

1 Minimum system requirements

Operating system	64-bit version of: ▪ Windows 11 Pro / Enterprise ▪ Windows 10 Pro / Enterprise ▪ Windows Server 2019 ▪ Windows Server 2016
RAM	8 GB
Storage capacity	Program: 1 GB Data: 100 GB
Serial ports	for devices with RS-232 interface
USB ports	for devices with USB interface
Screen	Minimum resolution: 1024 x 768
Network	10 Mbit/s, stable and permanent Communication via TCP/IP Safety systems, e.g. firewalls, have an impact on the performance of the client/server system.
PDF reader	A PDF reader must be installed on the computer. The Windows user must have administrator rights in order to be able to install the viva software.

2 Customizing energy options

During the determination, data loss may occur or there may be communication problems with certain energy options of the operating system. Proceed as follows to customize the energy-saving plan settings:

- 1 Under **Control Panel ► System and Security ► Energy Options**, open the system settings that specify the behavior when the power switch is pressed or the computer is folded shut.
- 2 Change the following settings:

- **When pressing the power switch:** Do nothing
- **When pressing the energy saving button:** Do nothing
- **When closing the lid:** Do nothing
- **Enable fast start-up:** Deactivated



NOTICE

To change the **Turn on fast start-up** option, you may need to enable it first as an administrator. To do this, click on **Some settings are currently unavailable** in the window.

- 3 Open the energy-saving plan settings under **Control Panel ► System and Security ► Energy Options**. Now click on **Change advanced energy settings**.
- 4 Change the following settings:
 - Under **Saving energy**:
 - **Deactivation after:** Never
 - **Allow hybrid standby mode:** Off
 - **Hibernate after:** Never
 - Under **USB settings**:
 - **Selective USB energy-saving settings:** Disabled

3 Single workplace installation

With the single workplace version **viva Full**, you can install the client and the database on your computer.

- 1 Prior to the installation, disconnect all the USB devices from the computer on which **viva** is to be installed.

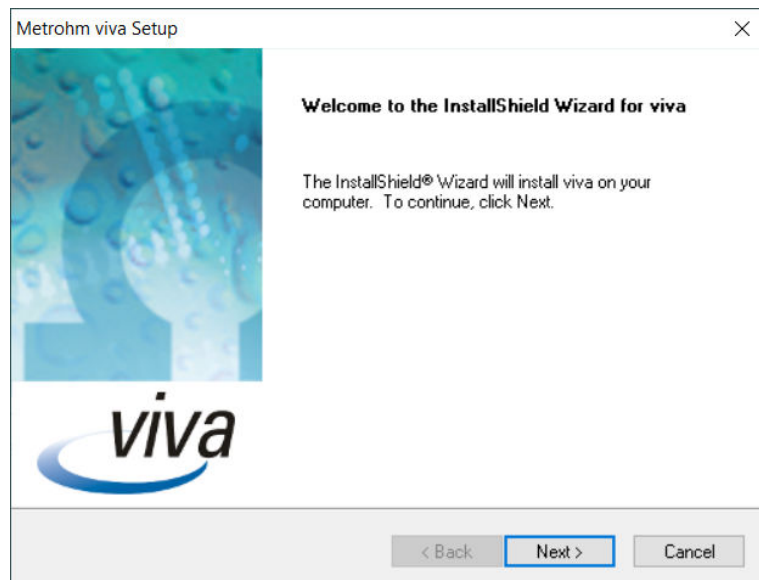
If the OMNIS Software is already installed on the computer, end the **Metrohm OMNIS DeviceServer** service via the Windows Task Manager.

- 2 Connect the USB flash drive with the **viva** installation file to the computer and start the **setup.exe** file.

