



HELiOS

UNLIMITED PLM PERFORMANCE DEVELOPED BY ISD

Installation Notes

Version 2022

HELiOS

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THE WORLD OF CAD AND PDM SOLUTIONS

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Getting Started

Important Notes!

Hardware Exchange

If you use local HELiOS licenses and want to exchange any hardware components, modify the partitioning of, or re-install the operating system, you need to revoke the existing license on the HELiOS workstation first, and request, using the new hardware or modified configuration, a new license key (further information on the procedure can be found in the software documentation).

If a revocation is technically possible, but will not be performed, the ISD reserves the right to charge costs in an appropriate amount for the reissuing of the license. If the license will not be revoked, or if such revocation is no longer technically possible, the ISD may request proof that the unrevoked license is no longer utilisable; in case of failure to produce such proof, the ISD reserves the right to refuse the transfer of the license to a new hardware.

Discontinuation of HELiOS 32-Bit and HiCAD Viewer 32-Bit

As of HELiOS 2022 (Version 2700.0), a 32-Bit version for HELiOS and the HiCAD Viewer will no longer be available. However, the interface to 32-Bit applications such as Office will still be possible and is not affected by the discontinuation of the 32-Bit installation of HELiOS.

Discontinuation of Oracle

As of HELiOS 2022 (Version 2700), Oracle will no longer be officially supported as a database system! Please migrate to a SQL Server as soon as possible.

Discontinuation of Microsoft Office 2010 interface

From HELiOS 2021 (Version number 2600.0) on, we will no longer support Office 2010 in the HELiOS – Office interface.

Discontinuation of old Multi-CAD interfaces for HELiOS 2022

As of HELiOS 2022 (Version 2700.0), the following versions of Multi-CAD interfaces are no longer supported:

- AutoCAD (Mechanical) 2018
- Inventor 2018
- Navisworks 2018

Discontinuation of the ISD.PDM.API

Before carrying out a HELiOS update for an older HiCAD version, please note that from HELiOS 2022 onwards, the previous ISD.PDM.API will be discontinued and replaced by the new API from Helios.Interface. If you use customisations that use functionalities from the previous ISD.PDM.API, you must update the customisations to the new API before carrying out the HELiOS update. If you use customisations that use functionalities from the HiCAD API, you should ensure that the HiCAD version used is at least version 2502.5 or 2601.1 or newer. If you are unsure whether you are using corresponding adaptations, please talk to your administrator or contact the ISD in case of doubt.

Discontinuation of Windows® 7 and Windows® 8

Microsoft® has discontinued support for the Windows® 7 operating system in January 2020. For compatibility reasons, HiCAD 2020 SP2 and HELiOS 2020 SP2 were the last versions of our CAD or PDM system to support Windows® 7. HiCAD 2021 and HELiOS 2021 no longer run under Windows® 7, Windows® 8 and the corresponding server operating systems (Windows Server 2008 R2, Windows Server 2012 and older) are also no longer supported. If an attempt is made to install HiCAD 2021 or HELiOS 2021 on a computer with Windows® 7 or Windows® 8, a message appears.

Data compatibility

When performing a HELiOS update, the update start mask shows you the HELiOS subversion, which needs to match the existing database. If this is not the case, only an error message will appear when you start HELiOS. To update the database schema, use the program HeliosDbUpdate.exe. If the database schema requires an update, you can **no longer access** the database with older HELiOS versions. Therefore, all workstations accessing the database need to be readjusted accordingly at the same time.

Update HELiOS

In the context of HELiOS Update Installations, the last 5 release cycles are supported. As of HELiOS 2022 (Version 270*.*), you can only update installations from 2017 (Version \geq 2200.0) and newer. (See also [Carrying out the installation.](#))

PDF preview in the HELiOS Desktop

Please note that the PDF preview in the HELiOS Desktop no longer works with **Acrobat Reader DC** from Version 2021.011.20039.

As an alternative, we recommend using **Foxit Reader**. Before installing it, you must uninstall Acrobat Reader DC. You may also have to adjust the configuration file hel_preview.ini if Acrobat Reader was explicitly defined for PDF preview there.

New Mask Editor in HELiOS 2020

Due to the complete revision of the Mask Editor in HELiOS 2020, the previous mask format has been changed from .MSK to .XML. In addition, mask files are now managed outside the installation directory, resulting in some changes in the system architecture that Administrators must consider:

- The masks of older versions (before V 2500.0) that were previously stored in the SYS directory of the installation are automatically converted to the new XML format in case of an update installation and stored at **%Programdata%**.
- The new masks at **%Programdata%** should not be overwritten under any circumstances, as these represent the "delivery status", which will be updated by later update installations. If masks are edited and changed with the Mask Editor, you must store and call them at **%Appdata%**.

Updating the HELiOS-Inventor interface

For an update of the Inventor interface from an older HELiOS version to HELiOS 2020 (Version 2500) or higher (and the corresponding update of the database schema) the following changes have to be considered:

1. The structure identifiers for Inventor parts must be updated.
2. The standard part and semi-finished product identifiers are changed to a document-based (instead of article-based) management.

An update installation can only be carried out after an appropriate preparation of the migration.

In case of an update, please contact the Consulting team of the ISD Group. New installations of HELiOS 2020 and the associated database are not affected.

Updating the HELiOS-SOLIDWORKS interface

For an update of the SOLIDWORKS interface from an older HELiOS version to HELiOS 2020 (Version 2500) or higher (and the corresponding update of the database schema) the following changes have to be considered:

Since a migration of the configuration IDs is performed during the update, an update installation can only be performed after the migration has been prepared accordingly. In the event of an update, contact the Consulting team of the ISD Group. New installations of HELiOS 2020 and the associated database are not affected.

Attribute mappings: Conversion of the default mapping

With HELiOS Major Release 2022 (V. 2700) an adjusted standard attribute mapping is delivered. By converting the mapping for designating component names to configuration-specific attributes, a significant performance increase was achieved when loading SOLIDWORKS assemblies.

Existing mappings, which are generally not changed by an update installation, should be updated to the new standard manually. Please refer to the HELiOS Online Help.

Important update notes for attribute mapping in title blocks

Until HELiOS 2019, attribute mapping at SOLIDWORKS was done by the following files:

- heliosw_titleblock.dat (attributes for the title block),
- helios_cs_global_config.dat (attribute mapping/presetting in both directions),
- sw_comp_name.dat (display in the model tree in CAD).

As of HELiOS 2020 (Version 2500.0), the mapping must be set up again manually. No migration tools exist.

Up to HELiOS 2019, the attribute for the title block in AutoCAD was created using the following files:

- heliosac_titleblock.dat,
- helacblock.xml

As of HELiOS 2020 (version 2500.0), the mapping must also be set up manually here.

In case of an update, please contact the Consulting team of the ISD Group.

Important notes for administrators during a HELiOS update installation working with the HELiOS integration for Inventor, AutoCAD and SOLIDWORKS!

When updating the database to HELiOS 2019 Service Pack 2 or higher, the old workspace is checked for documents in progress. These are documents with the pen symbol in the respective (old) workspace dialog, or entries of locked documents in the Workspace Manager from HELiOS Desktop (on the right hand side).

Should the check find relevant documents, the following message appears:

The update of the database cannot be performed because there are still locked documents in old local work areas which will not be supported in the future. After this update, only work areas with new administration are supported and automatic migration is not possible. More information can be found here.

HELiOS Data base schema

As existing datasets with non-compliant conditions may cause conflicts during the central update process of the HELiOS delivery database, you should consider the following:

1. **Do a database backup:** You should make sure that a backup of your HELiOS database has been created before the update. This can be done with the HELiOS Database Creator or via your SQL server application. Please contact the ISD hotline if you have any questions or need support for your individual system architecture.
2. **The log file of the update:** If any conflicts occur during the update, they are traced in the log file **HeliosDbUpdate.txt** (in the system path %appdata%\ISD Software and Systems\HeliosDbUpdate\). Have this file ready if you contact the ISD hotline for troubleshooting and successful updates.

Units for attributes when working with the HiCAD-HELiOS interface

If you work with the HiCAD-HELiOS interface and want to use interface-relevant units for attributes, then you must work with HiCAD 2022 (V 2700) or higher.

Omission of the system files KSTEXT_STDKOP.DLL and TEILHOST_NEXT.EXE

As of HELiOS 2022 (V. 2700), the system file KSTEXT_STDKOP.DLL and the executable file TEILHOST_NEXT.EXE are omitted. Customer-specific adjustments to your system, in which these files were used, must therefore be adjusted again.

Please contact the Consulting team of the ISD Group.

Operating system

We recommend deactivating local licenses and network licenses before performing an update/upgrade of the operating system (e.g. from Windows 8 to Windows 10), and activating them again after successful update/upgrade of the operating system.

Discontinuation of old figure format (FIG)

The following notes regarding FIG-FGA conversion are unnecessary if HELiOS is used in conjunction with the HELiOS Vault Server.

Since HiCAD 2017 we support FGA as figure format (before that FIG). From HiCAD/HELiOS 2021 or HELiOS 2021 as an update for HiCAD 2019/2020 onwards, we require that all figures stored with HELiOS have been converted to the new FGA format beforehand. To convert existing 2-D FIG files, the tool Converter_FIG_To_FGA.exe is available in the exe directory of the HiCAD installation.

If there are still unconverted FIG files in the HELiOS document database at the time of the database update to HELiOS 2600.0, you will be informed of the outstanding conversion of these files before the database update. In this case, the conversion must be carried out before or at the latest directly after the update using Converter_FIG_To_FGA.exe.

System Requirements

- HELiOS Database Server
- HELiOS Vault Server
- HELiOS Client
 - Compatibility Matrix for Interfaced Applications (HELiOS)
- HELiOS Internet Server
- HELiOS Spooler
- License Server
- HELiOS Application Server
- Operation in Virtual Environments
- Further Requirements for Installation

System Requirements for the HELiOS Database Server

The requirements with regard to the hardware primarily depend on the specifications given by the respective RDBMS supplier (Microsoft). Currently, following operating systems are supported:

	HELIOS 2022	HELIOS 2021	HELIOS 2020
Microsoft SQL Server 2019	✓	✓	✓
Microsoft SQL Server 2017	✓	✓	✓
Microsoft SQL Server 2016	✓	✓	✓
Microsoft SQL Server 2014	✓	✓	✓
Microsoft SQL Server 2012	✓	✓	✓
Microsoft SQL Server 2008	✗	✗	✓
Microsoft SQL Server 2005	✗	✗	✗

In addition, the following minimum requirements should be guaranteed for the main memory and hard disk:

	HELIOS 2022	HELIOS 2021	HELIOS 2020
Main memory	Additionally at least 4 GB main memory. With an increasing database size the working memory should be enlarged in order to guarantee optimal performance.		
Hard disk	Additionally at least 10 GB hard disk memory. The actual demand depends on the size of the database.		



Please note:

- The use of virtual servers is essentially possible. Please consider to grant sufficient performance within the virtual environment.
- On the database server, HELiOS data base should be imported beforehand, for example via HELiOS Database Creator, so that clients can connect with the database.
- SQL Server Standard vs. SQL Server Express
 As of late, the productive use of SQL Server Express is possible. Please note that SQL Express has limited storage size (10 GB) for each data base and provides weaker performance than SQL Standard, especially on powerful hardware. If well-equipped hardware is used for the server (multiple processors and plenty of RAM), the SQL server thwarts the performance again. On regular desktop hardware the difference between SQL Express and SQL Standard is smaller due to the accordance of express limits and system.

System Requirements for the HELiOS Vault Server

The minimum requirements are as follows:

	HELiOS 2022	HELiOS 2021	HELiOS 2020
Processor (CPU)	64 Bit processor		
Main memory	Additionally at least 1 GB main memory		
Hard disk	The required hard disk space depends on the volume of arising data use (files). A safety margin should be considered.		
Operating system	Microsoft Windows 10 or Microsoft Windows Server 2016 or higher Windows Server 2012 (R2) is supported from Vault Server Version 2601.1 or higher.		



Please note:

- If you work with only interfaces to HiCAD and/or Microsoft Office, the use of HELiOS Vault Servers is optional. Other interfaces must be used in conjunction with the HELiOS Vault Server.
- The needed hard disk space can also be distributed on multiple volumes.
- We recommend the use of RAIDs in order to ensure failsafe performance.

System Requirements for the HELiOS Client

The HELiOS Desktop (Client) is installed as 64-Bit application. The minimum requirements are as follows:

	HELIOS 2022	HELIOS 2021	HELIOS 2020
Processor (CPU)	64 Bit processor		
Main memory	Additionally at least 2 GB main memory		
Hard disk	Additionally at least 2 GB free hard disk memory		
Operating system	Microsoft Windows 10 or Microsoft Windows Server 2016 or higher		

The interfaces that are available for the HELiOS Client are listed in a Compatibility Matrix.



Please note:

- When interfacing the HELiOS Desktop with other applications, for instance with a CAD system or Office product, please consider the minimum requirements of each system manufacturer.
- If you want to use an integrated viewer, the hardware requirements of respective viewer manufacturer must be considered.
- Before you can use the HELiOS Client you require a HELiOS Database Server as well as an appropriately configured ODBC connection.
Documents (in .pdf format) describing the installation procedure for the database system and the import and export of the database can be found in the [Wiki](#).

Compatibility Matrix for Interfaced Applications (HELIOS)

Below you find a list of possible interfaces for the HELiOS Client:

	HELIOS 2022	HELIOS 2021	HELIOS 2020
Operating system			
Windows 11, 64 Bit	✓ (as of SP1)	✗	✗
Windows 10, 64 Bit	✓	✓	✓
Windows 8.1	✗	✗	✓
Windows 8	✗	✗	✓
Windows 7	✗	✗	✓
Server Operating system			
Windows Server 2022	✓ (as of SP1)	✗	✗
Windows Server 2019	✓	✓	✓
Windows Server 2016	✓	✓	✓
CAD system			

	HELIOS 2022	HELIOS 2021	HELIOS 2020
HiCAD 2022	✓	✗	✗
HiCAD 2021	✓	✓	✗
HiCAD 2020	✓	✓	✓
HiCAD 2019	✗	✓	✓
HiCAD 2018	✗	✗	✓
HiCAD 2017 or older	✗	✗	✗
AutoCAD 2023	✓ (as of SP2, Patch 1)	✓ (as of SP1, Patch 4)	✗
AutoCAD 2022	✓	✓ (as of SP1)	✗
AutoCAD 2021	✓	✓	✓ (as of SP1)
AutoCAD 2020	✓	✓	✓
AutoCAD 2019	✓	✓	✓
AutoCAD 2018	✗	✓	✓
AutoCAD 2017	✗	✗	✓
AutoCAD 2016	✗	✗	✓
AutoCAD 2015 or older	✗	✗	✗
AutoCAD Mechanical 2023	✓ (as of SP2, Patch 1)	✓ (as of SP1, Patch 4)	✗
AutoCAD Mechanical 2022	✓	✓ (as of SP1)	✗
AutoCAD Mechanical 2021	✓	✓	✓ (as of SP1)
AutoCAD Mechanical 2020	✓	✓	✓
AutoCAD Mechanical 2019	✓	✓	✓
AutoCAD Mechanical 2018	✗	✓	✓
Inventor 2023	✓ (as of SP2, Patch 1)	✓ (as of SP1, Patch 4)	✗
Inventor 2022	✓	✓ (as of SP1)	✗

	HELiOS 2022	HELiOS 2021	HELiOS 2020
 Important:			
*As of Inventor version 2021.1  (or newer) can be used from HELiOS Version 2502.3 or 2600.1. The reason for this is the bug in Inventor described here .			
Inventor 2021*	✓	✓	✓ (as of SP1)
Inventor 2020	✓	✓	✓
Inventor 2019	✓	✓	✓
Inventor 2018	✗	✓	✓
Inventor 2017	✗	✗	✓
Inventor 2016	✗	✗	✓
Inventor 2015 or older	✗	✗	✗
Navisworks 2022	✓	✓ (as of SP1)	✗
Navisworks 2021	✓	✓	✓ (as of SP1)
Navisworks 2020	✓	✓	✓
Navisworks 2019	✓	✓	✓
Navisworks 2018	✗	✓	✓
Navisworks 2017	✗	✗	✓
Navisworks 2016	✗	✗	✓
Navisworks 2015	✗	✗	✗
SOLIDWORKS 2022	✓ (as of SP1)	✓ (as of SP1, Patch 4)	✗
SOLIDWORKS 2021	✓	✓ (as of SP1)	✗
SOLIDWORKS 2020	✓	✓	✓
SOLIDWORKS 2019	✓	✓	✓
SOLIDWORKS 2018	✓	✓	✓
SOLIDWORKS 2017	✗	✗	✓
SOLIDWORKS 2016	✗	✗	✓
SOLIDWORKS 2015 or older	✗	✗	✗
CAE-SYSTEM			

	HELIOS 2022	HELIOS 2021	HELIOS 2020
EPLAN Electric P8 2022	✓ (as of SP2, Patch 1)	✓ (as of SP1, Patch 5)	✗
EPLAN Electric P8 2.9	✓	✓	✗
EPLAN Electric P8 2.8	✓	✓	✓
EPLAN Electric P8 2.7	✓	✓	✓
EPLAN Electric P8 2.6	✓	✓	✓
EPLAN Electric P8 2.5	✓	✓	✓
EPLAN Electric P8 2.4	✓	✓	✓
Zuken E3 2021	✓ (as of SP1)	✗	✗
Zuken E3 2020	✓ (as of SP1)	✗	✗
Zuken E3 2019	✓	✓	✓
OFFICE			
Office 2021	✓ (as of SP1)	✗	✗
Office 2019	✓	✓	✓
Office 2016	✓	✓	✓
Office 2013	✓	✓	✓
Office 2010	✗	✗	✓
Office 2007 or older	✗	✗	✗

The ✗ symbol does not always mean that the respective product is not compatible. It can also mean that the interactions between this product and the HELIOS Client have not been sufficiently tested by the ISD yet.

System Requirements for the HELiOS Internet Server

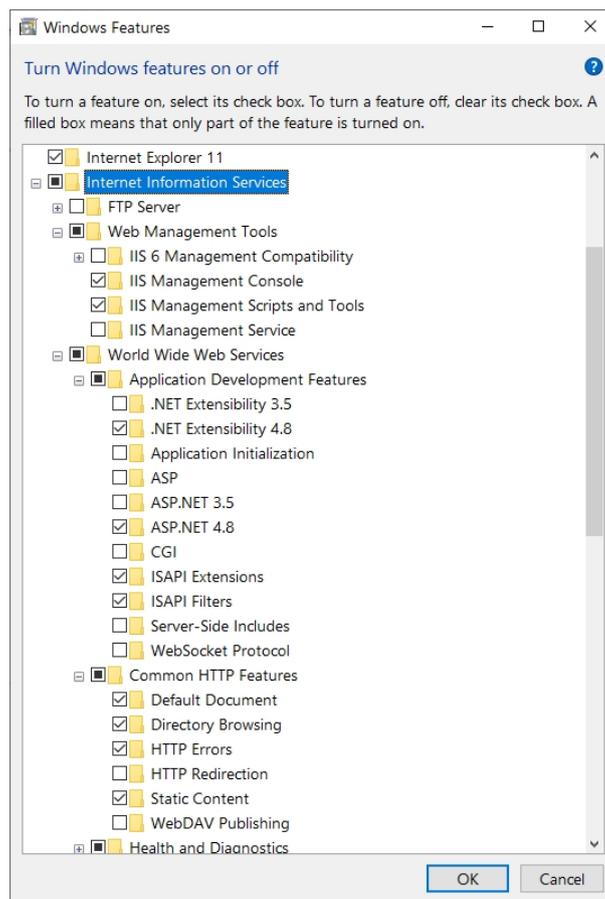
For the HELiOS Internet Server, similar system and hardware requirements as for the HELiOS Desktop apply:

	HELIOS 2022
Processor (CPU)	64 Bit processor
Main memory	Additionally at least 4 GB main memory
Hard disk	Additionally at least 2 GB free hard disk memory
Operating system	Microsoft Windows 10 or Microsoft Windows Server 2016 or higher
Others	As a prerequisite for the installation of a HELiOS Internet Server, a HELiOS Client must be installed beforehand. Operation via SSL (https) requires valid certificates for the corresponding web pages of the HELiOS Internet Server.

The Microsoft Internet Information Server (IIS), at least version 10.0 with ASP.NET 4.8 support, is also required. This is an integral part of Windows, but must be installed/activated separately before installing the HELiOS Internet Server.

Proceed as follows:

Choose **Control Panel > Programs and Features** and, at the top left of the window, select **Turn Windows features on or off**. In the Windows Features dialogue window, choose **Internet Information Services > Web Management Tools**, and **Internet Information Services > World Wide Web Services > Application Development Features** and activate the checkboxes as shown below:

**Please note:**

- Besides IIS, HELiOS Client (HELiOS Desktop) must be installed.
- IIS URL Rewrite from <https://www.iis.net/downloads/microsoft/url-rewrite> must be installed.
- For the operation of the HELiOS Internet Server, a (sub)domain including a valid SSL certificate and port forwardings are required.
- To operate the HELiOS Internet Server, a number of website configurations in the Internet Information Server (IIS) are required. Parallel operation with other websites/products on the IIS is not recommended.

System Requirements for the HELiOS Spooler

Generally, the HELiOS Spooler is a 64 Bit application. The main memory should be at least as large as the main memory for the utilized Client systems. This ensures that all data to be processed by the HELiOS Spooler (i.e. the data transmitted from the Client systems to the HELiOS Spooler can be handled successfully.

	HELIOS 2022	HELIOS 2021	HELIOS 2020
Processor (CPU)	64 Bit processor		
Main memory	Additionally at least 2 GB main memory		
Hard disk	Additionally at least 4 GB free hard disk memory		
Operating system	Microsoft Windows 10 or Microsoft Windows Server 2016 or higher		



Please note:

- The HELiOS Spooler runs on a separate Plot Server system. It is not possible to install the HELiOS Spooler together with the HELiOS Desktop on the same system! Reasons for this are, for example, possible difficulties with the Office interface, since both the HELiOS Desktop and the HELiOS Spooler install Word and Excel customizations. It is also not recommended to use the system on which the HELiOS Spooler is running as an occasional workstation. This is partly because it is assumed that the HELiOS Spooler is the only instance of the system that starts print jobs.
- The HELiOS Spooler requires locally installed CAD, electrical engineering or Office applications for that plot and conversion orders are carried out. Please note that the use of these applications requires respective licenses and that the hardware requirements of each system supplier must be considered as well.
- The main memory should be at least dimensioned as large as the main memory of the client system deployed. Thus it is guaranteed that the data (which is transferred from the client systems to HELiOS Spooler) can be processed accordingly.
- Besides the client operating systems for Windows, the above mentioned server operating systems can be used as well. It depends on the license terms for the Microsoft OS used by your company whether a server operating system can be used or not. Here, the number of permitted simultaneous connections is deciding here.
For Windows 10, 20 simultaneous logins are approved. In this case, you need to assure that apart from the current logins sufficient logins are available for each Client computer's Print Client.

System Requirements for the License Server

We use the Software Sentinel RMS© from gemalto© for licensing. The license server is in principal a 32 Bit application.

The minimum requirement for running a license server is as follows:

	HELIOS 2022	HELIOS 2021	HELIOS 2020
Processor (CPU)	X86 or AMD64 Architecture. Recommended: 2 GHz Processor		
Main memory	Additionally at least 1 GB main memory		
Hard disk	Additionally at least 2 GB free hard disk memory		
Operating system	Microsoft Windows 10 or Microsoft Windows Server 2016 or higher Windows Server 2012 (R2) is supported from License Server Version 2601.1 or higher.		



Please note:

- The license server need not be installed on a separate server or server operating system.
- A static IP address is required for the correct operation of a license server. When using a virtual server, a static MAC address is required.
- The license server must not be installed on the same computer with HELIOS Desktop, because both products share system information with regards to the licensing.
- Internet access is needed for the license server due to activation and deactivation.

System Requirements for the HELiOS Application Server

Please contact our consulting in terms of hardware requirements and installation of HELiOS Application Server.

Operation in Virtual Environments

HELiOS Client

Generally, the HELiOS Client can be operated on Virtual Machines (VM). If you use integrated viewers, the hardware requirements of the respective viewer manufacturer must be considered.

The HELiOS Client can also be used as a terminal application.

HELiOS Spooler

Generally, the HELiOS Spooler can be operated on Virtual Machines (VM). However, limitations may occur with regard to simultaneously installed CAD system, electrical engineering software or Office applications.

With regard to graphics functionality, performance and integration of printers, too, limitations may occur in virtual environments.

License Server

The license management system based on Sentinel RMS© by the company gemalto© can, generally, also be used in virtual environments.

Network licenses on Virtual Machines (VM)

If you want to use/activate/deactivate the network licenses on virtual machines, please observe the following points:

- A static MAC address is required
- A static IP address is recommended or required when using Commuter Licenses
- Before copying or changing a virtual machine, deactivate the network licenses, since the UUID (Universal Unique Identifier) of the VM will change due to the copying process, and cannot be deactivated afterwards any more. This also applies to the starting of the VM on a different host.

Further Requirements for Installation

- **Microsoft .NET Framework** and **Visual C++ Runtime Libraries** need to be installed on the computer before HELiOS can be used; these packages will be installed as part of the HELiOS installation if required.
- To be able to work with HELiOS, a database system must be available that has been prepared for HELiOS. For this you require
 - A Microsoft SQL Database Management system on your Server,
 - A HELiOS database imported with the **HELiOS Database Creator** and
 - An ODBC connection on the Clients.

Documents (in .pdf format) describing the installation procedure for the database system and the import and export of the database can be found in the [Wiki](#).

Installation

The installation medium (e.g. ISO file from the Download area) contains the installation files for:

- HELiOS Database Creator (required when creating a HELiOS database for the first time, and for importing or exporting an existing database)
- HELiOS Vault Server
- HELiOS Client (HELiOS Desktop, Standalone)
- HELiOS Help
- HELiOS Internet Server
- HELiOS Spooler
- EPLAN Article Synchronization
- Postscript printer driver (required for the output of multiple views in a PDF file)

Important note on the scope of installed modules!

The scope of modules that will be installed depends on the product that was purchased. This means that not all modules described in the installation manual may be included in your software version.

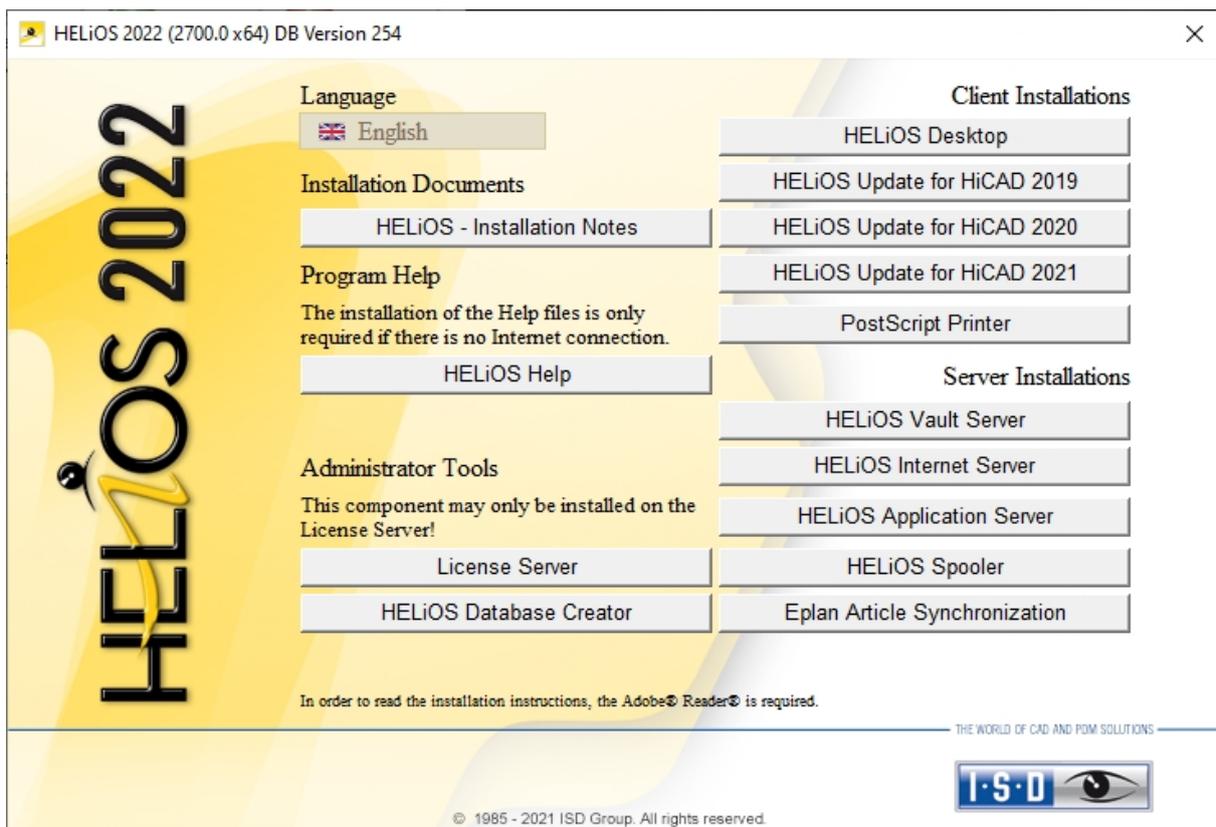
It is mandatory for the installation of HiCAD to start the **setup.exe** file from the root directory of the ISO file; only in this way it is ensured that the version will recognize the operating system, and that the matching HELiOS version will be installed.



