

1 Minimum system requirements

Operating system	32-bit version of:
	<ul style="list-style-type: none">▪ Windows 8 Professional/Enterprise▪ Windows 7 Professional/Ultimate/Enterprise▪ Windows Vista Business/Enterprise/Ultimate▪ Windows XP Professional SP2▪ Windows Server 2008 R2▪ Windows Server 2008▪ Windows Server 2003
	64-bit version of:
	<ul style="list-style-type: none">▪ Windows 8 Professional/Enterprise▪ Windows 7 Professional/Ultimate/Enterprise▪ Windows Server 2012▪ Windows Server 2008 R2
RAM	Windows Vista and higher: 2 GB Windows XP: 1 GB
Hard disk space	Program: 1 GB Data: 2 GB
Serial ports	For devices with RS-232 interface
USB ports	For devices with USB interface
Screen	Resolution 1024 x 768
Network	10 Mbit/s, stable and permanent Communication via TCP/IP

The Windows user must have administrator rights in order to be able to install the **MagIC Net** software.



CAUTION

Data loss may occur if the PC changes to sleep mode during a determination. The **sleep mode** should therefore be **deactivated** in the energy settings of the operating system.

2 Single workplace installation

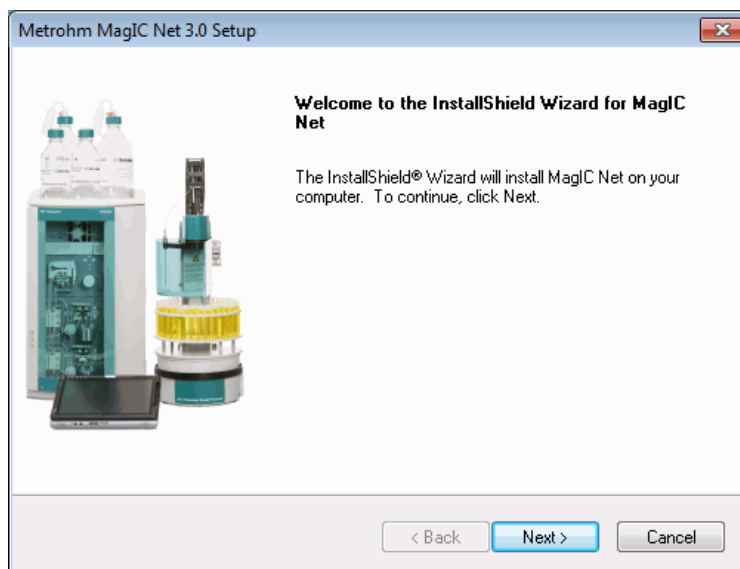
With the single workplace version **MagIC Net Basic**, **MagIC Net Compact** or **MagIC Net Professional**, you can install both the MagIC Net client and the server on the computer.

- 1 The installation process starts automatically when you insert the CD into the drive. If this option is deactivated on your computer, double-click on the file **setup.exe**.

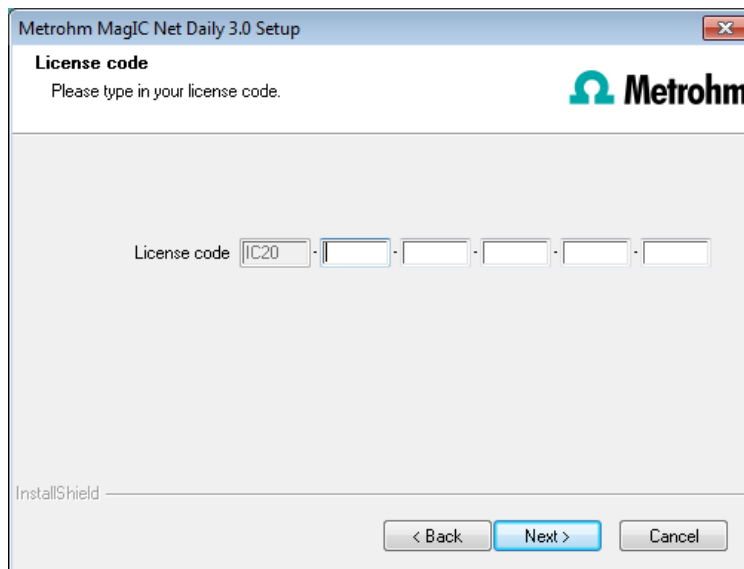
If the minimum system requirements are not met (see above) an appropriate message appears. Click on **[Yes]** if you would like to install the program nonetheless.

Afterwards, click on **[Next >]**.

- 2 During the installation process, the Welcome screen appears first. Click on **[Next >]** to install the software.



- 3 After having read the license agreement for **MagIC Net** and accepted it with **[Yes]**, a window will appear where you can enter the license code.

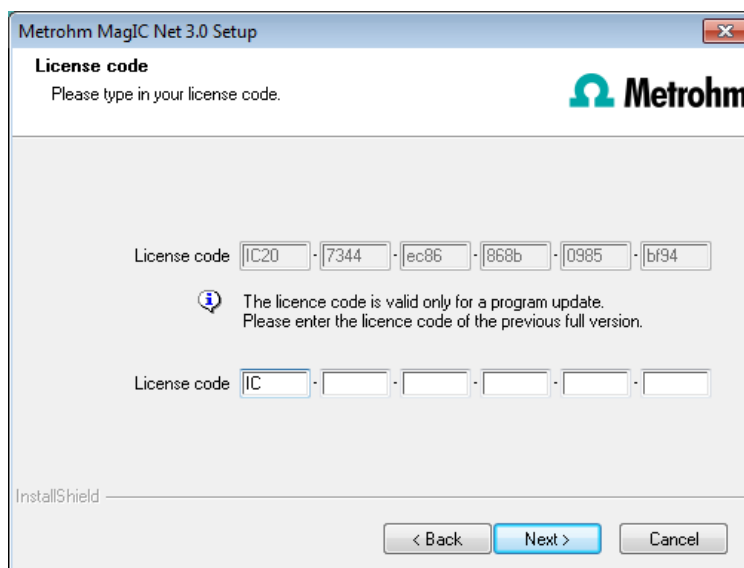


- 4 Enter the license code for **MagIC Net Basic**, **MagIC Net Compact** or **MagIC Net Professional** and click on **[Next >]**.