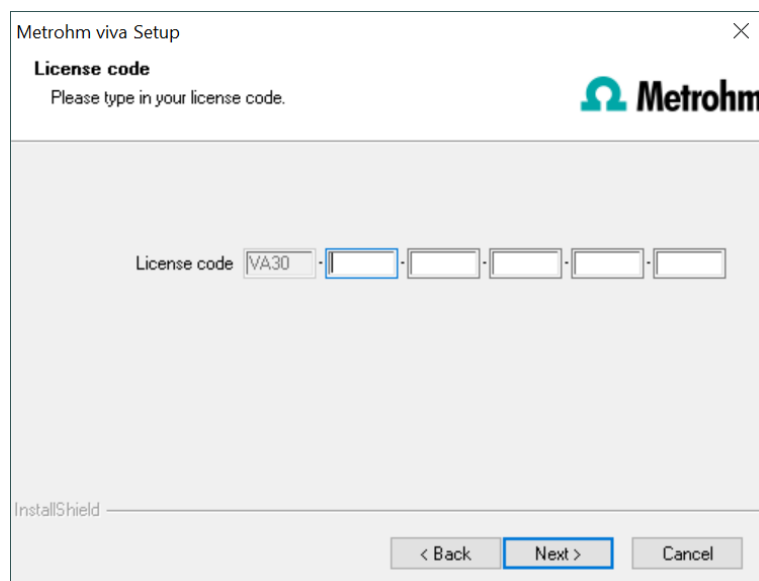
If the minimum system requirements are not met (see above), an appropriate message appears. Click on **[Yes]** if you would like to install the program nonetheless.

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

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



- 4 Read the license agreement for **viva** and accept it with **[Yes]**.
- 5 After having accepted the license agreement, a window will appear where you can enter the license code.

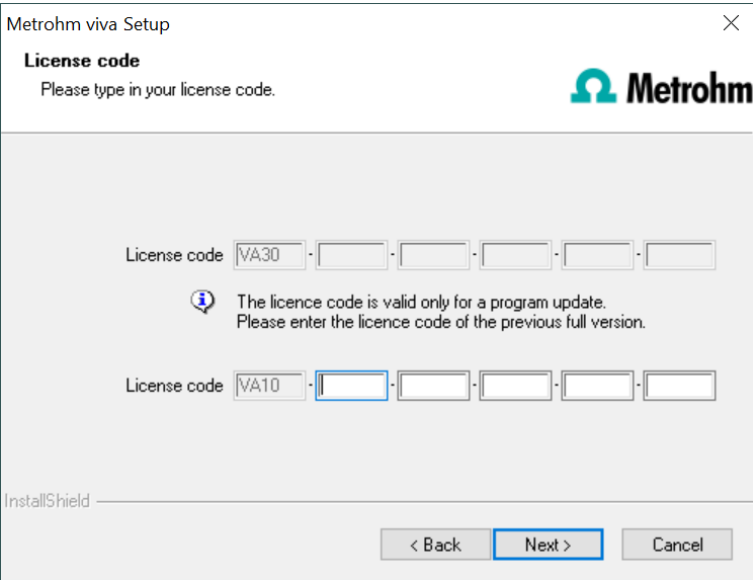


Enter the license code for **viva Full** and then click on **[Next >]**.



NOTICE

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



Metrohm viva Setup

License code
Please type in your license code.

License code VA30 - - - - -

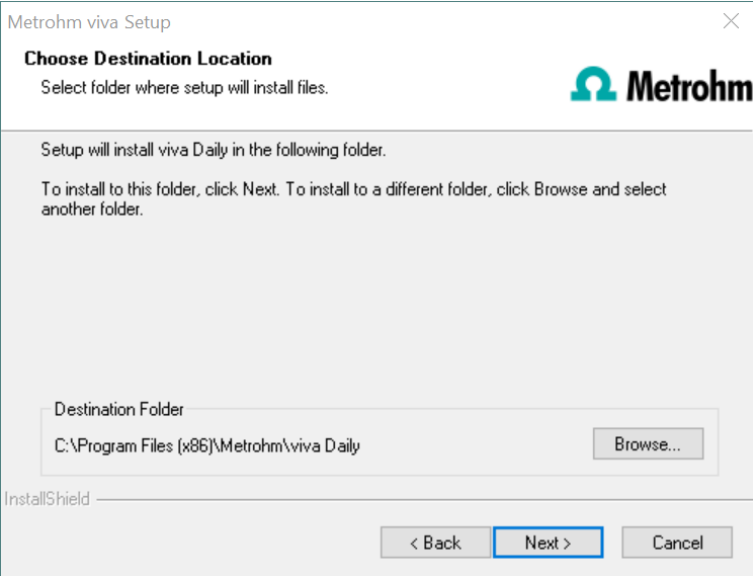
 The licence code is valid only for a program update.
Please enter the licence code of the previous full version.