Please note:

- You can conveniently download the current HELiOS version in the [Download Area](#) of the [ISD Wiki](#).

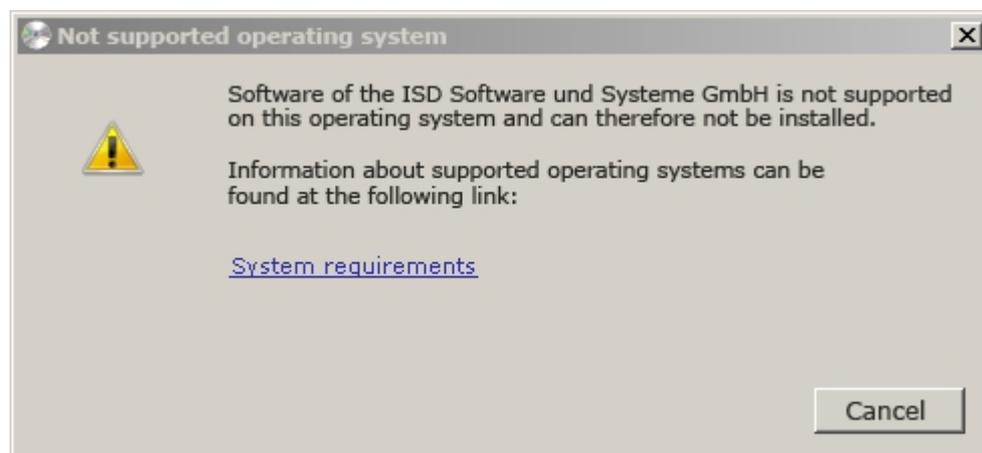
After running the **setup.exe** file, the following dialogue will be displayed:



Leave this selection mask open, so that you can select the desired components one after the other.

Discontinuation of Windows® 7 and Windows® 8

Microsoft® has discontinued support for the Windows® 7 operating system in January 2020. For compatibility reasons, HiCAD 2020 SP2 and HELIOS 2020 SP2 were the last versions of our CAD or PDM system to support Windows® 7. HiCAD 2021 and HELIOS 2021 no longer run under Windows® 7, Windows® 8 and the corresponding server operating systems (Windows Server 2008 R2, Windows Server 2012 and older) are also no longer supported. If an attempt is made to install HiCAD 2021 or HELIOS 2021 on a computer with Windows® 7 or Windows® 8, a message appears.



Installing the HELiOS Database Creator

The HELiOS PDM modules (Document management, Part Management, Workflow etc.) are based on a relational database. Before you put HELiOS into operation, the Microsoft SQL Server database administration system needs to be installed on the server, a HELiOS database needs to be imported and a ODBC connection needs to be set up on the clients.

When you set up a HELiOS database for the first time, the **HELiOS Database Creator** needs to be installed and executed on the database server first. The database and table structures will then be created, and filled with data records of the HELiOS standard database.

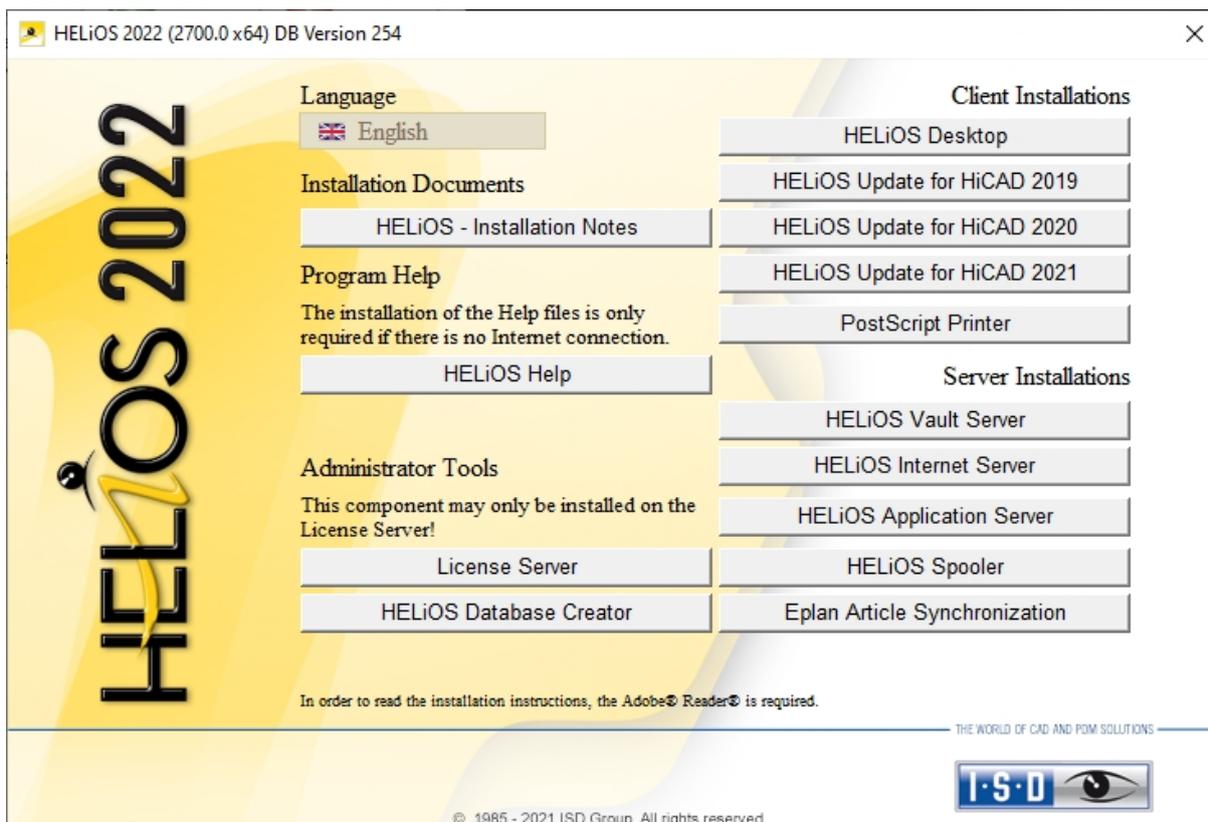


Please note:

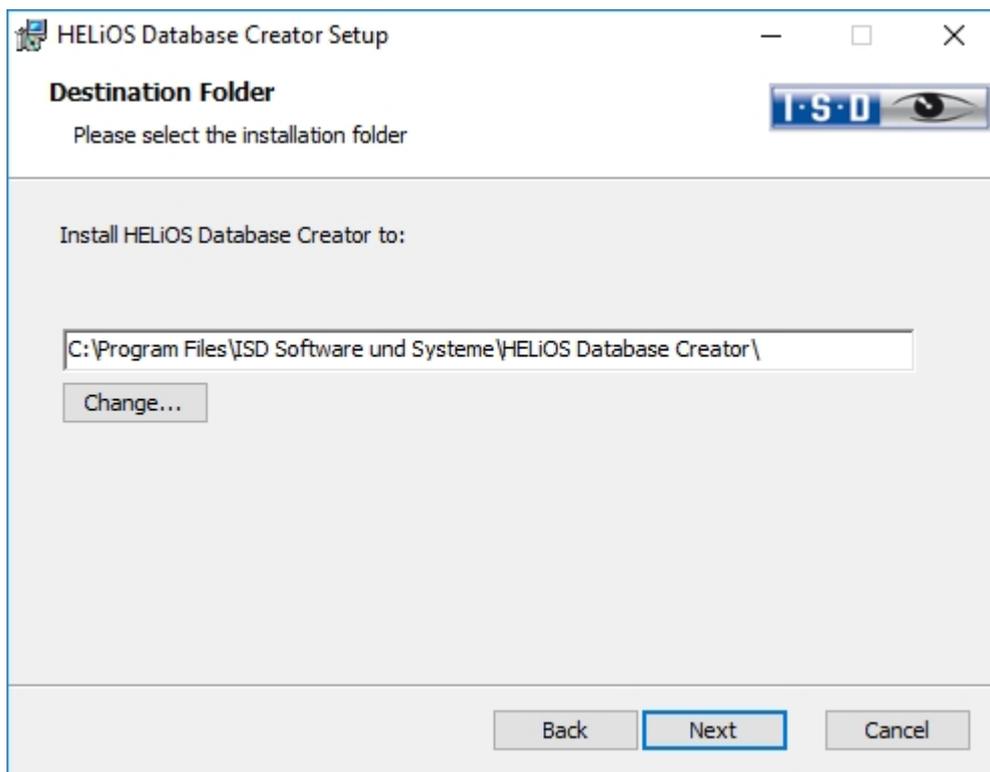
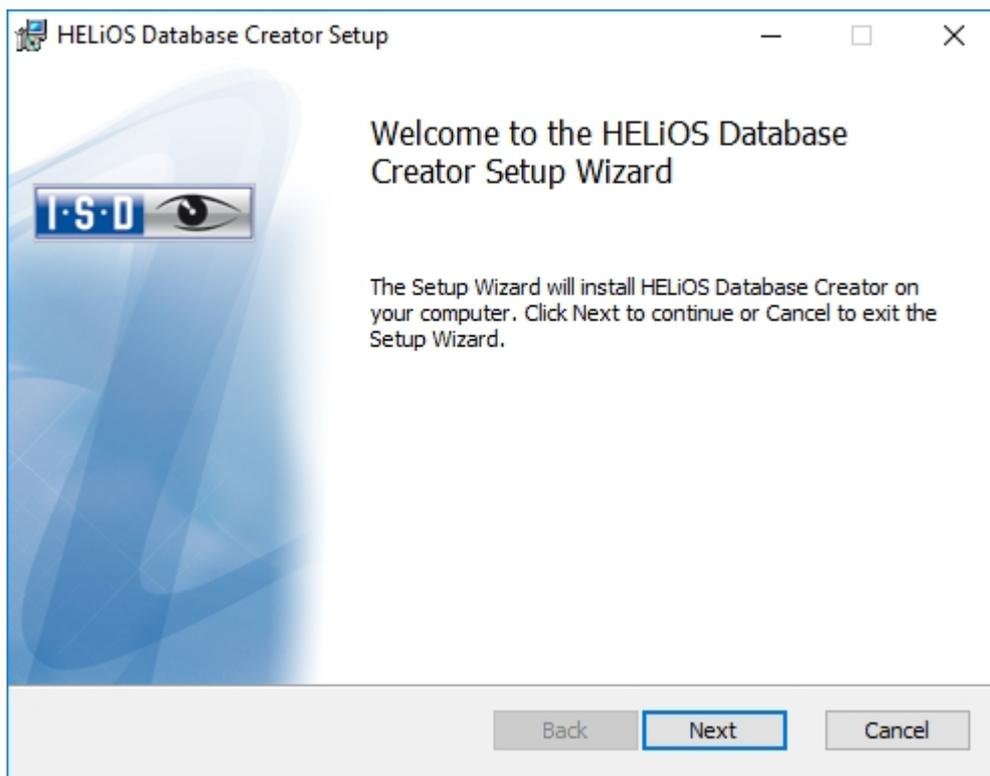
Further information about the correct procedure for the execution of the HELiOS Database Creator, as well as the previous and subsequent steps required for the setting up of a database server can be found in the user guide for the installation of the **Microsoft SQL Server**. You can find this document in the [ISD Wiki](#).

Start Windows to install the HELiOS Database Creator. If Windows has already been started, close all other applications and start the installation wizard.

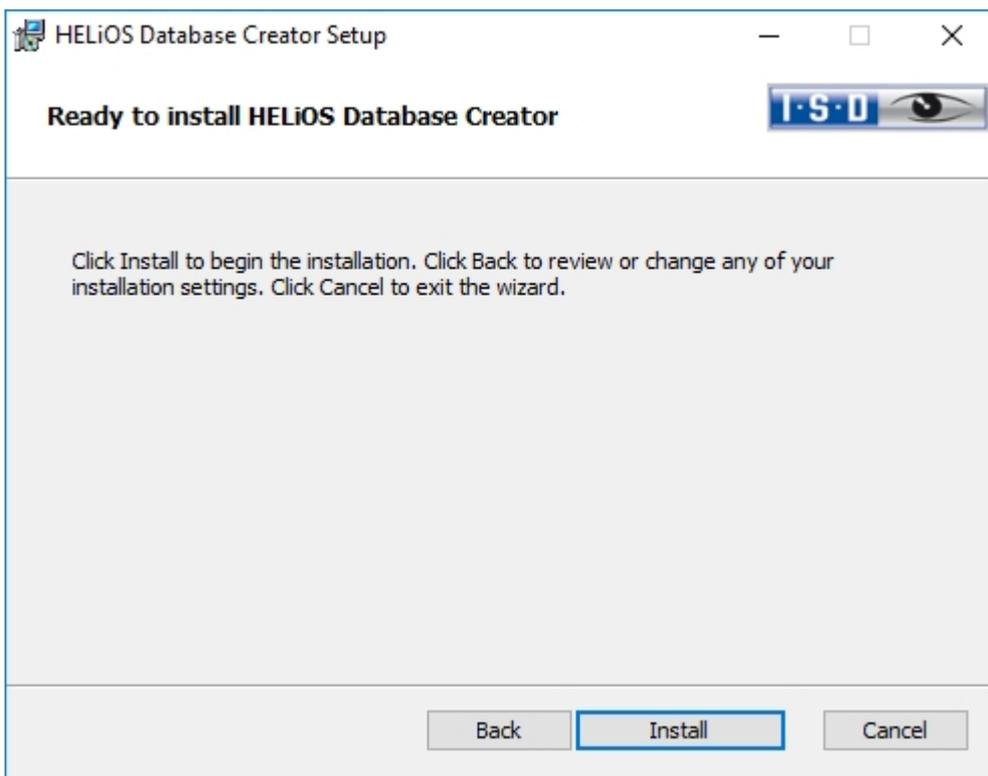
Leave this selection mask open, so that you can select the desired components one after the other.



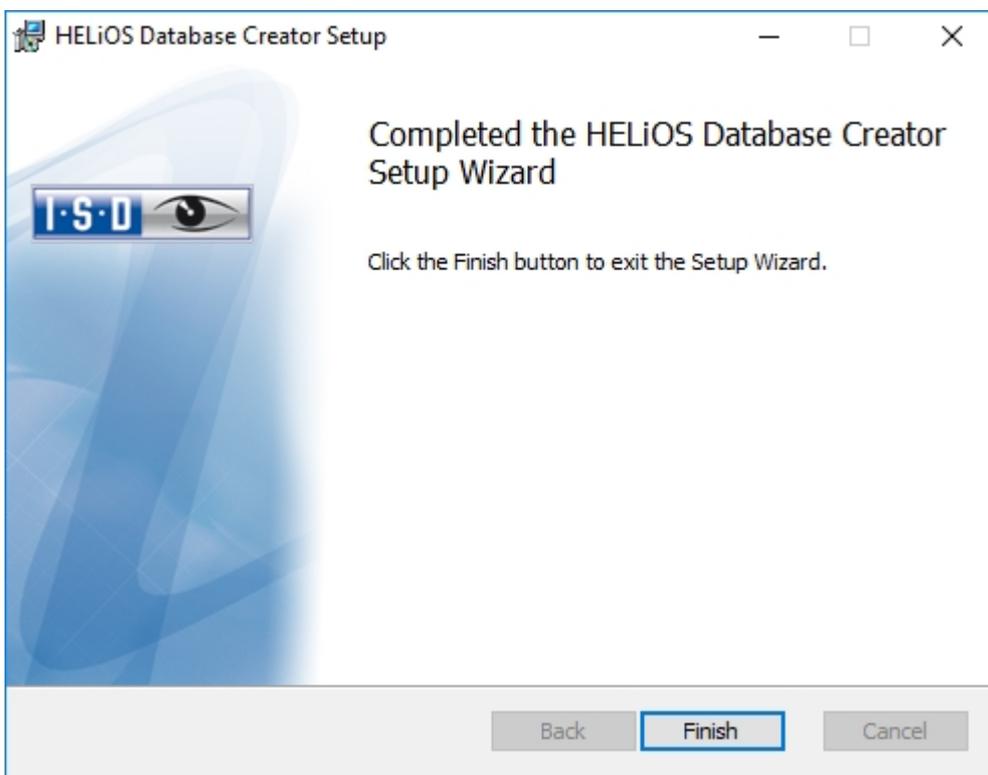
Click on the **HELiOS Database Creator** button.



Select an installation directory for the **HELiOS Database Creator** and click **Next**.



Click **Install** to start the installation.



Click **Finish** to complete the installation of the **HELiOS Database Creator**. If desired, you can now install further components via the selection mask.

Installing the HELiOS Vault Server

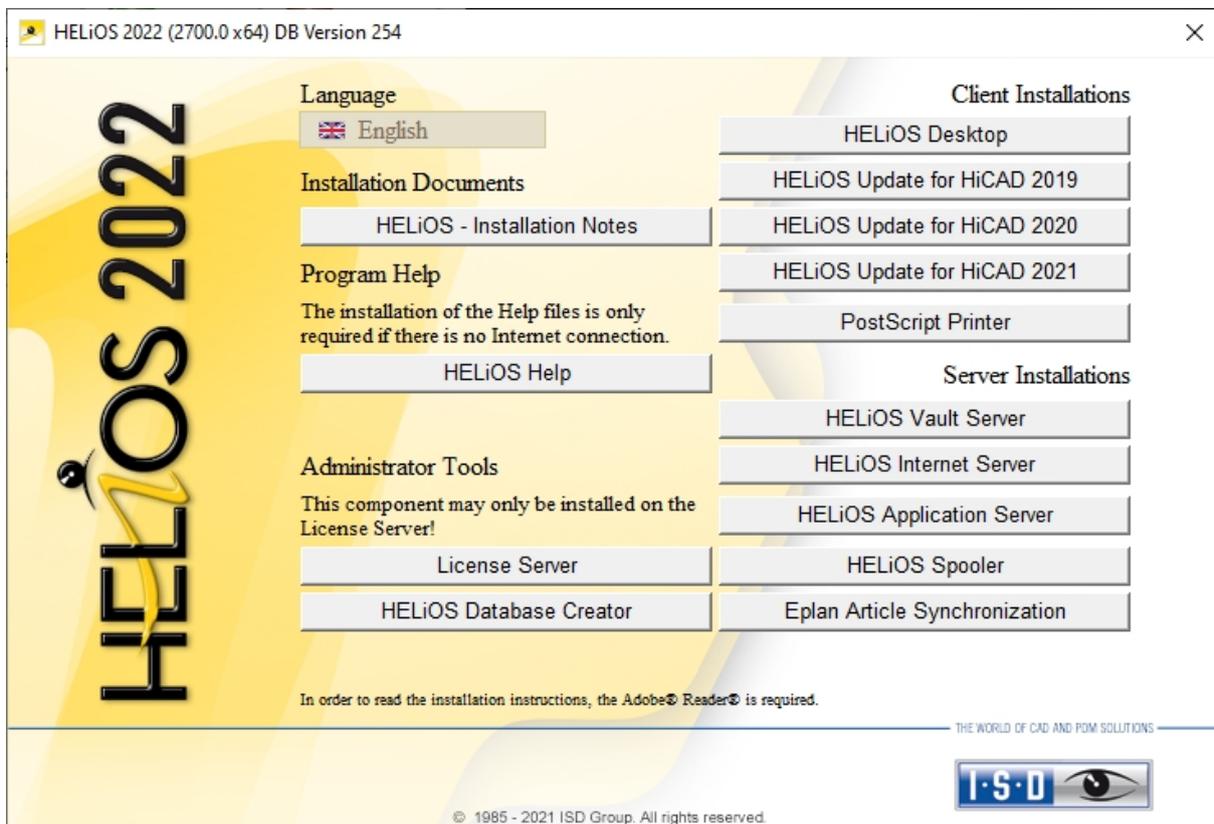
Please start Windows to install the HELiOS Vault Server. If Windows is already open, end all other applications and start the Installation Wizard.

This screen remains open so that you can install the required components one after another.

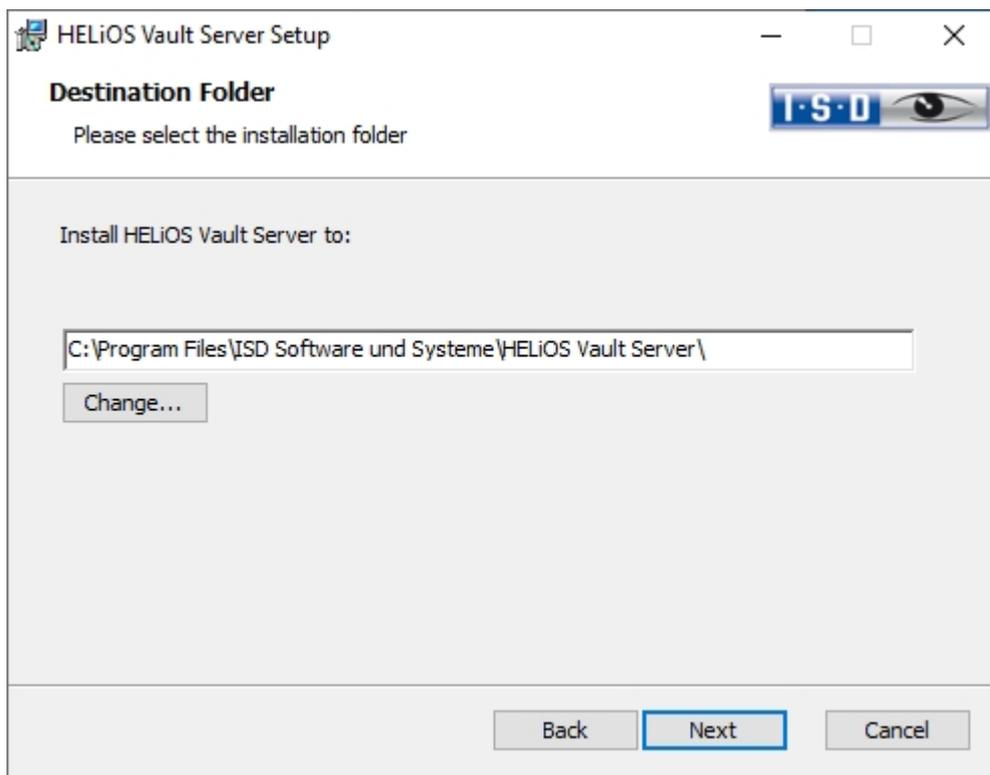
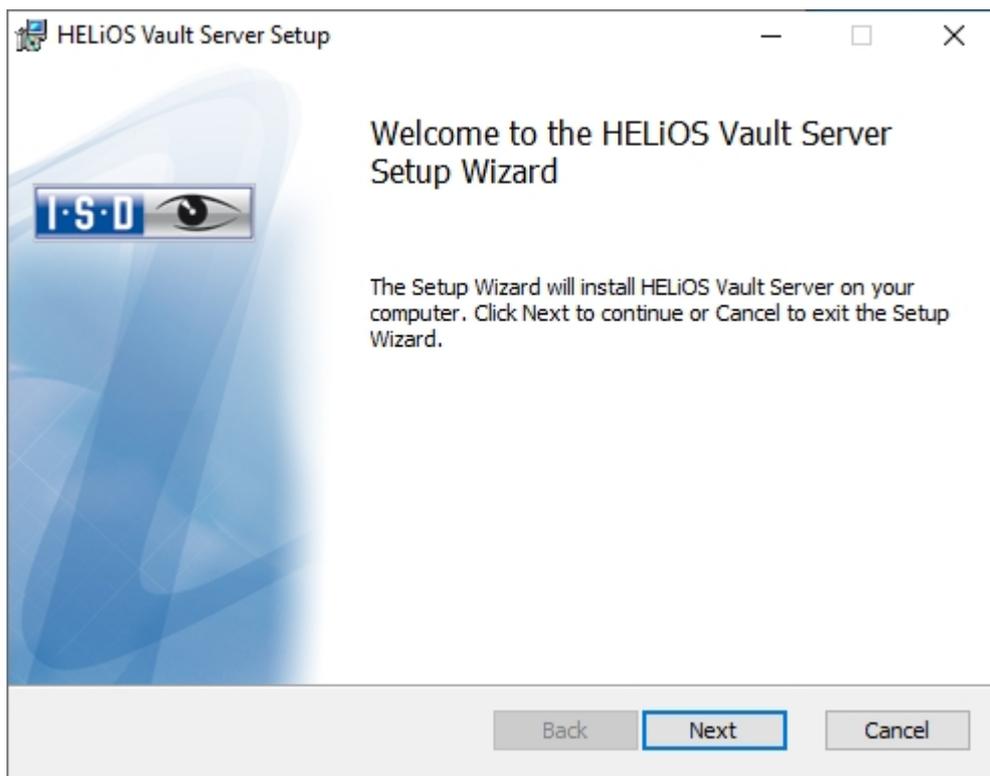


Please note:

In rare cases, a manually installed older version of the Vault Server may be found which is not touched (updated) by the setup for safety reasons. In case of an error message, please contact our hotline staff. E-Mail: support@isdgroup.com



Click on the **Vault Server** button.



Enter the installation directory for the Vault Server. If the installation wizard finds an already installed version, it will be offered to you for updating.

HELiOS Vault Server Setup

Configuration

HELiOS Vault Server Settings

Server name: ISDVAULT

Server port: 9000

Back Next Cancel

Give the Vault Server a name, e.g. the name of your company, plus the location of your company. This name will be shown, for example, when you connect to the Vault Server from the Vault Client.

HELiOS Vault Server Setup

Configuration

Server directories

Document directory: C:\HELIOS Vault ISDVAULT\Documents\

Management directory: C:\HELIOS Vault ISDVAULT\Management\

Create file table

Log directory: C:\HELIOS Vault ISDVAULT\Logfiles\

Log file name: ISDVAULT.log

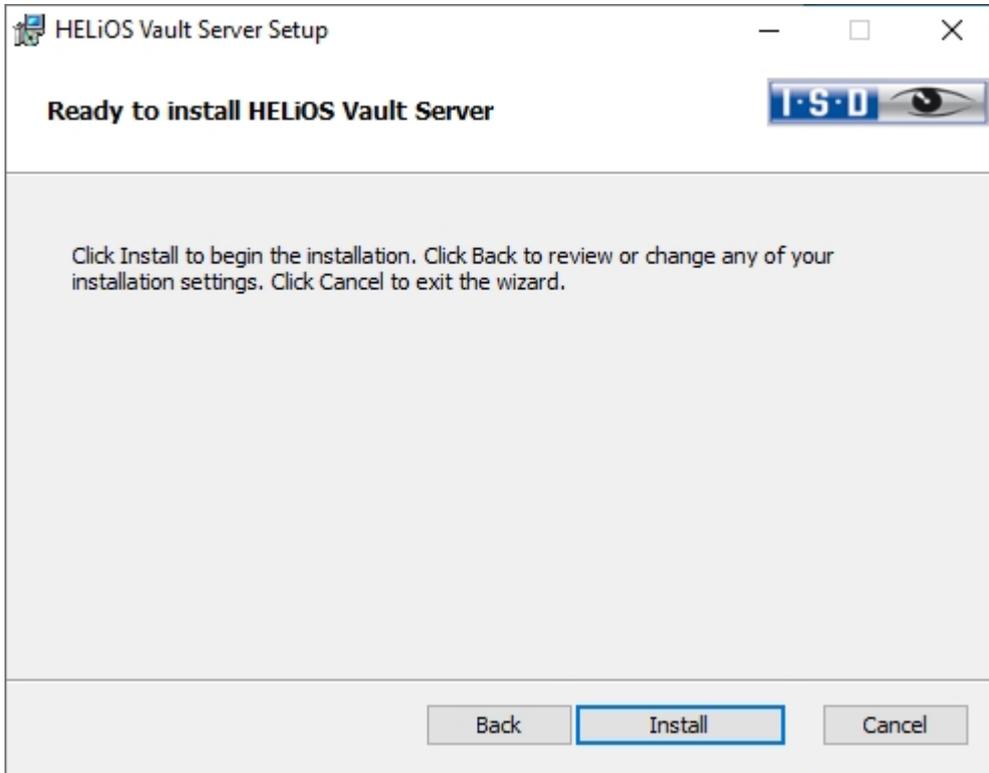
Back Next Cancel

The Vault Server renames all documents that are managed in the database (e.g. SZA, DOC, XLS, ...) to *.VDF. These VDF files are saved to the Document directory.

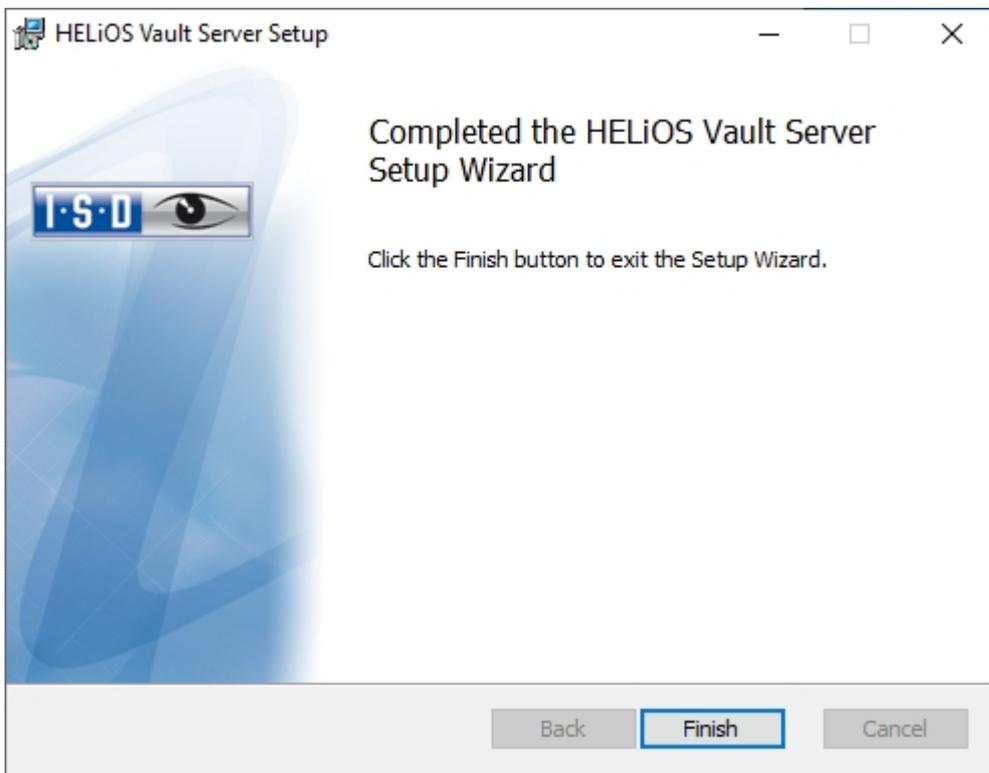
The files stored in the **Management directory** contain the assignments of the VDF file names to the “original file names”.

