



This document explains how to install Labmatica LIMS.

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### A Introduction

Labmatica LIMS software is a client/server system, so you must first install and prepare the database and after that you can install the client software.

**Note:** Labmatica LIMS is written in JAVA. You need minimum the Java Runtime Environment 1.6.0. You can download this from <http://java.com/download/>

### B Installing the database

You need to:

- a: Have a database management system like MySQL and
- b: run the Labmatica LIMS installation script on this database in order to create the necessary tables, views etc.

#### 1 Installing MySQL Server 5

Download the databases software from the [www.mysql.com](http://www.mysql.com) website and install it using the wizard or other ways you like. For more help on this consult the MySQL website. In the installation process you need to define a root user and root password. Remember this because you will need it later! Also download the MySQL „GUITools“. This is a set of free



tools to manage the database including the „MySQL Query Browser“ which we will use for this document. Of course there are other tools which you can use if you are familiar with the software.

Important: The default of the MySQL database is to listen only to connections from the local computer (localhost = 127.0.0.1). You need to change this in order to access the database from other client computers! How to do this?

Go to the my.ini (on Windows) or to the my.cnf (on LINUX) in the MySQL folder.

a.) for older MySQL version uncomment #skip-networking

b.) for newer versions uncomment #bind-address 127.0.0.1

This means put a '#' at the beginning of the line! Then restart the database

## 2 Running the Labmatica database script

1. Start MySQL Query Browser
2. At first enter the Server Host and Port (default: 3306) and then connect as "root" and enter the password that you set during the configuration.  
Note: You must not set a schema!
3. Open the following SQL-Script, that you can find in the folder labmatica/scripts/MySQL:  
FreeLIMS\_MySQL.sql
4. Run this SQL-Script to create the database "freelims" with all required tables and views.
5. Success: Now you can see the newly created database "freelims" in the Schema-Explorer.  
See screenshot:



```
MySQL Query Browser - Connection: / freelims
Datei Bearbeiten Ansicht Abfrage Skript Tools Fenster MySQL Enterprise Hilfe
Rückgängig/Wiederholen Laden Speichern Search Pause Fortfahren Schritt Ausführen Stopp
Ergebnismenge 1 Skript 1 x
4 -- * Laboptimizer Ltd,
5 -- * Rat-Beil-Strasse 63
6 -- * 60318 Frankfurt am Main,
7 -- * info@freelims.com,
8 -- * Germany
9 -- *
10 -- * This program is free software; you can redistribute it and/or modify
11 -- * it under the terms of the GNU General Public License as published by
12 -- * the Free Software Foundation; either version 2 of the License, or
13 -- * (at your option) any later version.
14 -- *
15 -- * This program is distributed in the hope that it will be useful,
16 -- * but WITHOUT ANY WARRANTY; without even the implied warranty of
17 -- * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
18 -- * GNU General Public License for more details.
19 -- *
20 -- * You should have received a copy of the GNU General Public License al
21 -- * with this program; if not, write to the Free Software Foundation, In
22 -- * 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
23 -- *
24
25 DROP DATABASE IF EXISTS `freelims`;
26 CREATE DATABASE `freelims`
27   CHARACTER SET utf8 COLLATE utf8_bin;
28 USE `freelims`;
29
30 -----
31 -- Tables
32
33 DROP TABLE IF EXISTS `ADDRESSES`;
34 CREATE TABLE `ADDRESSES` (
35   `id` INTEGER NOT NULL auto_increment,
36   `organization` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
37   `department` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
38   `street` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
39   `street_number` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
40   `phone` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
41   `fax` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
42   `email` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
43   `city` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
44   `zip` VARCHAR(50) CHARACTER SET utf8 COLLATE utf8_bin NULL,
45   PRIMARY KEY (`id`)) ENGINE=InnoDB;
13:1
```

## C Installing the Java Runtime Environment JRE1.6

Go to the <http://java.com/> website and check if you already have it on your client computer. You do not need it on the database server computer! If you do not have it download and install it! You need Version 1.6 or higher. Otherwise Labmatica will not work correctly.