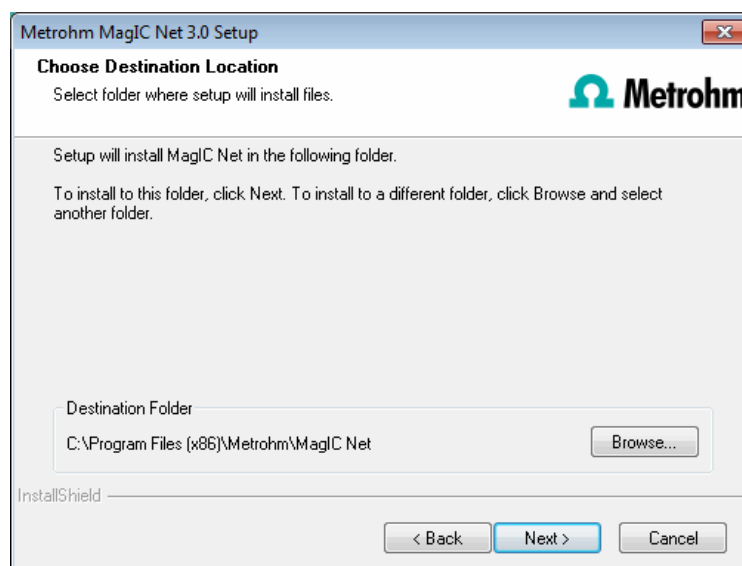


NOTE

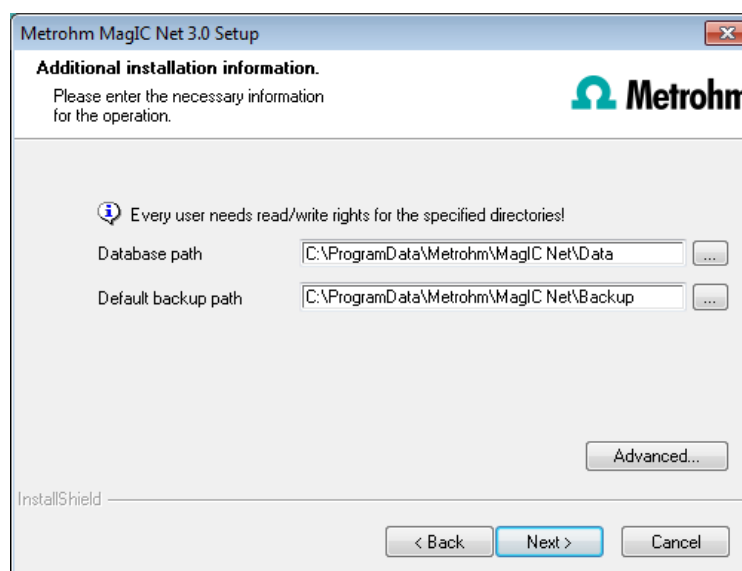
If you have entered the license code of an update license, then the license code of the previous full version will additionally be requested.



- 5 Now confirm the target folder for the **MagIC Net** installation with **[Next >]** or select a different target folder with **[Browse...]**.



- 6 In the **Additional installation information** window you can define the paths for the database and backup files:



NOTE

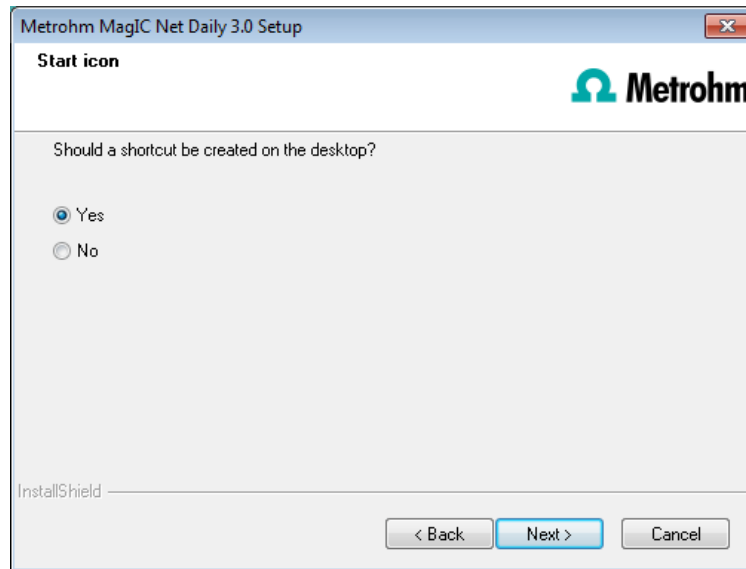
The default paths are different for Windows XP, Windows Vista, Windows 7 and Windows 8.

The database path must not be on a network drive.

