

How to install DPV

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Chapter 1

System requirements

1.1 Operating system

DPV can be installed on the following operating systems (32bit, 64bit):

- Windows 10
- Windows 11
- Windows Server 2016 (WoW64-Support installed)
- Windows Server 2019 (WoW64-Support installed)
- Windows Server 2022 (WoW64-Support installed)
- Windows Server 2025 (WoW64-Support installed)

Operating systems for which Microsoft has discontinued maintenance are not supported. As Microsoft no longer publishes security updates for these operating systems, it is not recommended to process personal data on these operating systems.

1.2 Minimal system requirements

1.2.1 Client

- **Processor**: x86 or x64 2 GHz Pentium processor or equivalent (minimum); 2 GHz Pentium processor or equivalent (recommended)
- RAM: 1 GB (minimum); 2 GB (recommended)
- Hard disk: up to 300 MB of available space may be required

1.2.2 Server

• **Processor**: x86 or x64 2 GHz Pentium processor or equivalent (minimum); 2 GHz Pentium processor or equivalent (recommended)

- RAM: 1 GB (minimum); 2 GB (recommended)
- **Hard disk**: approx. 2 GB 5 GB of available space may be required (depending on the number of records in the database, especially amount of imported sensor data)

1.3 Prerequisites

DPV depends on the .NET Framework 4.8, therefore it needs be installed prior to the DPV installation. The DPV setup detects if this framework is not yet installed and will start the setup of the .NET Framework 4.8.



Figure 1.1: Installation Microsoft .NET Framework 4.8

Please click "Install" to install the .NET Framework. DPV can only be installed after the installation of the .NET Framework has been completed successfully.

As the setup of the .NET Framework is called from the DPV setup, the DPV setup must be closed in order to install the .NET Framework. When installing the .NET Framework during an update of DPV, the DPV server service must be closed as well. With clicking "Yes" both of the programs will be closed by the setup of .NET Framework.

| Microsoft .NET Framework | × |
|---|---|
| Do you want Setup to close your programs? | |
| Setup has to update files that are being used by the following programs. Save your work and click Yes to automatically close these programs. If you click No, Setup may have to restart Windows after installation. | |
| Programs to close: | |
| DPV-Setup | |
| <u>Refresh</u> <u>Y</u> es <u>N</u> o | |

Figure 1.2: Microsoft .NET Framework 4.8 - quit programs

In order to complete the installation of the .NET Framework, the computer needs to be restarted. The DPV installation can only be completed successfully after restarting the computer.

| Microsoft .NET Framework | | | | | | |
|--|-----------------------|--|--|--|--|--|
| You must restart your computer to complete the installation. If you choose Restart Later, applications dependent on .NET Framework may stop working | | | | | | |
| Restart <u>N</u> ow | Restart <u>L</u> ater | | | | | |

Figure 1.3: Microsoft .NET Framework 4.8 - restart

The DPV setup assistant recognises if the .NET Framework is not yet installed in the required version. In this case, a notification about the required restart after the installation of the .NET Framework is displayed the installation overview.

Installation overview

The installation of DPV may take a couple of minutes.



| Type of installation | | single-desktop (clier | nt and serv | er) | | |
|--|------------------------------|--|--------------|----------------------------------|---------------------------|--------|
| Target directory | | C:\Program Files (x8 | 36)\QS_Ulm | \DPVc | | |
| Overview communication | | localhost:3782 | | | | |
| Caution, the .NET Framework 4.8 is not i Framework a restart of the computer w cancel the installation of DPV and run it | nstalle ill be n again | ed, yet. Please note tha lecessary. If a restart is later. | at after the | installation o ble at the mon | f the .NET nent, you s | hould |
| activate notification for database update | | i | | | | |
| | | | Back | Continue | Install | Cancel |

Figure 1.4: Notification in the setup assistant about the required restart

1.4 Techniques used

DPV is using common techniques provided by Microsoft Windows and the .NET Framework:

- WPF (Windows Presentation Foundation): graphical user interface
- WCF (Windows Communication Foundation): communication between clients and server
- Windows Firewall: port configuration for communication between clients and server
- Windows Services: hosting the server part and the import routine of DPV
- **Component Services**: Visual FoxPro DLL as Com+ Application for accessing the database by the server part of DPV
- MSMQ (Message Queuing): communication between Visual FoxPro DLL and server part of DPV

• Named Pipes: communication between setup und database update

1.5 Structure of DPV

1.5.1 Single-desktop

Only one user at a time can then work with DPV.

