



I Installation

I.1. General

The **QMSOFT®** software package is delivered on a CD-ROM. The installation procedure starts automatically if the "autostart"-property of the CD-ROM-drive is enabled. If the installation does not start automatically, please execute the program file "StartQmsoftCD.exe" manually. Follow the installation messages on the screen.

- ⇒ *Please note, that you should be logged in at least as a local "Administrator" at your PC to have all of the needed access-rights! Otherwise not all installation steps will be properly executed.*
- ⇒ *If an older 32-bit-installation of QMSOFT® exists already on your PC (Release 3.xx), please note the recommendations in appendix D and in chapter I.2 to execute the taking-over of all settings, template files, tolerance tables etc. into the new installation without any loss of information.*

After starting the installation you will get this screen, which shows several installation options:

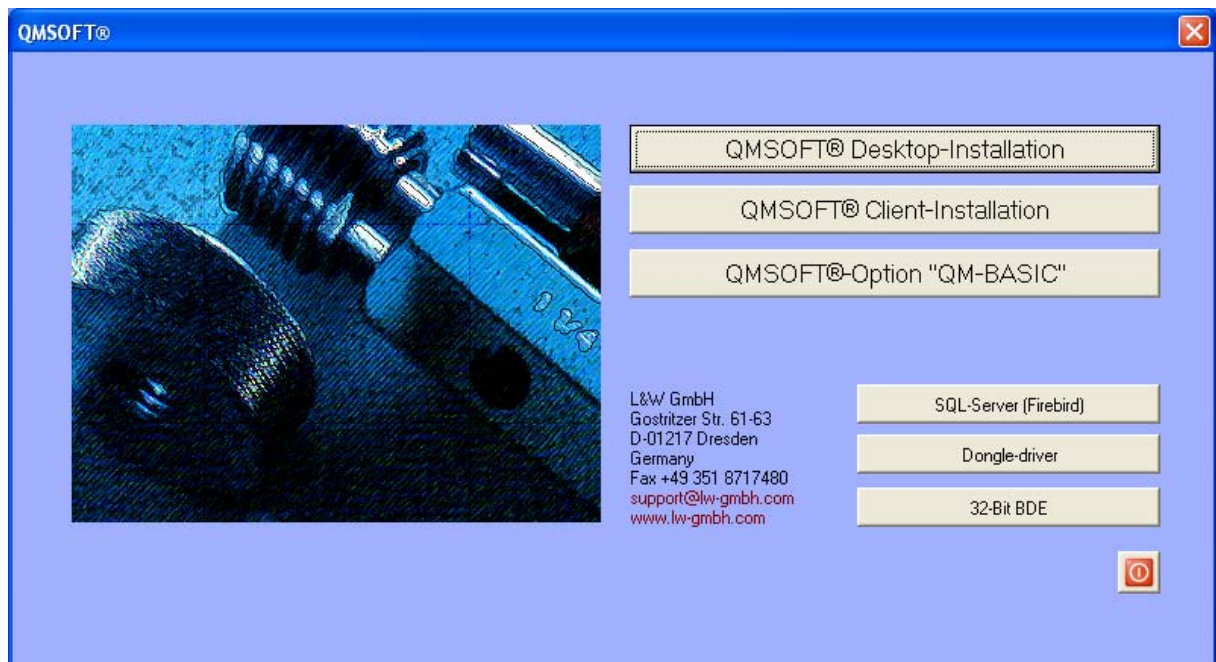


Figure: Select the type of installation

The following comments should help to select the optimum type of the installation. If you are not sure about your decision please contact your IT-department before you execute the installation to avoid trouble and problems.

I.2. Which installation option is required?

The gauge management program **QM-MANAG** of the system **QMSOFT®** is designed as a so-called **Client/Server-system**: the **QMSOFT®** gauge management works as a "Client", which all of the user interactions (inputs, database queries etc.) transfers to the "SQL-database-server" for execution. This "SQL-database-server" can run either on the local desktop-computer or on a server-computer in the network.

The choice of **QMSOFT® desktop installation** or **QMSOFT® client Installation** depends from the decision, where the database files should be stored: on the local PC or on a central server in the network.

⇒ *All of the QMSOFT®- programs, which contains database features, the installation of a SQL-database-server is needed (either on a central server-computer in the network or on the local PC). You need such a database server, if you want to use the gauge management program QM-MANAG or the programs QM-BLOCK (for the gauge block inspection) and QM-PIN (for the inspection of pins).*

If you want to use the gauge management program as a local user only and at your personal computer, and if the database files should be stored also at the local computer, please select then **QMSOFT® desktop installation**. If you want to store your gauge management data on a server in a network and/or you need the access to your Gauge management data from several working stations, please select **QMSOFT® client Installation**. If necessary please contact a person from your IT department!