Log files (*.LOG) are saved to the **Log directory**. They record each access to the VDF files.

Enter the name of the log file in the **Log file name** field. The name of the **Vault Server** would also be possible here. If the log file exceeds a certain length, it will be cut down and suffixed by the current date.



Click **Install**.

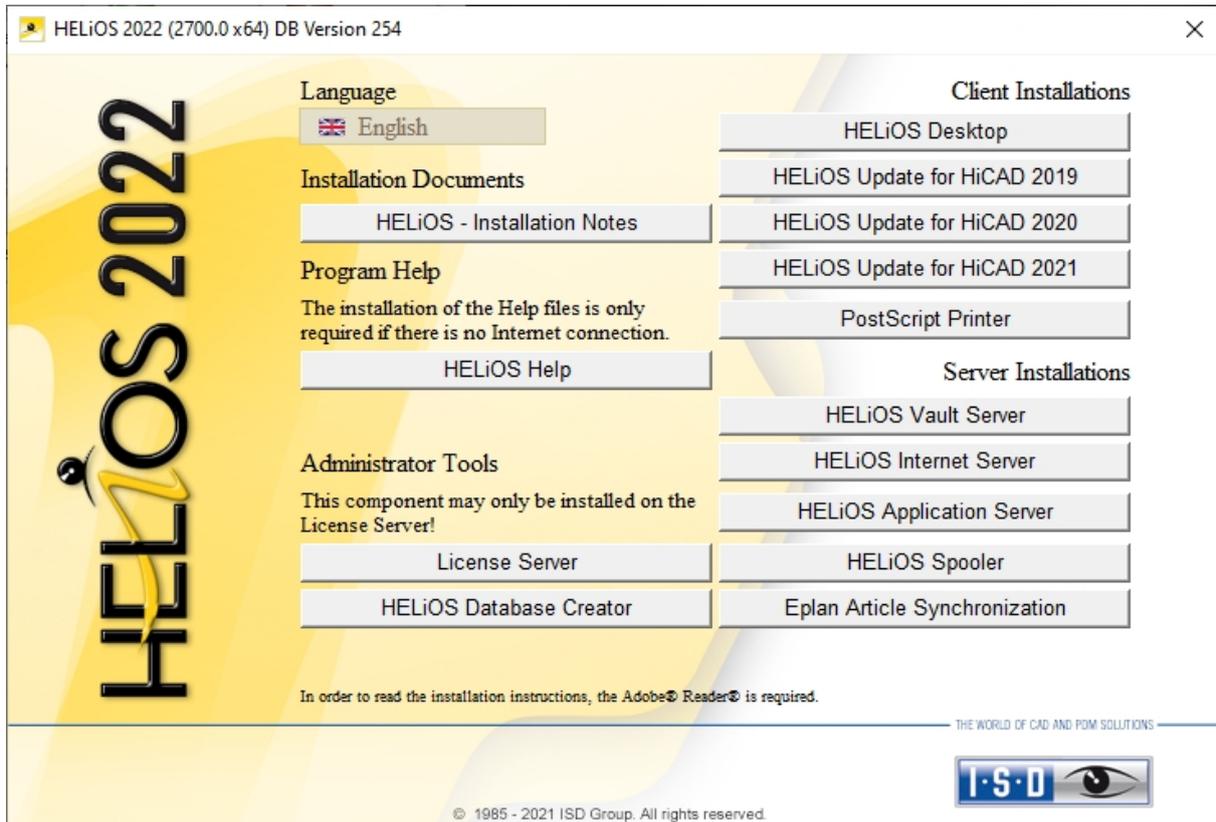


Click **Finish** to complete the installation of the Vault Server. You can now install further components from the selection mask.

Installing the HELiOS Client

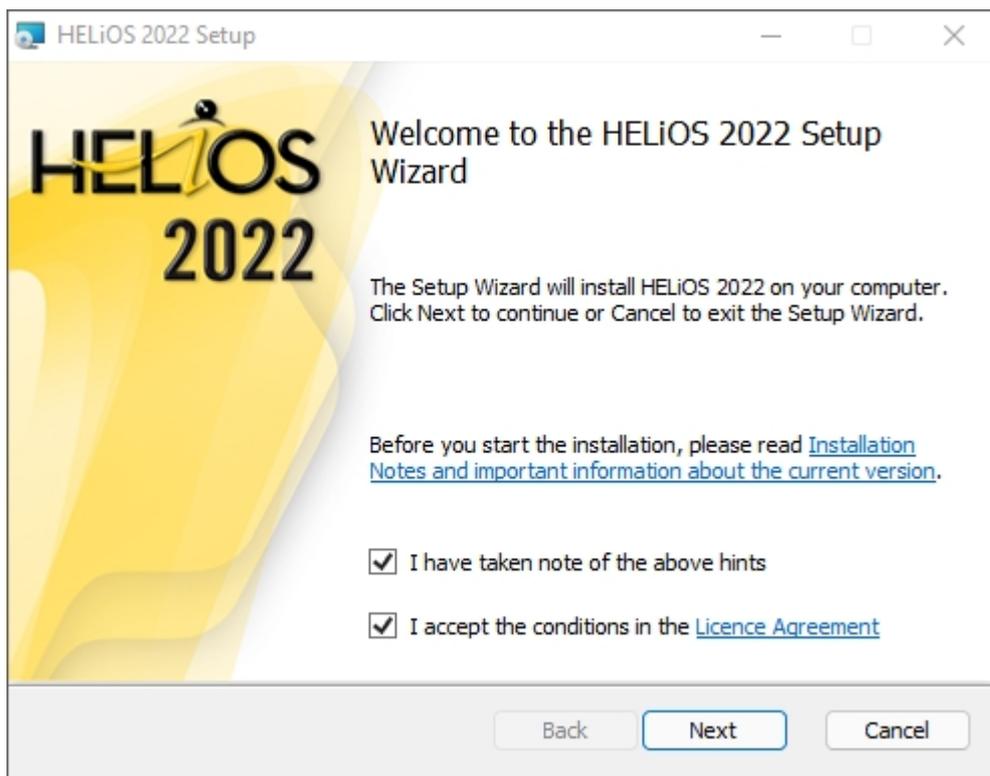
To install HELiOS, start Windows. If Windows has already been started, close all other applications and start the installation wizard.

Select a **Language** for your version.

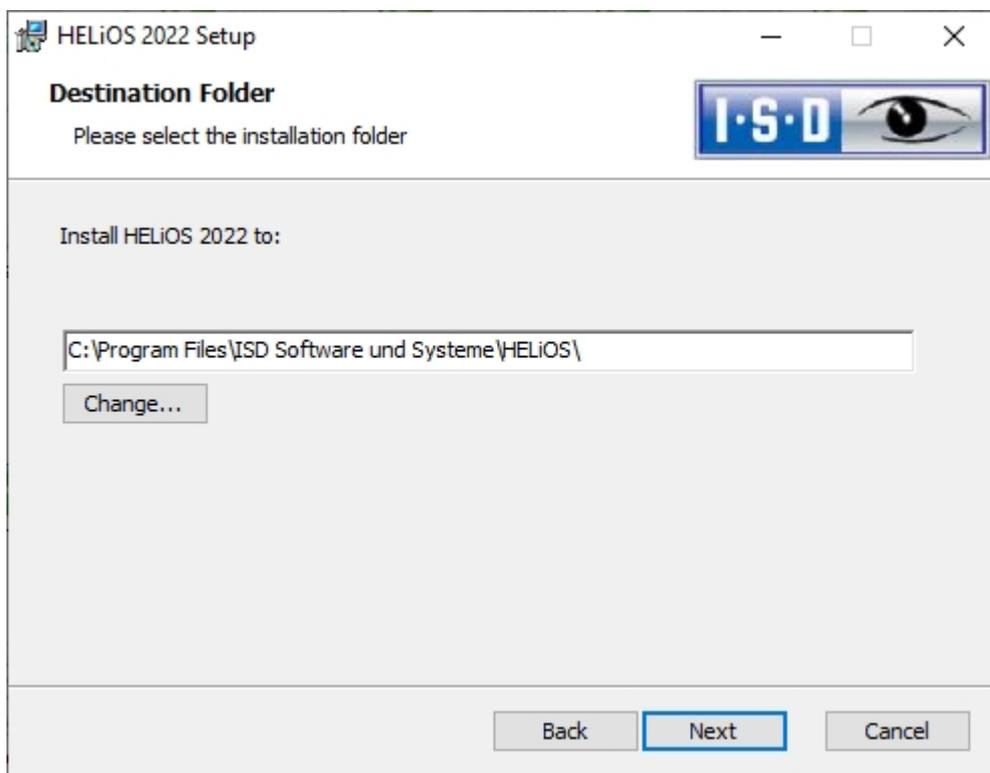


Click on the **HELiOS Desktop** button to start the installation.

Before using HELiOS, **Microsoft .NET Framework** and the **Visual C++ Runtime Libraries** must have been installed on the computer; these packages will be installed as part of the installation if required.



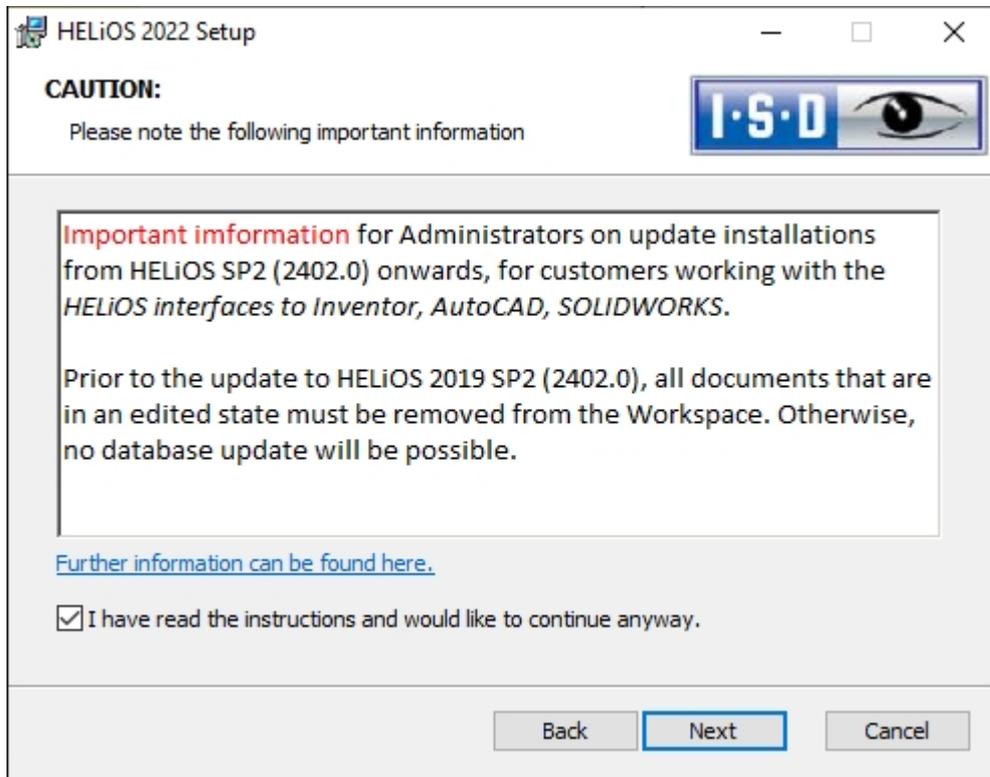
Please read the [Installation Notes](#) and the [Licence Agreement](#) carefully.



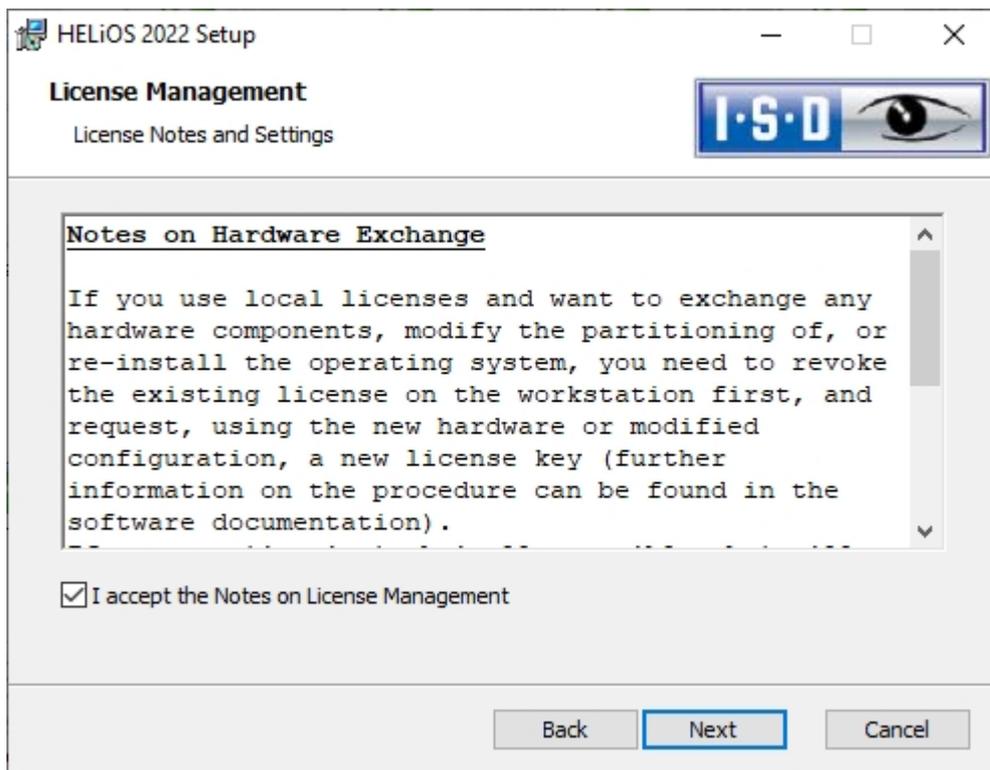
Select an installation directory. If the installation wizard finds an already installed version, it will be offered to you for updating.

In accordance with the current Microsoft guidelines, the HELiOS documents will be saved to C:\Users\s\Public\Documents\ISD Software und Systeme\ in case of a new installation. Only the Administrator has write permissions for the installation directory (C:\ProgramFiles\..).

If you work on several workstations without a Vault Server, you need to enter on each workstation the path of the document directory into the system file FILEGRUP.DAT. This means that the default path needs to be changed accordingly in all corresponding places of the FILEGRUP.DAT. The directory should be a shared network directory to which all Clients have access.



Please read these important notes on update installations for Inventor, AutoCAD and SOLIDWORKS carefully and activate the checkbox . [Further information can be found here.](#)



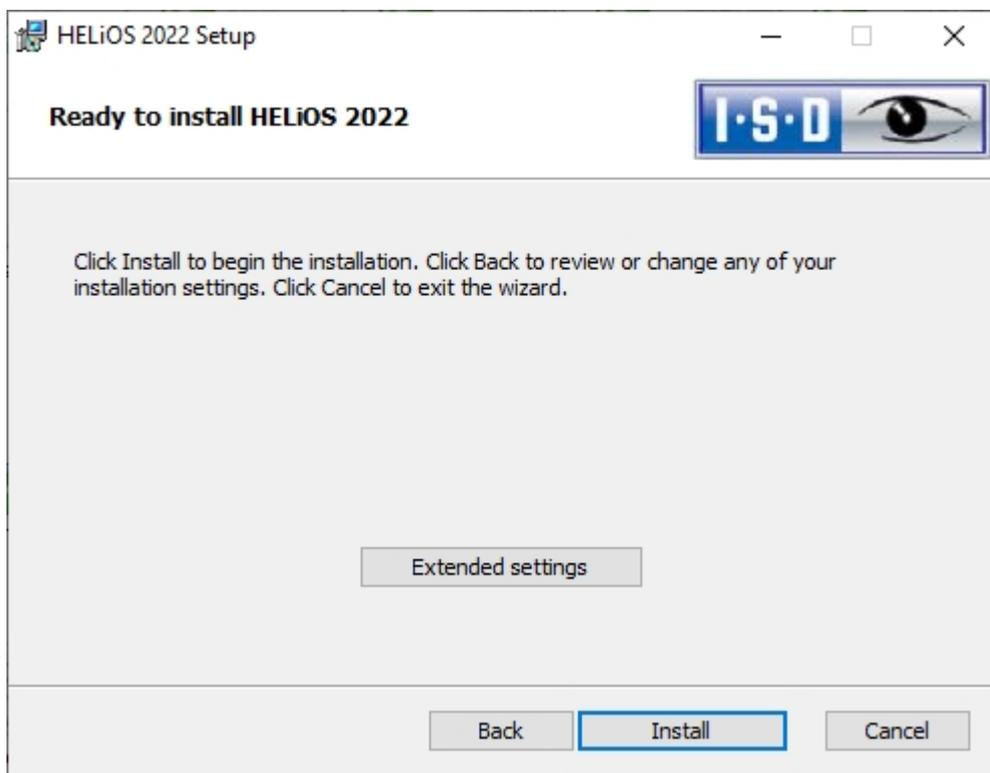
Please read the **Notes on Hardware Exchange** carefully.

Hardware Exchange

If you use local HELiOS licenses and want to exchange any hardware components, modify the partitioning of, or re-install the operating system, you need to revoke the existing license on the HELiOS workstation first, and request, using the new hardware or modified configuration, a new license key (further information on the procedure can be found in the software documentation).

If a revocation is technically possible, but will not be performed, the ISD reserves the right to charge costs in an appropriate amount for the reissuing of the license. If the license will not be revoked, or if such revocation is no longer technically possible, the ISD may request proof that the unrevoked license is no longer utilisable; in case of failure to produce such proof, the ISD reserves the right to refuse the transfer of the license to a new hardware.

Accept the notes to continue with the installation.



You can now start with the installation or modify the **Extended Settings** for HELiOS.

The screenshot shows the 'Extended settings' dialog box for HELiOS. The 'General' tab is selected. The 'System data source' field contains 'HeliosBauteil'. The 'User' field contains 'hicad' and the 'Password' field is masked with dots. There are several checkboxes for optional services: 'Use Vault Server', 'SmartSearch-Server', 'Use Spooler', and 'Use Application Server', all of which are currently unchecked. The 'SmartSearch-Server' section also includes an 'Activate' checkbox (unchecked) and a 'Configuration' field with a browse button. The 'Saving of configuration files' section has two radio buttons: 'Use local (computer-specific) directory' (selected) and 'Use central directory for configuration data' (unchecked). At the bottom, there are 'OK', 'Save', and 'Cancel' buttons.

In case of a new installation you can specify an arbitrary name for the system data source. In case of an update, the existing data source will be offered. User and Password will be identical with the ODBC login.

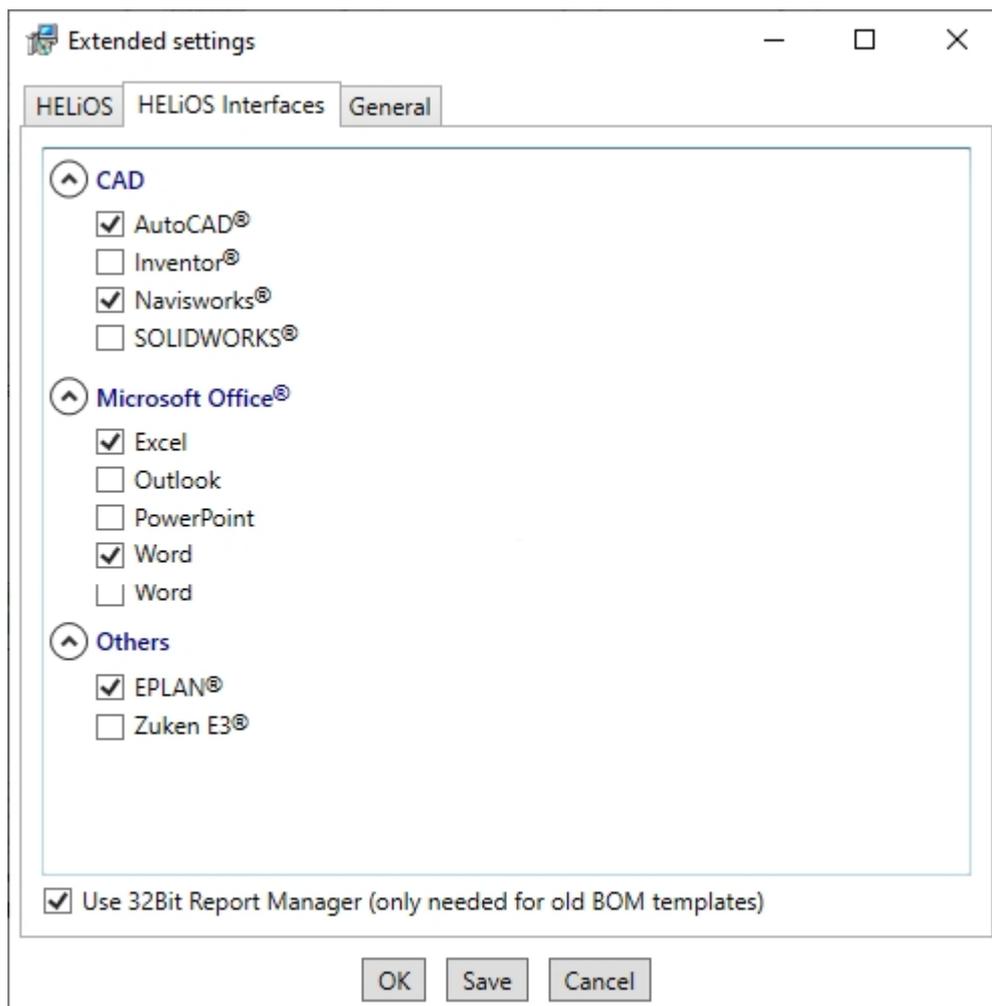
If you use a Vault Server, activate the **Vault Server** checkbox. Enter the name of the Server in the **Address** input field, and the Server Port of the Vault Server in the **Port** input field. You already entered both during the installation of the Vault Server.

If you have not installed the Vault Server yet, you can do this now: Choose HELiOS Options > Database > General > Vault Server  and specify the connection. For activation you must then restart the HELiOS Desktop.

If you want to process your print jobs via the Plotmanagement of the ISD, you need to install a **Print Client** on each workstation. Activate **Use Spooler**. In the Server field, enter the name of the computer on which you install the Spooler. The Spooler collects the print jobs and processes them according to your settings.

Individual settings of HELiOS can be distributed to other users or workstations. To do this, create a ZIP file in HELiOS at **View > Settings > Export**.

During installation, if the option **Use central directory for configuration data (across computers)** is activated, you can save the configurations of the HELiOS Desktop to a central computer and select and import them at **Configuration file**.



The availability of interfaces with HELiOS depends on the programs that are installed on your computer. You can only interface 64-Bit versions to HELiOS 64-Bit versions. An exception is the MS Office Interface, where you can link a 32-Bit Office to a 64-Bit HELiOS. Please note however that an additional, special ODBC connection will be required for old BOMs. In such cases, please contact the ISD Consulting team.

Multiple selections of HELiOS Interfaces are also possible. The HELiOS functions will be integrated in the programs that are linked to HELiOS.

Please take a look at the [Compatibility Matrix](#) to check which interfaces to external software products are supported by HELiOS.

When installing the CAD interface (AutoCAD, Inventor or SOLIDWORKS) the specific CAD configuration will be considered. The only thing you need to do is to copy the drawing frame template files from the corresponding ...templates\ subdirectory.

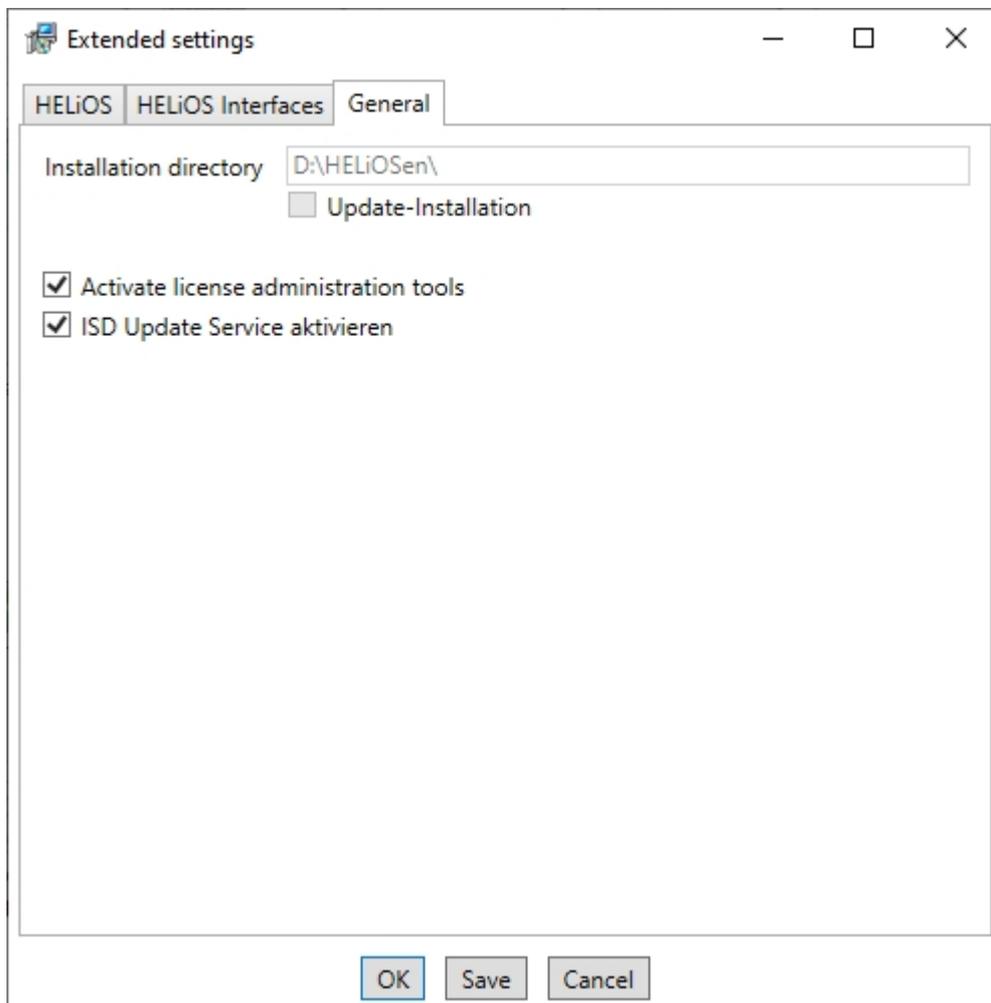
The installation automatically executes the configuration file MultiCAD.csv with the **HeliosClientConfig.exe** tool. If you work with your own .csv file, you can execute it subsequently: Start the **HeliosClientConfig.exe** tool from the \exe\ directory of your HELiOS installation, click the  button to select the path of the file and confirm with **OK**.

Interfaces with foreign systems can also be added via the Windows Control Panel. Select **Start > Control Panel > Programs and Features**, activate **HELiOS**, then right-click and select **Change**. This starts the installation of HELiOS, enabling you to select further interfaces with foreign software products on the **HELiOS Interfaces** tab.

Further information, e.g. how to activate specific interfaces in the foreign software, can be found in the HELiOS Help.