### D Installing the Labmatica client program

Download the program from the website [www.labmatica.com/downloads.html](http://www.labmatica.com/downloads.html)

When you have done this unzip the zip-file. In the unzipped folder you find subfolders and files (see next screenshot):

Name	Größe	Typ	Geändert am
lib		Dateiordner	25.06.2008 15:51
logging		Dateiordner	20.06.2008 16:57
reports		Dateiordner	10.07.2008 16:30
scripts		Dateiordner	24.06.2008 15:44
translations		Dateiordner	18.07.2008 16:19
labmatica.jar	617 KB	Executable Jar File	15.07.2008 15:34
logo.png	5 KB	PNG-Bild	11.07.2008 16:15
connect.xml	1 KB	Safari Document	18.07.2008 12:16
CHANGES.txt	5 KB	Textdokument	15.07.2008 15:10
COPYRIGHT.txt	2 KB	Textdokument	25.06.2008 14:33
LICENSE.txt	4 KB	Textdokument	24.06.2008 15:48
README.txt	1 KB	Textdokument	24.06.2008 15:50
syslog.log	22 KB	Textdokument	18.07.2008 16:24

What is the purpose of these files and folders:

- a.) labmatica.jar = the actual program. It will start when you double click it.
- b.) connect.xml = here you enter connection information. Important!!! If you do not edit this file the program will not work!
- c.) CHANGES.txt = lists changes form one program version to another
- d.) COPYRIGHT.txt = copyright information
- e.) LICENSE.txt = licensing information
- f.) README.txt = things you should know
- g.) syslog.log = logfile → see: logging.properties file in subfolder logging
- h.) lib = folder with necessary libraries (do not remove!)
- i.) logging = folder with a logging.properties file → copy this file to your java/jre/lib folder to log all system events to a file syslog.log.
- j.) reports = contains reports (jasper files) and a subfolder with the jrxml report templates which you can modify to your needs.
- k.) scripts = folder with the database scripts
- l.) translations = folder with the different languages (i.e. French.xml, german.xml) edit these files to modify the user interface to your needs



## E Connect Client and Database

Now you must configure the connection to the database.

1. Open the connect.xml file with a text-editor.
2. Now you have to set some values

[...]

```
<!-- What is the URL for the database server? -->  
<URL>jdbc:mysql://127.0.0.1:3306/freelims</URL>
```

Here you have to set the location of the server, in this example the database-server is on the local computer(127.0.0.1).

The value 3306 is the default-value for MySQL-Port. If you choose another port, you must change this.

[...]

```
<!-- What is the username for the database? -->  
<userid>root</userid>
```

You must enter the name of the user, which has the rights to connect and manage the freelims-database. (Note: root is the default administration-user of MySQL)

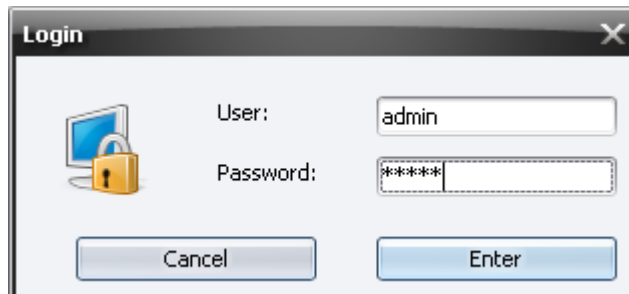
[...]

```
<!-- What is the password for this user? -->  
<password>#####</password>
```

Now you must alter the password. If you use the "root" user enter the root password instead of #####. Else enter the password for the user, which you have chosen instead of #####.

## F Starting the program

Just doubleclick on the labmatica.jar! A login screen should appear:



Enter  
user = admin



password = admin

and the program will start!

Note: on some computers / operating systems doubleclicking does not work. Use right mouse and click on „start with java runtime env.“

### **G Fixing Problems**

If you have followed this guide and have completed the above steps but do not succeed you can do the following to get more information:

a.) go to the connect.xml and set `<startup_screen>true</startup_screen>`

This will make a screen appear which will give you additional information about what is going on.

b.) copy the logging.properties file which you find in the labmatica/logging folder to your java/jre/lib folder.