The other installation features are the following:

- **QMSOFT® Option "QM-BASIC"**
This option is installing the measure driver software to show measuring values from measuring machine which are using a Heidenhain interface card (IK220) for the connection to the computer. The desktop- and also the client-installation include this option automatically.
- **SQL-Server (Firebird)**
This option does install only the SQL Database Server "Firebird"! The QMSOFT software does use the Firebird Database server as the default SQL database server. This option does not install any other QMSOFT® programs. Use this option to install the Firebird SQL Server on the server machine where you want to place your database files for a shared access from different client PC's.
- **Dongle-driver**
This selection is installing the hardware driver for the CodeMeter-stick (copy protection and licence management). This feature is needed in this case, that the CodeMeter-stick should be used on a central server machine in the network (the feature should be executed on the "server" machine only, the desktop- and the client-installation include the driver-installation automatically).
- **32-Bit BDE**
This option does install the 32bit Borland Database Engine. This option has to be installed in any case when you need to convert 16-bit QMSOFT database to the new 32-bit system. It is also required for the conversion of data for the 16-bit-versions of QM-BLOCK (gauge block inspection) and QM-PIN (cylindrical pins).

I.3. The QMSOFT® installation procedure

After clicking the button „**QMSOFT® - Client-Installation**“ or „**QMSOFT® - Desktop-Installation**“ the installation starts with loading and decompressing the installation kit. This needs a short time, please wait.

Now the installation of the "Codemeter Runtime Kit" will be executed. This software is needed to access the copy protection hardware ("CodeMeter-stick"). Use the "Continue" buttons to go forward through the dialogue, the requests for "Name" and "Organisation" you can ignore.

After selecting the installation language you have to confirm the licence agreement, the language setting for the program can also be changed after the installation.

After confirming the "Licence agreements" you have to enter the **QMSOFT®** licence information. If you have bought the software the delivery kit contains a CodeMeter-stick, which has to plug in into a free USB-port of the computer. This CodeMeter-stick was programmed with the licence codes related to the order of the customer.

You have to type in the name of your company and the number of the CodeMeter-stick, which you can find on the label of the stick.

Figure: Input of license data

⇒ *If you do not have a CodeMeter-stick you can use QMSOFT® as a demonstration-version to test it. In this case keep the licence code empty.*

In the next step you have to select, which of the **QMSOFT®** - programs should be installed. We recommend to select all of the programs (which is also the default pre-setting) to avoid trouble, if you want to extent the installation with additional licences later.

Now you have to determine the installation folder, where the **QMSOFT®** program files should be stored. In the most cases this is the folder „Qmsoft32“ in the „Program files“ folder of the Windows operating system.

A click onto the button „Next“ starts the program **QMSOFT® / GaugeMan** directly, which is the central entry-point into **QMSOFT®**.

I.4. The first start of QMSOFT®

If you start **QMSOFT®** the first time, a configuration assistant guides you through some setup dialogues to define some basic settings. Please follow the dialogues and note the information on the screens. In the most cases we recommend to use the default settings.

I.4.1. QMSOFT data folder settings

The first setting is the name of the folder, where **QMSOFT®** is saving all of the data, template, certificate and configuration files.

If you install more than one workplace in a network, you have to execute some additional steps, in this case please note also the information in chapter „I.5 Specials for network installation“!