**Please note:**

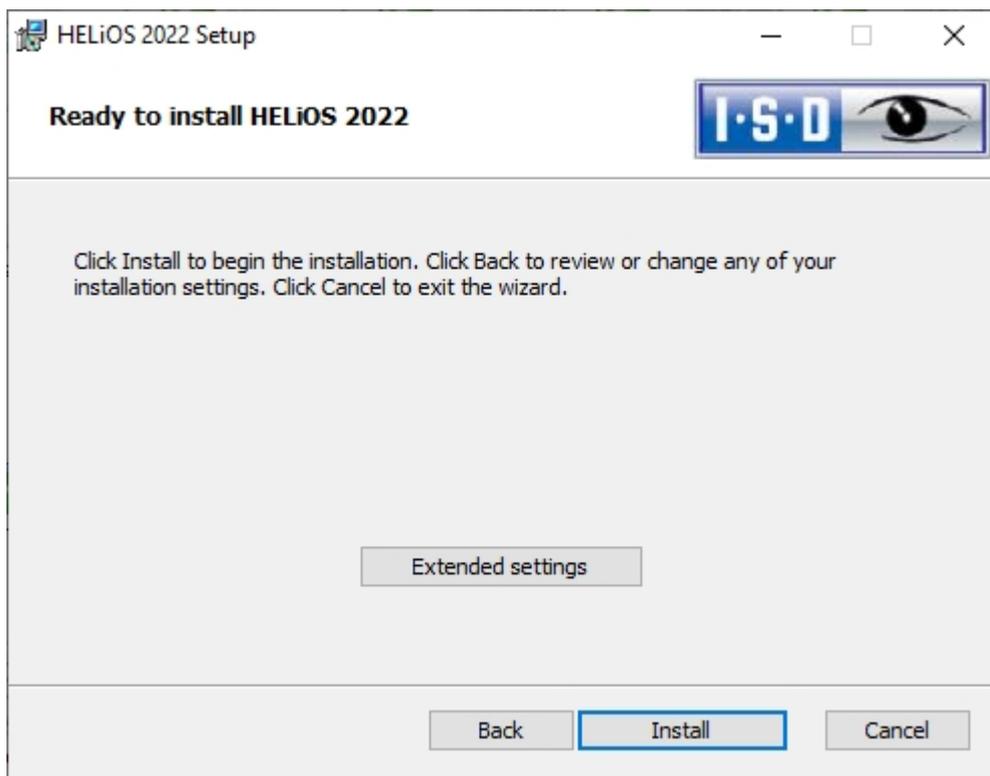
- A prerequisite for the interface with a foreign software is that his software must be installed on the same system.
- An interface between a 32-Bit software and a 64-Bit version of HELiOS is not possible. MS Office is an exception. Here it is basically possible to interface a 32-Bit Office with HELiOS (64-Bit).
- For EPLAN you also require the Article Synchronization Service running separately on the system. You will find the corresponding button in the HELiOS installation mask. For the configuration of the HELiOS-EPLAN interface please contact the ISD Consulting team.
- If you have installed AutoCAD and AutoCAD Mechanical, both will be considered for the interface.



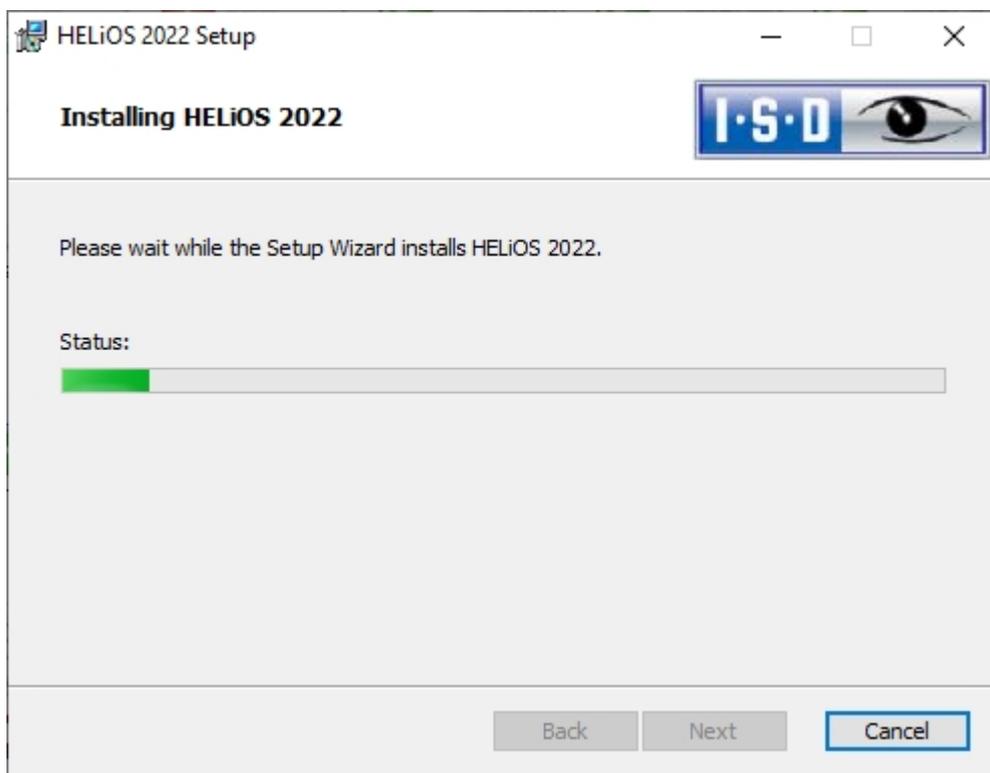
The **Activate license administration tools** checkbox must be activated for the management of server licenses.

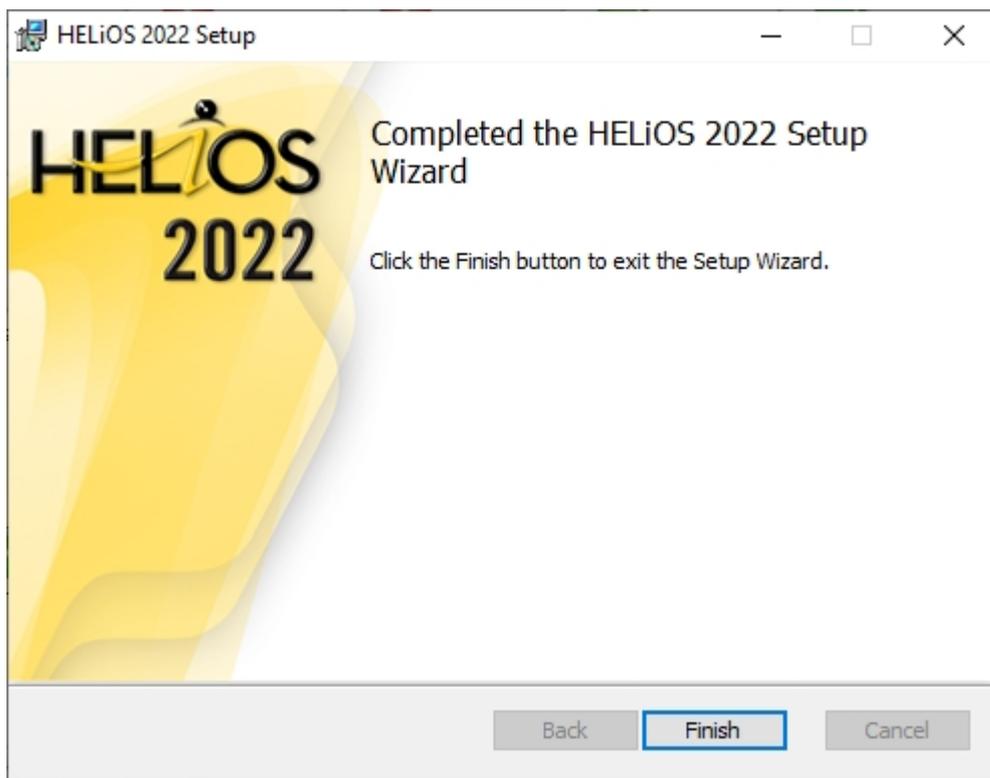
Click **Save** to save the **Extended Settings** to an **.ini file**. If you place the **.ini file** in the installation directory when installing server licenses, the settings will be applied.

Close the **Extended Settings** dialogue with **OK**.



Click **Install**.



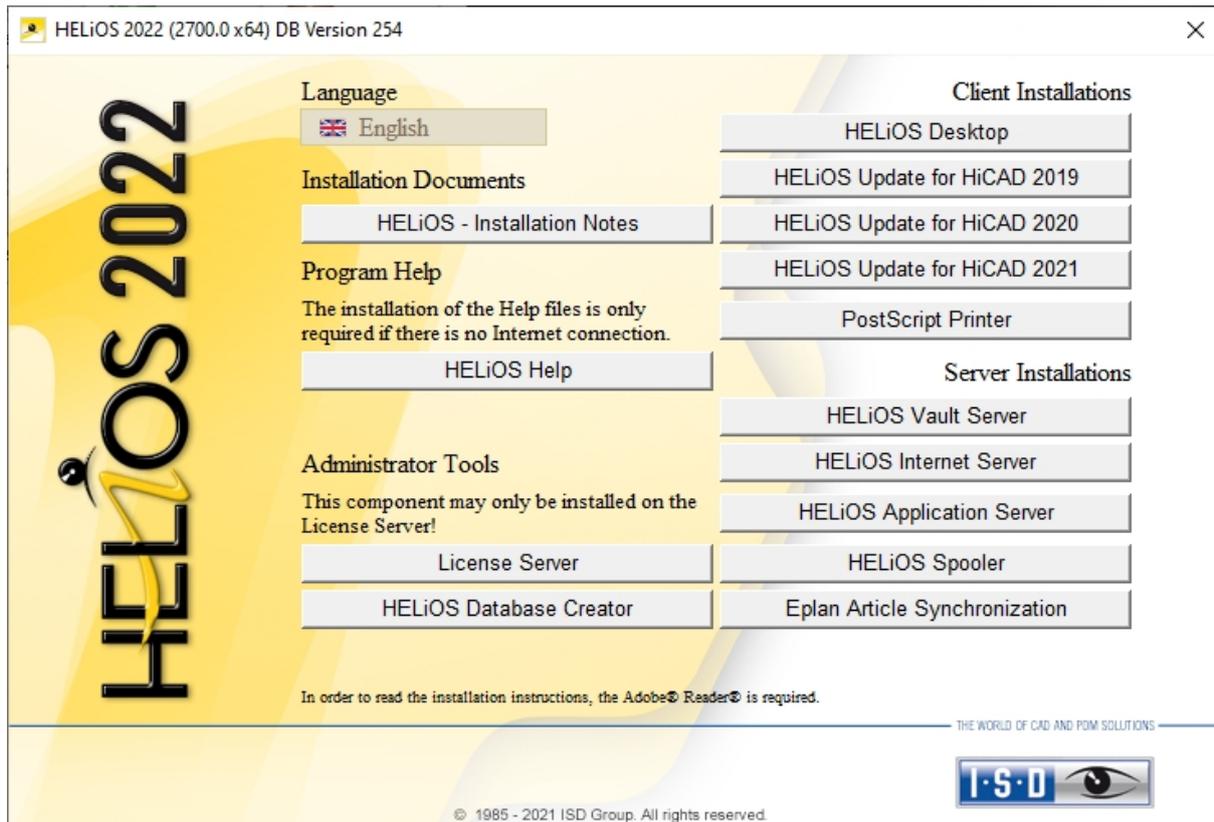


After successful installation, you will find the **HELIOS**  shortcut on the Desktop of your computer for program start.

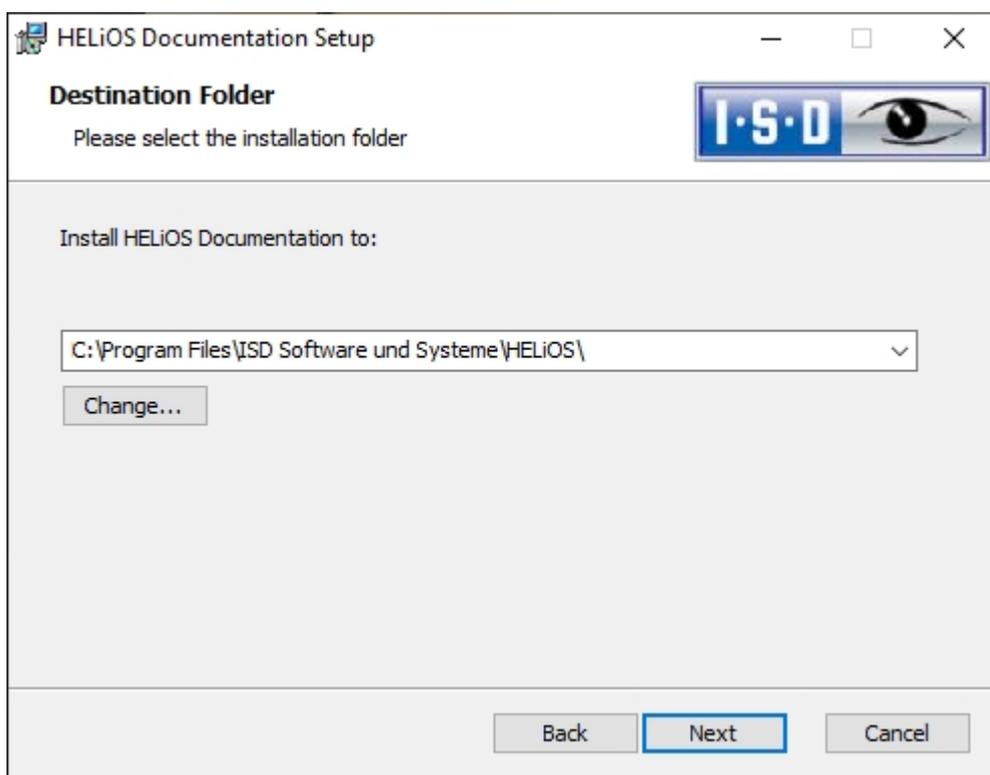
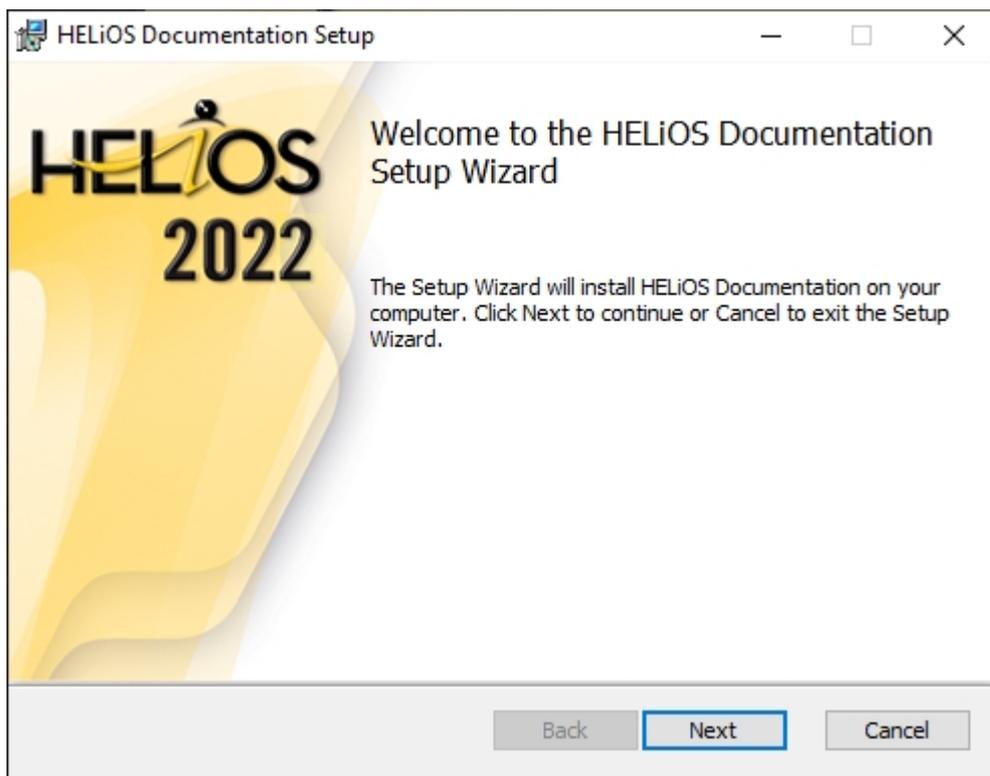
Installing the HELiOS Help

The Online Help is available locally (status of the date of installation DVD creation) and on the Internet (regularly updated) at www.help.isdgroup.com. Both versions of the Help can be directly launched from HELiOS. Please note that corresponding login data are required to access the Internet version of the Help.

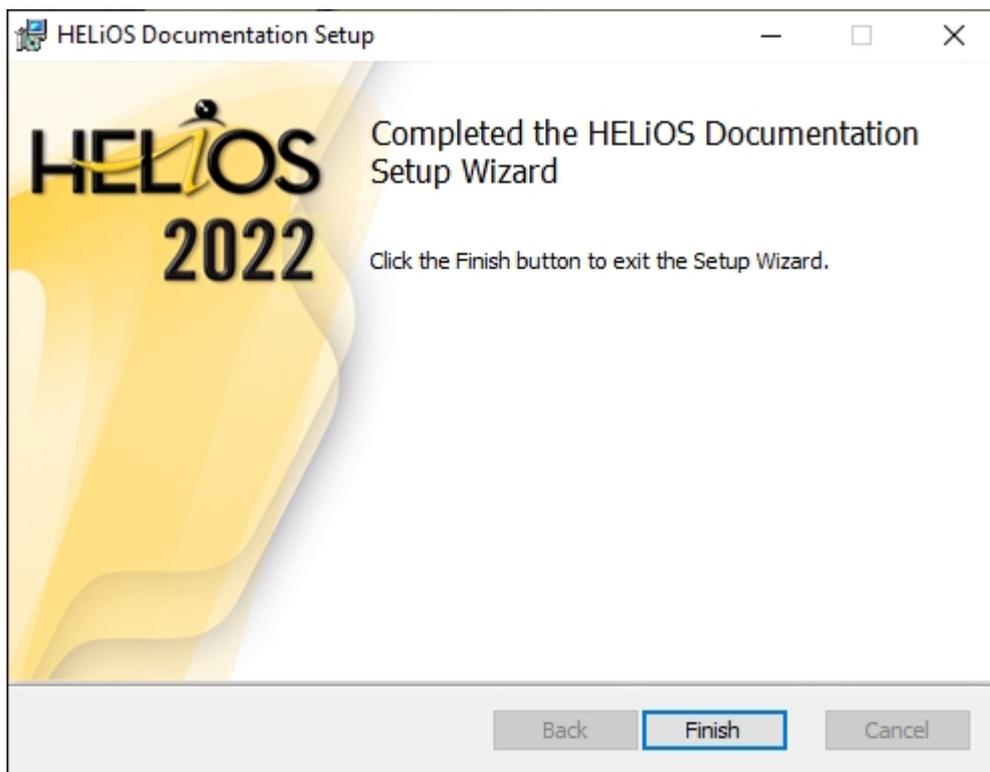
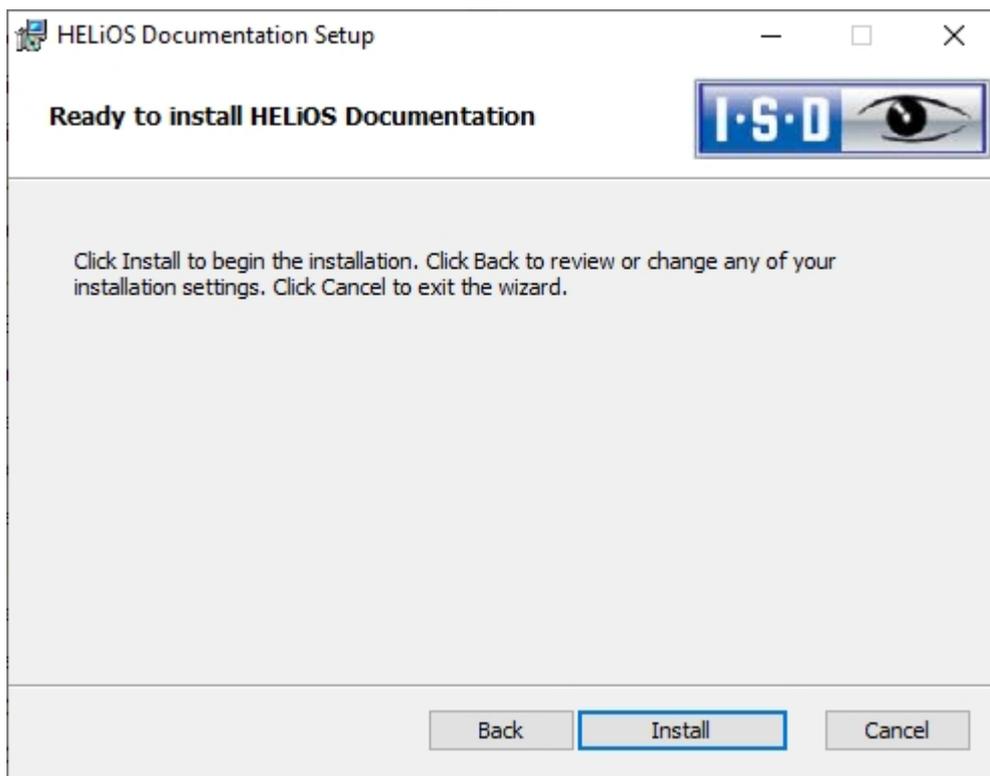
Start Windows to install the Help. If Windows has already been opened, close all other applications and start the installation wizard. Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.



Click on the HELiOS Help button.



Enter the installation directory for HELiOS.



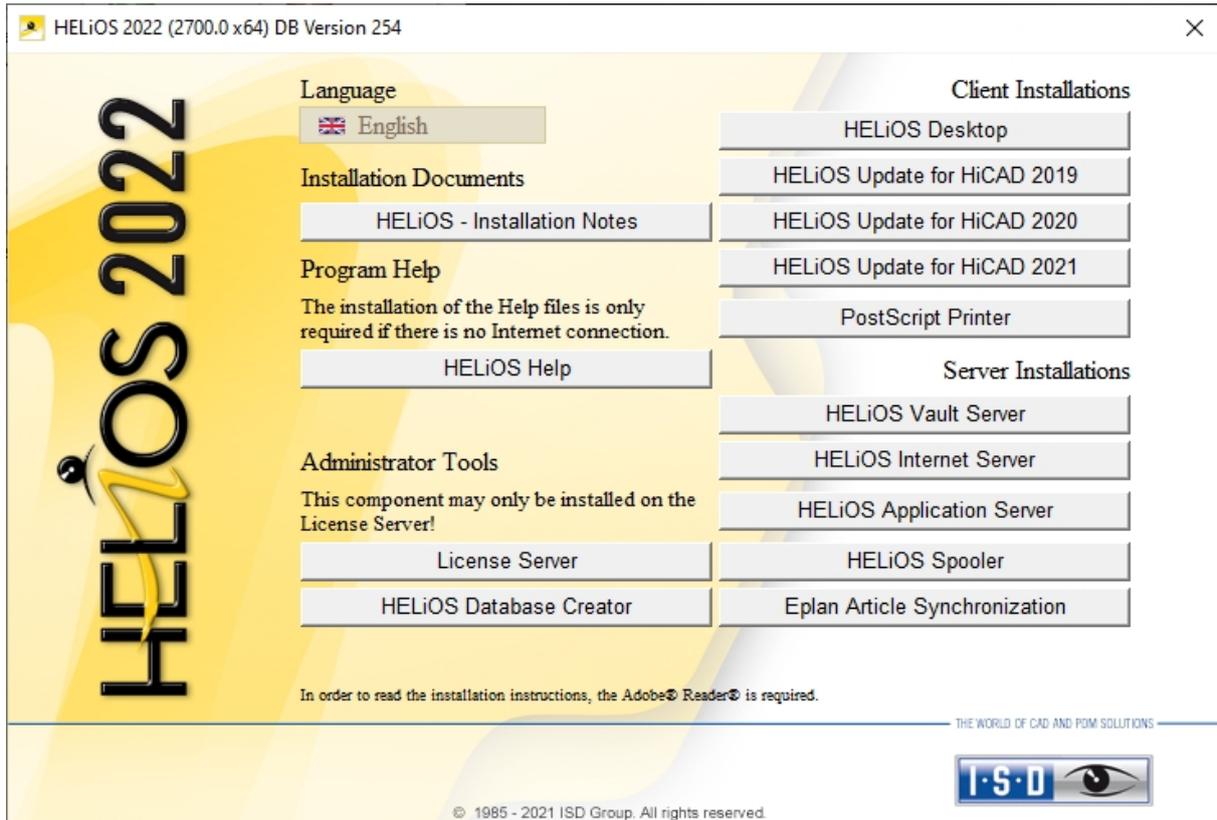
After successful installation, the Help can be found in the program folder and can be called from HELiOS .

Installing the HELiOS Internet Servers

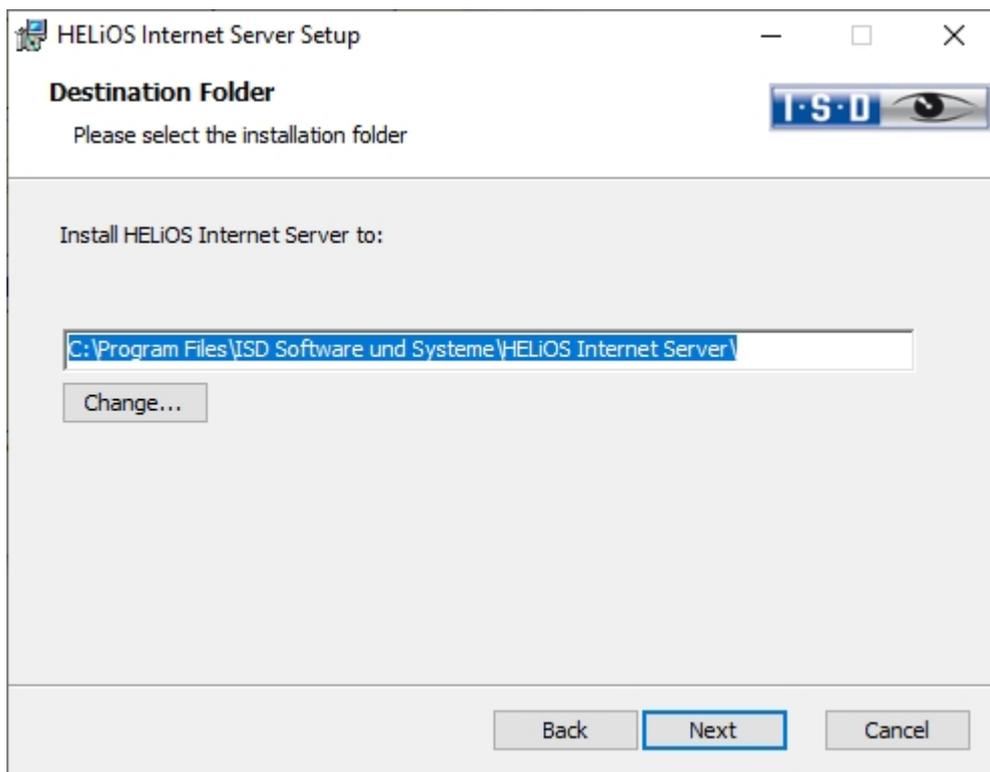
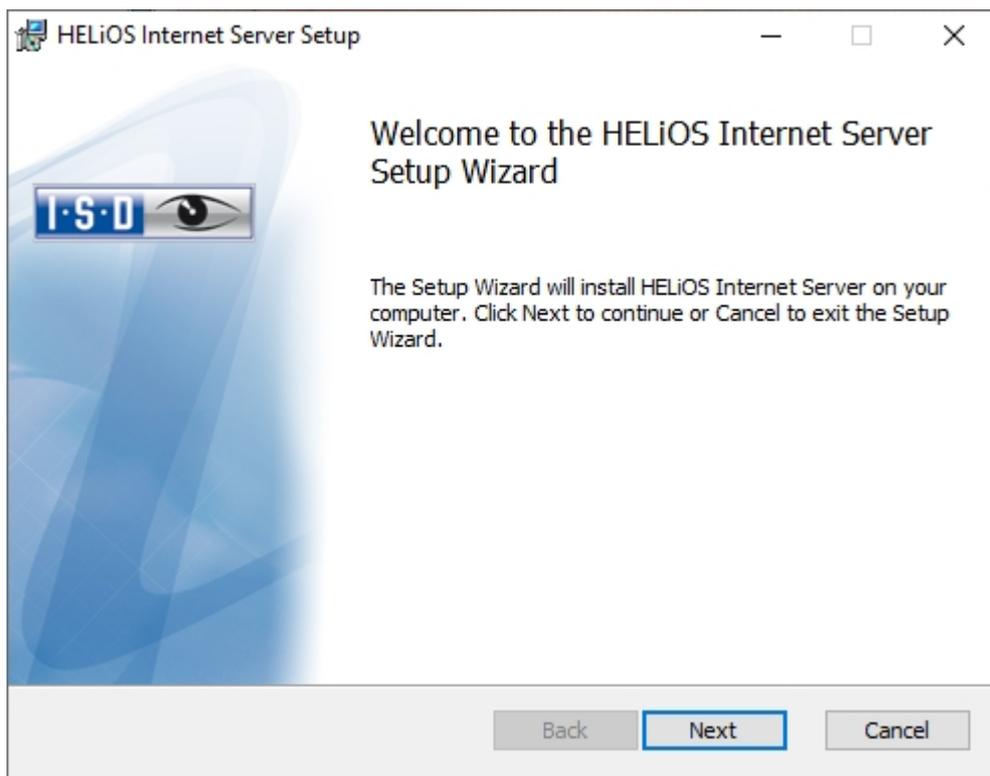
For the **HELiOS Internet Server** you require the **Microsoft Internet Information Services**. In Windows this is included, but requires a separate installation/activation that needs to be performed before installing the HELiOS Internet Server.

To install the HELiOS Internet Server, close all other applications and start the installation wizard.