1.5.2 Client-server – server

In a multi-user environment the server part has to be installed on an actual server which can be accessed by the designated clients. It is also possible to install the DPV server part on a virtual machine with a supported operating system.

1.5.3 Client-server – client

The client part has to be installed on every client DPV shall be used on. The client part can also be installed on a terminal server or in a Citrix environment.

DPV clients can also be installed using the command line. The following parameters are required:

- -quiet -silent: Default MSI parameters for silent installations
- BurninstallationsVz: Installation folder for DPV client (no trailing slash)
- **BurnInstallationPort**: Port which is used for the communication with the DPV server (default: 3782)
- **BurnInstallationIP**: IP address or hostname of the server with the DPV server installation
- **BurnInstallationTyp**: Type of installation for DPV client installation the value 2 must be set
- **BurnInstallationSprache**: Default language of the DPV client (e.g. en-GB for English)
- **BurnInstallationPrereq**: Optional specification of whether the silent installation should be terminated if system requirements are missing (e.g. .Net Framework 4.8). The default value is 1 (no termination in case of missing prerequisites). If the value 2 is specified, the installation is stopped if the prerequisites are not met. A corresponding message will appear in the installation log and the setup will be terminated with the exit code 17031.

<<pre><<pre><<pre>cont to the setup file>> -quiet -silent BurnInstallationsVz=<<installation directory>>
BurnInstallationPort=<<pre>cont DPV server (default: 3782)>> BurnInstallationIP=<<IP or DNS entry of the
DPV server>> BurnInstallationTyp=2 BurnInstallationSprache=en-GB [BurnInstallationPrereq=1]

C:\Temp\setup_DPV_7.50.065.exe -quiet -silent BurnInstallationsVz=C:\QS_Ulm\DPVc BurnInstallationPort=3782 BurnInstallationIP=servertest BurnInstallationTyp=2 BurnInstallationSprache=en-GB BurnInstallationPrereq=1

Chapter 2

DPV setup file

2.1 Download DPV setup file

The DPV setup file can be downloaded via: https://sweet.zibmt.uni-ulm.de/software. php



Figure 2.1: Download setup file

The setup file is an executable file. The name of the setup file consists of the phrase "setup_DPV_", the version number and the file extension ".exe". For example: "setup_DPV_7.50.040.exe".

Using this setup file you can install DPV and update DPV as well.

2.2 Run DPV setup file

Please start the setup file on the PC/server on which you want to install DPV. Do NOT start the setup file via the right-click menu item "Run as administrator".

After starting the setup file the User Account Control is displayed. Please click the button "Yes". If you do not have the required permission to install DPV, the password of an user with administrative rights must be entered in order to proceed. In order to run the setup file local administrative rights are needed. User Account Control

Do you want to allow this app from an unknown publisher to make changes to your device? Х

setup_DPV_7.50.094.exe

Publisher: Unknown File origin: Hard drive on this computer

Show more details

| Yes | No |
|-----|----|
| | |

Figure 2.2: User Account Control

Chapter 3 Installing DPV

To install DPV, please run the DPV setup file. The setup starts with the "Welcome"-screen. You can change the language of the setup assistant if neccessary.

| | Welcome to the D | DPV Setup Wizard |
|------------------------|---|--|
| DPV QS-DPV DPV-Wiss | Please select language | English |
| | The Setup Wizard will install DPV on your compuexit the Setup Wizard. | iter. Click "Continue" to proceed or "Cancel" to |
| | | |
| | | |
| | | Back Continue Install Cancel |

Figure 3.1: setup assistant - welcome-Screen

To proceed, click the "Continue"-button.

3.1 Type of installation

In the next screen, please choose the type of installation. The following options are available

- **Single-desktop**: this will install the server part, as well as the client part of DPV on the PC.
- **Client-server server**: this will install the server part of DPV. For this purpose the hostname (or IP) of the server and the port for the communication have to be provided.
- **Client-server client**: this will install the client part of DPV. For this purpose the hostname (or IP) and the port of the server on which the server part of DPV is installed have to be provided for the communication.

Type of installation Here you can choose the type of installation of DPV. Type of installation • single-desktop (client and server) • client-server - server • client-server - client



Figure 3.2: setup assistant - type of installation

To proceed, click the "Continue"-button.