License code VA10 - - - - -

InstallShield

< Back Next > Cancel

- 6** Confirm the target folder for the **viva** installation with **[Next >]** or select a different target folder with **[Browse...]**.



Metrohm viva Setup

Choose Destination Location
Select folder where setup will install files.

Setup will install viva Daily in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Destination Folder
C:\Program Files (x86)\Metrohm\ viva Daily

Browse...

InstallShield

< Back Next > Cancel

- 7** You can define the paths for the database files and default backup files in the **Additional installation information** window:

Metrohm viva Setup

Additional installation information.
Please enter the necessary information for the operation.

Every user needs read/write rights for the specified directories!

Database path: C:\ProgramData\Metrohm\viva\Data

Default backup path: C:\ProgramData\Metrohm\viva\Backup

Advanced...

InstallShield

< Back Next > Cancel



NOTICE

The database path must not be on a network drive.
The default backup path may also be on a network drive.

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

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

Metrohm viva Setup

Start icon

Should a shortcut be created on the desktop?

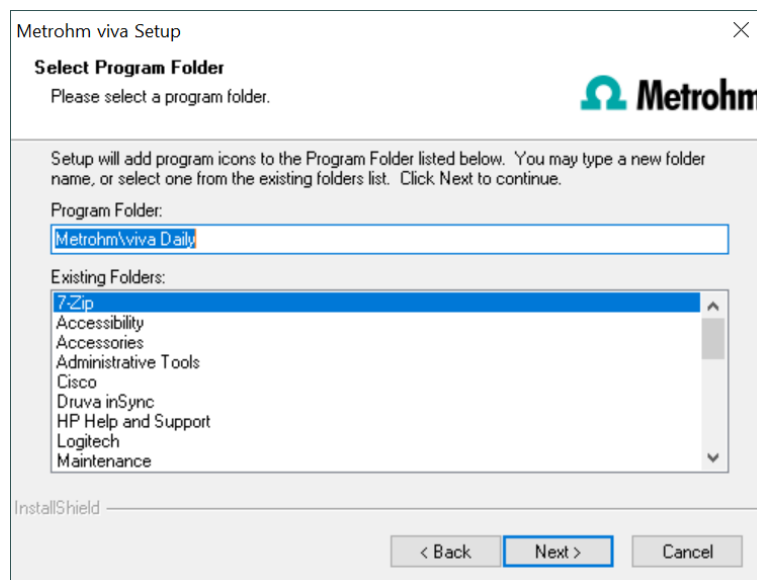
☒ Yes

☐ No

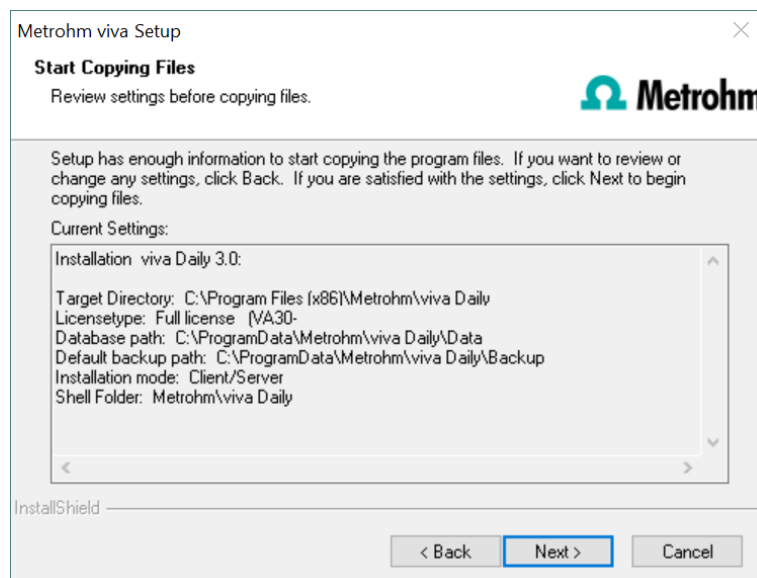
InstallShield

< Back Next > Cancel

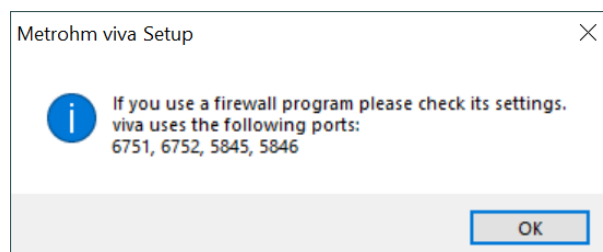
- 9 Confirm the program folder with **[Next >]** or select a different program folder.



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



- 11** The following message appears during the installation of **viva**:



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

viva will now be installed.



NOTICE

During the installation, all device drivers that are required for controlling the supported USB devices are installed or updated. If the driver software needs to be updated, a message appears. Confirm the installation by clicking on the **[Install]** button.