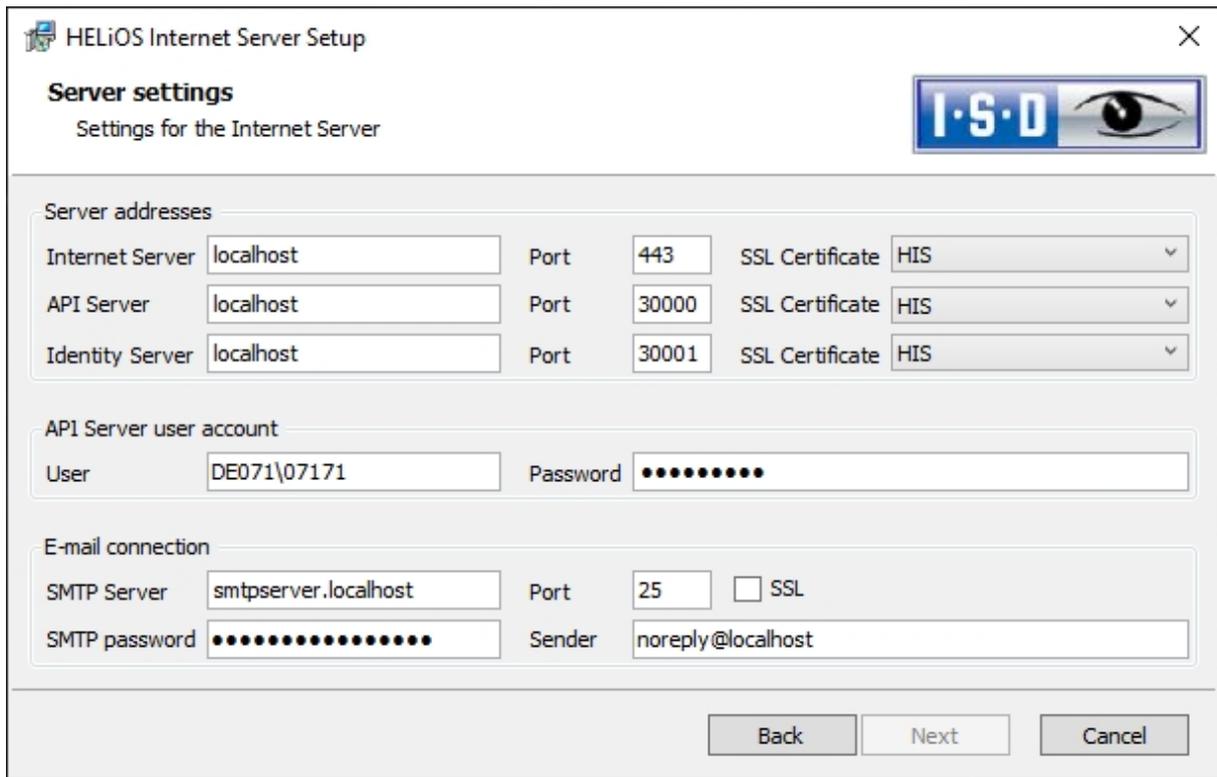
Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.



Click on the **HELiOS Internet Server** button.

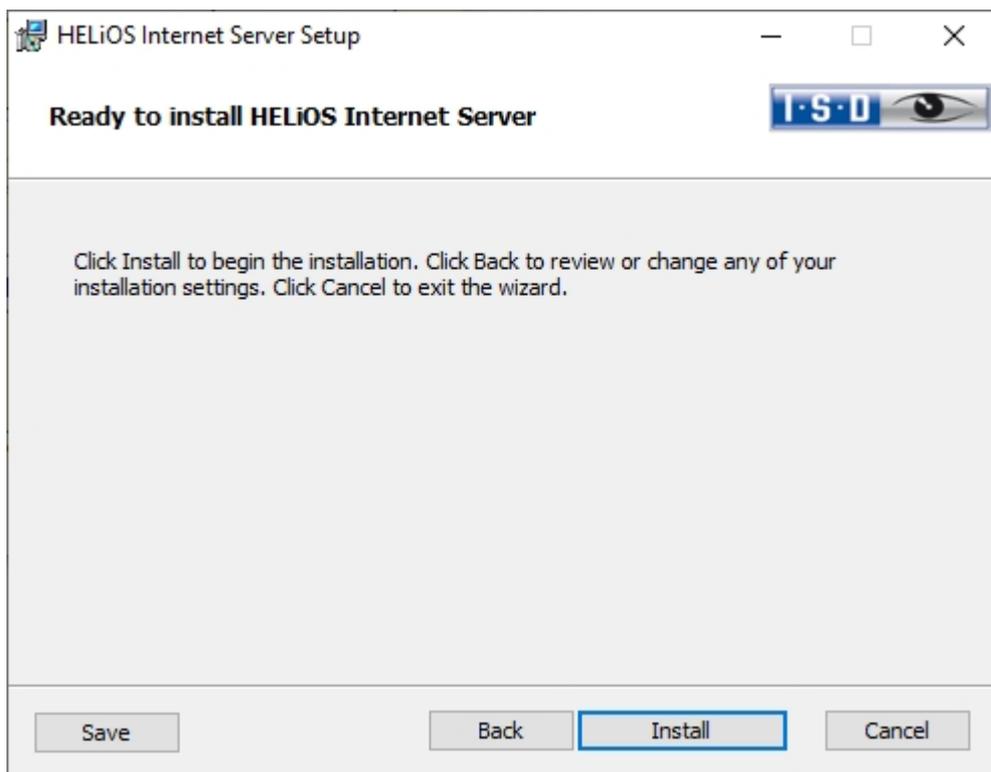


Enter the installation directory for the software. If the installation wizard finds an already installed version, it will be offered to you for updating.

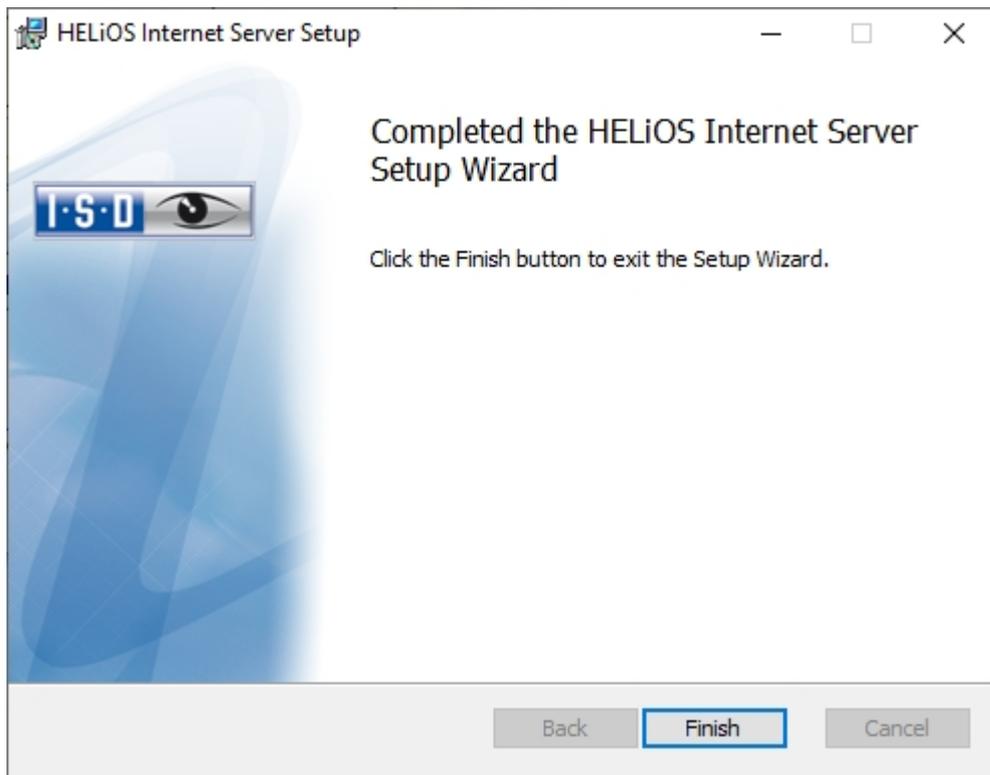


Under **Server addresses** you enter the internet addresses for the HELiOS internet server (e.g. his.isdgroup.com / his-api.isdgroup.com / hisid.isdgroup.com), including ports and one or more SSL certificates for https matching the internet addresses.

Enter your Windows user account under **API Server user account** under which HELiOS functions are to be executed. Under **E-mail connection** enter the connection settings of the E-mail server to send "Forgot password" E-mails as an example. Then click **Next**.



Click **Install**.



After successful installation, the HELiOS Internet Server can be found in the program folder.



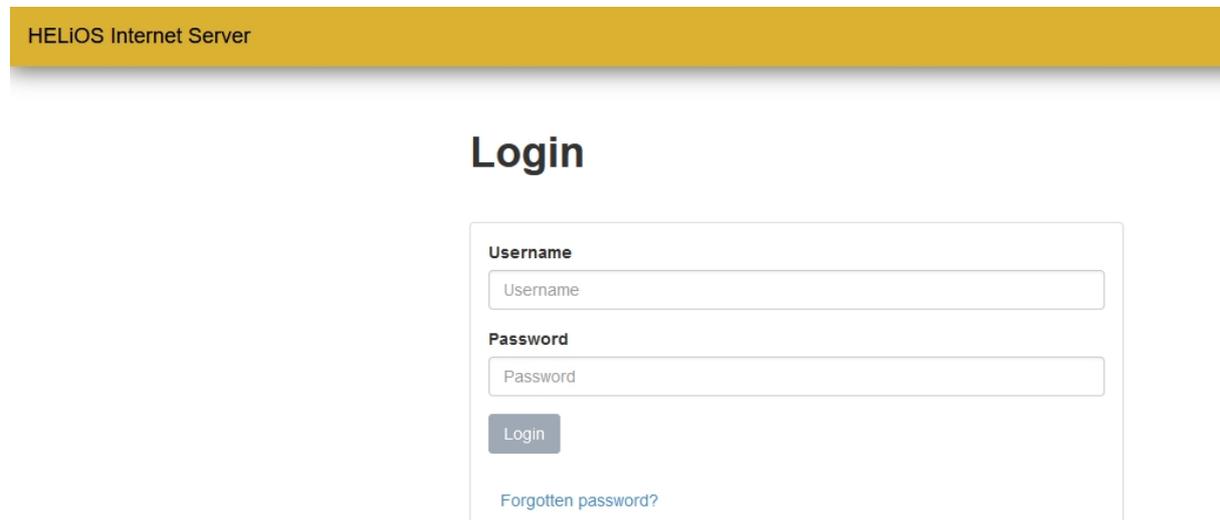
Please note:

For server access, passwords for web access must be assigned to the corresponding user logins of the HELiOS database (see [HELIOS Online Help](#)).

Checking the operability of the individual server components of the HELiOS Internet Server

In a current browser, call up one after the other the domain names specified under **Server Addresses** including the **Port** (e.g. `https://his.your-companyname.com:30000`).

When calling the server address of the HELiOS Internet Server, you must see the **Login** page.



HELIOS Internet Server

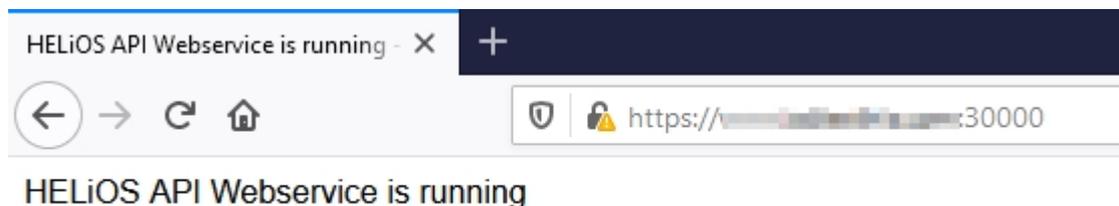
Login

Username

Password

[Forgotten password?](#)

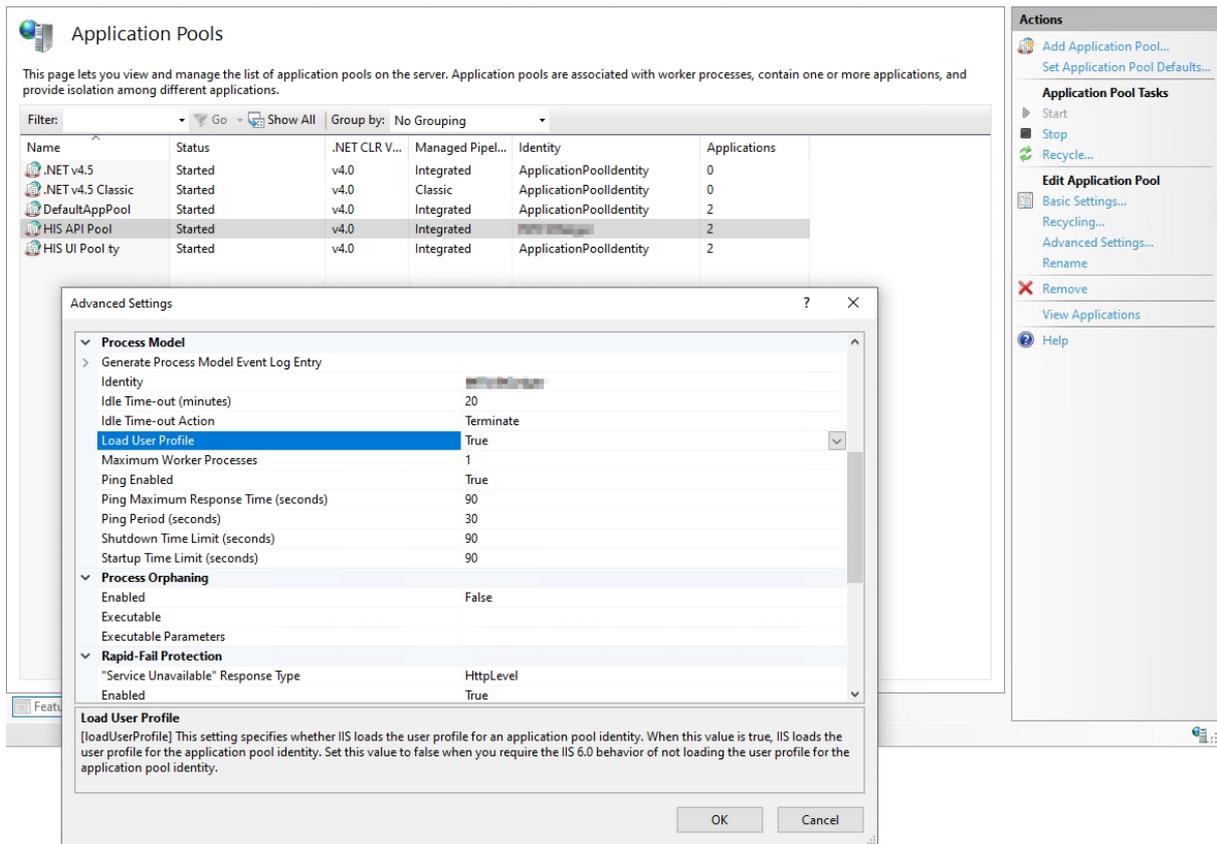
When you call up the **HELIOS API Server** and the **HELIOS Identity Server** in your browser, you will receive a status message that the corresponding service is running (e.g. "HELIOS Identity Server is running").



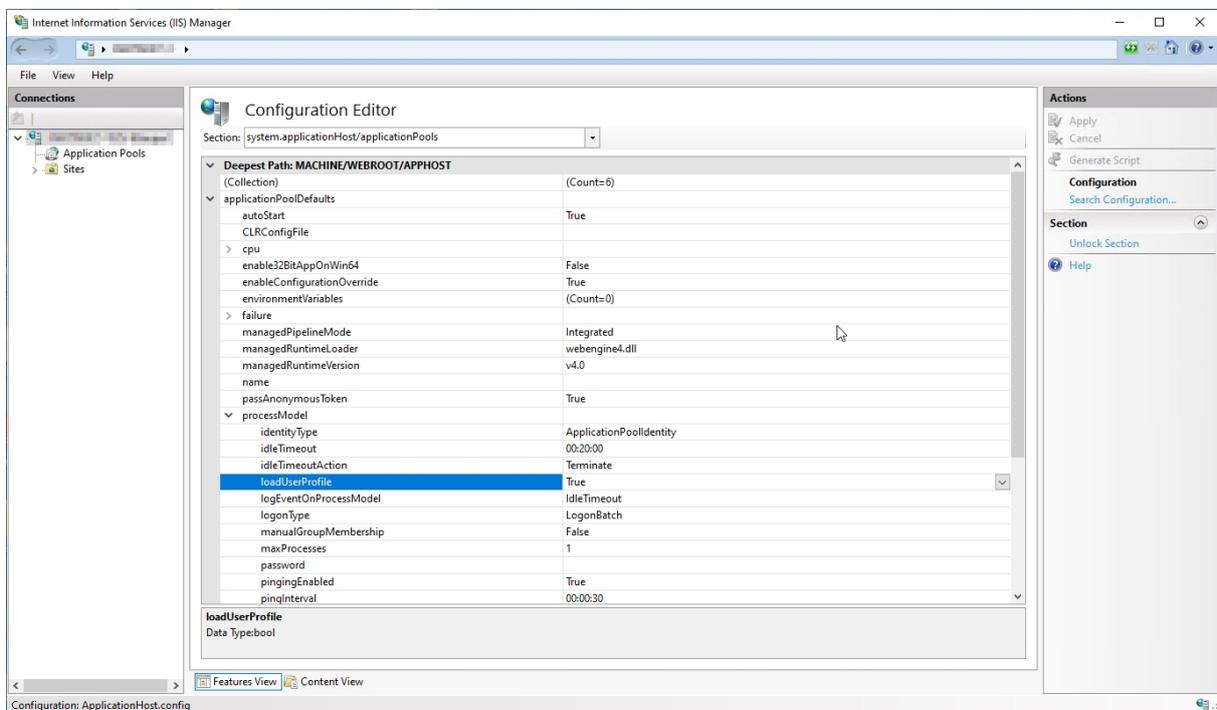
If you do not see a status message, please make sure that the **Application Pool** of the **HELIOS API Server** is not running in the user context.

Therefore, please check the following two settings in the (ISS) Manager Control Panel > System and Security > Administrative Tools > Internet Information Services (IIS) Manager):

- Check in the **Advanced Settings** of the **Application Pool** of the **HIS API Pool** whether the **Load User Profile** option is set to **True**.



- Also check if the option `loadUserProfile` is set to `True` in the **Configuration Editor** of the server under the section "system.applicationHost/applicationPools".



Troubleshooting Support

Below you will find solutions to various problems that may occur during the activation of the HELiOS Internet Server.

1. Read and write permission for MachineKeys

How does the problem manifest?

When calling the URL of the HELiOS Identity Server or when logging in to the HELiOS Internet Server, the following error message appears in the browser:

Server error in the application /.

The remote certificate is invalid according to the validation procedure.

Description: Unhandled exception while executing the current web request. Check the stack trace to display more information about this error and to determine where the error was caused in the code.

Exception details: System.Security.Authentication.AuthenticationException: According to the validation procedure the remote certificate is invalid .

Source error:

An unhandled exception was generated while executing the current web request. Information about the origin and the location of the exception can be displayed via the stack trace.

Stack trace:

```
[AuthenticationException: The remote certificate is invalid according to the validation procedure.]
System.Net.TlsStream.EndWrite(IAsyncResult asyncResult) +305
System.Net.ConnectStream.WriteHeaderCallback(IAsyncResult ar) +167
[WebException: The underlying connection has been closed: No position of trust could be established for the protected SSL/TLS channel..]
System.Net.HttpWebRequest.EndGetResponse(IAsyncResult asyncResult) +762
System.Net.Http.HttpClientHandler.GetResponseCallback(IAsyncResult ar) +81
[HttpRequestException: Error while sending the request.]
...
```

In the Windows Event Viewer of the server hosting the HELiOS Internet Server, there is a warning to be found in the "Windows Logs" / "Application" section regarding the ASP.NET source, similar to the following:

Windows Logs - Application Number of events: 1

Level	Date and Time	Source	Event ID	Task Cat...
 Warning	08.06.2021 12:44:44	ASP.NET 4.0.3031...	1309	Web Event

Event 1309, ASP.NET 4.0.30319.0

General Details

Event code: 3005
 Event message: An unhandled exception has occurred.
 Event time: 6/8/2021 12:44:44 PM
 Event time (UTC): 6/8/2021 10:44:44 AM
 Event ID: 191bd2a677624b88ba083917081053e2
 Event sequence: 2
 Event occurrence: 1
 Event detail code: 0

Application information:
 Application domain: /I/M/W3SVC/2/ROOT.2-132676226813087060

Log Name:	Application	Logged:	11/08/2021 08:35:46
Source:	ASP.NET 4.0.30319.0	Task Category:	Web Event
Event ID:	1309	Keywords:	Classic
Level:	Warning	Computer:	HHMS0011.ds.intern
User:	N/A		
OpCode:			
More Information:	Event Log Online Help		

As can be seen in the details, the problem is caused by an access violation of the HELiOS Identity Server in connection with cryptographic keys. The corresponding keywords are highlighted in yellow in the figure below as an example.

```
...
Process information:
Process ID: 5376
Process name: w3wp.exe
Account name: IIS APPPOOL\HeliosIdentity

Exception information:
Exception type: TargetInvocationException
Exception message: Ein Aufrufziel hat einen Ausnahmefehler verursacht.
at System.RuntimeMethodHandle.InvokeMethod(Object target, Object[] arguments, Signature sig, Boolean
constructor)
at System.Reflection.RuntimeMethodInfo.UnsafeInvokeInternal(Object obj, Object[] parameters, Object[] argu-
ments)
at System.Reflection.RuntimeMethodInfo.Invoke(Object obj, BindingFlags invokeAttr, Binder binder, Object[]
parameters, CultureInfo culture)
at Owin.Loader.DefaultLoader.<>c__DisplayClass12.<MakeDelegate>b__b(IAppBuilder builder)
at Owin.Loader.DefaultLoader.<>c__DisplayClass1.<LoadImplementation>b__0(IAppBuilder builder)
at Microsoft.Owin.Host.SystemWeb.OwinAppContext.Initialize(Action`1 startup)
at Microsoft.Owin.Host.SystemWeb.OwinBuilder.Build(Action`1 startup)
at Microsoft.Owin.Host.SystemWeb.OwinHttpModule.InitializeBlueprint()
at System.Threading.LazyInitializer.EnsureInitializedCore[T](T& target, Boolean& initialized, Object& syncLock,
Func`1 valueFactory)
at Microsoft.Owin.Host.SystemWeb.OwinHttpModule.Init(HttpApplication context)
at System.Web.HttpApplication.RegisterEventSubscriptionsWithIIS(IntPtr appContext, HttpContext context,
MethodInfo[] handlers)
at System.Web.HttpApplication.InitSpecial(HttpApplicationState state, MethodInfo[] handlers, IntPtr appCon-
text, HttpContext context)
at System.Web.HttpApplicationFactory.GetSpecialApplicationInstance(IntPtr appContext, HttpContext context)
at System.Web.Hosting.PipelineRuntime.InitializeApplication(IntPtr appContext)

Zugriff verweigert

at System.Security.Cryptography.CryptographicException.ThrowCryptographicException(Int32 hr)
at System.Security.Cryptography.X509Certificates.X509Utils._LoadCertFromFile(String fileName, IntPtr pass-
word, UInt32 dwFlags, Boolean persistKeySet, SafeCertContextHandle& pCertCtx)
at System.Security.Cryptography.X509Certificates.X509Utils.LoadCertFromFile(String fileName, IntPtr pass-
word, UInt32 dwFlags, Boolean persistKeySet, SafeCertContextHandle pCertCtx)
at System.Security.Cryptography.X509Certificates.X509Certificate.LoadCertificateFromFile(String fileName,
Object password, X509KeyStorageFlags keyStorageFlags)
at System.Security.Cryptography.X509Certificates.X509Certificate2..ctor(String fileName, String password)
at Helios.IdentityServer.Startup.LoadCertificates()
at Helios.IdentityServer.Startup.<Configuration>b__1_0(IAppBuilder idserverApp)
at Owin.MapExtensions.Map(IAppBuilder app, PathString pathMatch, Action`1 configuration)
at Owin.MapExtensions.Map(IAppBuilder app, String pathMatch, Action`1 configuration)
...
```

How do I solve the problem?

You must give the group IIS_IUSRS write permission for the %ProgramData%\Microsoft\Crypto\RSA\MachineKeys directory. See also <https://github.com/Microsoft/dotnet-framework-early-access/issues/25>.

2. "Unexpected error" after login

How does the problem manifest?

After entering the user name and password when logging in to the HELiOS Internet Server, the following error message appears in the browser:



An unexpected error occurred

How do I solve the problem?

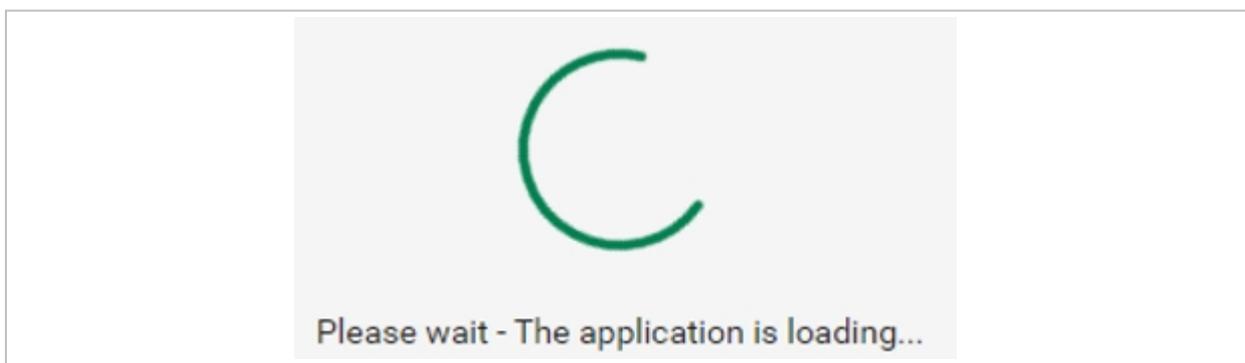
Please check whether the ODBC data source for the connection of the HELiOS Internet Server to the database has been set up as a system DSN connection. If this is not the case, remove the DSN connection in the user context and replace it with a system DSN connection.

Why this is necessary: The IIS starts the HELiOS Identity Server in a separate process, specified in the user context during installation. To ensure that the established ODBC connection can be accessed in this user context, it should be set up as a system DSN connection (user-independent).

3. HIS freezes after login

How does the problem manifest?

After entering the user name and password when logging in to the HELiOS Internet Server, the login freezes, showing a "Please wait" message, even after a longer period of time:



Note: When the HELiOS Internet Server is called for the first time (e.g. after restarting the server), it may take some time until the login occurs. In the background, the HELiOS core is being initialised and started. Therefore, please wait for a while and, if necessary, try logging in once more after closing the browser tab and calling the HELiOS Internet Server URL again.

How do I solve the problem?

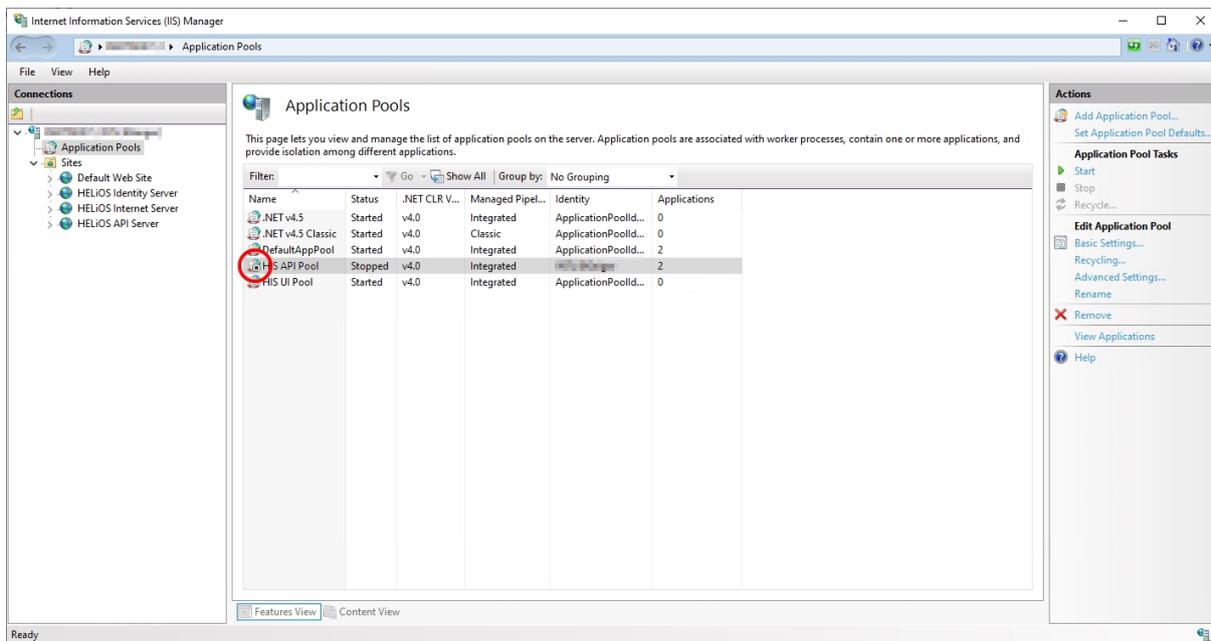
There are two situations that can cause the problem.

User data is wrong or rights are missing

If a "Service Unavailable" page appears when calling the URL for the HELiOS API Server,



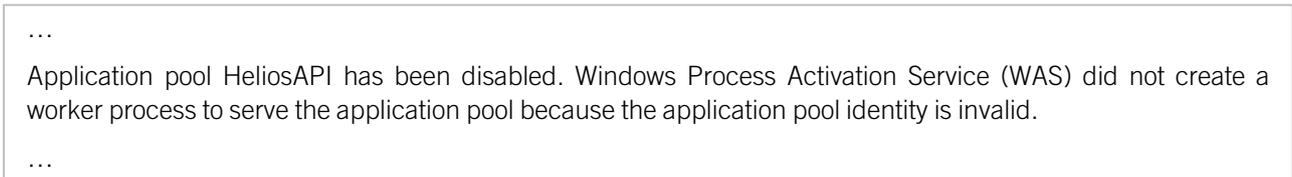
please check whether the Application Pool for the HELiOS API Server is running or if it has been terminated. This can be recognised by the icon or by the status display in the IIS Manager:



If the Application Pool has been terminated (as is the case in the screenshot above), this may be due to data or permissions that are stored for the user to run the Application Pool being incorrect.