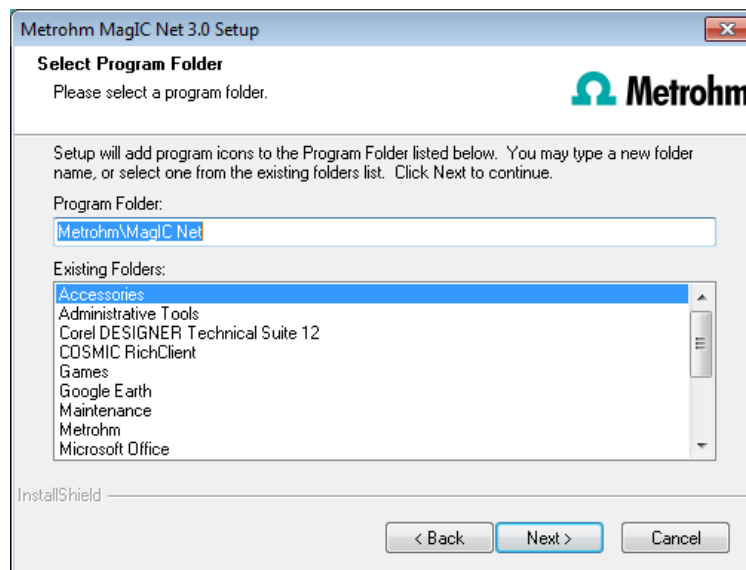
The default backup path may be on a network drive.

You can change the ports **MagIC Net** uses to communicate with the database server and the administration server with the button **[Advanced...]**. If the ports are already used, an appropriate error message will appear. Ask your system administrator for more information about this. Continue with **[Next >]**.

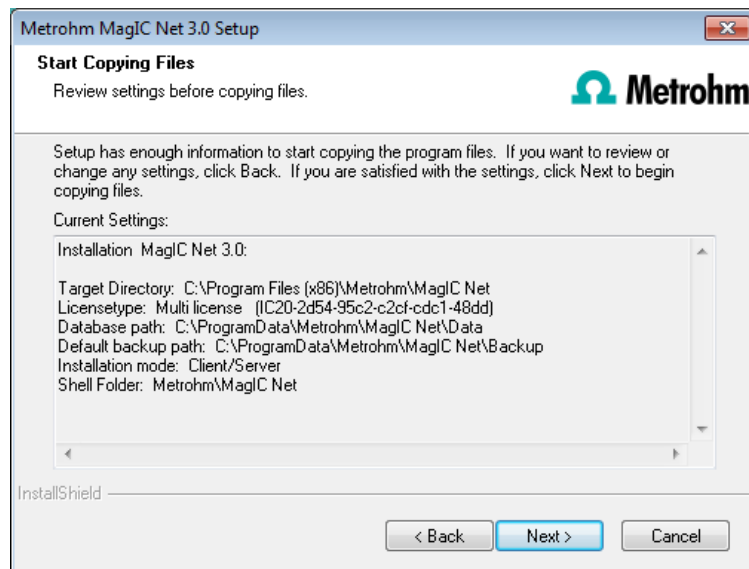
- 7 If you would like to create a shortcut on your desktop to start the **MagIC Net** software, activate **[Yes]** and then click on **[Next >]**.



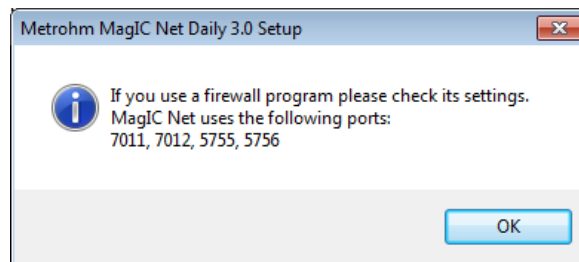
- 8 In normal cases, you can confirm the selection of the program folder by clicking on **[Next >]**.



- 9 The installation settings can now be checked. Start the copy process with **[Next >]**.

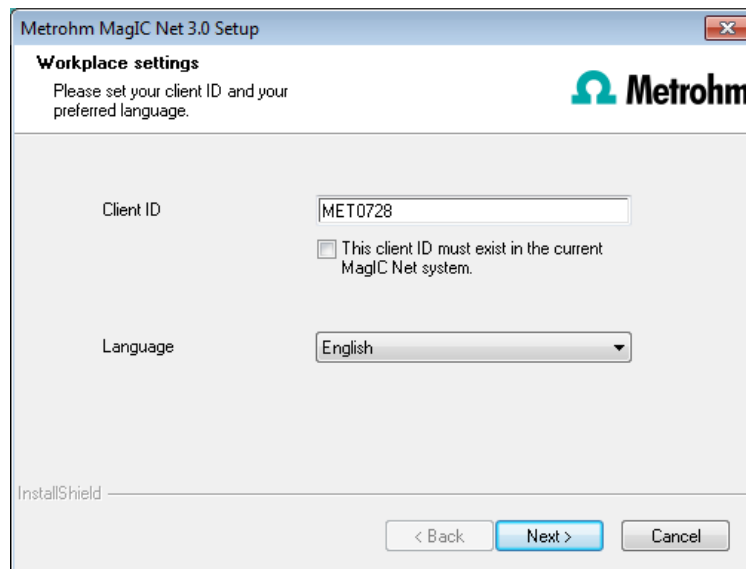


- 10 Follow the instructions of the program until the following message appears:



This message points out again which ports **MagIC Net** uses. Write down these ports and inform your system administrator in case **MagIC Net** is not able to connect to the database. Confirm the message with **[OK]**.

- 11 **MagIC Net** will now be installed.
- 12 Once the copying procedure has been completed you can make further workplace settings:



The option **This client ID must exist in the current MagIC Net system** is only selectable if a database from a previous installation already exists on your computer or if you want to connect to a database server which has been installed on another computer.

If you activate this option, then **MagIC Net** checks whether the identifier you have entered exists in the database. If this is true the identifier and all associated settings will be adopted. With this option reinstalling a client is much easier.

Click on **[Next >]**. If the database ports are not available, an appropriate error message will appear and the installation will be canceled. In this case, check your server and firewall settings before installing the program again.

- 13** At the end of the installation, the file **info.txt** will be created. This file contains all relevant information concerning your current **MagIC Net** installation. Save this file on your hard drive for future reference and print it (add to IQ).



NOTE

An **InstallLog** file can be found in the installation directory of **MagIC Net** under ...bin\InstallLog. It contains a listing of all files copied to your computer during the installation and a confirmation that the installation has been successfully completed.