- 12** Once the copying procedure has been completed you can make further workplace settings:

The option **This client ID must exist in the current viva system.** can only be activated if a database from a previous installation already exists or if you want to connect to a database server on another computer.

If you enable this option, then **viva** checks whether the identifier you have entered exists in the database. If this is the case, 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 **viva** installation. Save this file on your hard drive for future reference and print it (add to installation qualification).



NOTICE

An **InstallLog** file can be found in the installation directory of **viva** 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]**.

If the OMNIS Software is already installed on the computer, start the **Metrohm OMNIS DeviceServer** service via the Windows Task Manager again.

Fonts

On the operating system Windows 10, it may be necessary for the correct display of East Asian fonts (e.g., in reports) to add the corresponding font. There are two options to do this. Only carry out one of the two described options.

- Install the missing language.
Procedure for Windows 10, version 1809: **Windows Settings ► Time & Language ► Language ► Add a language**
- Download the fonts for all the languages.
Procedure for Windows 10, version 1809: **Windows Settings ► Personalization ► Fonts ► Download fonts for all languages**

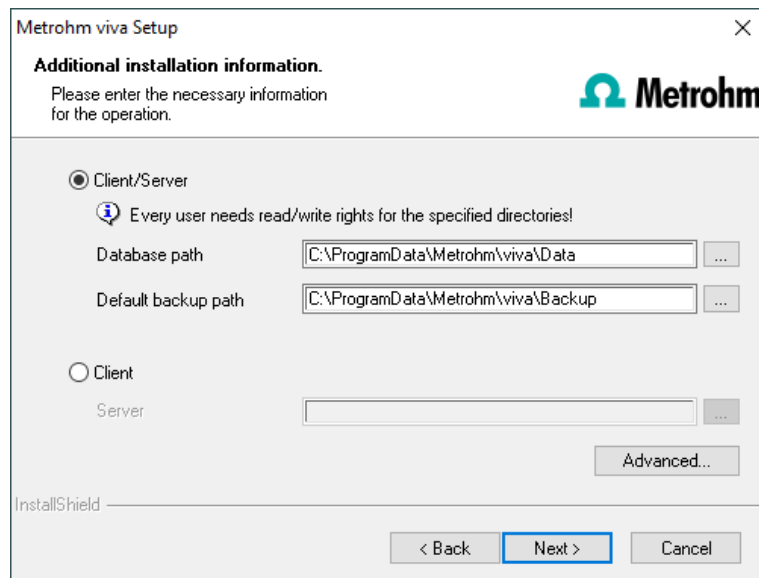
4 Client/server installation

With the **viva multi** version (multi-client version with 3 licenses) you can select during the installation whether you want to install only a **Client** or a **client** and a **server** (database 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 Follow steps **1** to **6** of the single workplace installation (*see chapter 3, page 2*).