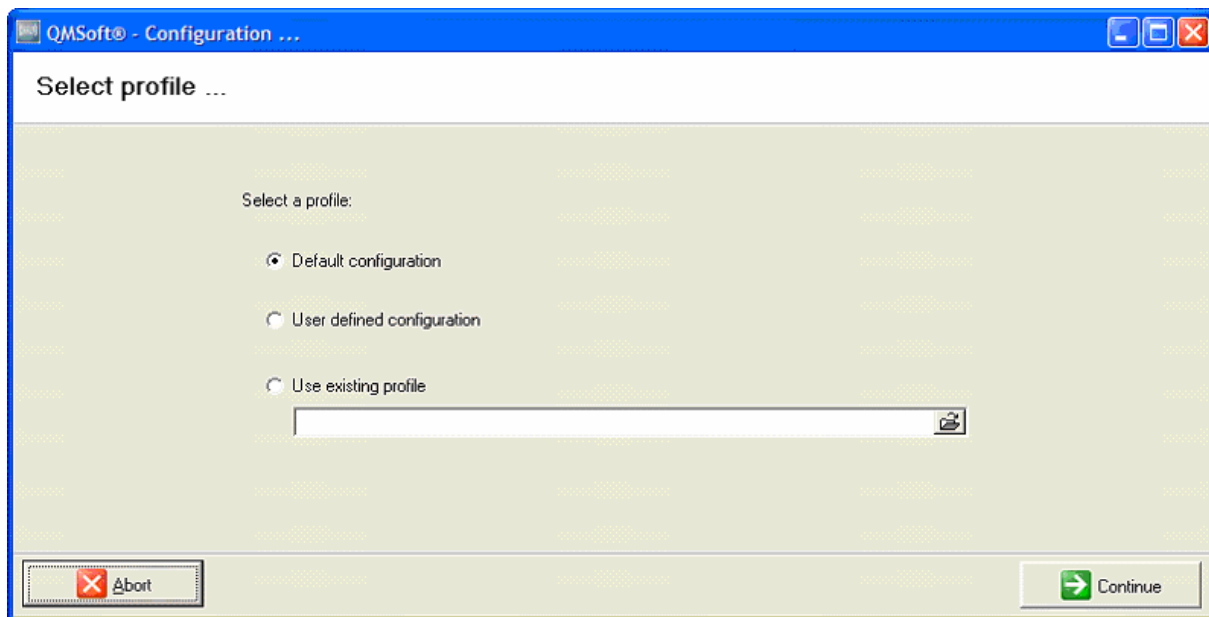


Figure: Select profile

You have three options:

- **Default configuration** (recommended for a single-place-installation)
in this case the certificate template files, the files for factory tolerances and inspection positions etc. will be stored into the default folders of the Windows operating system "Public documents" (the location depends from the version of the operating system)
- **User defined configuration** (recommended for network installations, 1st computer)
here you can define the folder for the certificate template files, the files for factory tolerances and inspection positions etc. manually. This is useful for multi-user-access in a network.
- **Use existing profile** (recommended for network installations, 2nd and more computer)
this feature make the deployment of an existing configuration from one to an other very simple.

At the first start of the program you also have to do the following steps:

- Check the licence data
- Create and configure the gauge database

This step is necessary only in the case, that the gauge management program QM-MANAG was included in the installation options (the programs QM-BLOCK and QM-PIN also use QM-MANAG automatically for management tasks)!

- Connection settings for the online communication with measuring devices

This step is necessary only in the case, that the QMSOFT® inspection programs should be used with measuring devices.

I.4.2. Check licence data / Settings for network access

While the installation procedure the number of the CodeMeter stick was already typed in.
In case, that you want to use the CodeMeter stick not on the local PC but on a central "server" computer in a network, you need to set the option the CodeMeter access to „network“. Following you has to enter the name (or the IP-address) of this "server" computer where the CodeMeter stick is plugged in.

Figure: Settings for network access of the licence data

Please note also the chapter „I.5.1 CodeMeter-Stick on a server“ describing the installation procedure on the server.

I.4.3. Creating and / or connecting a database

While the installation procedure of QMSOFT® **no database** for the gauge management program QM-MANAG was installed/created, because Client/Server-technology means, that the client software has no file access to the database folder of the SQL-server.

⇒ *If you start QMSOFT® at the first time, an error message window appears, which is indicating a connection error. After confirming this message the configuration tool for the database connection starts automatically.*

A screen dialogue appears with a step-by-step-description of the settings, which you have to do. The following pages will give you more information.

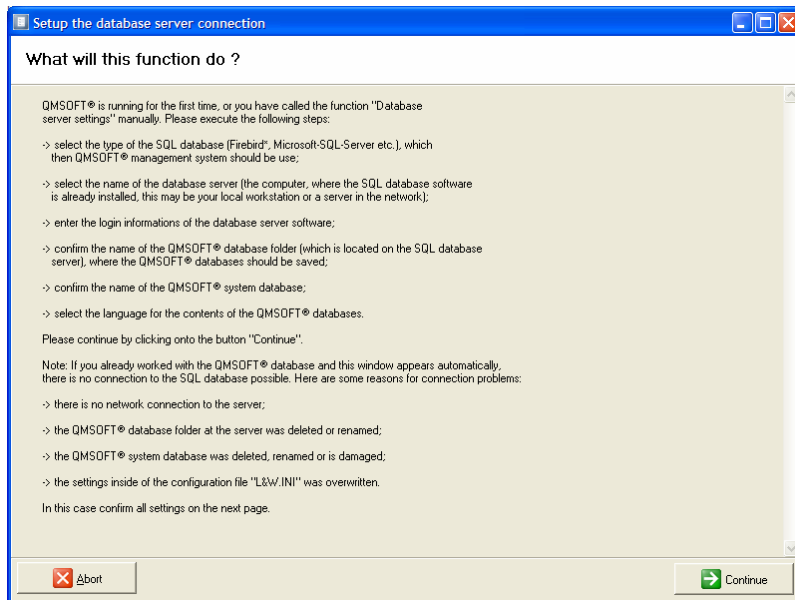


Figure: Setup the database server connection, step 1

This dialogue also appears, if a database exists, but the connection to this database is not possible. The causes of this situation are described in the dialogue text itself.