- 14** Complete the installation with **[Finish]**.

3 Client/server installation

With the **MagIC Net Multi** version (multiple workplace version with three licenses) you can select during the installation whether you want to install a MagIC Net **client** or a MagIC Net **client** plus **server** on your computer.

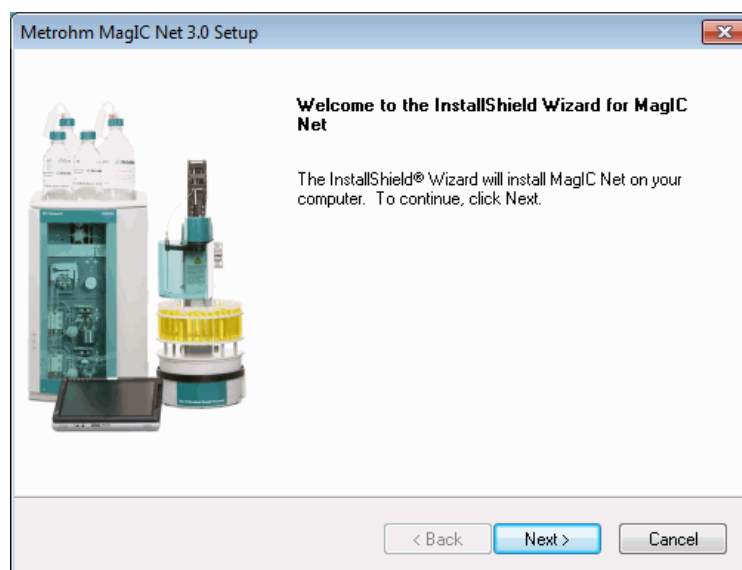
If you want to install only a client on your computer, a server to which the client will be connected must have been previously installed on another computer.

- 1 The installation process starts automatically when you insert the CD into the drive. If this option is deactivated on your computer, double-click on the file **setup.exe**.

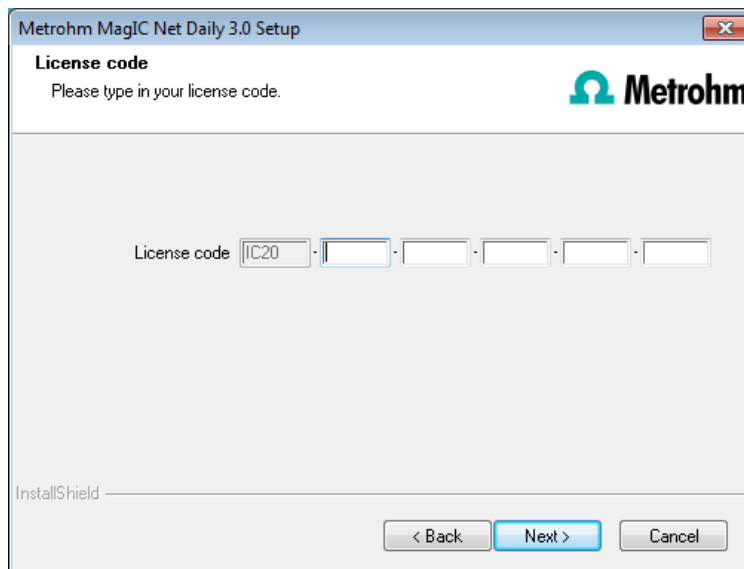
If the minimum system requirements are not met (see above) an appropriate message appears. Click on **[Yes]** if you would like to install the program nonetheless.

Afterwards, click on **[Next >]**.

- 2 During the installation process, the Welcome screen appears first. Click on **[Next >]** to install the software.



- 3 After having read the license agreement for **MagIC Net** and accepted it with **[Yes]**, a window will appear where you can enter the license code.

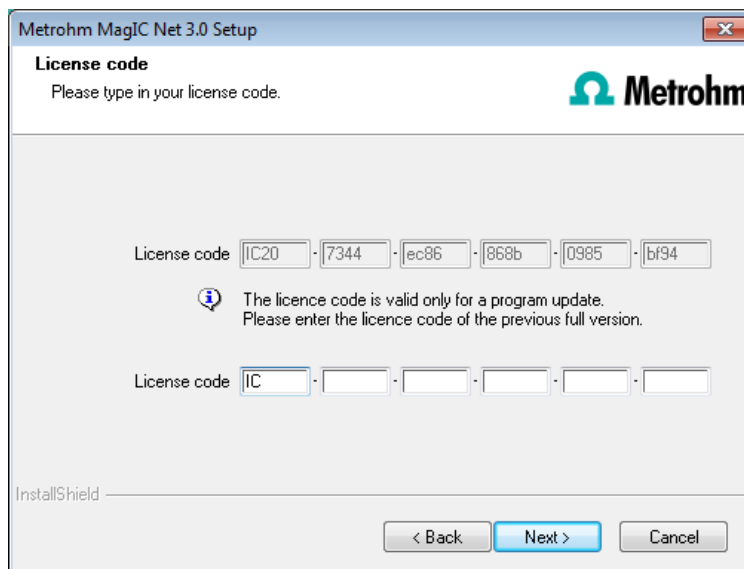


- 4 Enter the license code for **MagIC Net Multi** and click on **[Next >]**.

