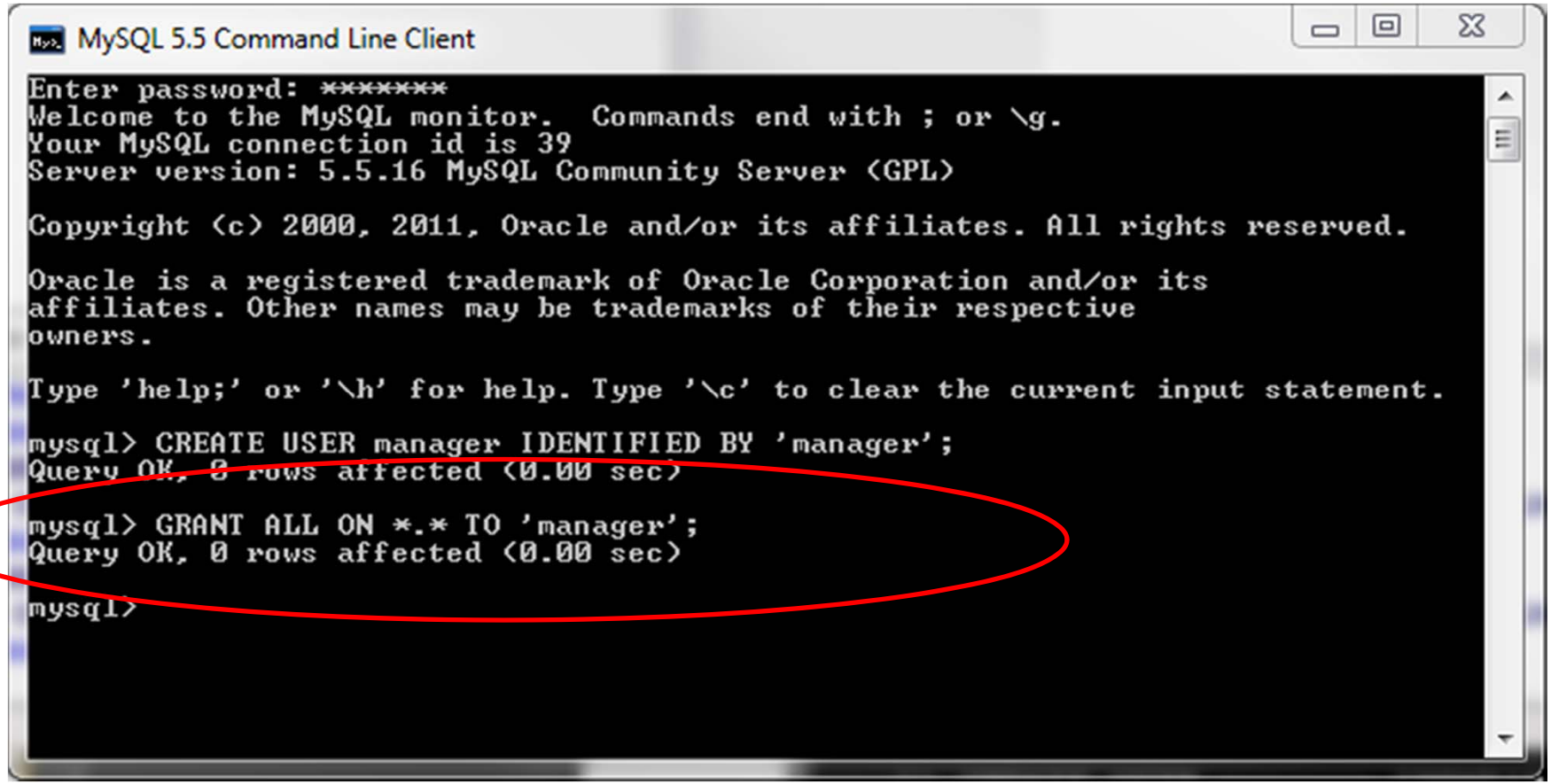


# Create User 'manager', in MySQL

- In the MySQL Command Line Client you have to create a user: manager with password: manager (see picture)