While creating the database structures for the first time two database files will be created. One database file contains the „System database” of QMSOFT®, which is used to manage the logins, access rights, customer names and addresses etc. The second database file is the gauge database itself.

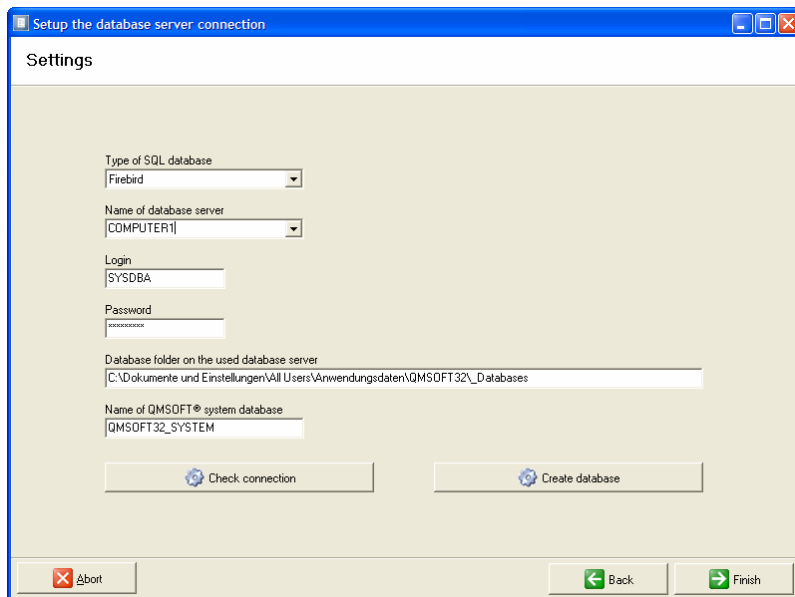


Figure: Setup the database server connection, step 2

Select or enter the following parameters:

Type of SQL database:

at time Firebird SQL server and MS-SQL Server (Version 8.0 and higher) server will be supported. The installation of the open source project Firebird SQL server is a part of the QMSOFT installation CD. This will be used as the default database server for the QM-SOFT system.

Name of Database server:

select the name of the computer where your SQL server program is running. For a local installation it is the name of your PC. In this case you can also type in "**localhost**"!

Login and Password:

here the default settings for the SQL-Server access are made. Change this settings only if you use an existing SQL server in your network with different access codes! In this case you have to ask your Database Administrator to get it.

- ⇒ *Using a MS SQL Server your administrator has to give you an personal access code (User name and Password) which does enable you the creation of a new database ("dbo" rights)! (see also section 1.5.2 for it)*

Using the Firebird-SQL-server the default "Login" name is "sysdba", the "Password" is "masterkey".

Physical database folder on the database server:

Please type in the name of the folder, where the database files should be stored. Use the default settings when installing a local database; otherwise you have to contact your database administrator to get the name of a folder on one of the server-internal hard-disk drives.

- ⇒ *If the database should be installed onto a "Server" computer, make sure that you will enter the name of a "physical" existing drive on ther server side and NOT a "mapped" drive where you have only a "logical" name.*

Name of QMSOFT system database:

usually you should not change the default setting "QMSOFT32_SYSTEM".

Now you can continue with "Check connection" or "Create database". If you click the button "Check connection" and the system database could not be found (in case that you start it the first time there does no database exist) you will get an error message.

If you are sure, that no database exists (this is the situation after the first installation of QMSOFT®), you can create one by clicking the "Create database"-button. You will now get this screen:

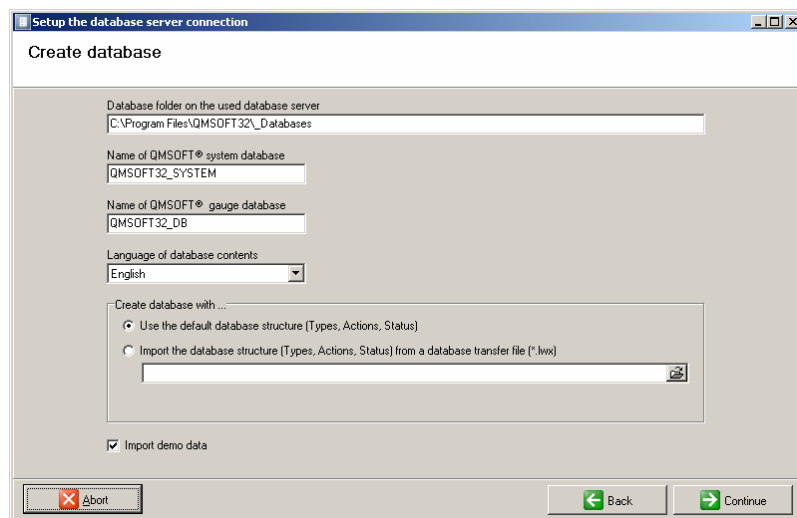


Figure: Settings for the creation of a new database

Here you will see again the names of the database folder and the system database (see also the previous figure). The other settings are:

Name of QMSOFT gauge database:

usually you should use the default name "QMSOFT32_DB"

- ⇒ *The "MS-SQL-Server" connection type is using the OLEDB interface. It can be used for both: the MS SQL Server 2005 as well as the MS-SQL Server 2000. In this case the Microsoft Data Access components (MDAC) 2.6 (or higher) are required, which are normally already included into the Windows operating system.*
- ⇒ *Generally, the MS SQL administrator has to create the two database files, which will be used by the QMSOFT® system, before. The default names of these two files (empty database files without any table or something else) are: "QMSOFT32_SYSTEM" and "QMSOFT32_DB". Nevertheless you can choose the names as you want.*

Language of database contents:

here you can select the language for the database which should be created.

Create database with...:

Usually a new database will be created by using the given "Default" database structure. In some cases you can have a special file including a different database structure (mostly when you do a conversion of gauge data from an older database). Only if you have such special file use the option "Import the database structure.." and select the related file.

Import demo data:

activating this option you can create a separated "DEMO" client which will be filled with a number of gauge data. This "Demo" client you can use to test the program functions.

⇒ *Doing a local ("Desktop") installation you can generally use all of the default settings.*

Use the "Continue" Button to continue.

⇒ *Activated „Firewalls“ or special programs as „Norton Security“ etc. can block the creation of databases on the local computer. If you get an error message „Unable to connect ..“ while the database creation process, you have to check the security settings of your computer (the port "3050" has to be opened for TCP/IP connections).*

I.4.4. Default measuring device selection

All QMSOFT® measuring programs includes the feature to take over the measures directly from a measuring device, which is connected (by several interface technologies) to the computer. If you start one of the measuring programs at the first time you have to select the device configuration.

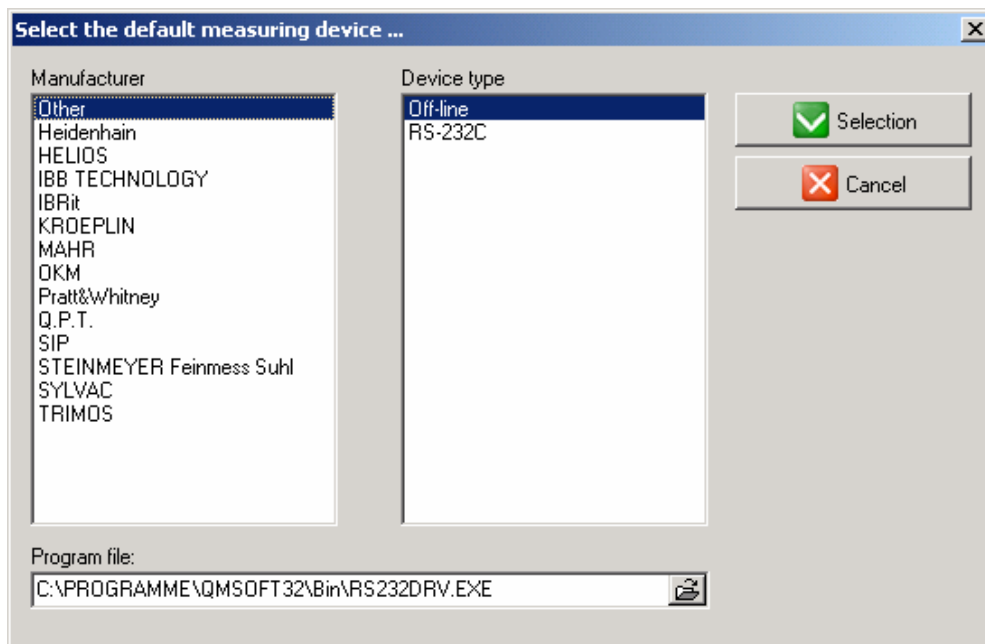


Figure: Set the default measuring device

Select the manufacturer and the device type. In the input field "Program file" the QMSOFT® measure driver program, which will realize the communication, will be indicated. Continue with the "Selection" button to set the parameters.