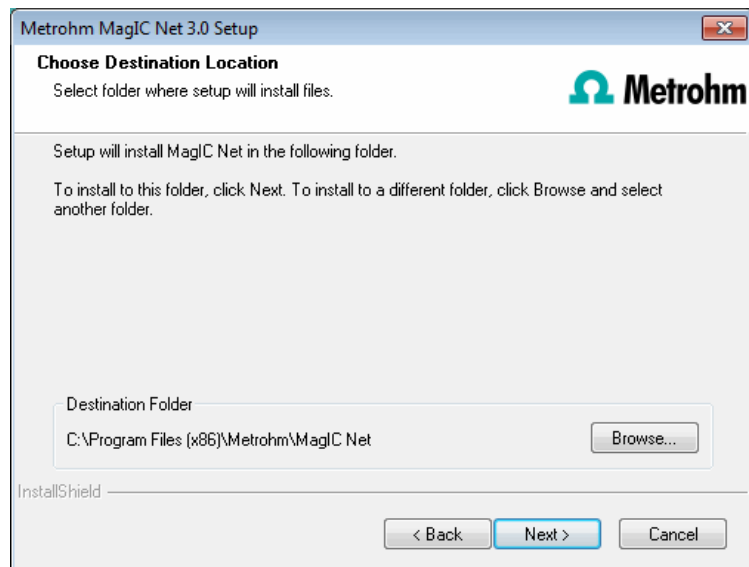


NOTE

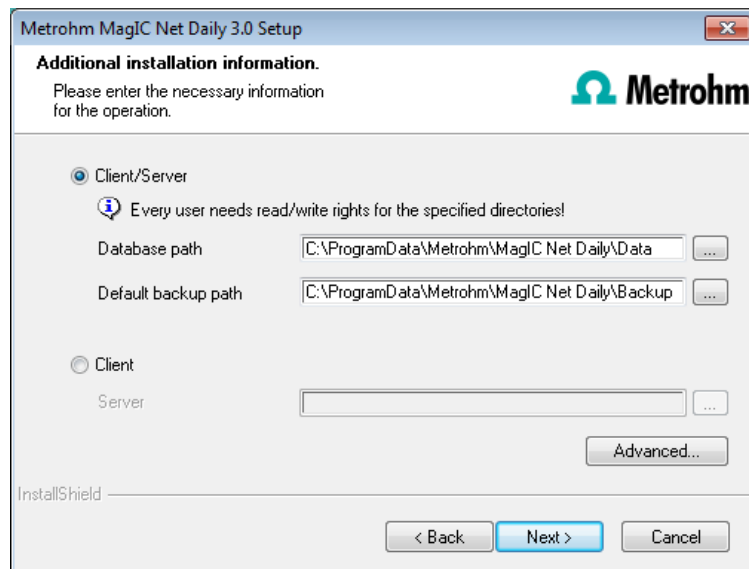
If you have entered the license code of an update license, then the license code of the previous full version will additionally be requested.



- 5 Now confirm the target folder for the **MagIC Net** installation with **[Next >]** or select a different target folder with **[Browse...]**.



- 6 The **Additional installation information** dialog appears. Here you can select whether you want to install a **client** or the **server**:



The option **Client/Server** installs the client and the database server on your computer. Select this option if your computer will be used as server.




NOTE

The default paths are different for Windows XP, Windows Vista, Windows 7 and Windows 8.

The database path must not be on a network drive.

The default backup path may be on a network drive.

With **Client**, only the **client** will be installed and you have to select the database server (has to be installed in advance!) you would like to use with the  button. The network server name or the IP address is accepted as the name.

With the button **[Advanced...]** the ports **MagIC Net** uses to communicate with the database and administration server can be changed. If the ports are already used, an appropriate error message will appear. Ask your system administrator for more information about this. Continue with **[Next >]**.

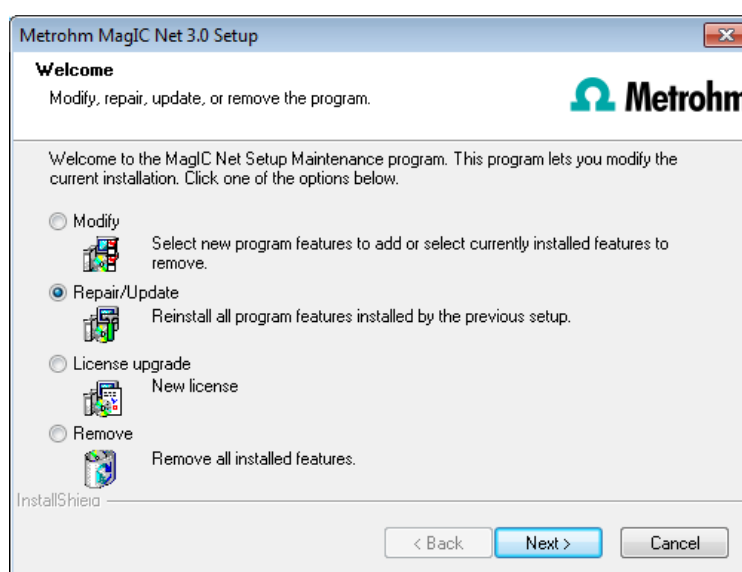
- 7** All further installation steps correspond to those of the single workplace installation from **point 6** onwards.

4 Modifying/repairing/removing the installation and upgrading the license

In order to carry out modifications on the current **MagIC Net** installation, start the file **setup.exe** on the installation CD or click under:

- Windows XP - **Control Panel ▶ Software**
- Windows Vista / Windows 7 / Windows 8 - **Control Panel ▶ Programs and Features**

on **Metrohm MagIC Net**. Then select **Change/Remove**:



Modify

With this option you can change the paths to the database and backup files and set the ports which **MagIC Net** uses for communication. With the **MagIC Net Multi** version you can additionally change the path to the database server.

If the database path is changed, the existing databases are automatically copied to the new location.

Repair/Update

With this option you can **repair** an existing defective installation or **update** an older installation.

- **Repairing the installation**

In case of a defective **MagIC Net** installation because, for instance, a DLL file is missing or a program file has been deleted by mistake, **MagIC Net** can be repaired with this option.

- **Updating the installation**

In case an older version of **MagIC Net** is installed, it will be updated to the new version of **MagIC Net**.



CAUTION

During updating older MagIC Net versions the databases will be converted to the new version. Depending on the size of the database, this may take some time. For each database a progress bar which informs about the status of the conversion is displayed.

