Database Setup for Perpustakaan Professional

Preliminary Remark

Perpustakaan has got an automatic database setup, see in addition also manual, chapter 8.1 Base parameters. With it technical laymen can also launch a process which allows the access of other computers on the same database. The "central computer" launches this process by the first call of Perpustakaan. So this principle always needs Perpustakaan getting startet on the central computer. The first professionalization can be to launch this Java DB process if necessary independent of the application program:

Start / Stop of the Java DB service

cd C:\Users\Public\databases
"C:\Program Files (x86)\Perpustakaan\jre\bin\java" -jar "C:\Program Files (x86)\Perpustakaan\db\lib\derbyrun.jar" server start -h 192.168.0.2

The command to stop the Java DB process is:
"C:\Program Files (x86)\Perpustakaan\jre\bin\java" -jar "C:\Program Files (x86)\Perpustakaan\db\lib\derbyrun.jar" server shutdown -h 192.168.0.2

(adapt IP address)

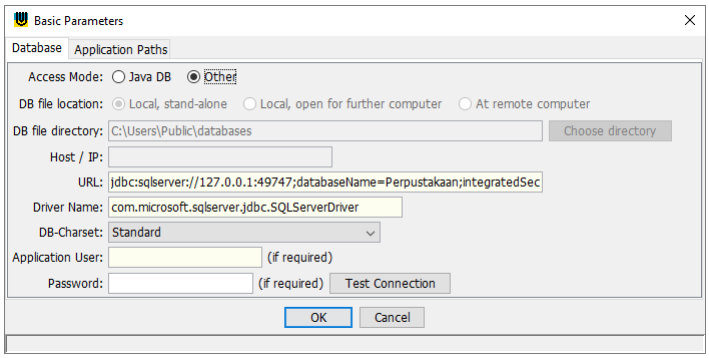
When required other database systems can be also used according to predilections. This is explained in the following. Please, note that you must get yourselves a suitably JDBC driver. This must be made available in the lib directory of the installation, so, e.g., 'C:\Program Files (x86) \Perpustakaan\lib'.

Create Datenbase

Create with a database system of your choice (e.g., MySQL) a database named "Perpustakaan" as well as a user who has got the right to create tables and indexes.

Configure Clients

Call menu Administration, Basic Parameters and select the access mode "other". Enter according to database type URL and driver name and replace "localhost" or "dbServerNameOrIP" if necessary with the IP address or the name of your database server. If the database listens to a different port, also customize this.



MS SQL Server

Please, get yourselves a JDBC driver suitable for your database and copy it into the directory C:\Program Files (x86) \Perpustakaan\lib. At the moment sqljdbc42.jar is the right thing.

URL: jdbc:sqlserver://localhost:1433;databaseName=Perpustakaan;integratedSecurity=false

Driver Name: com.microsoft.sqlserver.jdbc.SQLServerDriver

Hint: To use windows authentification (integratedSecurity=true), a further DLL is required in the windows system folder: sqljdbc_auth.dll

Oracle

Please copy driver file classes12.zip or classes12.jar into the library folder of the Perpustakaan installation, e.g. into „C:\Programme\Perpustakaan\lib“.

URL: jdbc:oracle:thin:@dbServerName:1521:orcl
Driver Name: oracle.jdbc.driver.OracleDriver

DB2 für iSeries

Please copy driver file jt400.jar into the library folder of the Perpustakaan installation, e.g. into

„C:\Programme\Perpustakaan\lib“.

URL: jdbc:as400://dbServerName/perpustakaan
Driver Name: com.ibm.as400.access.AS400JDBCDriver

MariaDB

Download from https://mariadb.com/kb/en/mariadb/about-mariadb-connector-j/ Please copy driver file mariadb-java-client-...jar ins lib-Verzeichnis der Perpustakaan-Installation, z.B. nach „C:\Programme\Perpustakaan\lib“ and restart Perpustakaan.

URL: jdbc:mariadb://dbServerNameOrIP:3306/perpustakaan
Driver Name: org.mariadb.jdbc.Driver

MySQL

Download von http://www.mysql.com/downloads/connector/j/: mysql-connector-java-....zip entpacken. Please copy driver file mysql-connector-...jar into the library folder of the Perpustakaan installation, e.g. into „C:\Programme\Perpustakaan\lib“ and restart Perpustakaan.

URL: jdbc:mysql://dbServerNameOrIP/Perpustakaan
Driver Name: com.mysql.jdbc.Driver

PostgreSQL

Download a suitable driver, e.g. from https://jdbc.postgresql.org/download.html into the library folder of the Perpustakaan installation, e.g. into „C:\Programme\Perpustakaan\lib“ and restart Perpustakaan.

URL: jdbc:postgresql://dbServerNameOrIP:5433/Perpustakaan
Driver Name: org.postgresql.Driver

Hints

Log File

Causes of any disturbances with the connection setup are captured in the log file „C:\users\<userName>\Perpustakaan\application.log“. To get support please send this log file via e-mail.

Server Installations Tips

The configuration of the database connection is saved in the file C:\Users\Public\Perpustakaan\BaseProperties.ser. If Perpustakaan is installed on a server disc drive and called by the client, this configuration would have to be repeated with every client. This can be avoided, while the file BaseProperties.ser is moved in the directory C:\Program Files (x86) \Perpustakaan. There it has immediate validity for all clients, the Perpustakaan start. (Perhaps existing BaseProperties.ser on the clients must be deleted.)

Another possibility consists in extending the desktop link Perpustakaan.exe by parameters; the third parameter is interpreted as a directory in which the BaseProperties.ser is to be read. Sample: "C:\Program Files (x86)\Perpustakaan\bin\Perpustakaan .exe" arg1 arg2 C:\Temp

This parameter can be also used to access different databases using a single client: One unique Perpustakaan installation, a desktop link for the student's library, another desktop link for the learning aid stuff.