⇒ *If you have no on-line connected measuring device, please select "Other" and "Off-line"!*

I.5. Specials for network installations

Compared with a local installation you have to note for a network installation some changes to the default settings to

- use a central CodeMeter-stick for the licence procedure (if desired),
- connect the local QMSOFT-installations with a central database server (see also chapter „I.4.3 Creating and / or connecting a database“),
- save common used files (templates, tolerance tables, inspection positions etc.) onto a central server.

The following chapters will give some hints to avoid errors and mistakes and to minimize manual parameter changes.

I.5.1. CodeMeter-Stick on a server

In contrast to the single-user licence for a network is useful to connect the CodeMeter stick to a central server. This provides the possibility of a so-called "floating license", in which a certain number of simultaneous use of a QMSOFT® program without any firm commitment to a particular workplace computer is allowed. In this case, the CodeMeter stick is managing the maximum number of simultaneously possible uses of each of the licensed programs.

To install the the CodeMeter stick on the "server", proceed as follows:

- Install the CodeMeter dongle driver on the "server", which is the computer, where the dongle as a network provided CodeMeter stick is connected (insert QMSOFT-CD; after starting the QMSOFT installation procedure click on the "dongle driver" - button in main form),
- Start the "CodeMeter Control center" on the dongle server (see CodeMeter-icon in the system tray right in the Windows taskbar)



click here

- In the CodeMeter control center click now the "WebAdmin" button to start your internet browser and provides you the access to the dongle configuration settings.

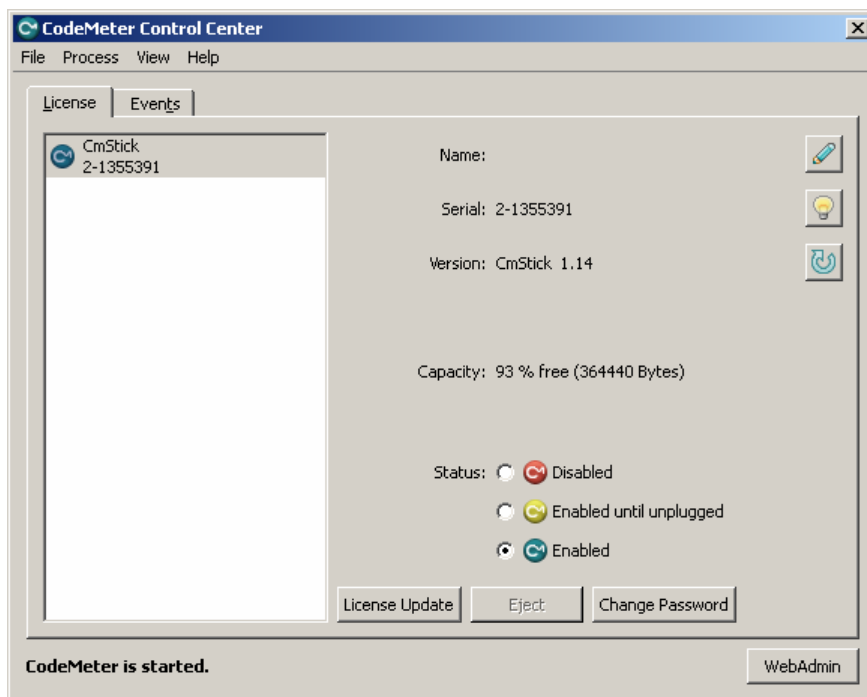


Figure: CodeMeter control center

- Select the item „**Configuration**“ from the upper menu, now the item „**Network**“ from the sub-menu, activate the item „**Run Network Server**“, click to the button „**Apply**“, exit the browser and start the „CodeMeter control center“ again.

Please note:

⇒ *For using the network dongle for floating licences the TCP/IP-port „**22350**“ has to be opened in the settings of the Firewalls on all corresponding computers.*

The configuration of the client PC's does now require only the setting of the "CodeMeter access mode" to "network" and the entering of the name of the CodeMeter server computer (see also section I.4.2) for it.

Note: if there are problems on the client side you can check the communication with the central CodeMeter-stick by doing the following steps:

- start the „CodeMeter control panel“ on the local computer, click onto the button „WebAdmin“,
- Select the item „**Configuration**“ from the upper menu, now the item „**Network**“ from the sub-menu, type in into the field „Server Search List“ the IP-address (or the network-name) of the computers, to which the CodeMeter-Stick is connected, click onto the button „**Apply**“.
- Check the dongle access by clicking onto menu item „**Home**“ in upper menu, onto button „**Host name**“ and by selecting the computer from the list. Now click onto menu item „**Server**“ to see an overview over all of the licences, which are programmed into the dongle.