There is already a file like this. Replace it. Then you will get a syslog.log file in the labmatica folder. Open this file and you find the internal program log messages. If you do not understand them send an email with this logfile to [support@labmatica.com](mailto:support@labmatica.com)

### **H Configuration Options**

#### **1 Look and Feel**

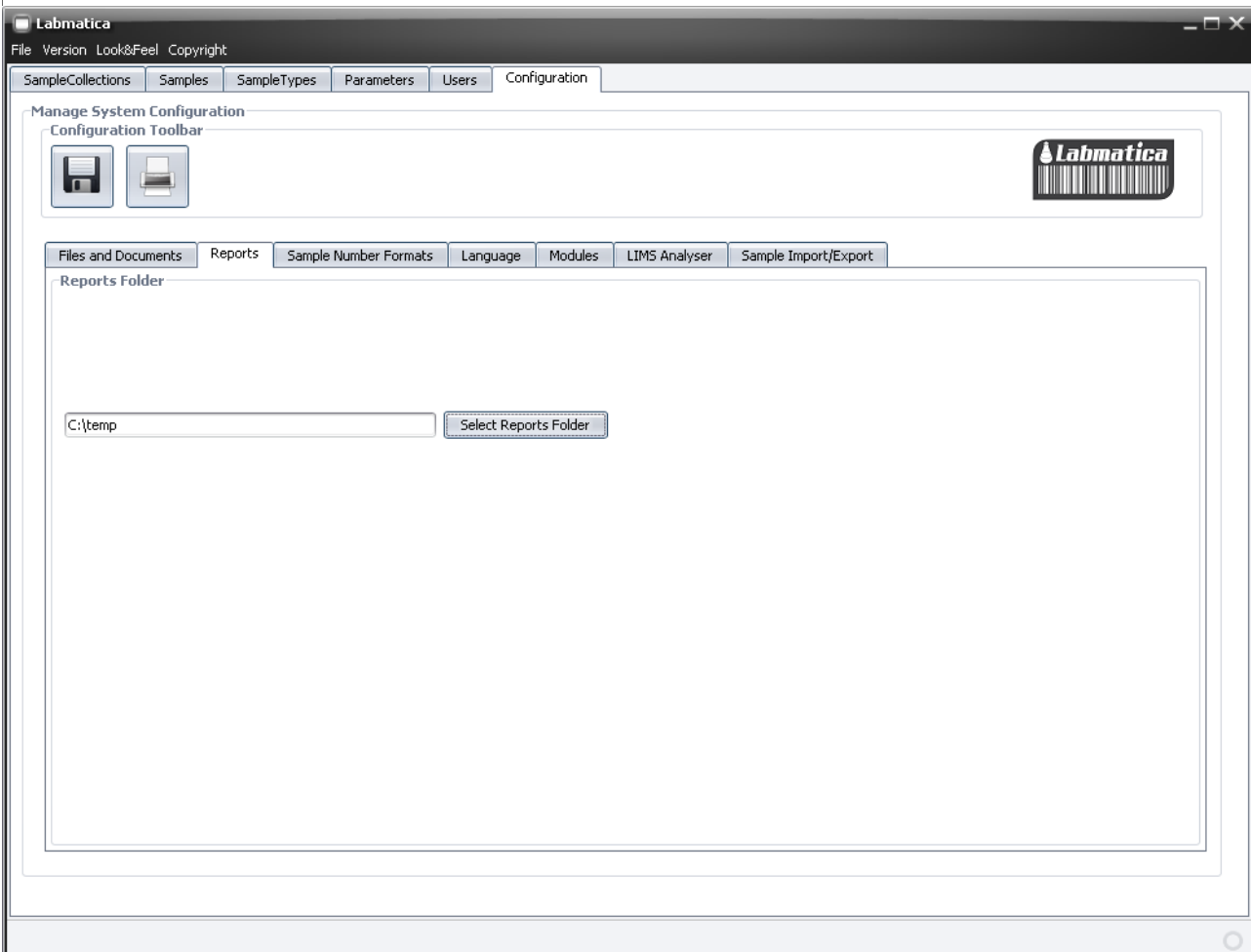
In the connect.xml you can choose and save different look and feel options. Try it! Choose a number between 1 and 9 and restart the program.

```
<look_and_feel>3</look_and_feel>
```