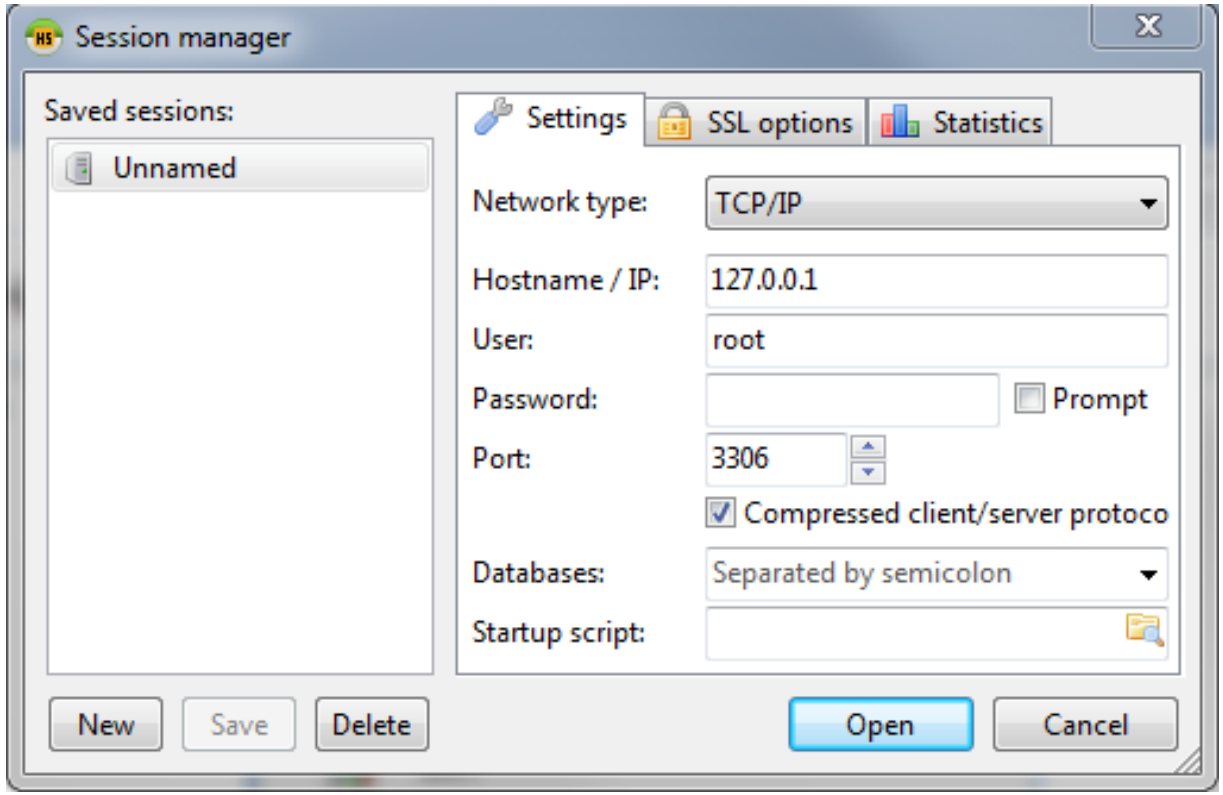


# Grant (all) rights to 'manager' in MySQL



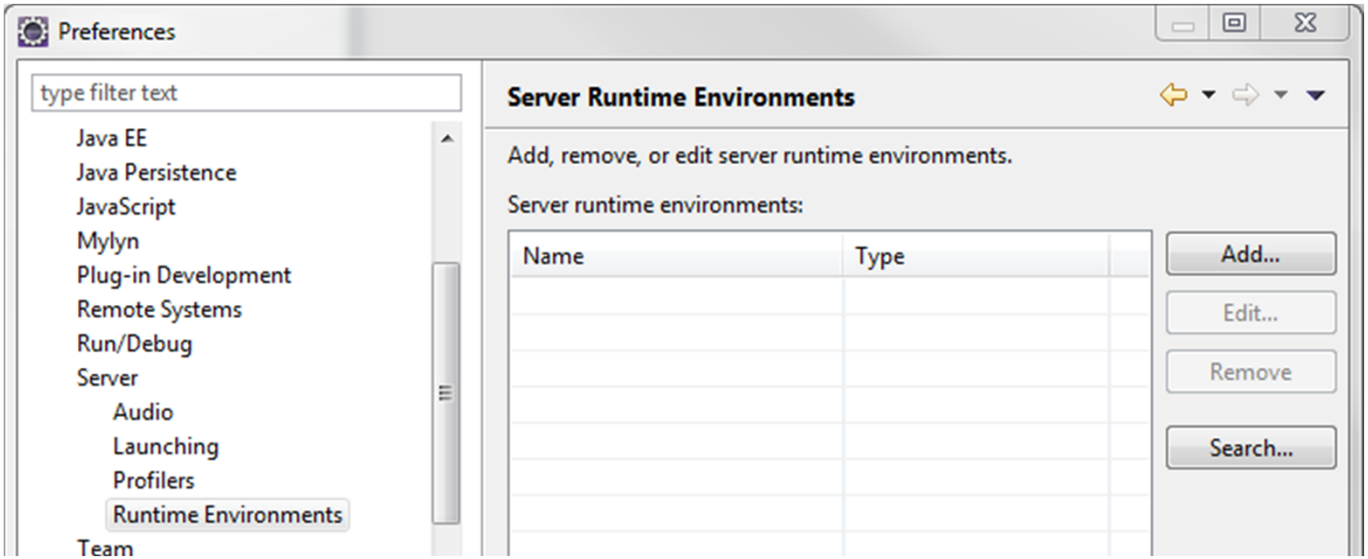
# MySQL GUI / Client: HeidiSQL

- After the installation of HeidiSQL,
  you can connect to your MySQL Database Server

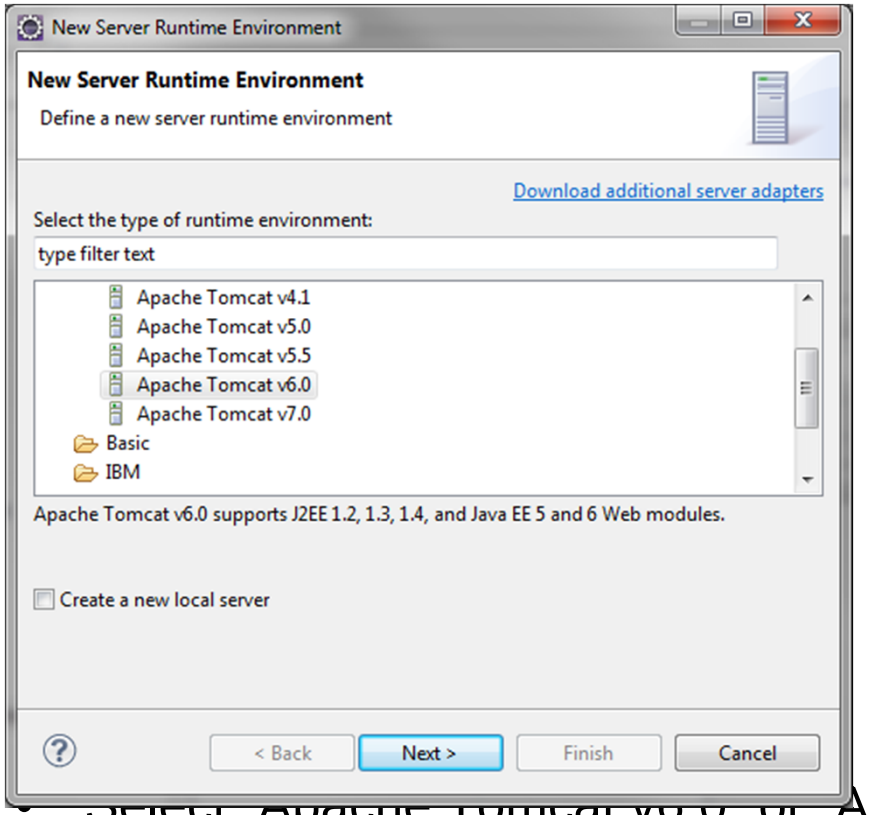


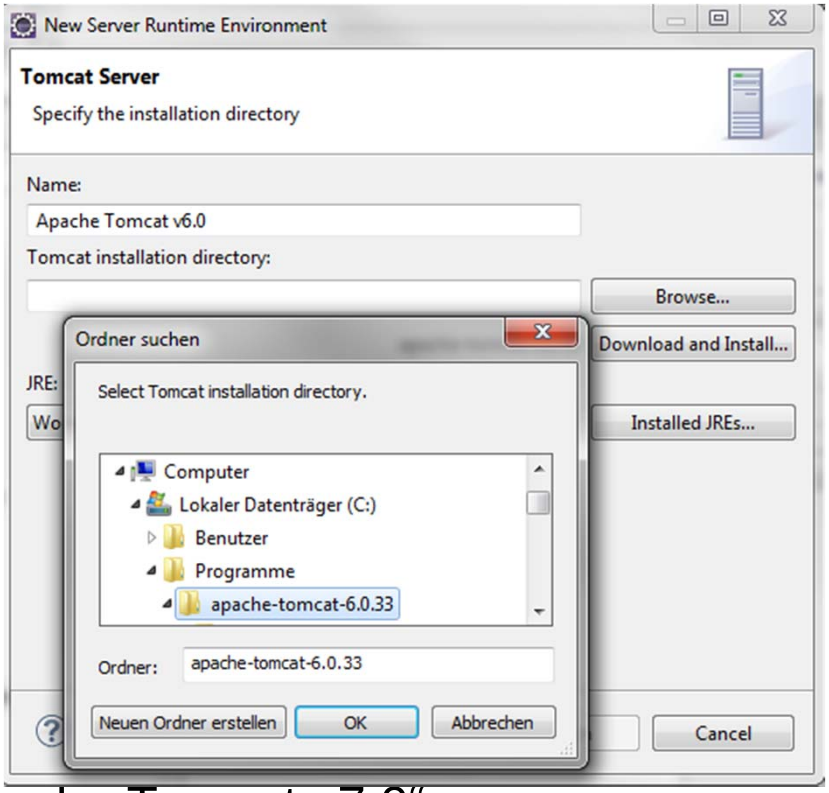
# Configuration of Eclipse

- Start Eclipse
- Add Tomcat Server 6 / 7
  - Click „Window > Preferences ...“,
  - Choose „Server > Runtime Environments“
  - and Click „Add…“.