3.2 Target directory

A new installation of DPV is performed by default in the Windows programs directory (Windows 32 bit ☐ C → Program Files → QS_Ulm → DPVc; Windows 64 bit ☐ C → Program Files (x86) → QS_Ulm → DPVc).

To change the target directory for the installation, please click the "Search Folder"button.

Target directory



Click "Continue" to install into the default directory or click Browse to choose a different directory.

Install DPV to:

C:\Program Files (x86)\QS_Ulm\DPVc





Figure 3.3: setup assistant - target directory

It is neither possible to install the DPV server nor the DPV client on a network drive. During the installation on a network drive various problems can occur, as the installation of DPV not only consists of the files which are stored in the corresponding installation directory. Several services, registry entries, port releases, etc. are part of the installation.

It is definitely not recommended to copy the DPV client installation folder to a network drive. This can cause problems when accessing the DPV client via the network share. All resources are only set up locally on the PC on which the initial installation was done. We therefore advise users to make the DPV client installation available locally.

To proceed, click the "Continue"-button.

3.3 Communication between server and client

This screen will only be shown when the server or client part of DPV are installed separately. Please provide the hostname (or IP) of the server and the port on which client and server should communicate.

| Communication betwe Here you can define the v | | QS-DPV DPV-Wiss | | | | |
|---|-----------|-----------------|------|----------|--|--------|
| | | | | | | |
| IP or name of the server | localhost |] | | | | |
| Port on the server | 3782 |] | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | Back | Continue | | Cancel |

Figure 3.4: setup assistant - communication between server and client DPV

To proceed, click the "Continue"-button.

3.4 Installation overview

On the next screen, an overview for the pending installation is shown. To install DPV, please click the "Install"-button.



Figure 3.5: setup assistant - installation overview

3.5 Installation progress

During the installation, all buttons are disabled and a progress bar is shown.



Figure 3.6: setup assistant - progress

Progress of installation



Figure 3.7: setup assistant - progress

3.6 Installation successful

When the installation has finished successfully, the screen below will be shown. To end the setup, click the "Exit"-button.



The installation of the DPV software was completed successfully.

Exit

Figure 3.8: setup assistant - installation successful

To start DPV, please click on the new icon on the desktop:



Figure 3.9: DPV desktop icon

Chapter 4 Updating DPV

It is important to update DPV regularly. DPV is constantly being developed. New functiones will be added, existing functions are optimized, new fields be added and errors fixed. Moreover the guidelines are always adapted to the current status.

4.1 DPV version

New DPV versions will be frequently released on the SWEET-website.

The version numbers of the currently installed DPV version can be seen in the DPV menu via "help -> info".

| Version information | | | | | |
|----------------------------------|--|--|--|--|--|
| client version | 7.50.094 | | | | |
| server version | 7.50.094 | | | | |
| installation information | | | | | |
| client installation directory | C:\Program Files (x86)\QS_Ulm\DPVc\DPVcClient\ | | | | |
| server installation directory | C:\Program Files (x86)\QS_UIm\DPVc\DPVcServer\ | | | | |
| IP or name of the server | localhost | | | | |
| Port | 3782 | | | | |
| Contact | | | | | |
| Ramona Ranz | <u>ramona.ranz@uni-ulm.de</u> | | | | |
| Andreas Hungele | andreas.hungele@uni-ulm.de | | | | |
| telephone | +49 731 50-25316 | | | | |
| FAX | +49 731 50-25309 | | | | |
| Homepage | <u>www.d-p-v.eu</u> | | | | |
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Figure 4.1: info currently installed DPV version

It is not possible to downgrade to older DPV versions. The version of the update to be installed must be more recent or the same as the DPV version already installed.

Newer version of DPV detected

A newer version of DPV has been detected.



A more recent version of DPV has been detected. It is not possible to install an older version of DPV.

Exit



4.2 Procedure for updating

4.2.1 Updating a single-desktop installation

When updating a single-desktop installation both the client part and the server part will be updated.



Figure 4.3: setup assistant - installation overview update single-desktop

4.2.2 Updating a server-client installation

In a server-client installation, the server part must be updated first and then the clients.

Start the setup file for updating the DPV server part on the PC/server, on which the DPV server part is installed. The setup automatically detects the existing installation of the DPV server and runs the update.

Then the single DPV client installations have to be updated. This can be done with the same setup file. DPV client can also be updated using the command as described in a previous chapter.