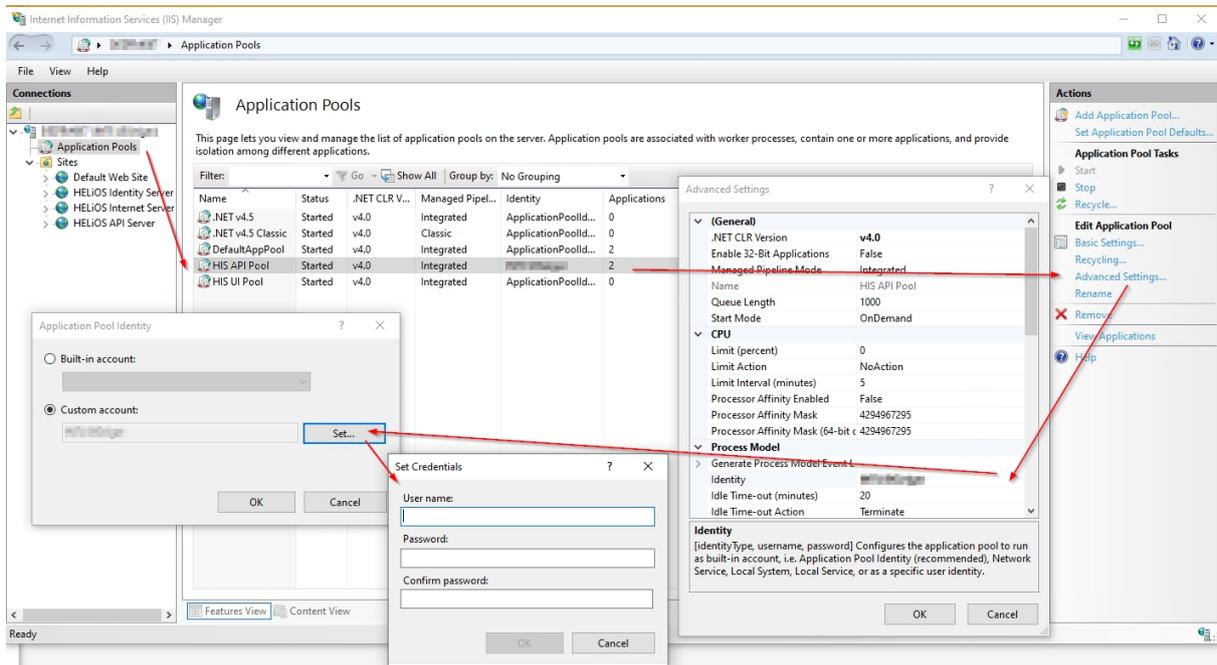
In this case, you should find a warning regarding the source WAS (Windows Process Activation Service) in the Windows Event Viewer of the server hosting the HELiOS Internet Server, located in the section "Windows Logs" / "System".

The following text should be included in the details:



If this is the case, two things must be checked:

1. User name and password for running the HELiOs API Server must be correct. Please enter the correct data again if necessary:



2. The user who is stored for the execution of the Application Pool must have sufficient rights (see also <https://docs.microsoft.com/en-gb/troubleshoot/iis/default-permissions-user-rights#default-windows-user-rights-assignments>), specifically the following permissions are required and should be checked:
 - a. "Sign in as a service"
 - b. "Sign in as a batch job"

No license available or license already occupied

Check whether there is a hint under C:\Temp\HISLogs\CoreActivities\ pointing to the fact that the license could not be occupied in the daily log file. If this is the case, please check the available licenses using the ISD Licensing Tool.

4. Background activation service is not running

How does the problem manifest?

All web pages of the HIS (Internet Server, Identity Server, API Server) are not accessible. The corresponding pages in the IIS Manager are closed and when trying to launch the pages you receive an error message saying that the background activation service is not running.

How do I solve the problem ?

Locate the "Windows Process Activation Service" (WAS) under Services in the Administrative Tools and start the service. If this fails, you can try running the service once by a command line with admin permissions. To do this, type "net start WAS" into the console window. The start of the service should also fail here but it will display an error message.

If "error code 13" is displayed here, please check the IIS log file (c:\windows\iis.log) to see if a line in the form of

```
< !!FAIL!! > Failed to create the NetFrameworkConfigurationKey key container (result=0x8009000f)
```

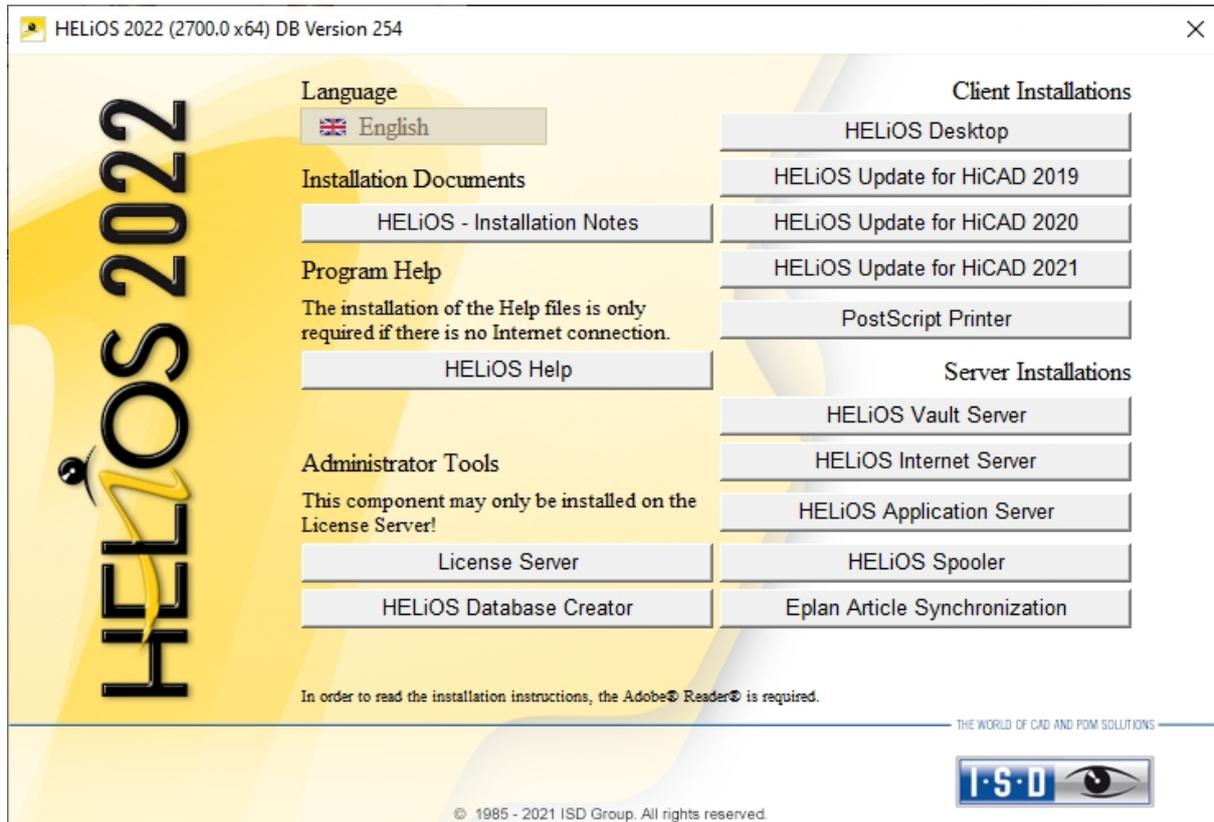
appears there. If this is the case, it indicates problems with the creation of a cryptographic key in the C:\Users\All Users\Application Data\Microsoft\Crypto\RSA\MachineKeys folder. If no keys for other relevant applications are stored there, you can delete the folder as an administrator. Afterwards, you should be able to start the Windows Process Activation Service manually again and Windows will automatically recreate the MachineKeys folder.

To prevent data loss, it can be useful to back up the contents of the MachineKeys folder before deleting it.

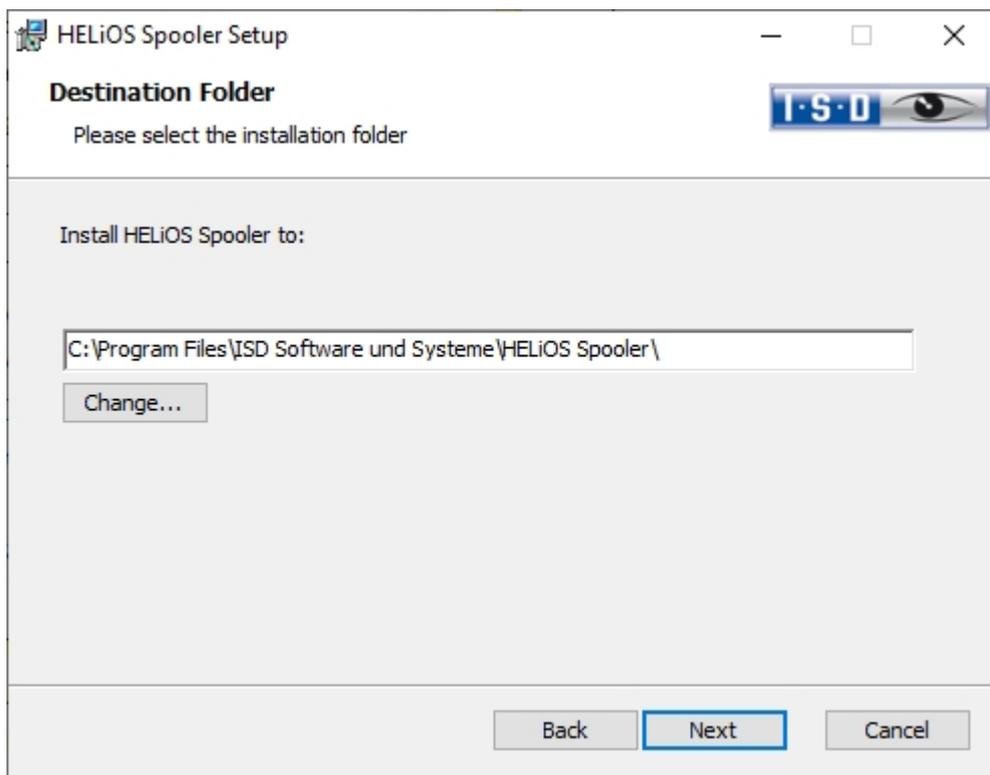
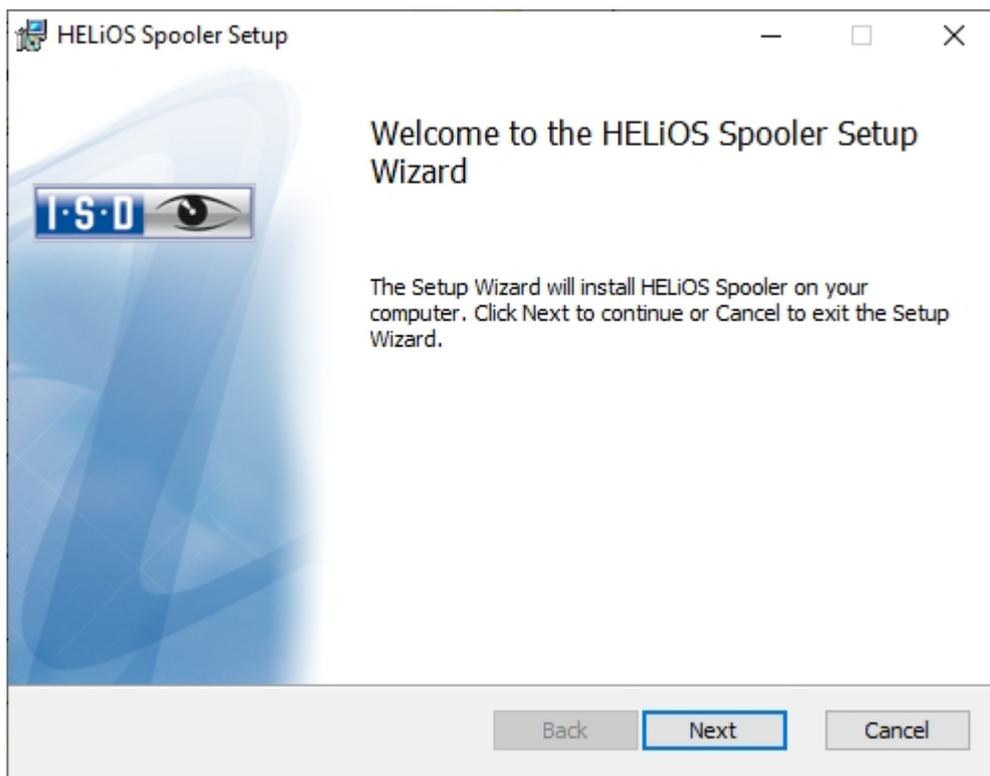
Installing the HELiOS Spooler

Start Windows to install the HELiOS Spooler. If Windows has already been opened, close all other applications and start the installation wizard.

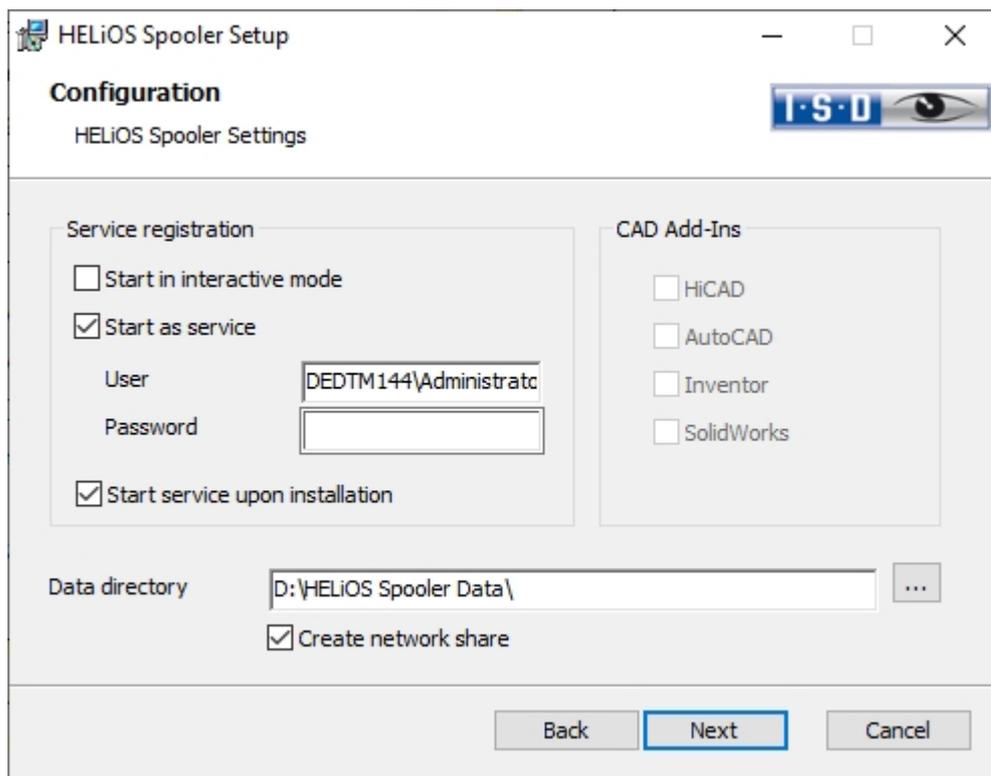
Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.



Click on the **HELiOS Spooler** button.



Enter the installation directory for the software. If the installation wizard finds an already installed version, it will be offered to you for updating.



In the Service registration area you can choose between the options Local system and User account.

A part of the Spooler is started by the system as a background process (Windows service). For safety reasons it is recommended to create a **Windows User account**, with **User name** and **Password** with read and access permission, before installation.

If you do not know the user yet, you can choose Local system. The Spooler will then run, initially without access to any printers, as a simple Windows system service. Now, select **Control Panel > Administrative Tools > Services**. Right-click **HELiOS Spooler** and select **Properties**. On the **Log On** tab, switch to **This account** and enter the **User name** and the **Password**.



Important:

If the Spooler user's password later changes or expires, the password must be reassigned to the HELiOS Spooler service in the Windows **Control Panel** at **Management > Services** via **Right-click > Properties > Log On**.

If the **Start service upon installation** option is active, the Spooler service will not require a manual start after installation.

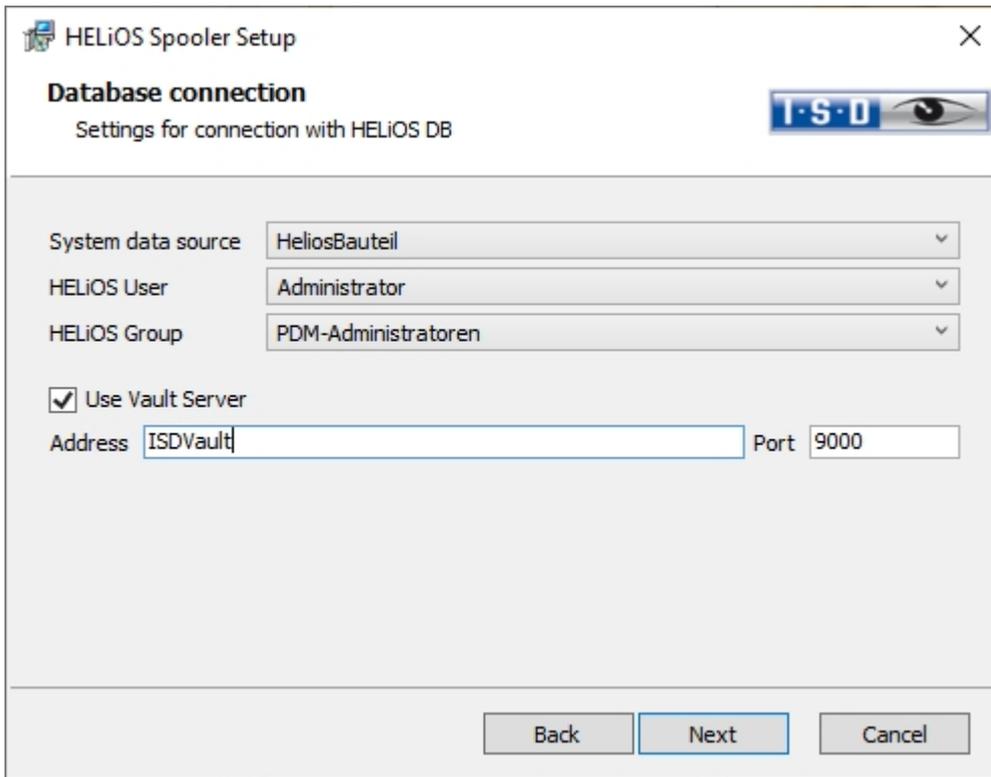
Normally, the HELiOS Spooler runs as a Windows Service in the background. In this standard configuration the Spooler process will be started by the operating system in a special session which is not visible for the user. Therefore, the process will even continue running after the Spooler user has logged off from the computer. Unfortunately, internal tests have found that problems may occur with this type of operation in conjunction with some CAD systems; currently this applies in particular to the interface with SOLIDWORKS.

If you are considering using the HELiOS Spooler together with SOLIDWORKS, we therefore recommend choosing the **Start in interactive mode** option during installation in order to avoid problems. When this option has been selected, the Spooler will no longer be set up as a service, but will be started directly in the foreground via the Administration UI. During this type of operation, the Spooler process will appear in the form of a small text window in the window bar (Caution: When you log off from the Server, the Spooler process will also be ended here!)

For starting the “interactive” configuration of the Spooler automatically, the file **Helios.Spooler.exe** from the installation directory must be invoked with the option “—no service”, for instance, either from the “Autostart” folder or via **Windows task planning**. If you have further questions, please contact our ISD Consulting team.

Select the data directory. Activate the Create network share checkbox to enable the communication with the **PrintClient**. If the network share is not created during installation, it must be created manually afterwards. Since special settings will be required here, we recommend contacting our Consulting team.

Choose the CAD system that you want to link to the HELiOS Spooler, and click **Next**.



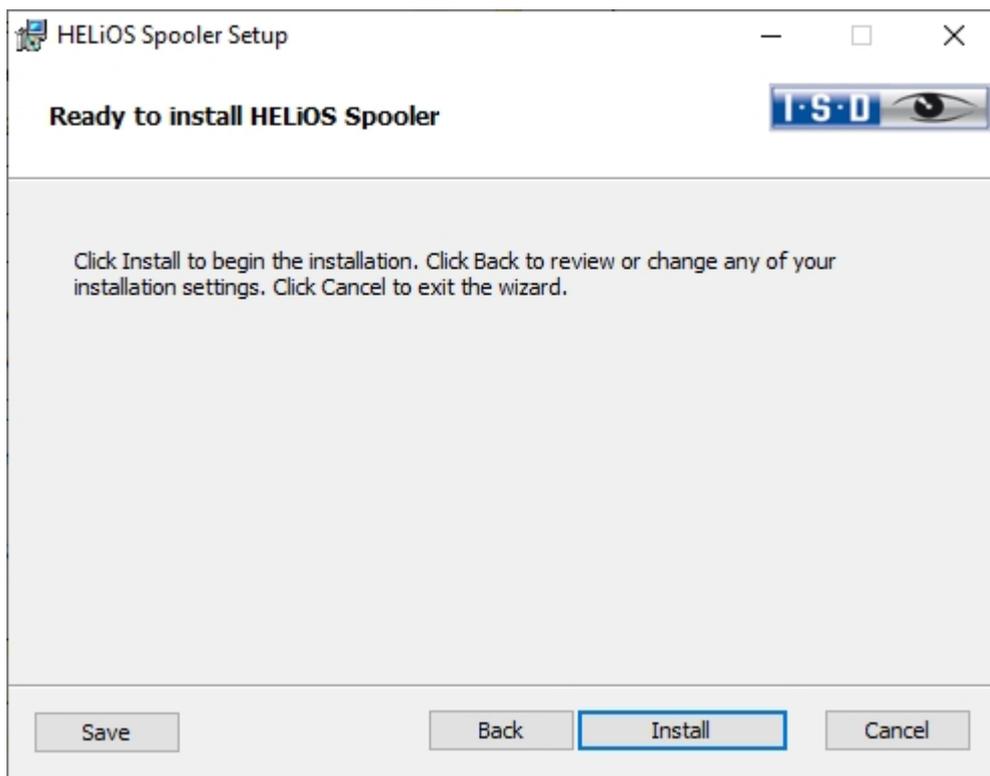
The screenshot shows the 'HELiOS Spooler Setup' dialog box with the 'Database connection' tab selected. The title bar includes the application icon and the text 'HELiOS Spooler Setup'. Below the title bar, the text 'Database connection' is displayed in bold, followed by 'Settings for connection with HELIOS DB'. A logo for 'T.S.O.' with an eye icon is visible in the top right corner. The main area contains several configuration options: 'System data source' is a dropdown menu set to 'HeliosBauteil'; 'HELiOS User' is a dropdown menu set to 'Administrator'; 'HELiOS Group' is a dropdown menu set to 'PDM-Administratoren'; 'Use Vault Server' is a checked checkbox; 'Address' is a text input field containing 'ISDVault'; and 'Port' is a text input field containing '9000'. At the bottom of the dialog, there are three buttons: 'Back', 'Next', and 'Cancel'.

In this dialog window you will be asked for the login of the database user, which is the login of the (SQL) database system.

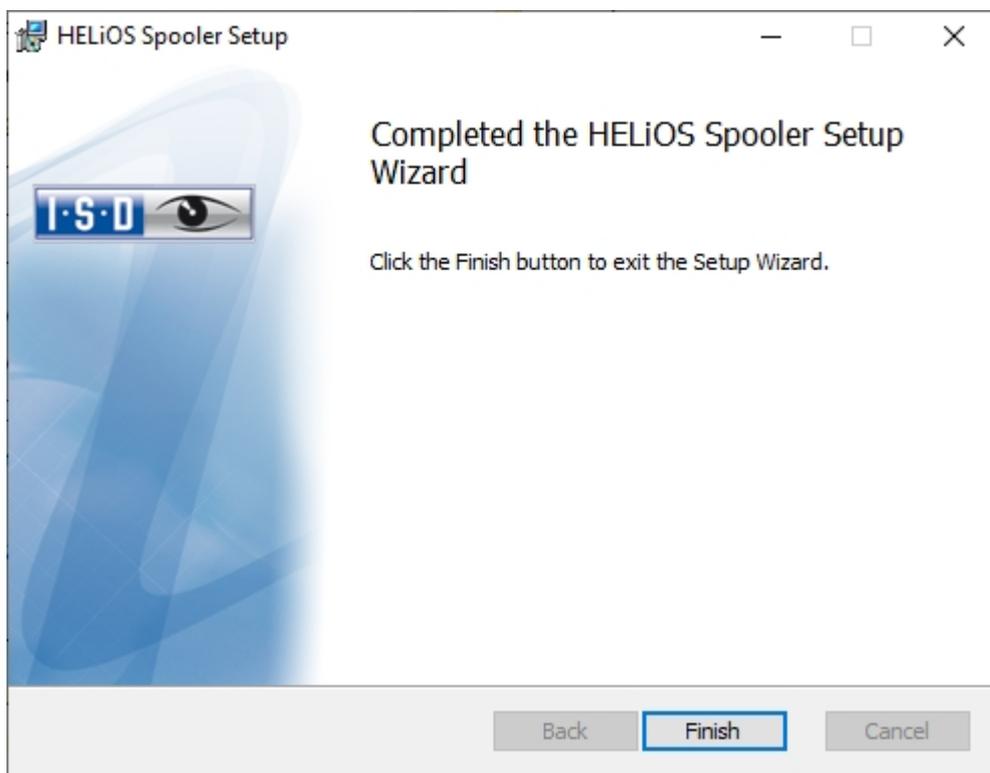
Under **System data source** you must then select the corresponding ODBC database connection. The **HELiOS User** via which the Spooler will run is also selected here. It is important that this user has administration rights and is also assigned to the **HELiOS Group** "PDM Administrators" at this point. Otherwise you will receive an error message.

Activate **Use Vault Server** and enter the **Address** and **Port** of the Vault Server installed in the system for your Multi-CAD operation.

Click **Next**.



Click **Install**.



Click **Finish** to complete your installation.

After successful installation, the HELiOS Spooler can be found in the program folder.

Installing the EPLAN Article Synchronization

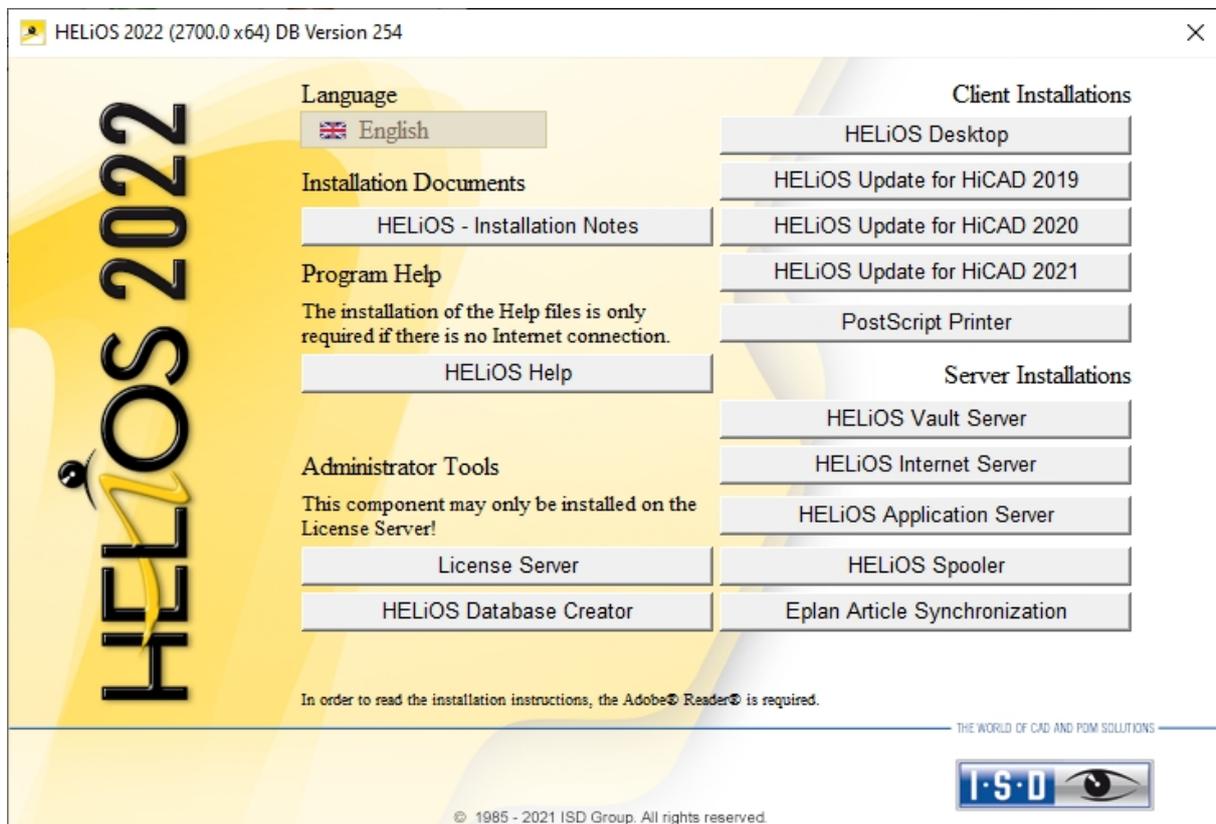
In addition to the EPLAN interface that must be activated in the **HELIOS Interfaces** tab of the **Extended settings** window, you need to install the **EPLAN Article Synchronization** service. You can find the corresponding button at the bottom right of the selection mask.