2 The **Additional installation information** dialog appears. Here you can select whether you want to install only a **client** or a **client** and a **server** (database server) on your computer.



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.



NOTICE

The default paths are different for the various operating systems.
The database path must not be on a network drive.
The default backup path may also be on a network drive.

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

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

- 3 All further installation steps correspond to those of the single workplace installation from **point 8** onwards (see chapter 3, page 2).

Fonts

On the operating system Windows 10, it may be necessary for the correct display of East Asian fonts (e.g., in reports) to add the corresponding font. There are two options to do this. Only carry out one of the two described options.

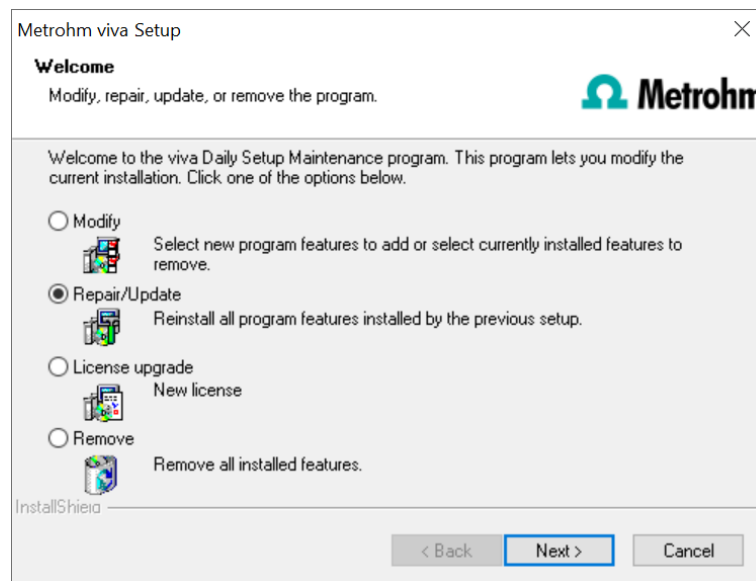
- Install the missing language.
Procedure for Windows 10, version 1809: **Windows Settings ► Time & Language ► Language ► Add a language**
- Download the fonts for all the languages.
Procedure for Windows 10, version 1809: **Windows Settings ► Personalization ► Fonts ► Download fonts for all languages**

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

In order to carry out modifications on the current **viva** installation, start the **setup.exe** file from the USB flash drive or click under:

Control Panel ► Programs and Features on **Metrohm viva**. Then select **Uninstall/Change**:

- XML structure missing: ul



Modify

With this option you can adjust the paths to the database and backup files and change the ports which **viva** uses for communication. With the **viva 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 **viva** installation because, for instance, a DLL file is missing or a program file has been deleted by mistake, **viva** can be repaired with this option.
- **Updating the installation**
In case an older version of **viva** is installed, it will be updated to the new version of **viva**.



CAUTION

During the updating of older viva versions to viva 3.0 the databases will be converted to the new version. Depending on the size of the database, this may take some time. A progress bar showing the status of the conversion is displayed for each database.

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

License upgrade

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

- **viva Full** to **viva Multi**

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

Remove

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

6 Program update with viva full

During the program update, the configuration database (system configuration, methods, templates) and the determination databases are automatically updated for further use.