# Configuration of Eclipse: Adding Tomcat Server …

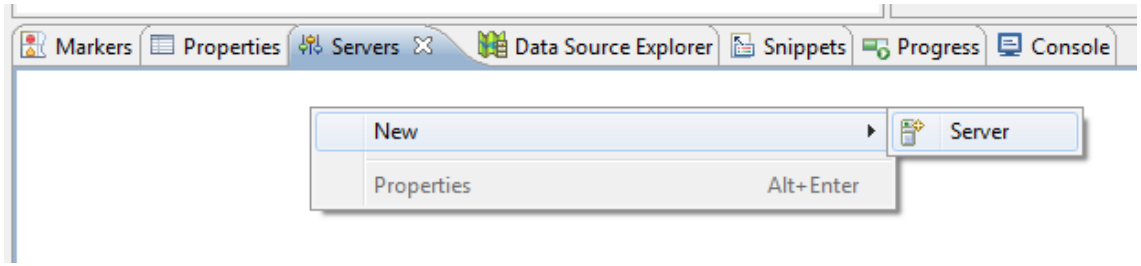


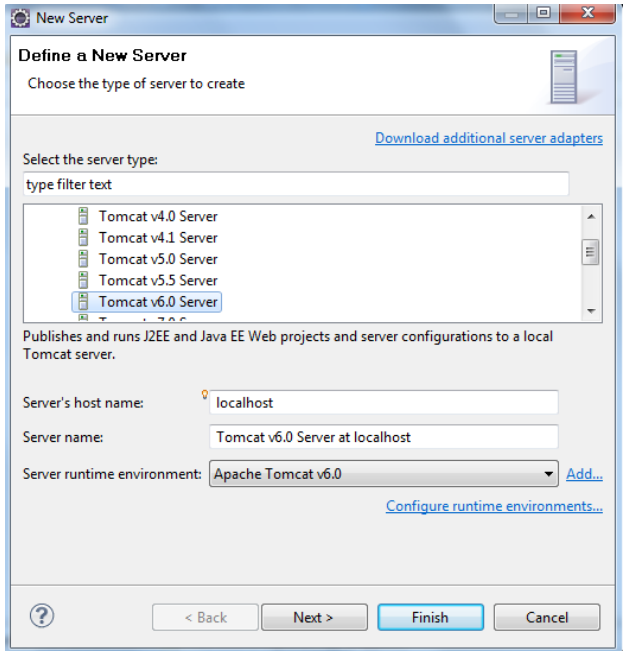




- Select „Apache Tomcat v6.0“ or „Apache Tomcat v7.0“
- If necessary, browse to the installation directory of the Tomcat Server
- Click „Finish“

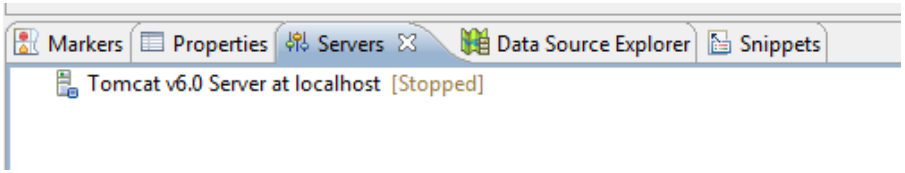
# Configuration of Eclipse: Adding Tomcat Server …

- Add server to „Servers“ tab
  - If tab is not visible, change to JavaEE Perspective or click „Window >Show View->Other…“ > choose „Servers“ in directory „Server“ and click „OK“



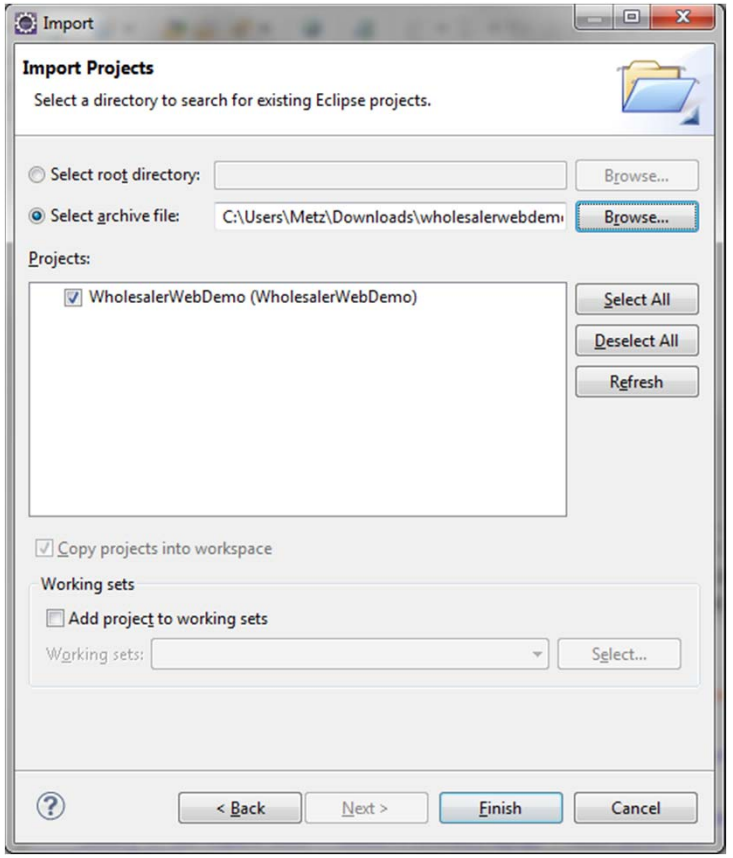

- Select „Tomcat v6.0 Server“ or „Tomcat v7.0 Server“
- Click „Finish“



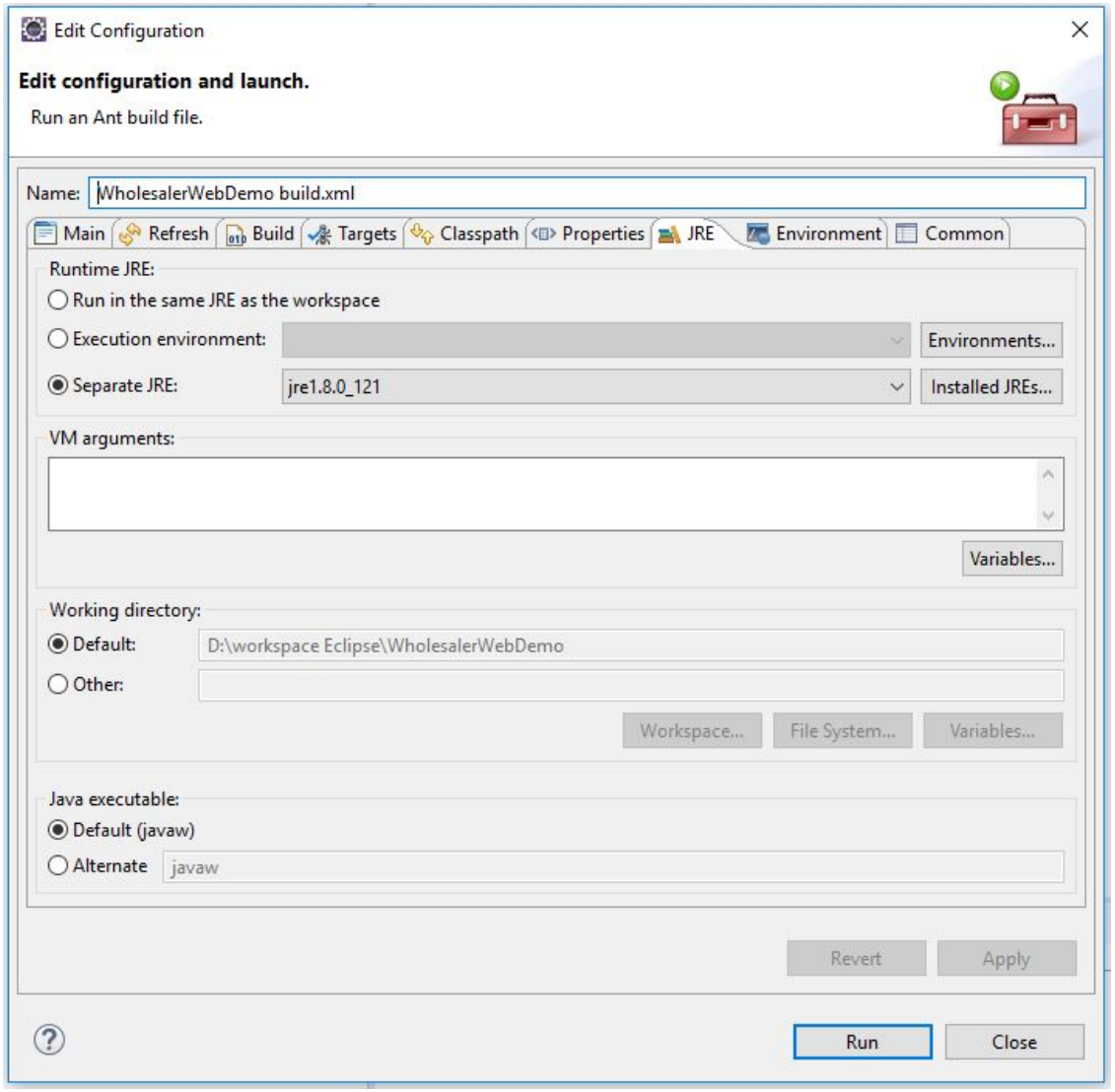
# Import of Web Demo Application Project into Eclipse