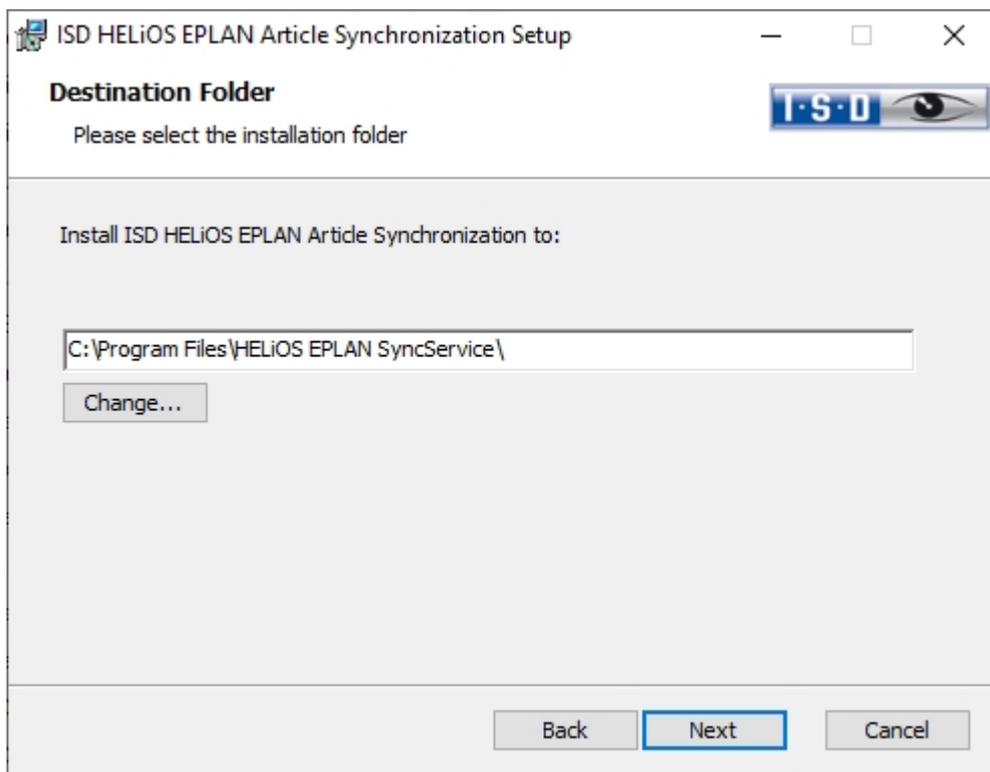
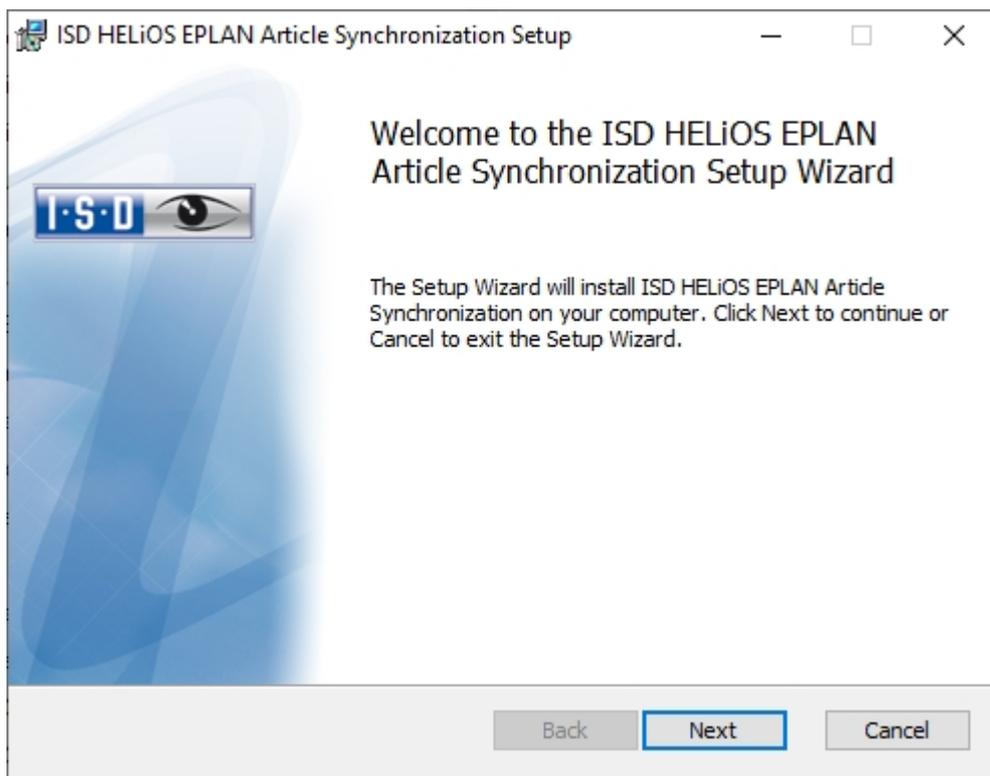
Please note:

For the configuration of the HELIOS-EPLAN interface please contact the ISD Consulting team.

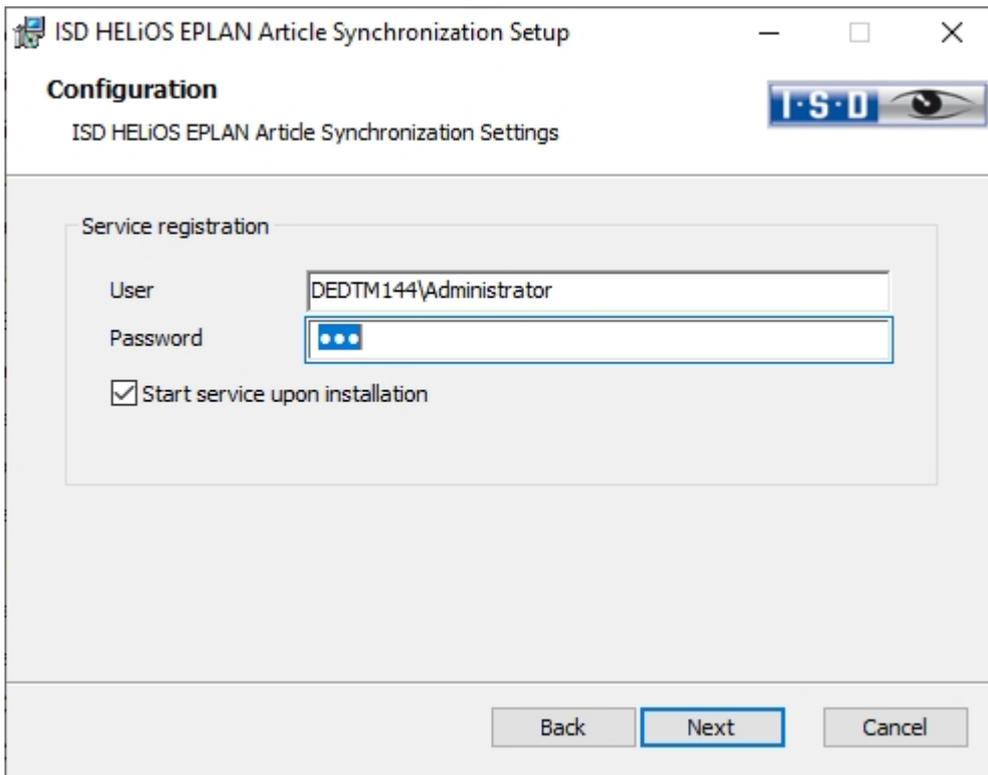
To install the HELIOS Spooler, please start Windows. If Windows has already been started, please close all other applications. Insert the DVD in your DVD drive. The installation wizard will then be started automatically.



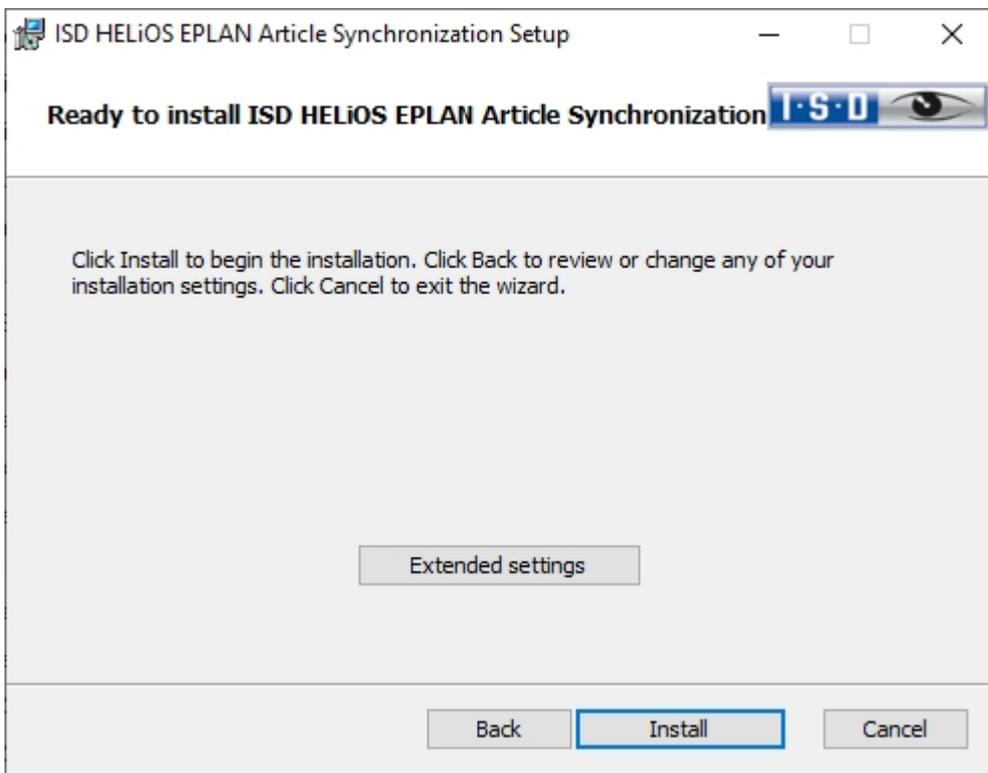
Click on the **EPLAN Article Synchronization** button.



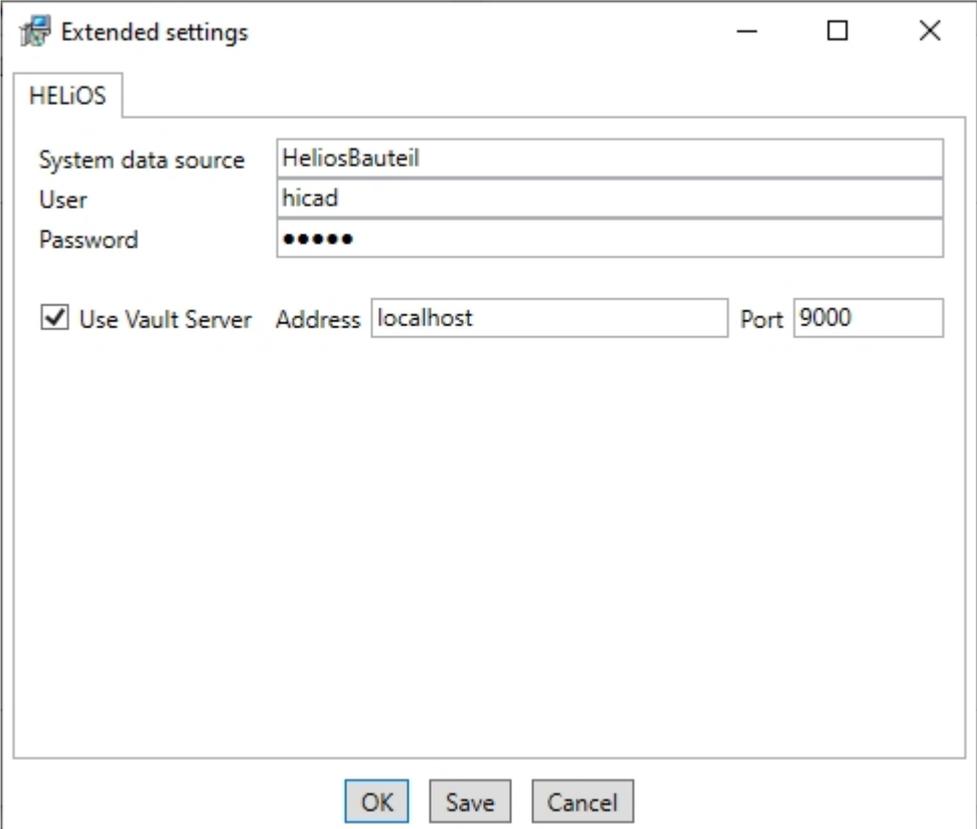
Enter the installation directory for the software.



In the **User** field, enter the User login for HELiOS, (or a user account) with access to HELiOS.



You can now begin with the installation or modify the **Extended settings**, e.g. for HELiOS.



Extended settings

HELIOS

System data source HeliosBauteil

User hicaad

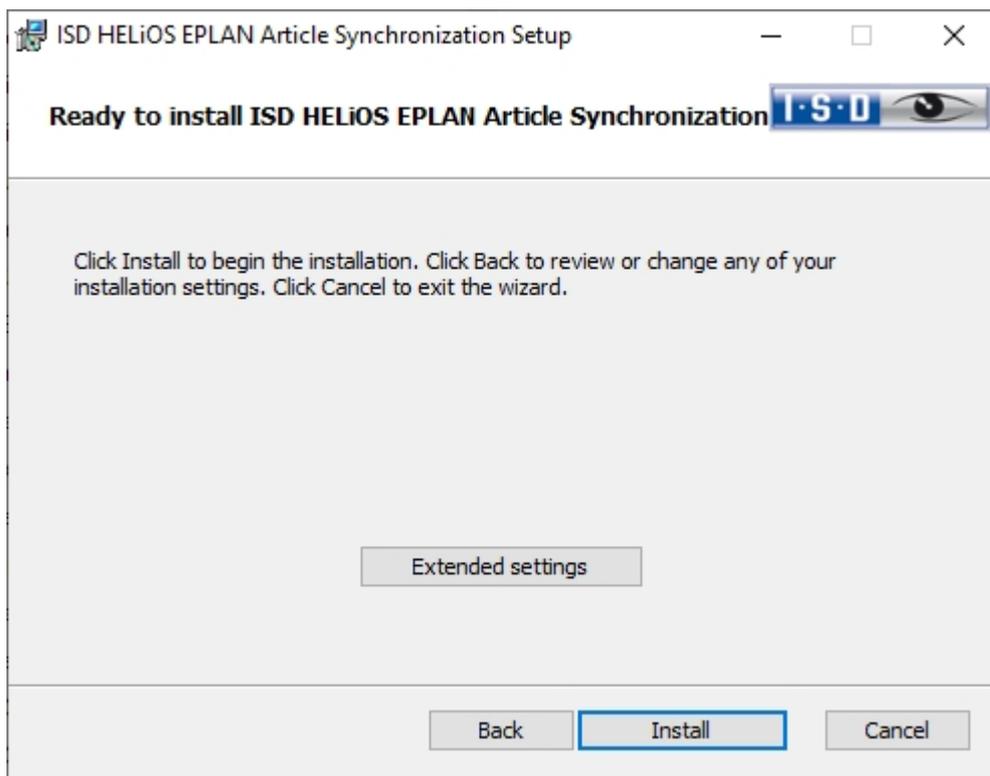
Password ●●●●●

Use Vault Server Address localhost Port 9000

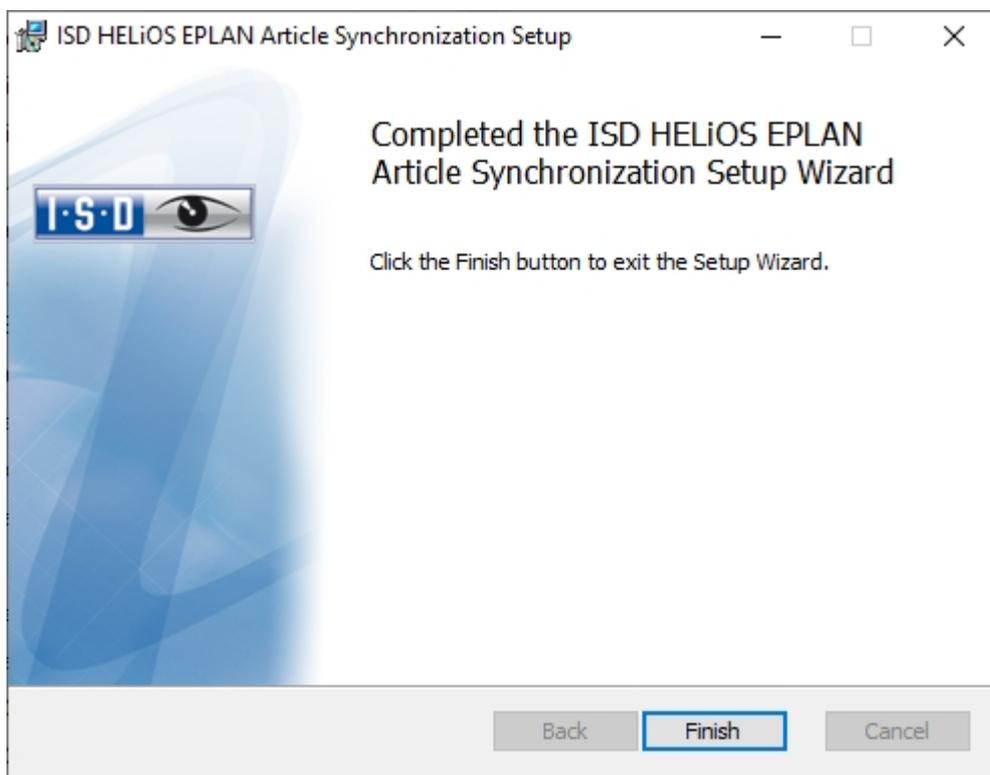
OK Save Cancel

The existing system data source will be suggested. **User** and **Password** are identical to those for the **ODBC login**. If you use a Vault Server, activate the **Vault Server** checkbox. Enter the name of the Server in the **Address** input field, and the Server Port of the Vault Server in the **Port** input field. These can be found at  > HELIOS Options > Database > General > Vault Server .

Click **Save** to store the **Extended settings** in an **.ini file**. Confirm with **OK**.



Click **Install** to start the installation.



After successful installation, the EPLAN menu will contain the **Synchronize articles with HELiOS** function in the **PDM** menu.

Configuration

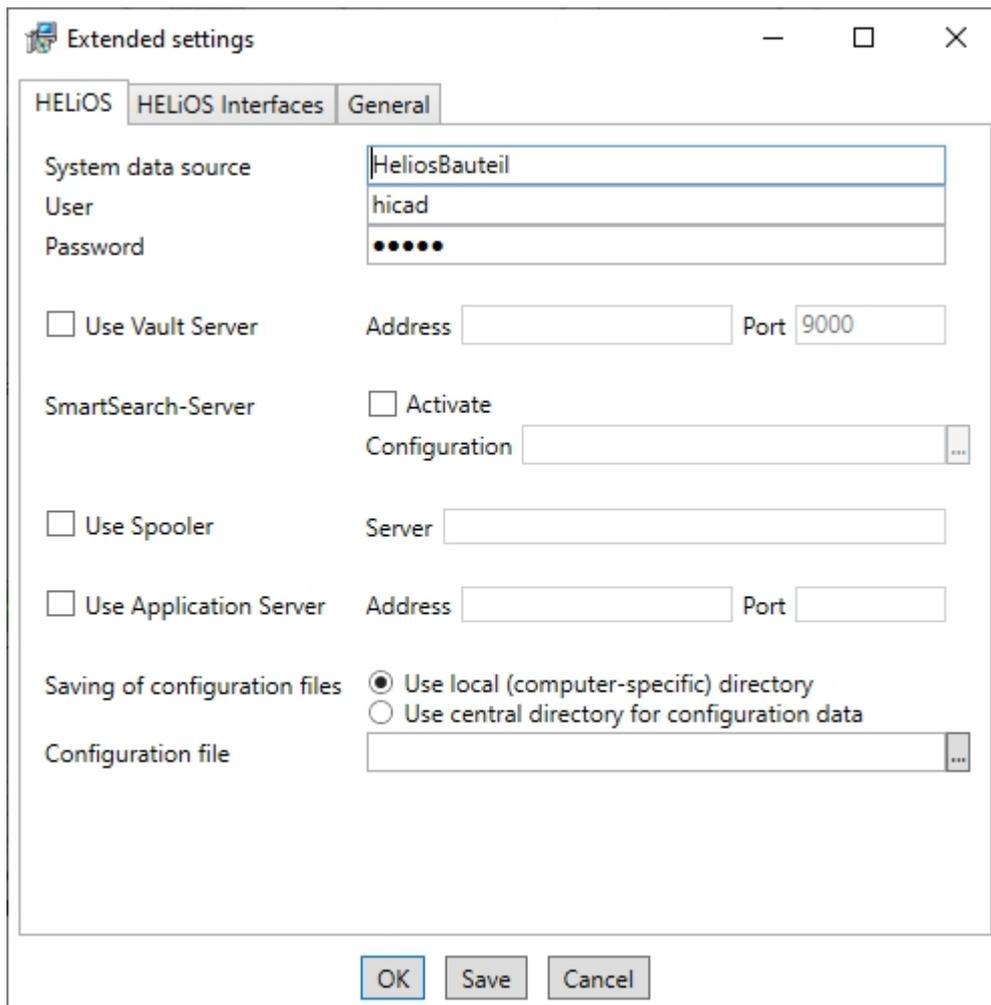
Company- or user-specific requirements can be conveniently adapted to the configuration.

- Configuration HELiOS (Central Distribution of Settings)
- Parameter Configuration for HELiOS

Configuration HELiOS (Central Distribution of Settings)

During installation of HELiOS you may either import the HELiOS settings (e.g. user interface, masks and attribute assignments) as a ZIP package as usual or provide them locally (in a network folder). HELiOS then checks for newer settings when the application is started and updates the local settings accordingly.

During the optional query for **UI configuration**, it is possible to distinguish between a local and a central (cross-computer) directory. This allows you to save the HELiOS configuration for several workstations in a central directory instead of having to "distribute" it to the individual local directories. To do this, create a ZIP file in HELiOS under **HELiOS Options > MANAGE... > Export settings**.



If you select the option **Use central directory for configuration data** in the new or update installation, a **directory** (e.g. network drive) must be selected via Windows Explorer  instead of the local **Configuration file** in .ZIP format.

Change Installation

A **Change Installation** from HELiOS offers the option to change a central configuration subsequently. However, a subsequent selection of a local Configuration file is not required here. If you would like to change the configuration file subsequently, use the **HELiOSConfigImport.exe** tool.



Please note:

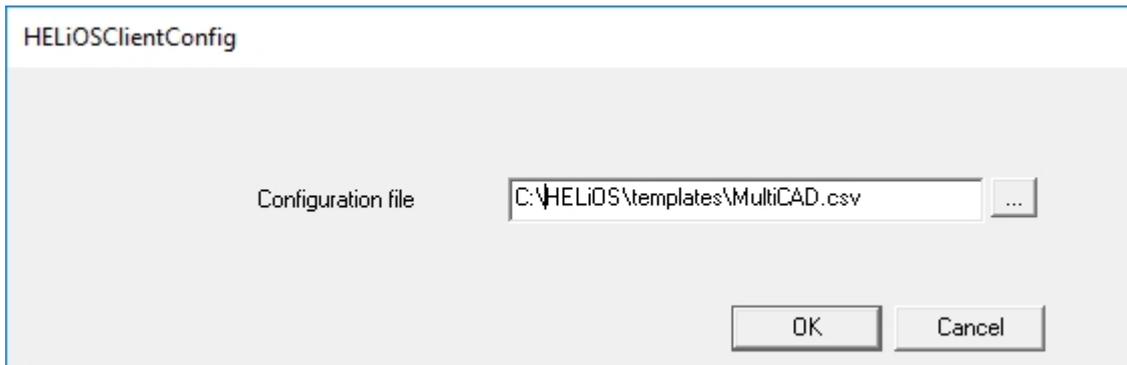
- Settings files that are provided by the administrator in a central directory must be selectively copied to that directory. The directory structure provided by HELiOS must be observed due to the dependency on files. This must correspond to the directory structure defined in **%APPDATA%\ISD Software und Systeme\HELiOS 2022**. If in doubt, contact the ISD consulting team if you have any further questions.
- If the set configuration directory is not accessible at runtime, HELiOS behaves as if it is empty. This means that the program starts without updating the interface configuration.
- During the update installation of HELiOS for an older HiCAD version (before 2020), the option for setting the configuration directory is missing and can only be adjusted via the registry. If you have any questions, please contact the ISD consulting team.
- When updating an older HELiOS to HELiOS 2020 or higher, old mask files (in the \sys\ directory of the installation) are converted to the new XML format during the process and saved under %Program Data%. This conversion is not dependent on whether the local or central directory was selected for the interface configuration. The old configuration file can then be found in a backup directory created by the operation below the installation folder.

- The new masks at **%Programdata%** should not be overwritten in any case, because these are the "delivery status", which may be updated by later update installations. If masks are edited and changed with the mask editor, they are stored at **%Appdata%** and are called up by HELiOS when working in corresponding masks from this directory. This means: If masks are to be distributed uniformly to different workstations, they must be saved under **%Appdata%** and not (!) under **%Programdata%**

Parameter Configuration for HELiOS

HELiOS provides appropriately adjusted user interfaces and configurations for various interfaces. During installation of HELiOS the **MultiCAD.csv** file, that sets up the templates required for the operation of the interface, will automatically be run via the **HeliosClientConfig.exe** program.

You can also load an own *.csv file subsequently if desired. In the EXE directory of your HELiOS installation, start the **HeliosClientConfig.exe** program. Click the  button to select the path of the CSV file and confirm with **OK**.



Furthermore, HELiOS offers template files for title blocks (AutoCAD drawing frames with database attributes) and HELiOS masks that have been adjusted for Multi-CAD operation:

- In the ...templates directory of your HELiOS Desktop installation you will find the adjusted HELiOS masks for Multi-CAD operation in the ...MultiCAD folder. Copy them to the ...sys directory of your HELiOS installation.
- In the ...templates\AutoCAD\ directory you will find drawing frame templates that you can copy to the corresponding templates directory of your CAD software

Update

- Licensing in Case of Updates
 - Updating the Server License
 - Updating Local Licenses
- Carrying Out the Installation
- Data Compatibility of HiCAD/HELIOS
- Update of HELIOS
 - Backups Before Performing the HELIOS Update-Installation
 - Update Installation of HELIOS
- ISD Update Service
 - Installing the ISD Update Service
 - Using the ISD Update Service
 - ISD Update Service: Settings
- Updating the HELIOS Database (Database Schema)
- Mask Converter for HELIOS
- Manual Registration of Multi-CAD Add-ins

Important notes on updates!

Hardware Exchange

If you use local HELIOS licenses and want to exchange any hardware components, modify the partitioning of, or re-install the operating system, you need to revoke the existing license on the HELIOS workstation first, and request, using the new hardware or modified configuration, a new license key (further information on the procedure can be found in the software documentation).

If a revocation is technically possible, but will not be performed, the ISD reserves the right to charge costs in an appropriate amount for the reissuing of the license. If the license will not be revoked, or if such revocation is no longer technically possible, the ISD may request proof that the unrevoked license is no longer utilisable; in case of failure to produce such proof, the ISD reserves the right to refuse the transfer of the license to a new hardware.

Licenses

Before updating HELIOS, you must deactivate all licenses (Server Licenses or Local Licenses). The procedures for Server Licenses and Local Licenses are different.

Data compatibility

When performing a HELIOS update, the update start mask shows you the HELIOS subversion, which needs to match the existing database. If this is not the case, only an error message will appear when you start HELIOS. To update the database schema, use the program HeliosDbUpdate.exe. If the database schema requires an update, you can **no longer access** the database with older HELIOS versions. Therefore, all workstations accessing the database need to be readjusted accordingly at the same time.

Administrator

Before carrying out an update you should inform the responsible Administrator to ensure a well coordinated switch to the higher version.

Update HELIOS

In the context of HELIOS Update Installations, the last 5 release cycles are supported. As of HELIOS 2022 (Version 270*.*) , you can only update installations from 2017 (Version \geq 2200.0) and newer. (See also [Carrying out the installation.](#))

Backup HELIOS

It is mandatory to make a database backup before carrying out an update, as the update can normally only be reverted by importing the backup.

HELIOS Data base schema

As existing datasets with non-compliant conditions may cause conflicts during the central update process of the HELIOS delivery database, you should consider the following:

1. **Do a database backup:** You should make sure that a backup of your HELIOS database has been created before the update. This can be done with the HELIOS Database Creator or via your SQL server application. Please contact the ISD hotline if you have any questions or need support for your individual system architecture.
2. **The log file of the update:** If any conflicts occur during the update, they are traced in the log file **HeliosDbUpdate.txt** (in the system path %appdata%\ISD Software and Systems\HeliosDbUpdate\). Have this file ready if you contact the ISD hotline for troubleshooting and successful updates.