## 2 Reports

When you have started the system, go to -> configuration → Reports

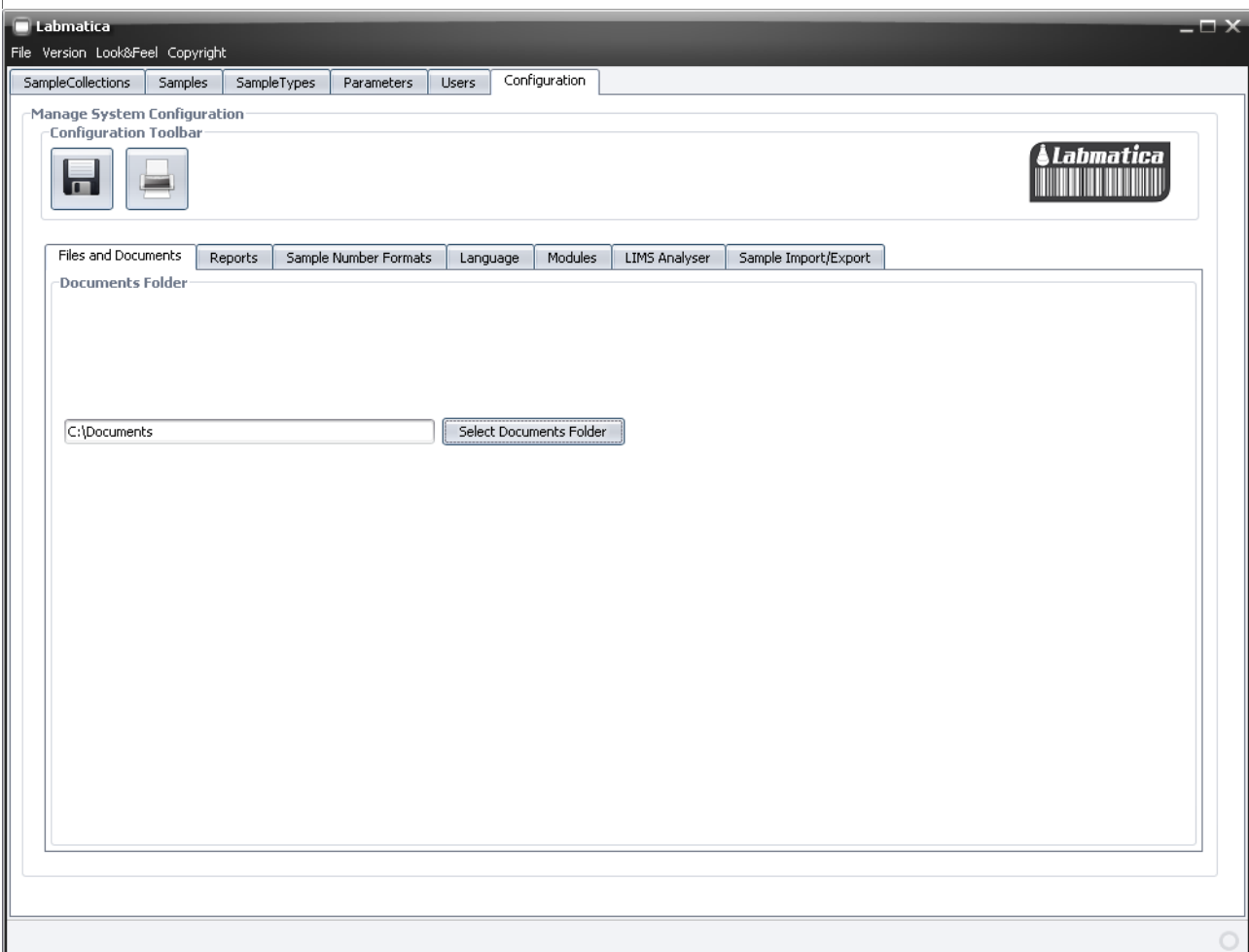


and enter a path to a folder where you want to store your reports. Save! Reports will not work before you have done this!



## 3 Dokument Management

When you have started the system, go to -> configuration → Files and Documents and enter a path to a folder where you want to store your Documents (like images, PDFs, scans...). Save! Document management will not work before you have done this!





## 4 System language

When you have started the system, go to -> configuration → language and select a language from the combobox. Save and restart the system!

If you want to run your system in a language that is not yet available translate a language.xml file in the translations subfolder or send a email to [request@labmatica.com](mailto:request@labmatica.com)