1. In Eclipse, click„File > Import“ and choose „General > Existing Projects into Workspace“

2. Select „Select archive file“ and choose the downloaded zipped project file „WholesalerWebDemo_2.1.zip“

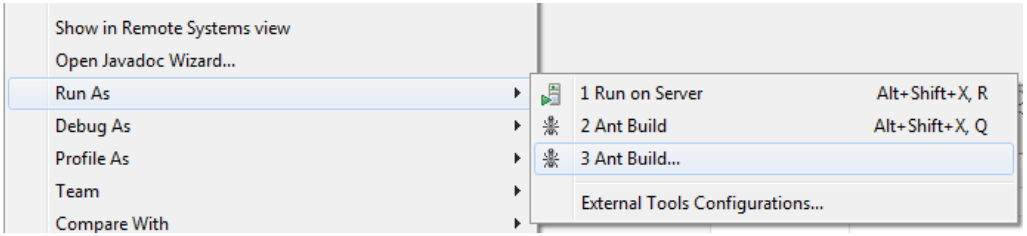


# Configuration of Ant in Eclipse

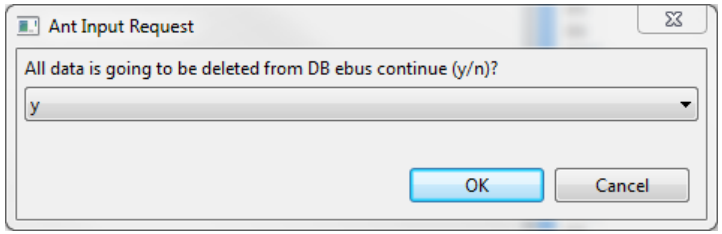


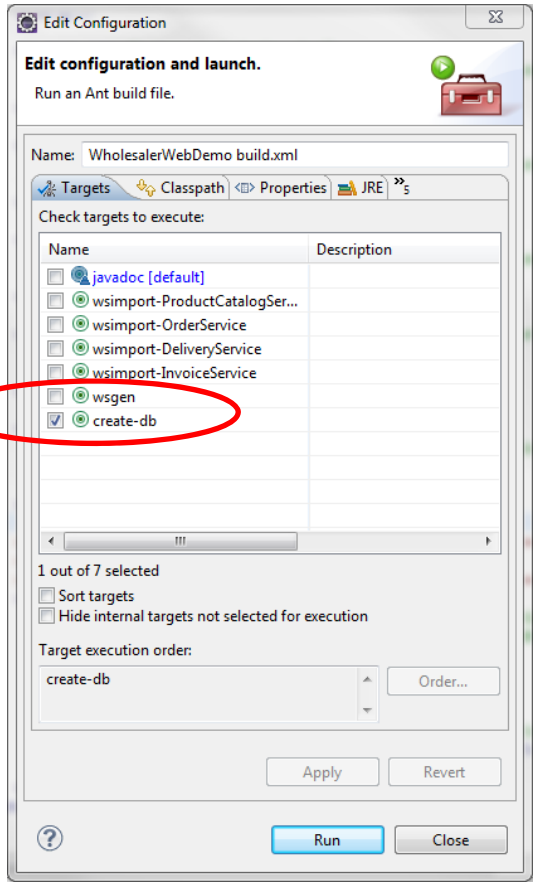
# Creation of Database „ebus“ in mySQL DBS: Running the Ant Script

1. Make Sure *..\mysql\bin* is in your PATH (echo %PATH%)
2. Right click in project explorer on „build.xml“




3. Choose „Run As – Ant Build …“
4. Select „create-db“
5. Choose „y“ and click „OK“



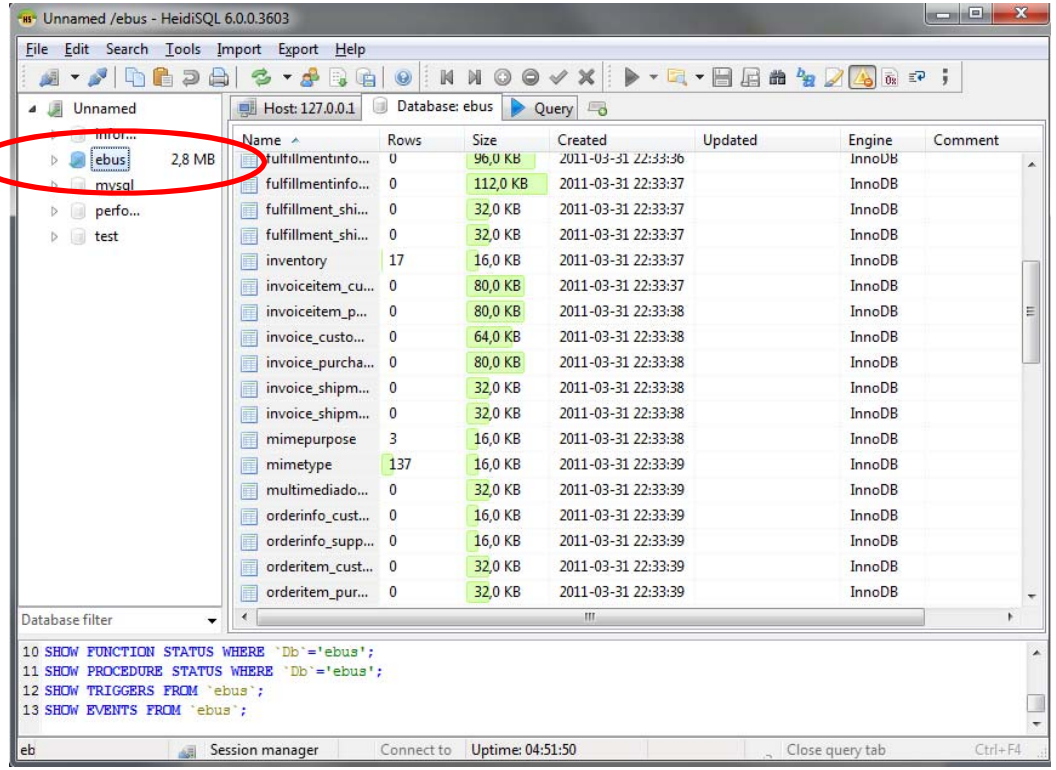



# Creation of Database „ebus“ in mySQL DBS: Database succesfully created

Markers | Properties | Servers | Data Source Explorer | Snippets | Progress | Console