NOTICE

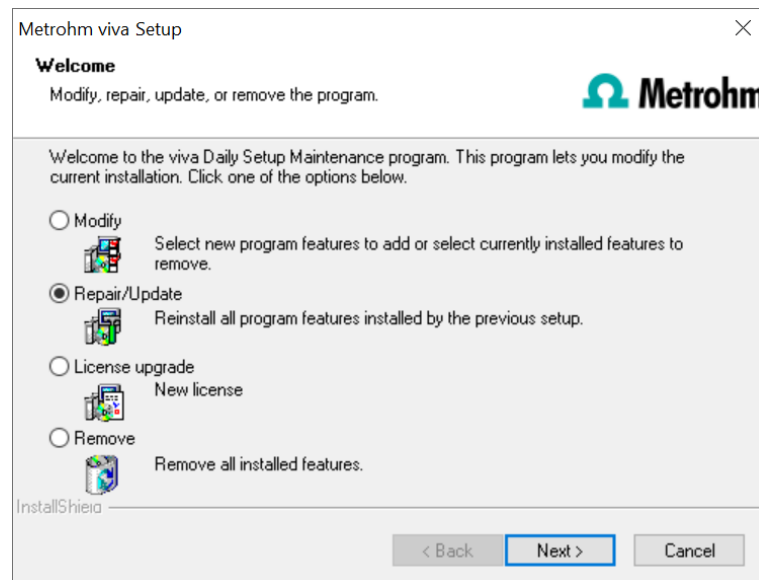
The files in the database directory and the backup directory will be retained when the program is updated.

Files in the subdirectories **bin**, **jre**, **lib**, **res**, **doc** and **examples** will be overwritten by the update. The 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 to an external directory using the backup function of **viva**. In the **Configuration** program part, select the **File ► Backup ► Manually** menu item. Select **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out. Then copy the backup file to an external storage medium.
- 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**, mark all methods to be exported and click on **[Edit] ► Export....** Select the desired export directory and click on **[OK]**. The methods are exported to the desired directory. Then copy the method files to an external storage medium.

- 3** Save all determination databases created by you to an external directory using the backup function of **viva**. In the **Database** program part, select the **File ► Database manager...** menu item. Select the desired database and click on **[Backup]**. Select **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out. Then copy the backup file to an external storage medium.
- 4** Also save further files created by you in the installation directory (e.g. export files) to an external directory or to an external storage medium.
- 5** Close **viva**. Connect the USB flash drive with the installation file to the computer and start the **setup.exe** file. Then select **Repair/Update** and click on **[Next >]**.



- 6** Enter your update license code and click on **[Next >]**.

7



CAUTION

During the updating of older viva versions to viva 3.0 the databases will be converted to the new version. Depending on the size of the database, this may take some time. A progress bar showing the status of the conversion is displayed for each database.

The computer must not be restarted or Windows 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 of a successful installation is saved in the **viva** installation folder (default: C:\Program Files(x86)\Metrohm\viva) under bin\InstallLog.

7 Program update with viva 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 **viva multi**.



NOTICE

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

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

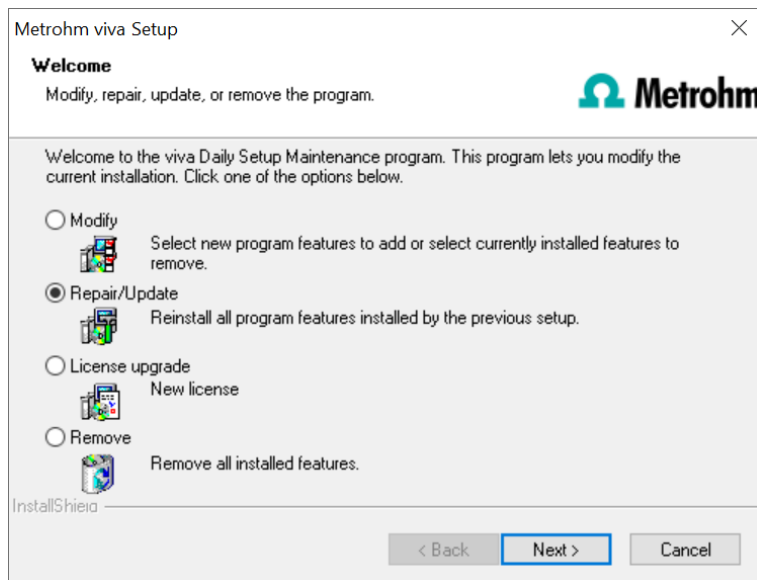
- 1 Make sure **viva multi** is closed on all clients.