The computer or Windows must not be restarted or shut down as long as the conversion is running!

License upgrade

A direct upgrade of your current installation to a **MagIC Net** version with additional features is possible with this option:

- **MagIC Net Compact** to **MagIC Net Professional** or **MagIC Net Multi**
- **MagIC Net Professional** to **MagIC Net Multi**

In order to do this, enter your new license code in the next dialog window.

Remove

This option removes your **MagIC Net** installation. Data which has been generated after the installation (e.g. database entries, log files, exported data, etc.) will not be deleted.

5 Program update with MagIC Net Compact/Professional

During the program update, the configuration database (system configuration, methods, templates) and the determination databases are automatically updated for further use with the new version of **MagIC Net Compact/Professional**.

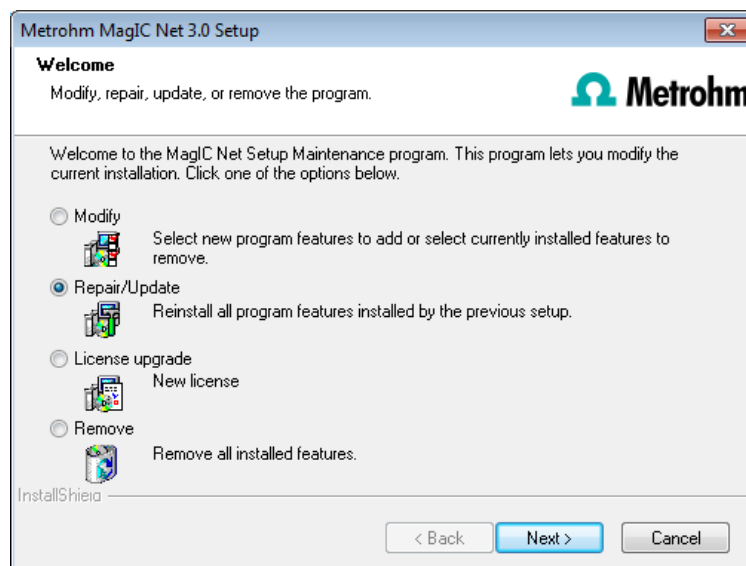


NOTE

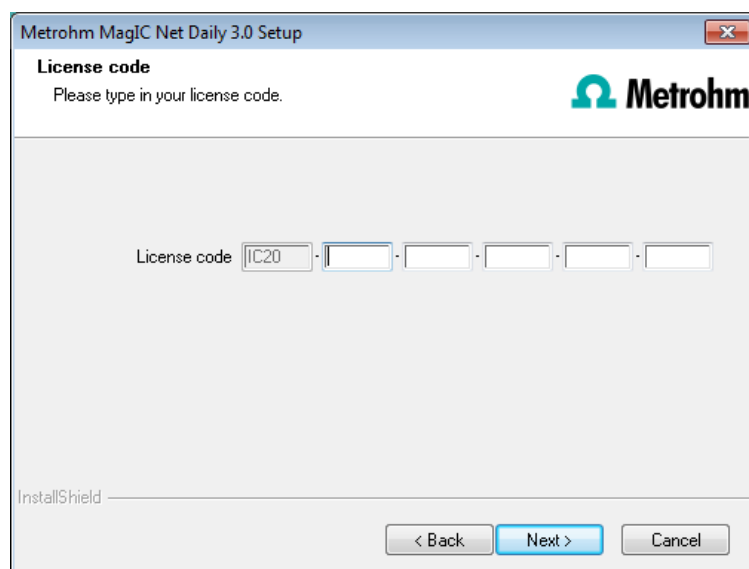
The files in the database and backup directory will be retained when updating the program.

Files in the subdirectories **bin**, **jre**, **lib**, **res**, **doc** and **examples** will be overwritten by the update. Those files in these directories which are not updated during the update will be deleted. The deleted files are listed in the **Install-Log**.

- 1 Save the configuration database into an external directory using the backup function of **MagIC Net**. In the **Configuration** program part, select the **File ► Save ► Manually** menu item. Select the **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out automatically. It is recommended to copy the backup file to CD/DVD afterwards.
- 2 If desired, export the methods in addition to the automatic backup with the configuration database (see above) into an external directory. In the **Method** program part, select the **File ► Method manager...** menu item. Select the desired **Method group**, select all methods to be exported and click on **[Edit] ► Export....** Select the desired export directory and click on **[OK]**. The methods are exported into the desired directory. It is recommended to copy the method files to CD/DVD afterwards.
- 3 Save all determination databases created by you into an external directory using the backup function of **MagIC Net**. In the **Database** program part, select the **File ► Database manager...** menu item. Select the desired database and click on **[Backup]**. Select the **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out automatically. It is recommended to copy the backup file to CD/DVD afterwards.
- 4 Save further files created by you in the installation directory (e.g. export files) into an external directory or to CD/DVD.
- 5 Close **MagIC Net**. Insert the installation CD and double-click on the file **setup.exe**. Then select **Repair/Update** and click on **[Next >]**.



- 6 Enter the update license code for **MagIC Net Compact** or **MagIC Net Professional** and click on **[Next >]**.



7



CAUTION

During updating older MagIC Net versions to MagIC Net 3.0 the databases will be converted to the new version. Depending on the size of the database, this may take some time. For each database a progress bar which informs about the status of the conversion is displayed.

The computer or Windows must not be restarted or shut down as long as the conversion is running!

Complete the installation with **[Finish]**.

An **UpdateLog** file with a list of all files that have been copied to your computer during the program update and with a confirmation for a successful installation is saved in the **MagIC Net** installation folder (default: C:\Program Files\Metrohm\MagIC Net) under bin\InstallLog.

6 Program update with MagIC Net Multi

During the program update, the configuration database (system configuration, methods, templates, user-specific data for all clients) and the determination databases on the server are automatically updated for further use with the new version of **MagIC Net Multi**.