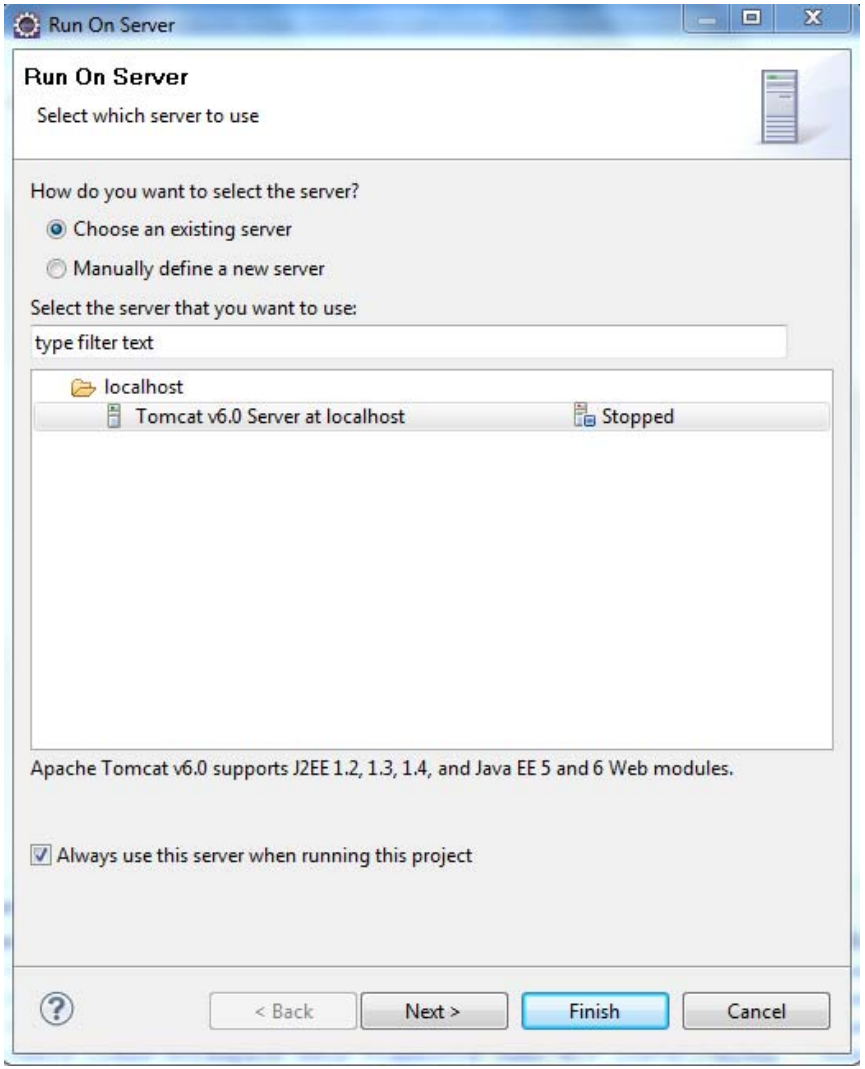
<terminated> WholesalerWebDemo build.xml [Ant Build] C:\Program Files\Java\jre6\bin\javaw.exe (29.02.2012 14:01:17)

```
Buildfile: C:\workspace\WholesalerWebDemo\build.xml
create-db:
     [echo] Starting example database table generation
     [exec] C:\workspace\WholesalerWebDemo\install>mysqladmin --host=localhost --user=manager --password=manager drop ebus -f
     [exec] Database "ebus" dropped
     [exec] C:\workspace\WholesalerWebDemo\install>mysqladmin --host=localhost --user=manager --password=manager create ebus
     [exec] C:\workspace\WholesalerWebDemo\install>mysql --host=localhost --user=manager --password=manager --database=ebus  0<ebus.sql
BUILD SUCCESSFUL
Total time: 27 seconds
```



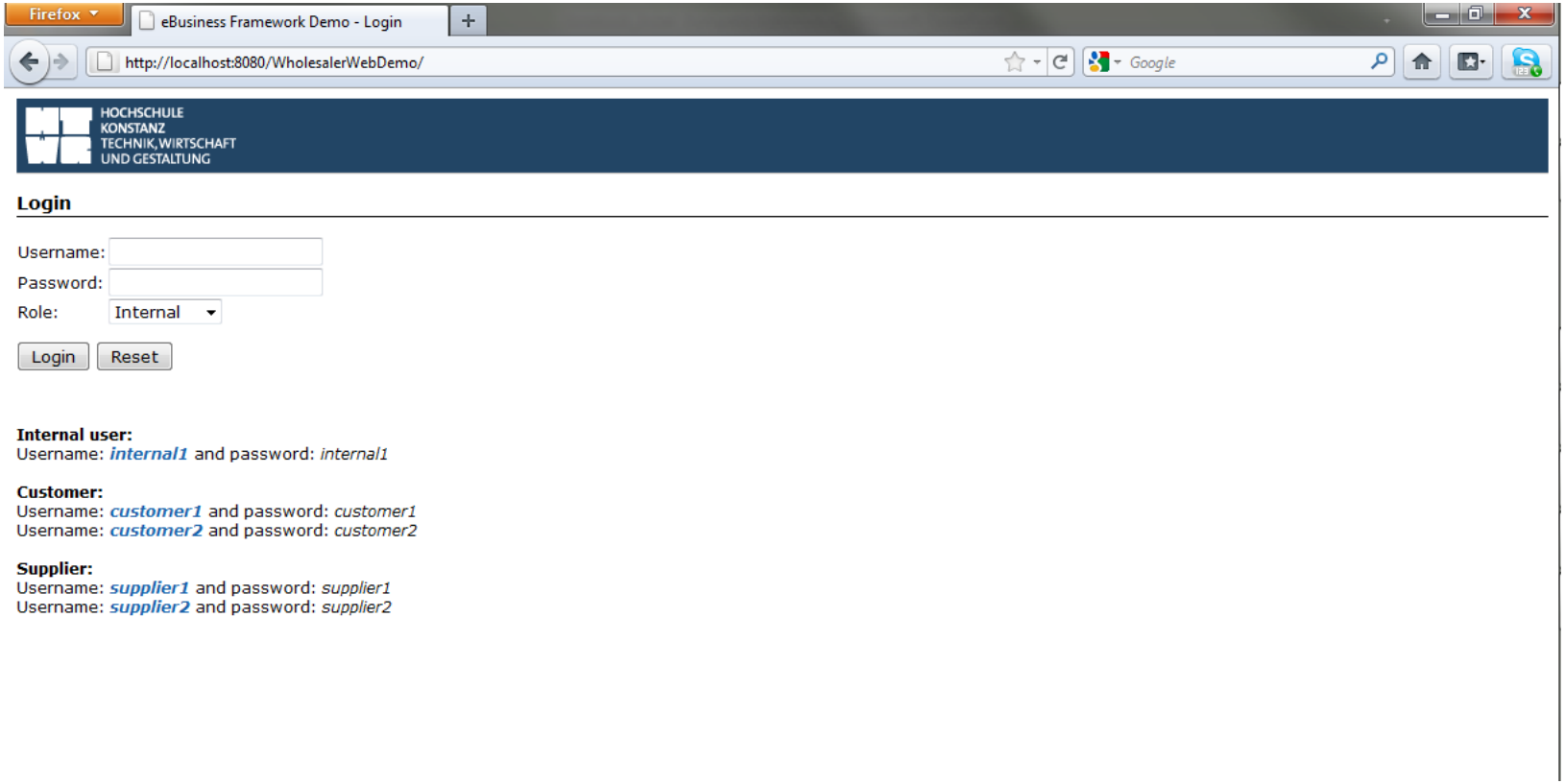
# Start of the „Web Demo Application“ in Eclipse