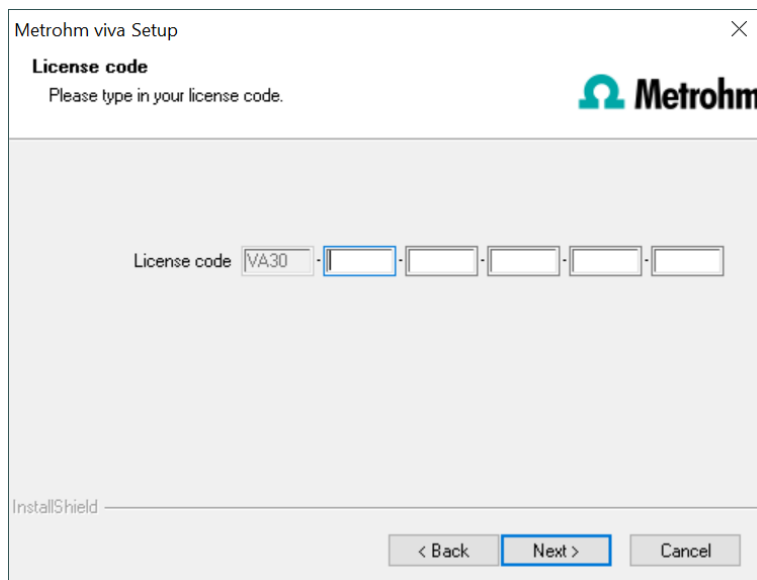
NOTICE

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

- 2 Open **viva multi** on the server and save the configuration database to an external directory using the backup function of **viva**. In the **Configuration** program part, select the **File ► Backup ► Manually** menu item. Select **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out. Then copy the backup file to an external storage medium.
- 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**, mark all methods to be exported and click on **[Edit] ► Export....** Select the desired export directory and click on **[OK]**. The methods are exported to the desired directory. Then copy the method files to an external storage medium.
- 4 Save all of the determination databases on the server to an external directory using the backup function of **viva**. In the **Database** program part, select the **File ► Database manager...** menu item. Select the desired database and click on **[Backup]**. Select **Backup directory**, enter a name for the backup file and click on **[Start]**. The backup is carried out. Then copy the backup file to an external storage medium.
- 5 Also save further files created by you in the installation directory (e.g., export files) to an external directory or to an external storage medium.
- 6 **Updating the server**
Close **viva multi** on the server and on all clients. Connect the USB flash drive with the installation file to the **server** and start the **setup.exe** file. Then select **Repair/Update** and click on **[Next >]**.



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



8



NOTICE

The update of **viva 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 the updating of older viva versions to viva 3.0 the databases will be converted to the new version. Depending on the size of the database, this may take some time. A progress bar showing the status of the conversion is displayed for each database.

The computer must not be restarted or Windows 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 during the program update and with a confirmation of a successful installation is saved in the server's **viva** installation folder (default: C:\Program Files(x86)\Metrohm\ viva) 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 **viva** (dialog: **Configuration ► Tools ► Program administration... ► Licenses ► Add licenses**).

11 Updating clients

Connect the USB flash drive with the installation file to each client in turn and start the **setup.exe** file. Then select **Repair/Update** and click on **[Next >]**. Complete the installation with **[Finish]**.



NOTICE

To facilitate the updating of many clients at once, the installation can be copied from the USB flash drive to a writable medium and the file **viva_init.ini** can be modified. There, user-defined parameters for the installation (license code, installation path, server name, etc.) can be set in advance, so that one needs only 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 of a successful installation is saved in the **viva** client's installation folder (default: C:\Program Files(x86)\Metrohm\ viva) under bin\InstallLog.

If additional licenses were removed at the time of the server update or if further additional licenses are to be added, proceed as follows:

Adding additional licenses

- 1** Open the directory **C:\Users\'Username\AppData\Local\VirtualStore\Program Files (x86)\Metrohm\ viva\bin**. If there is a file there named **license.mlic**, delete it. Repeat this for each user.