NOTE

The files in the database and backup directory will be retained when updating the program.

Files in the subdirectories **bin**, **jre**, **lib**, **res**, **doc** and **examples** will be overwritten by the update. Those files in these directories which are not updated during the update will be deleted. The deleted files are listed in the **Install-Log**.

- 1 Make sure **MagIC Net Multi** is closed on all clients.



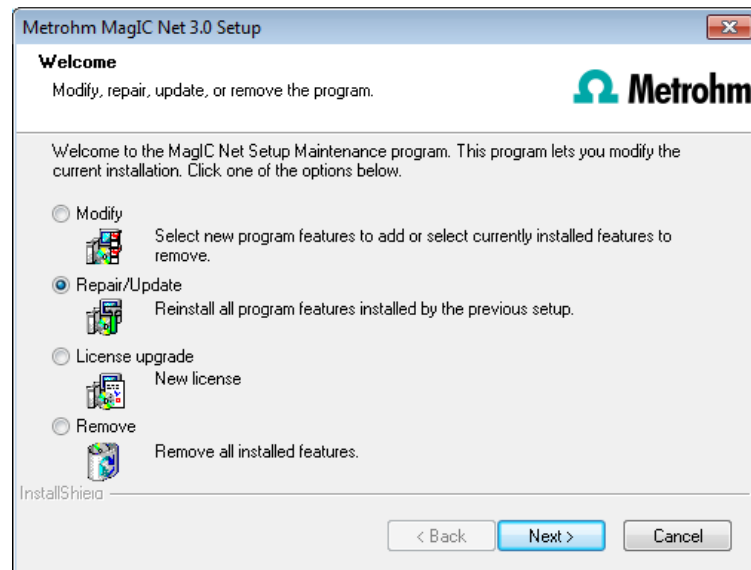
NOTE

In the **bin** subdirectory of the **MagIC Net** installation, you can find the **Clients.exe** application, with which all clients and their status can be displayed.

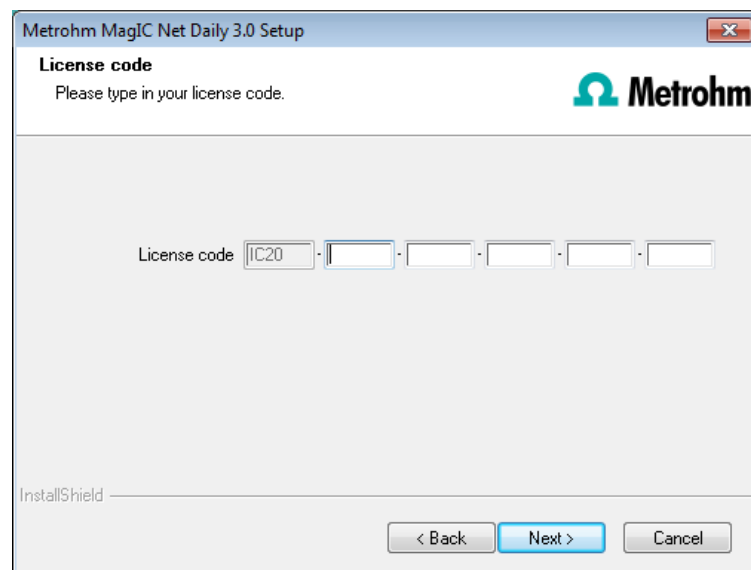
- 2 Open **MagIC Net Multi** on the server and save the configuration database into an external directory using the backup function of **MagIC Net**. In the **Configuration** program part, select the **File ► Save ► Manually** menu item. Select the **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out automatically. It is recommended to copy the backup file to CD/DVD afterwards.
- 3 If desired, export the methods in addition to the automatic backup with the configuration database (see above) into an external directory. In the **Method** program part, select the **File ► Method manager...** menu item. Select the desired **Method group**, select all methods to be exported and click on **[Edit] ► Export....** Select the desired export directory and click on **[OK]**. The methods are exported into the desired directory. It is recommended to copy the method files to CD/DVD afterwards.
- 4 Save all determination databases on the server into an external directory using the backup function of **MagIC Net**. In the **Database** program part, select the **File ► Database manager...** menu item. Select the desired database and click on **[Backup]**. Select the **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out automatically. It is recommended to copy the backup file to CD/DVD afterwards.
- 5 Save further files in the installation directory (e.g. export files) into an external directory or to CD/DVD.

6 Updating the server

Close **MagIC Net Multi** on the server and on all clients. Insert the installation CD on the **server** and double-click the file **setup.exe**. Then select **Repair/Update** and click on **[Next >]**.



7 Enter the update license code for **MagIC Net multi** and click on **[Next >]**.



8



NOTE

The update of **MagIC Net Multi** consists of the server license and three client licenses. If an existing installation contains additional client licenses, these will be deleted.

Click on **[OK]** in the corresponding message in order to continue the installation.

9



CAUTION

During updating older MagIC Net versions to MagIC Net 3.0 the databases will be converted to the new version. Depending on the size of the database, this may take some time. For each database a progress bar which informs about the status of the conversion is displayed.

The computer or Windows must not be restarted or shut down as long as the conversion is running!

Complete the installation with **[Finish]**.

An **UpdateLog** file with a list of all files that have been copied to the server and with a confirmation of a successful installation is saved in the **MagIC Net** server's installation folder (default: C:\Program Files\Metrohm\MagIC Net) under bin\InstallLog.

10

In case additional licenses have been removed during the server update, or if further additional licenses are to be added, the **Administrator** can enter them in **MagIC Net** (dialog: **Configuration** ► **Tools** ► **Program administration** ► **Licenses** ► **Add licenses**).

11 Updating clients

For each client, insert the installation CD and double-click the file **setup.exe**. Then select **Repair/Update** and click on **[Next >]**. Complete the installation with **[Finish]**.