If you have any problems here please contact us immediately, we will try to help to fix it.

I.5.2. Central database server in a network

You have to decide, which of the from QMSOFT® supported types of SQL-servers you want to use: the Firebird-SQL-server is a free-of-charge Open-Source-product, alternatively you can use a MS-SQL-server, where you have to pay for every client licence.

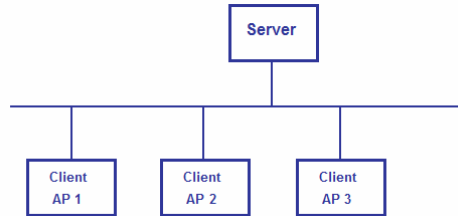


Figure: central server, local clients

Please note also the chapter „I.4.3 Creating and / or connecting a database“ with information about the parameters of the database connection setup.

SQL-Server Firebird

- on the server and on all clients the TCP/IP-port 3050 has to be opened
- Firebird-Server 2.03
- Optional: if you want to use the Backup-feature of QMSOFT also from the local „Client“, the Firebird-SQL-Server also has to be installed onto the local computer, although the central Firebird-SQL-server is used.

MS-SQL-Server

- QMSOFT® supports the MS-SQL-Server-versions 2000 and 2005, newer versions on request,
- the administrator of the SQL-server has to create:
 - empty container (database file) „**QMSOFT32_SYSTEM**“ (for the „System“-database)
 - empty container (database file) „**QMSOFT32_DB**“ (for the „gauge“-database)
- on all of the client-computers should be installed MDAC 2.6 (or newer, MDAC = Microsoft Data Access Components)

For the authorization to get the SQL-server-access we recommend the user authorization mode with a separate user login, which has assigned to the „dbo“-access-right (dbo = database owner). The empty containers (database files, see above) has to be created with this user login.

I.5.3. Profiles

If you have to install more than one workplace with QMSOFT®, you can minimize the number of configuration steps, if you are using so-called „profiles“, which contains stored configuration settings (database connections, folder names and program links, licence data). We suggest the following steps:

- **Installation of the 1st QMSOFT®-workplace**
Install the first workplace, use the „**user defined configuration**“ (see chapter „I.4.1 QMSOFT data folder settings“). Configure all of the settings as „template“ for all of the next installations. Define the folders for templates, files for the factory tolerances etc. manually. Useful is here a central directory on a network drive of a file-server.
 - **Save settings into a “Profile”-file**
After starting **QMSOFT®/GaugeMan** save the settings with the help of the menu item „**Profiles | Export profile**“ into a file (use a folder on the central file-server), be sure to have access to this folder from all of the other local computers, which should be used with QMSOFT®.
 - While installing all of the other QMSOFT®-workplaces use the feature „**Use existing profile**“ (see chapter „I.4.1 QMSOFT data folder settings“), type in the name and path of the profile file, which you have created before on the 1st computer. So you are using exactly the same settings as on the machine, where the profile was created before.
- ⇒ *The “Profiles” feature is also very helpful, if you want to switch between different licence- or/and database servers. This is necessary, if you want to use a Laptop computer sometimes stand-alone out of the office, sometimes in the office with access to your network.*

I.6. Licence enlargements

A change of the licence volume of a **QMSOFT**®-installation (enlargement or reduction of the licences) needs a two-step-procedure, which is based on the exchange of files between the **QMSOFT**®-user on the one side and the **QMSOFT**®-manufacturer on the other side. We call this "Remote licence update". An exchange of the CodeMeter-stick is also a possible procedure, but this means transportation costs and time delay to get the new licence.

To execute a remote licence update please do the following steps (the proper business procedure is here tacitly assumed):

- create a remote-context-file with the help of the "Disk"-button (see upper right area in the licence data configuration window). While this process the CodeMeter-stick has to be connected to the computer!
- send this file to the email-address „support@lw-gmbh.com“,
- you will receive a remote-update-file by email,
- import this remote-update-file with the help of the „Import“-button (see upper right area in the licence data configuration window). While importing the file the CodeMeter-stick has to be connected to the computer! If you are using the floating-licence-feature in a network, no other **QMSOFT**®-user should work with **QMSOFT**®!
- Click onto the „Key“-button. If the button becomes a green colour, the remote-update-procedure was successful.

Close the licence dialogue by clicking the „OK“-button. From this point of time the changed licence volume can be used.