- Right click on the Java project and choose „Run As > Run On Server“
- Choose the Tomcat server to be used
- Optional: Activate „Always use this server …“
- Click on „Finish“

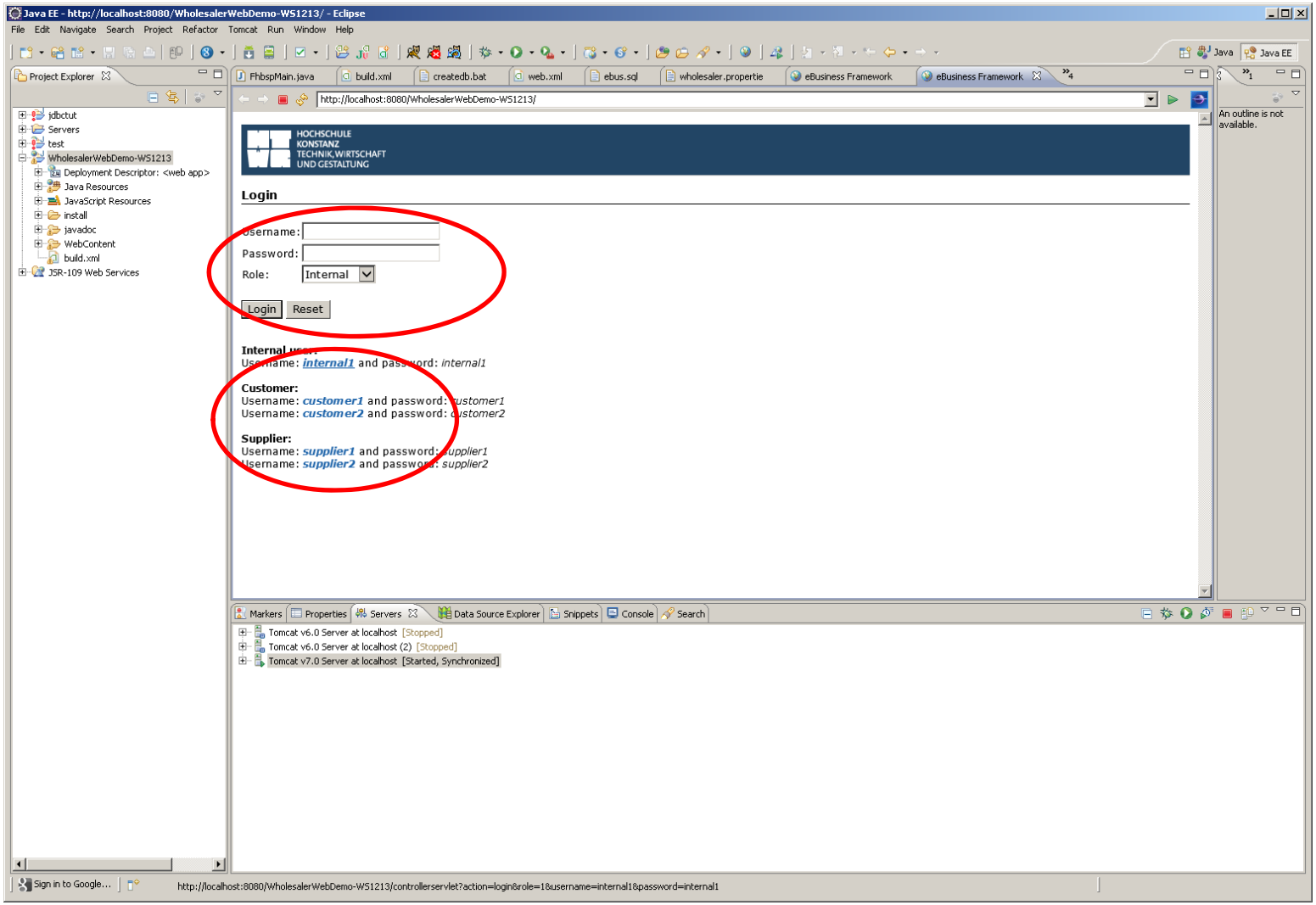


# Start of the „Web Demo Application“ in Eclipse

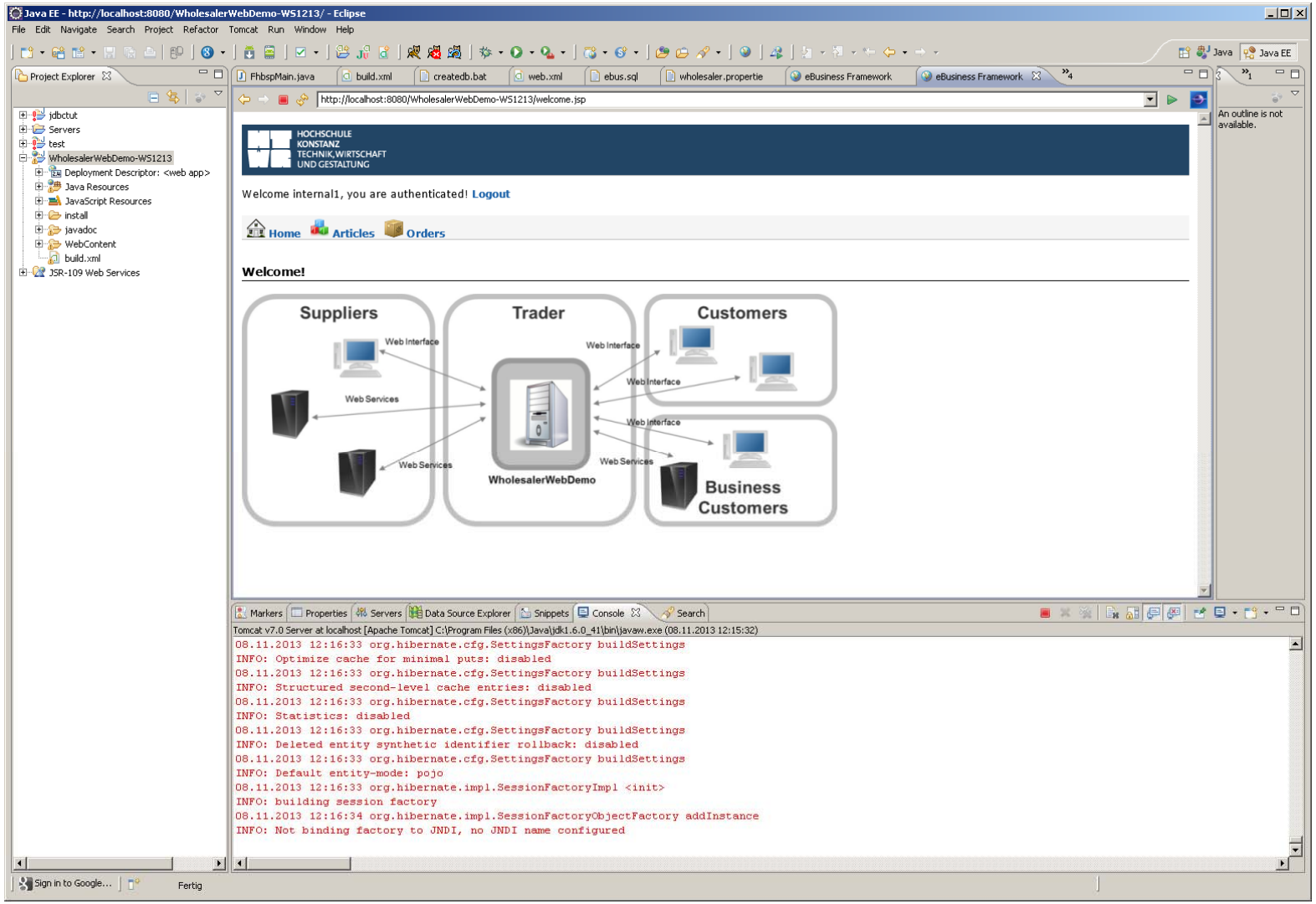
- The Web Demo Application Login Screen after Successful Start