2 Right-click on the file **setup.exe** and select **Run as administrator**.

3 Add the desired licenses in the **Configuration** program part under **Extras ► Program administration ► Licenses ► Add 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 (e.g., **C:\Program Files(x86)\Metrohm\viva\bin**).



NOTICE

For more information on adding additional licenses, refer to *Chapter 9, page 18*.

8 Installation of drivers

In normal cases, the installation routine of **viva** automatically installs all the driver software necessary for actuating the supported devices.

It may be necessary to install individual driver software manually in combination with a few devices. This is the case if the operating system displays a message when connecting a device to the computer, as e.g. **Device driver software was not installed. No driver software found**. The message should also show the name of the corresponding device. Write down this name and proceed as follows to install the driver software manually:

- 1 Open the Windows Device Manager. The corresponding device can be found under **Other devices**.
- 2 Right-click on the device. 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 **viva** (default: **C:\Program Files (x86)\Metrohm\viva**).
- 6 Open the **drivers** subfolder. This contains a subfolder with the required (***.inf**) driver software file for each of the corresponding devices. For example, the **Avantes** subfolder contains the driver software for the Avantes spectrometer.
- 7 Apply the selection with **[OK]**. A Windows safety prompt is displayed. In order to install the driver, click on **[Install]**.

8 After successful installation, close the Device Manager.

9 Adding additional licenses

General

Windows 10 has a UAC (User Account Control), which permits running tasks either as non-administrator or as administrator (without changes of user, switching off or similar). For more information about this function, see <https://docs.microsoft.com/en-us/windows/security/identity-protection/user-account-control/how-user-account-control-works>.

This function can cause difficulties with client/server installations of **viva**.

Problem description

Additional licenses for the program should be added. For this purpose, the license code for an additional 5 licenses, for example, has been added (on the server) in the **Configuration** program part in the **Program administration** dialog window (accessible via the **Tools ► Program administration...** menu item, **Licenses** tab).

Normally the **license.mlic** file, which contains the standard license code and the additional license codes, is stored in the **bin** directory of the program installation (e.g. **C:\Program Files(x86)\Metrohm\ viva\bin**).

However, it may happen that the 5 licenses have been added and the **license.mlic** file contains only the standard license code (for 3 licenses). If this is the case, check whether there is a file named **license.mlic** in the **C:\Users\Username\AppData\Local\VirtualStore\Program Files (x86)\Metrohm\ viva\bin** directory. This file contains the license codes for the standard licenses and the 5 newly added licenses, i.e. the additional licenses were 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 **license.mlic** file from the **C:\Users\Username\AppData\Local\VirtualStore\Program Files (x86)\ viva\bin** directory to the detail list of the **C:\Program Files (x86)\Metrohm\ viva\bin** directory.

The **license.mlic** file in the **C:\Program Files (x86)\Metrohm\ viva\bin** directory determines the client/server functionality of the database server, however, 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). To fix this, the **license.mlic** file must be deleted from the **VirtualStore**.

Remedy

- **For new installations**
 - Start the program as an administrator.
 - Add the license code for additional licenses as usual. The **license.mlic** file in the **C:\Program files(x86)\Metrohm\ viva\bin** directory contains both license codes.

- **For existing installations**
 - In the **C:\Users\Username\AppData\Local\VirtualStore\Program Files(x86)\Metrohm\ viva\bin** directory, check whether there is a file present named **license.mlic** and delete it if necessary.
 - Start the program as an administrator.
Add the license code for additional licenses as usual. The **license.mlic** file in the **C:\Program files(x86)\Metrohm\ viva\bin** directory contains both license codes.

10 User rights for viva

In order for the logged-in user to be able to access all functions with **viva**, 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 backups will be stored (...Backup).	Modify	User*
%PROGRAMDATA%\Metrohm**	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*
Installation directory, e.g. %PROGRAMFILES(x86)%\Metrohm\ viva	Read & execute	User*

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

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



NOTICE

The **BackupServer.exe** process must be started for carrying out a backup (backup of the configuration database and of the determination databases). You can check this under "Windows Task Manager".

The **user** must be logged in during the whole backup process.