II The program system QMSOFT®

Here you can get a short overview about QMSOFT® and some basic information about the handling of the software.

After starting QMSOFT® you will be asked for a login-name and a password. The login-name will be used in the QMSOFT® inspection programs to „sign“ the created calibration certificates. Please do not use any space characters in the login-name and also not in the password (you can create login-data in the configuration tool of the database program later), otherwise the take-over of this data into the inspection program does not work.

- ⇒ Please use the user name and the password „system“ (type it “lower case”).
- ⇒ QMSOFT®/GaugeMan also starts, if the login-data are empty. In this case you will be asked again for his data every time after starting one of the password-protected programs of QMSOFT®.

After starting the **QMSOFT®** system you get the following screen:



Figure: The program window of QMSOFT®/GaugeMan

You can see different groups of program symbols. Depended of their basically functions differ the following types of **QMSOFT®** program modules.

The optical mapping to the categories of programs is realized by the grouping of the program icons in the **QMSOFT®/GaugeMan** program window into different frames and through an appropriate menu structure. By crossing the different icons with the mouse you get a short info-text with the program name and a brief description.

- ⇒ Blank icon fields particularly in the field "Miscellaneous" you can link to any program. Just click the mouse on such an empty box and follow the dialogue.
- ⇒ Used (not empty) icon fields you can clear by clicking on a field with the right mouse-key and deleting the contents of the appearing configuration dialogue with the button "Delete".

You can start **QMSOFT®** components by clicking the corresponding icon or alternatively by using the corresponding menu item.

- ⇒ The user manual for each program you can find in the menu item "Help | User manual" of the started program!

The different programs are designed to get a powerfull tool for the gauge data management and all of the steps while calibrating gauge stocks.

II.1. Group „Database“

The programs of this group are designed to store, manage and evaluate the gauge data. The central part of this group is the program **QMSOFT®/QM-MANAG**, which represents the gauge management software itself.

If you start the gauge management program you will be asked for the name of the data set (client). Here you can select from all of the existing data sets (which were created while creating the database). The data set "DB" is provided for your gauges, the data set "Demo" contains some gauge examples to play around with the features of **QMSOFT®** to get some experiences.

II.2. Group „Inspection programs“

Inspection programs are designed to carry out the gauge inspection for the different types of gauges (e.g. program QM-DIAL for dial gauges and dial test indicators). The programs are related to the standardized procedures for each gauge type. They will be activated automatically by using the gauge management program QM-MANAG, but you can start it also as "stand-alone" programs (in this case the results and certificates are NOT saved to the database). Inspection programs also contains features to calculate the nominal data (tolerances) for the gauges, to manage inspection positions, to collect and to evaluate measures and to create template-based certificates.

II.3. Group „Measuring devices“

Indication programs are designed to realize the communication with the length measuring machines. Depended on the machines interface, you should use different indication programs. Please note, that every inspection program, which want to use the online-feature to take-over measures from a device, is configured (linked) to the accurate driver program of the measuring device. This setting was defined while the first start of **QMSOFT®**. If changes are needed click onto the menu item "**Settings | General settings**" and check the page "**Directories**", field "**Measure display program**", use the browser button to select the field content.

Here the most important measure display programs:



The program "**RS232DRV**" is used to connect a length measuring machine with your computer using a serial interface. This program is supporting a wide range of different interface types (Helios; Zeiss, Mahr, Heidenhain, Trimos, Sylvac etc). If you want to do an "Online" measurement set the parameters for the serial interface before.



The program "**QM-BASIC**" (old name: „**IK220DRV**“) is used to connect a length measuring machine with your computer, which is using a Heidenhain PC interface card IK 220. Please note also appendix C of this manual for more information about the configuration parameters.



The program "**SIPDRV**" is designed to support the measurement with a SIP 550M device. It is realizing the connection to the SIP LMC interface program. Please note, that older SIP-machines with serial interface-box („red front-panel“) or with a IK 220-card are not supported by „**SIPDRV**".



The program „WinDHI“ is a special program designed by TRIMOS S.A., Renens Switzerland. This program will be used for the connection to the TRIMOS „LabConcept“ machines.

II.4. Group „Miscellaneous“

In this area you can find different features for the program environment (configuration settings, , licencing etc.).

We would like to add that we would be very interested to hear your ideas, requests and criticism concerning the **QMSOFT®** system. We are constantly endeavoring to improve the program and welcome your feedback for use in future versions of the program.

You can contact us by mail or by fax:

L&W GmbH
Gostritzer Strasse 61-63
D-01217 Dresden
Germany

Fax ++49 351 871 7480
Homepage: www.lw-gmbh.com
E-Mail: support@lw-gmbh.com