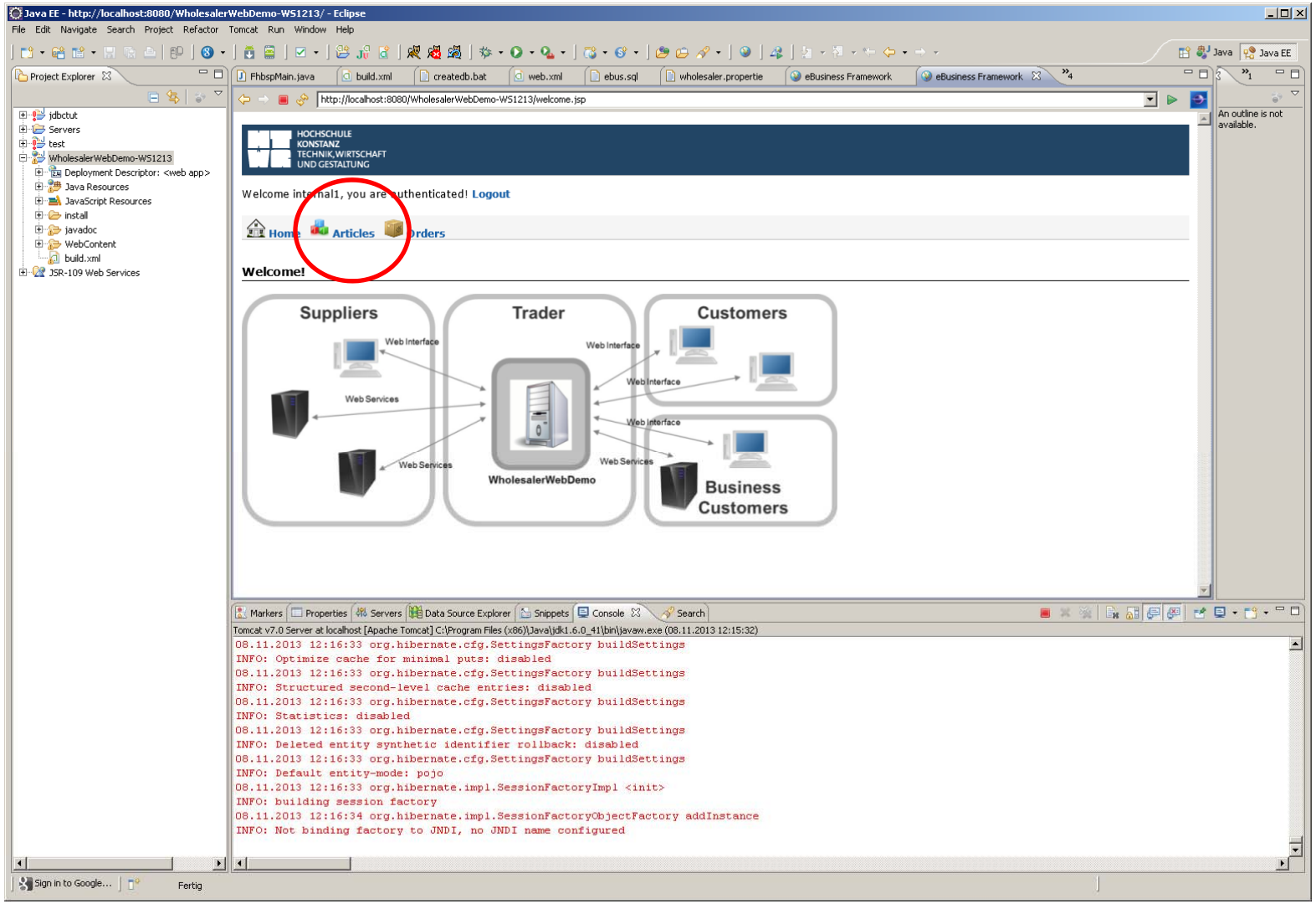
# Login (Shortcuts can be used)



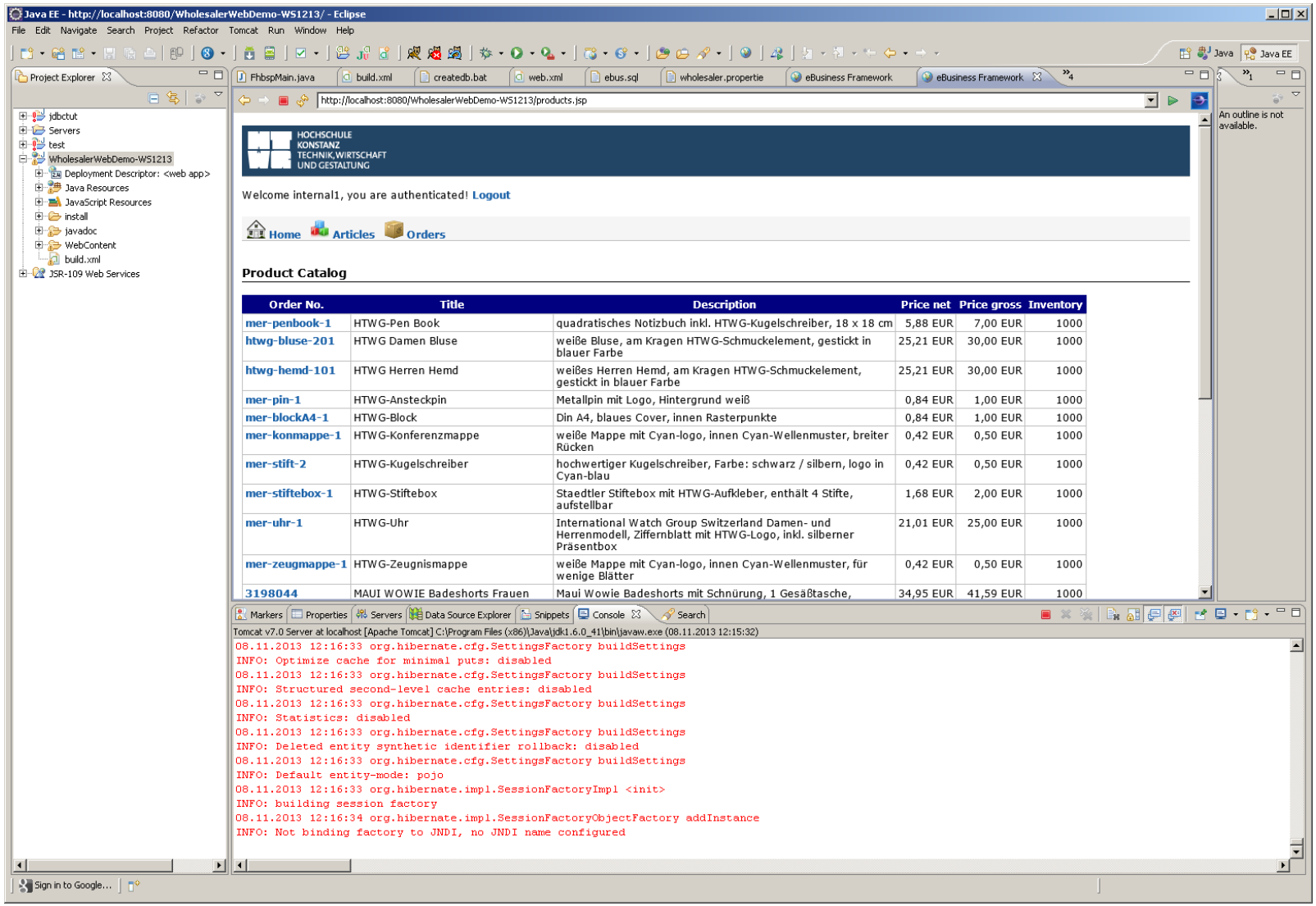
# Home Screen of the Web Demo Application