NOTE

In order to facilitate the updating of many clients, the installation can be copied from the CD to a writeable medium and the file **magic_init.ini** can be modified. There, user-defined parameters (license code, installation path, server name, etc.) for the installation can be set in advance, which allows you to only have to click through the installation.

An **UpdateLog** file with a list of all files that have been copied to the client computer and with a confirmation for a successful installation is saved in the **MagIC Net** client's installation folder (default: C:\Program Files\Metrohm\MagIC Net) under bin\InstallLog.

7 Installation of drivers

In normal cases, the installation routine of **MagIC Net** automatically installs all the drivers necessary for controlling the supported devices.

If you are using a 64-bit operating system it may be necessary to install drivers manually in combination with a few devices. This is the case if the operating

systems displays a message when connecting a device to the computer, e.g. **Device driver software was not successfully installed. No driver found.** The message should also show the name of the corresponding device. Note this name and proceed as follows to install the driver manually:



NOTE

The following description applies for Windows 7 (64-bit version). It may slightly vary for your system.

- 1** Open the Windows Device Manager. Under **Other devices** the corresponding device can be found.
- 2** Click on the device with the right mouse button. The context menu opens.
- 3** In the context menu, select **Update Driver Software....** A dialog window opens.
- 4** Select **Browse my computer for driver software.** The file selection dialog opens.
- 5** Navigate to the installation folder of **MagIC Net** (default: C:\Program Files\Metrohm\MagIC Net).
- 6** In the installation folder, open the subfolder **drivers**. This folder contains the subfolder **889**, in which you can find the driver for the 889 IC Sample Center and the Combustion Module.
- 7** Apply the selection with **[OK]**. A safety prompt is displayed. In order to install the driver, click on **[Install]**.
- 8** After the successful installation, close the Device Manager.

8 Adding additional licenses with Windows Vista or newer

General

Since Windows Vista, Microsoft has introduced the UAC (User Account Control), which permits running tasks either as non-administrator or as administrator (without changes of user, switching off or similar).

<http://technet.microsoft.com/en-us/library/cc709691%28WS.10%29.aspx>

<http://technet.microsoft.com/en-us/magazine/2007.06.uac.aspx>

This function can, however, cause difficulties with client-server installations of **MagIC Net**.

Problem description

One would like to add additional licenses for the program; the license code for an additional 5 licenses, for example, is added (on the server) in the program part **Configuration** in the dialog window **Program administration** (accessible via menu item **Tools ► Program administration...**, tab **Licenses**).

The file **license.mlic**, which contains the standard license code and the additional license codes, is stored in the **bin** directory of the program installation (**C:\Program Files\Metrohm\MagIC Net\bin**).

If one adds the 5 licenses and then looks at this file **license.mlic**, only the standard license code will be listed (for 3 licenses).

If one highlights the file **license.mlic** and presses **Compatibility files** in the bar, then one will arrive in the directory **C:\Users\'User\'AppData\Local\VirtualStore\Program Files\Metrohm\MagIC Net\bin** ('User' being the abbreviation (UID) for the user logged in on the operating system). The file **license.mlic** with the license codes for the standard licenses and the 5 newly added licenses is to be found here, i.e. the additional licenses are stored in the **VirtualStore** only for the Windows user who was logged in on the PC at the time the additional licenses were added.

On the server, the program recognizes all of the licenses; the operating system adds the file **license.mlic** from the directory **C:\Users\'User\'AppData\Local\VirtualStore\Program Files\MagIC Net\bin** to the detail list of the directory **C:\Program Files\Metrohm\MagIC Net\bin**.

For the client-server functionality of the database server, however, the file **license.mlic** in the directory **C:\Program Files\Metrohm\MagIC Net\bin** is relevant, and here only the basic license is listed. Therefore, problems are to be anticipated when adding additional clients (more than the 3 clients present in the default settings).

Remedy

■ For new installations

- To enter additional licenses, the program must be started as administrator (position the mouse on the Program icon and click the right mouse button – select **Run as administrator** there).
- If one then adds the license code for additional licenses in the usual way, then the file **license.mlic** in the directory **C:\Program Files\Metrohm\MagIC Net\bin** will contain both license codes.

- **For existing installations**
 - First of all, the file **license.mlic** in the directory **C:\Users\%User%\AppData\Local\VirtualStore\Program Files\Metrohm\MagIC Net\bin** must be deleted.
This file must not be present in the **VirtualStore** of any user – a check must be made to make sure of this, and any such files which may be found must be deleted.
 - Afterwards, the program must be started as administrator (position the mouse on the Program icon and click the right mouse button – select **Run as administrator**).
If one then adds the license code for additional licenses in the usual way, then the file **license.mlic** in the directory **C:\Program Files\Metrohm\MagIC Net\bin** will contain both license codes.

9 User rights for MagIC Net

In order for the logged-in user to be able to access all functions with **MagIC Net**, the Windows system administrator must ensure that the permissions are set for the directories as listed below:

Directory	Permission	Group name or user name
Database directory Directory where the databases will be saved (...Data).	Modify	SYSTEM User*
Backup directory Directory where the backup copies will be stored (...Backup).	Modify	User*
%ALLUSERSPROFILE%\Application Data\Metrohm (Windows XP)**	Modify	User*
%PROGRAMDATA%\Metrohm (Windows Vista and higher) **	Modify	User*
Export directories Directories where the exported files are to be saved.	Modify	User*
PDF directories Directories where the PDF files are to be saved.	Modify	User*
Desktop	Modify	User*
%PROGRAMFILES%\Metrohm\MagIC Net	Read Execute	User*

* **User** = name of the user who is logged in

** During installation of **MagIC Net** the permission **Full Control** is set for the following groups: **SYSTEM, Administrators, Users, Guests, Main users.**