When the versions of the clients and the server differ, DPV cannot be started and a corresponding messages will appear.



Figure 4.4: version conflict

4.3 Update - setup assistant

The setup file also contains the update procedure. The setup automatically detects, if DPV is already installed. At the start of the update the following screen will be shown:

| Installation overview The installation of DPV may take a coup | le of min | utes. | QS-DPV DPV-Wiss |
|---|-----------|-------------------------------------|-----------------|
| Type of installation | | single-desktop (client and server) | |
| Target directory | | C:\Program Files (x86)\QS_Ulm\DPVc\ | |
| Overview communication | | localhost:3782 | |
| | | | |
| | | | |
| | | | |
| activate notification for database update | | | |
| | | Back Continue | Update Cancel |

Figure 4.5: setup assistant - update for DPV

To install the update click the "Update"-button.

4.3.1 Update - Logged in users

When updating the DPV server it will be checkd, if any users are logged in to DPV. The update can only be continued, when no user is logged in.

| Logged in users Attention, users are sti Please make sure that | DPV QS-DPV DPV-Wiss | | |
|---|------------------------|----------------|-----------------------|
| DPV user signature: Demo | Windows user | computer name | Date of log in |
| a | hungele | WIN10-TRAINING | 11/5/2024 2:58:04 PM |
| | | C | |
| | | Back | ontinue Update Cancel |

Figure 4.6: Logged in DPV users

When the installation of the update has finished, the screen below will be shown.



The DPV-update was installed successfully.

Exit

Figure 4.7: setup assistant - update successful

To end the setup, click the "Exit"-button

4.3.2 Database update

In contrast to the previous DPV the database will be updated directly while updating DPV 7. The progress of the database update will be displayed via a progressbar and corresponding texts.

| Progress of installation | QS-DPV DPV-Wiss |
|--|-----------------|
| | |
| Update database: start database update | |
| | |





| Progress of installation | QS-DPV DPV-Wiss |
|--|-----------------|
| | |
| | |
| Update database: database clean-up: inpatient days | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |



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When several signatures are used in DPV, all databases will be updated during the update.

Chapter 5 Uninstalling DPV

DPV can be uninstalled via the Windows Control Panel. To do this, please select the entry of DPV in the list of installed programmes and click the "Uninstall" button.

| 1 | DPVcInstallation | | 768 MB 11/5/2024 |
|-----------------|------------------|--------|----------------------------|
| | 7.50.94.0 | | ., |
| | | Modify | Uninstall |

Figure 5.1: Uninstalling DPV via Control Panel

The setup assistant for uninstalling the software then opens. With a click on the button "Uninstall" you start the uninstallation of DPV.

| Uninstalling DPV | DPV OS DBV DBV WHAT |
|----------------------------------|------------------------|
| Here you can uninstall DPV | QO-DEA DEATRIS |
| | |
| | |
| Please select language English 🔹 | |
| | |
| | |
| | |
| | |
| | |
| Uninstall | Exit |



As soon as the uninstallation of DPV is completed, the corresponding page is displayed in the setup assistant. To exit the setup, please click the "Exit" button.



Uninstalling the DPV software was completed successfully.



Figure 5.3: setup assistant - Uninstalling successful

Please note that you should create a data backup before uninstalling a DPV standalone installation or uninstalling the DPV server component. Otherwise, uninstalling DPV may lead to loss of patient data.

5.1 Uninstall DPV client using command line

A DPV client installation can be uninstalled using the command line with the following command:

 $<\!<\!path$ to the setup file>> -quiet -silent Uninstall BurnInstallationTyp=2

C:\Temp\setup_DPV_7.50.065.exe -quiet -silent Uninstall BurnInstallationTyp=2

Please note that uninstalling a DPV client using the command line only works with a setup file matching the version of the installed DPV client. It is not possible to uninstall the DPV client using the command line with the setup file of a later DPV version.

Chapter 6 Error during installation

If an error occurs during the installation, the following screen is shown.

Error during installation

An error occured during the installation of DPV. Please save the installation log and send it to us via e-mail.

Ramona Ranzramona.ranz@uni-ulm.deAndreas Hungeleandreas.hungele@uni-ulm.detelephone+49 731 50-25316FAX+49 731 50-25309



Figure 6.1: setup assistant - Error during installation

Please click on the button ",Save installation log as file". A zip-file will be created. This zip-file contains the installations log files. Please send us the saved zip-file via e-mail.