# Change to Articles Screen



# Articles Screen

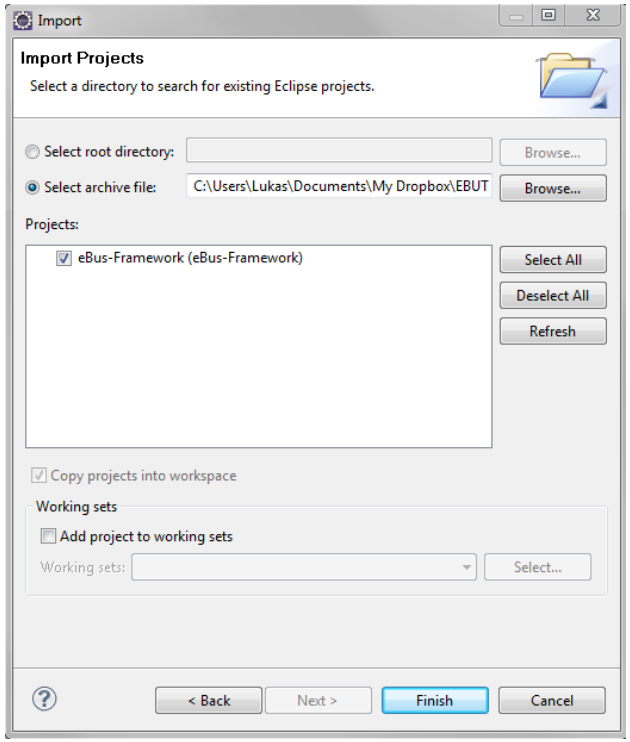


# Import of the "E-Business Framework 2.1" Project

**Import is not necessary but useful if you wish to know how the E-Business Software Framework works**

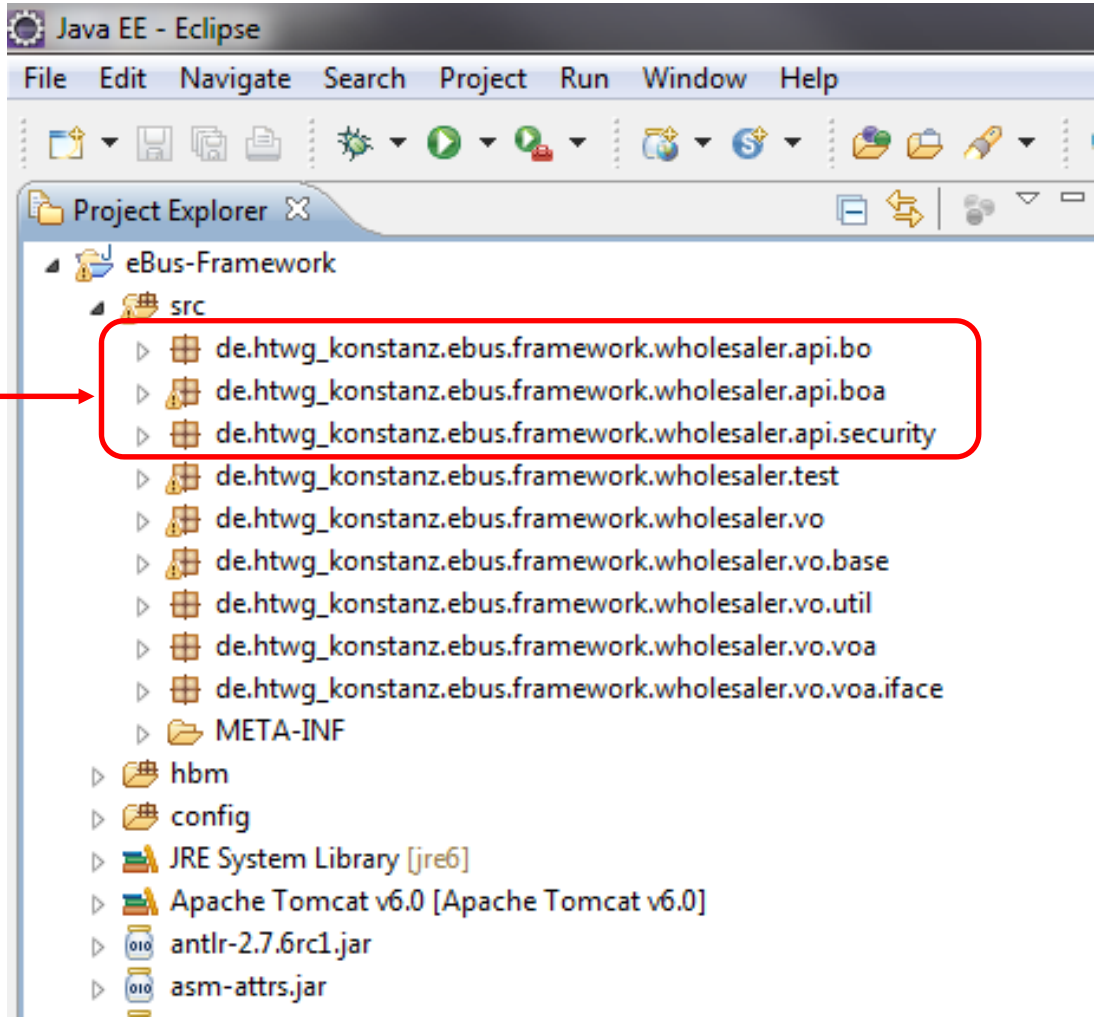
1. In Eclipse Click „File > Import“ and choose „General > Existing Projects into Workspace“

2. Select „Select archive file“ and chosse the downloaded zipped project file „EBUS-Framework-2.1.1.0.zip“



# E-Business Software Framework in Project Explorer

Important packages



# Questions?