New Mask Editor in HELiOS 2020

Due to the complete revision of the Mask Editor in HELiOS 2020, the previous mask format has been changed from .MSK to .XML. In addition, mask files are now managed outside the installation directory, resulting in some changes in the system architecture that Administrators must consider:

- The masks of older versions (before V 2500.0) that were previously stored in the SYS directory of the installation are automatically converted to the new XML format in case of an update installation and stored at **%Programdata%**.
- The new masks at **%Programdata%** should not be overwritten under any circumstances, as these represent the "delivery status", which will be updated by later update installations. If masks are edited and changed with the Mask Editor, you must store and call them at **%Appdata%**.

Updating the HELiOS-Inventor interface

For an update of the Inventor interface from an older HELiOS version to HELiOS 2020 (Version 2500) or higher (and the corresponding update of the database schema) the following changes have to be considered:

1. The structure identifiers for Inventor parts must be updated.
2. The standard part and semi-finished product identifiers are changed to a document-based (instead of article-based) management.

An update installation can only be carried out after an appropriate preparation of the migration.

In case of an update, please contact the Consulting team of the ISD Group. New installations of HELiOS 2020 and the associated database are not affected.

Updating the HELiOS-SOLIDWORKS interface

For an update of the SOLIDWORKS interface from an older HELiOS version to HELiOS 2020 (Version 2500) or higher (and the corresponding update of the database schema) the following changes have to be considered:

Since a migration of the configuration IDs is performed during the update, an update installation can only be performed after the migration has been prepared accordingly. In the event of an update, contact the Consulting team of the ISD Group. New installations of HELiOS 2020 and the associated database are not affected.

Important update notes for attribute mapping in title blocks

Until HELiOS 2019, attribute mapping at SOLIDWORKS was done by the following files:

- heliossw_titleblock.dat (attributes for the title block),
- helios_cs_global_config.dat (attribute mapping/presetting in both directions),
- sw_comp_name.dat (display in the model tree in CAD).

As of HELiOS 2020 (Version 2500.0), the mapping must be set up again manually. No migration tools exist.

Up to HELiOS 2019, the attribute for the title block in AutoCAD was created using the following files:

- heliossac_titleblock.dat,
- helacblock.xml

As of HELiOS 2020 (version 2500.0), the mapping must also be set up manually here.

In case of an update, please contact the Consulting team of the ISD Group.

HELiOS List attributes

The database subversion update (HELiOSDbUpdate.exe) checks from HELiOS 2022 onwards whether list attributes with other data types than VARCHAR exist. If this is the case, the database subversion update for updating the database schema will not be carried out. In this case, please contact the ISD in order to migrate with the help of the Consulting the corresponding attributes to data types that will be supported in the future.

Important notes for administrators during a HELiOS update installation working with the HELiOS integration for Inventor, AutoCAD and SOLIDWORKS!

When updating the database to HELiOS 2019 Service Pack 2 or higher, the old workspace is checked for documents in progress. These are documents with the pen symbol in the respective (old) workspace dialog, or entries of locked documents in the Workspace Manager from HELiOS Desktop (on the right hand side).

Should the check find relevant documents, the following message appears:

The update of the database cannot be performed because there are still locked documents in old local work areas which will not be supported in the future. After this update, only work areas with new administration are supported and automatic migration is not possible. More information can be found here.

Material Manager

The Material Manager (materialmanager.exe) that enables a taking over of materials from Catalogue Editor to HELiOS needs to have the same database schema as HELiOS. Therefore the Material Manager will also be updated.

Licensing in Case of Updates

Before updating HELiOS, you must deactivate all licenses (Server Licenses or Local Licenses). The procedures for Server Licenses and Local Licenses are different.

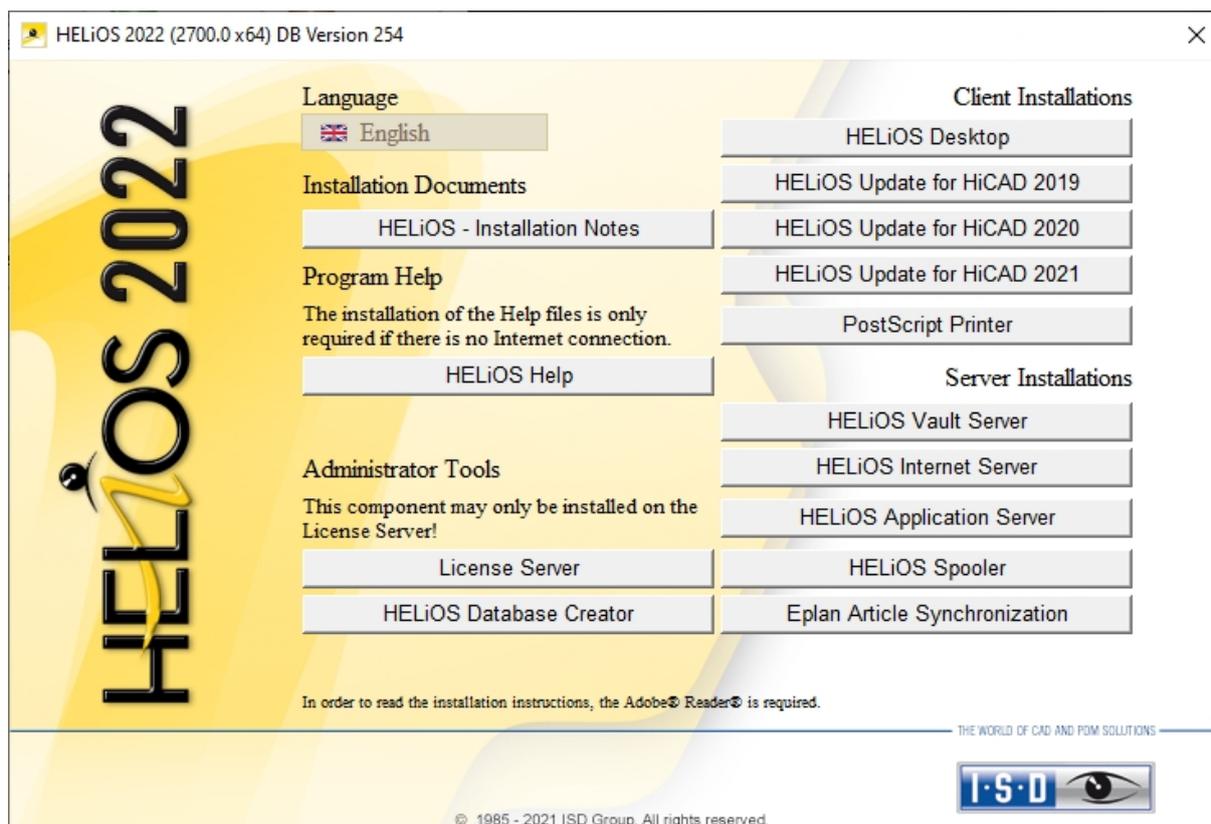
Updating the Server License

For a Server license the License Server software and the License Management tools may require an update. Furthermore, you need to deactivate the licenses for the old Version first, and then activate those for Version 2022.

You can start with the installation of HELiOS before or after activation of the new licenses; a starting of the software is, however, only possible after activation of the new licenses.

The current Version of the License Server, Sentinel RMS License Manager 8.6.2, can be found on the installation medium of HELiOS 2022. If you have an older version, you need to uninstall this version with the help of the Windows Control Panel. First, uninstall the **Sentinel RMS License Manager** there and (if there are any) the AdminToolsServer.

You can then install the new version of the License Server from the installation medium. Start the installation wizard. In the selection mask of the installation wizard, click on the **License Server** button.



Before you can use the new licenses of HELiOS 2022, you need to deactivate the old licenses with the help of the License Manager. This tool is located in the Windows **Start** menu at **All programs > ISD Software und Systeme > Administration**.

After starting the **ISD License Manager** the **License Activator** tab will be active. Normally, the **EID** (Entitlement ID) field is still filled in and the fields **E-mail** and **Password** are still empty. The activated modules of the old Version are highlighted (blue). Click on the **Deactivate** button to revoke the activation of these modules.

To activate the new licenses you require the **ISD License Manager**. After installing HELiOS 2022 this tool will be available to you in the **Start** menu of Windows at **ISD Software und Systeme > Administration**.

Another prerequisite for the activation of the new licenses is their requesting via the new Update form (isdgroup.com > [Support & Schulung](#) > [ISD Wiki](#) > [Download](#)) and the subsequent provision of the licenses by the ISD. .

Start the **ISD License Manager**, which you can find in the **Start** menu of Windows at **ISD Software und Systeme > Administration**(C:\Program Files (x86)\ISD Software und Systeme\AdminToolsServer\exe).

On the **License Activator** tab, enter the **Entitlement ID**, your **E-mail address** and your **Password** and click **Login**. After connecting to the **ISD License Server**, all your purchased licenses will be shown. Use the checkboxes to select the modules that you wish to activate and confirm your selection with a click on the **Activate** button.

After successful activation you can start HELiOS.

Updating Local Licenses

Before installing HELiOS 2022, you need to deactivate the local licenses of the old version on your workstation. After installing HELiOS 2022, you need to activate the new licenses.

To deactivate the old licenses you use the **ISD License Manager**, which is located in the Windows start menu at **ISD Software und Systeme > Administration** (C:\Program Files (x86)\ISD Software und Systeme\AdminToolsServer\exe).

On the **License Activator** tab, click on the **Deactivate** button to revoke the activation of the modules, i.e. to deactivate them. After successful deactivation, a corresponding message will be displayed.

To activate the new licenses you require the **ISD License Manager 4.0**. After installing HELiOS 2022 this tool will be available to you in the **Start** menu of Windows at **ISD Software und Systeme > Administration**.

Another prerequisite for the activation of the new licenses is their requesting via the new Update form (isdgroup.com > [Support & Schulung](#) > [ISD Wiki](#) > [Download](#)) and the subsequent provision of the licenses by the ISD. After installing HELiOS, start the **ISD License Manager**, which you can find in the **Start** menu of Windows at **ISD Software und Systeme > Administration**(C:\Program Files (x86)\ISD Software und Systeme\AdminToolsServer\exe).

On the **License Activator** tab, enter the **Entitlement ID**, your **E-mail address** (the address to which the E-mails of the Activation@isdgroup.de were sent) and your **Password** and click **Login**.

After connecting to the **ISD License Server**, all your purchased licenses will be shown. Use the checkboxes to select the modules that you wish to activate and confirm your selection with a click on the **Activate** button. The selected modules will then be activated on your workstation. You can deactivate them again at any time to enable their use on a different workstation.

After successful activation you can start HELiOS.

Carrying Out the Installation

The installation of HELiOS can be carried out by the Consulting of the ISD. In the context of Update Installation, the last 5 release cycles are supported.

We recommend to note the following instructions:

1. Users with sufficient background knowledge can generally perform the updates themselves.
2. When performing an Update Installation, the "Installation Notes" must be read/considered thoroughly. The responsibility lies with the user. Updates generally fall under the category "Consulting". Therefore, questions about the Update Installation that go beyond purely functional questions about the installation are subject to a charge.
3. When performing an Update Installation, in addition to reading the "Installation Notes", we always recommend carrying out a test update as part of a test installation first and, only if this is successful, carrying out the update in the live system. Customer-specific adjustments to the HELiOS installation may have to be updated/adjusted as part of the test installation.

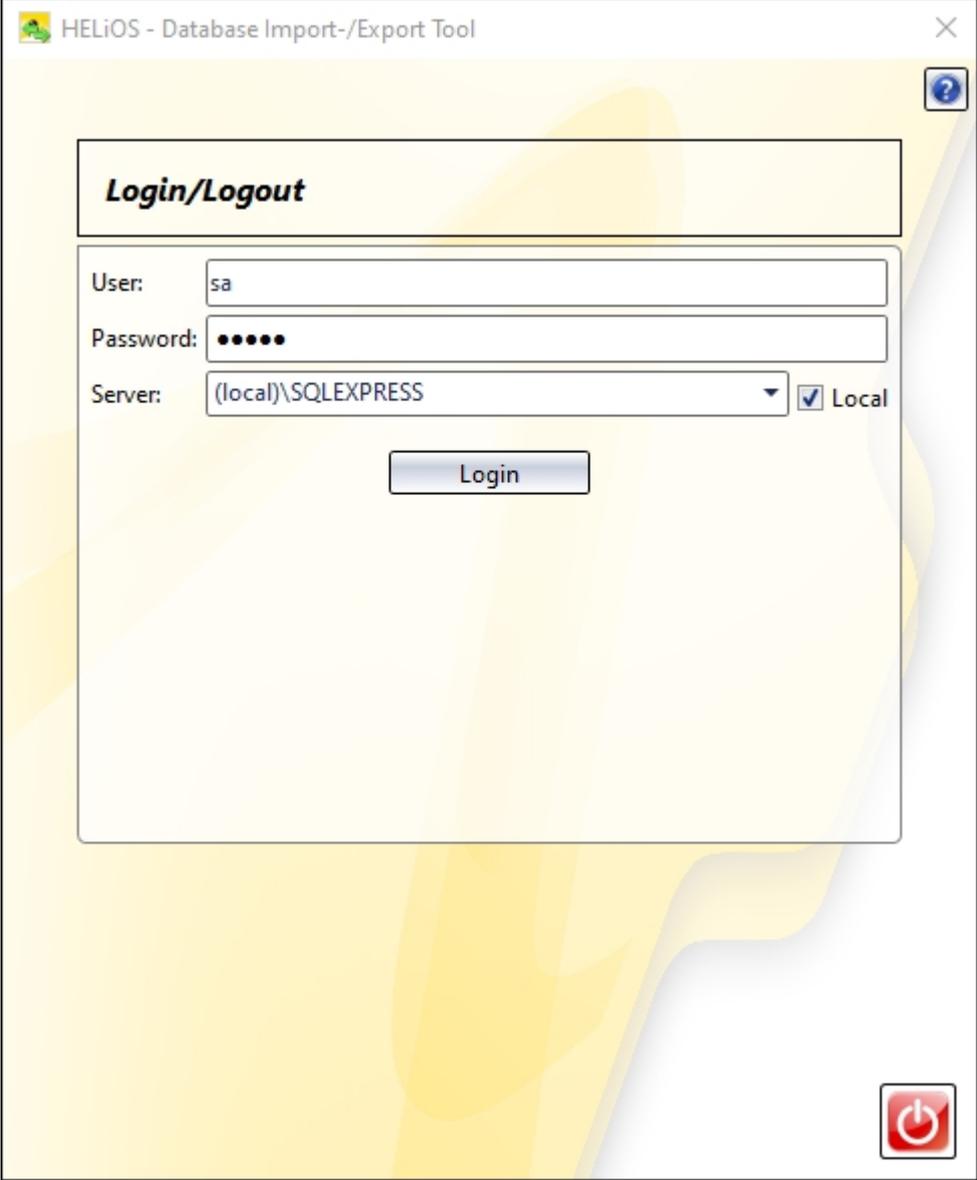
Since the effort of an update increases with the number of skipped versions, we generally recommend an installation by the ISD. This also saves the user from having to familiarize themselves with the Update Installation topics and ensures that nothing will be forgotten.

Update of HELiOS

The ISD recommends performing an Update Installation when switching from an old version to HELiOS 2022 or for the installing of Service Packs and Patches. Before the update, create a backup of the [HELiOS Database](#).

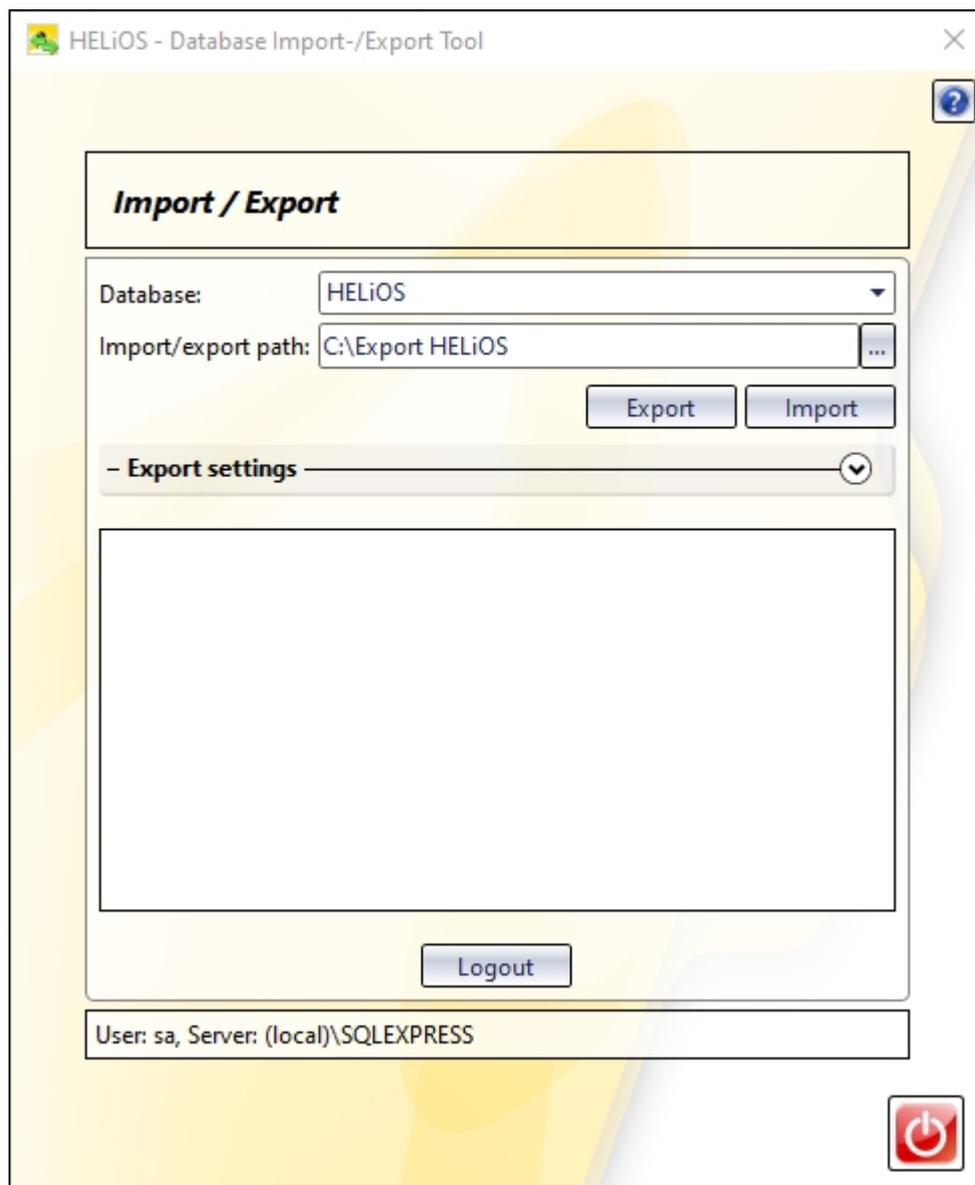
Backups Before Performing the HELiOS Update Installation

Before starting the Update Installation of HELiOS, you should create a backup of the database (see also [InstallationGuide Microsoft SQL Server](#)). To do this, start the **HELiOS Database Creator**.

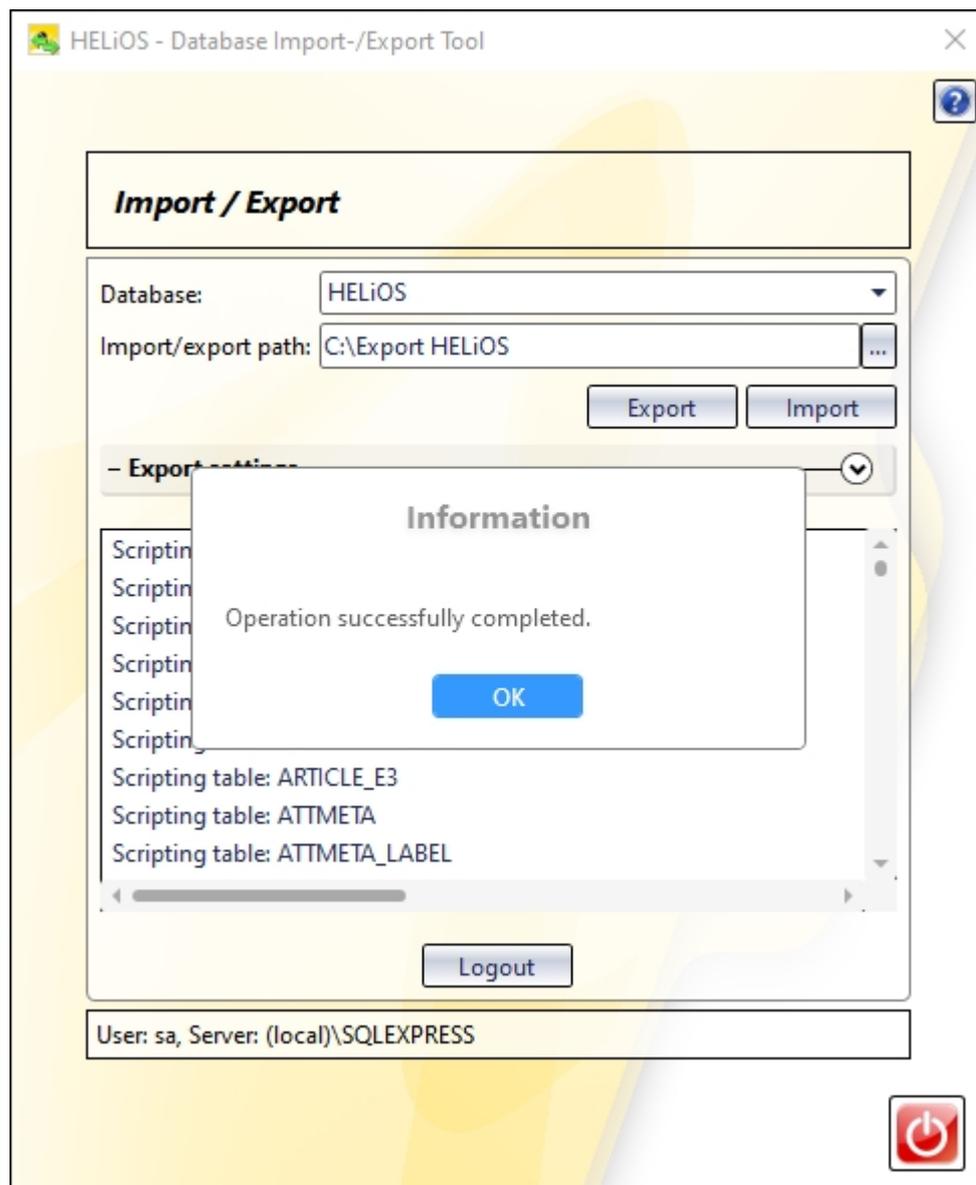


The screenshot shows a dialog box titled "HELiOS - Database Import-/Export Tool". Inside the dialog, there is a section titled "Login/Logout". Below this title, there are three input fields: "User:" with the text "sa", "Password:" with six dots, and "Server:" with a dropdown menu showing "(local)\SQLEXPRESS" and a checked "Local" checkbox. A "Login" button is centered below these fields. In the bottom right corner of the dialog, there is a red power button icon.

After entering the user data - user **sa**, the password and the SQL Server to be connected to - select **Login**.



Then enter the name of your database and the export path. The export path must not contain any files. Click on the **Export** button.



After exporting successfully, a message is displayed which you confirm with **OK**.

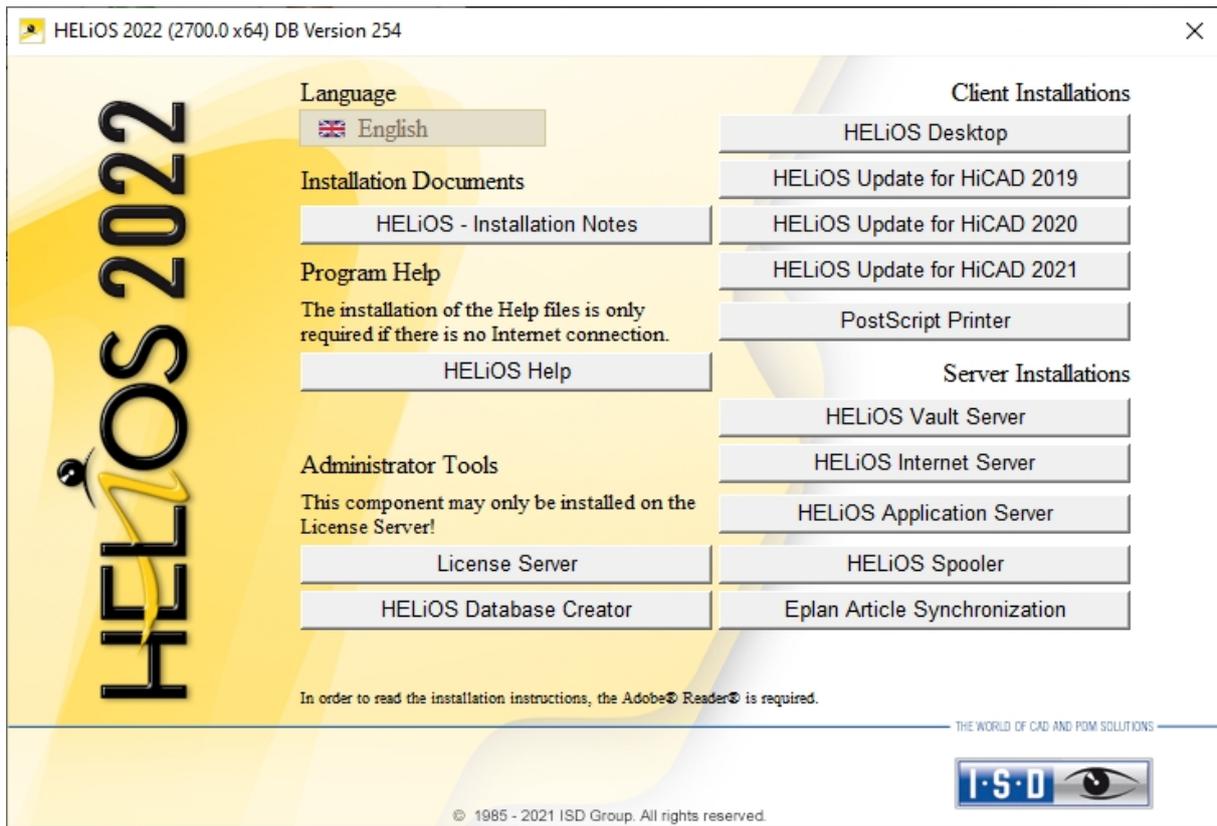
The log file of the procedure can be found at %Appdata%\Roaming\ISD Software und Systeme\HELiOS%\Datenbankname%_Helios_Export.log and the configuration can be found at %Appdata%\Roaming\ISD Software und Systeme\Helios.DBImportExport\DBImportExportConfig.

Update Installation of HELiOS

You can conveniently download the current HiCAD version in the [Download Area](#) in the ISD Wiki. Please note that a HELiOS update usually requires you to also update the database.

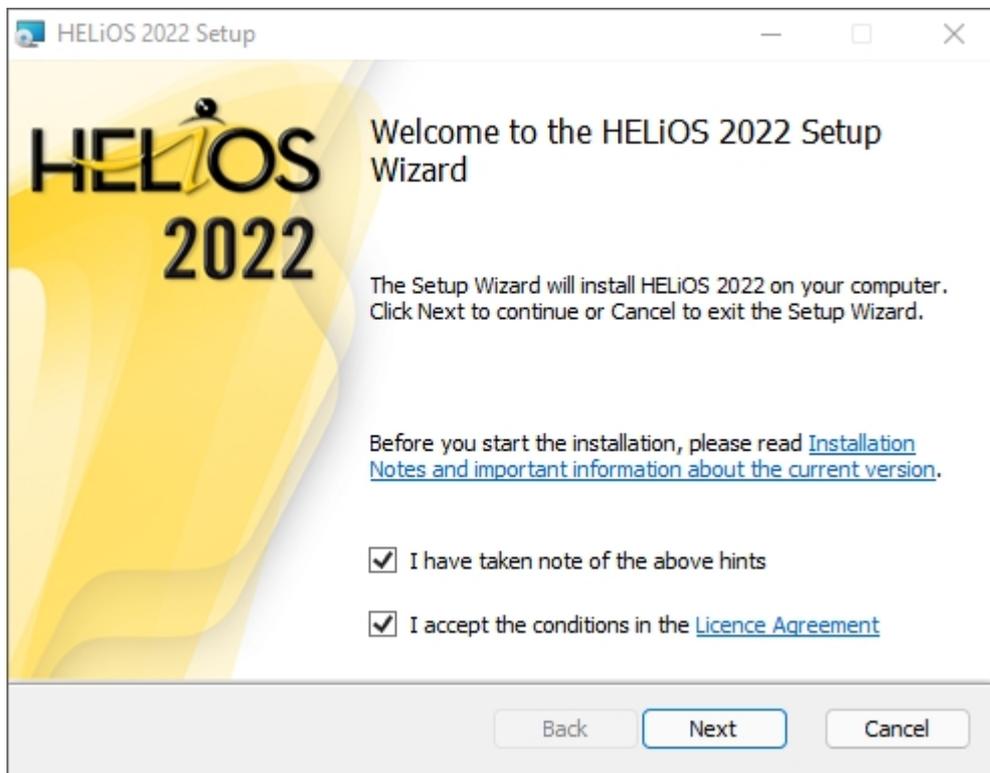
Close all other applications and start the installation wizard. For the installation, it is essential to start the **setup.exe** file from the root directory of the ISO file; this is the only way to ensure that the installation wizard recognises the operating system correctly and installs the appropriate HELiOS version.

Then select the language of the version.



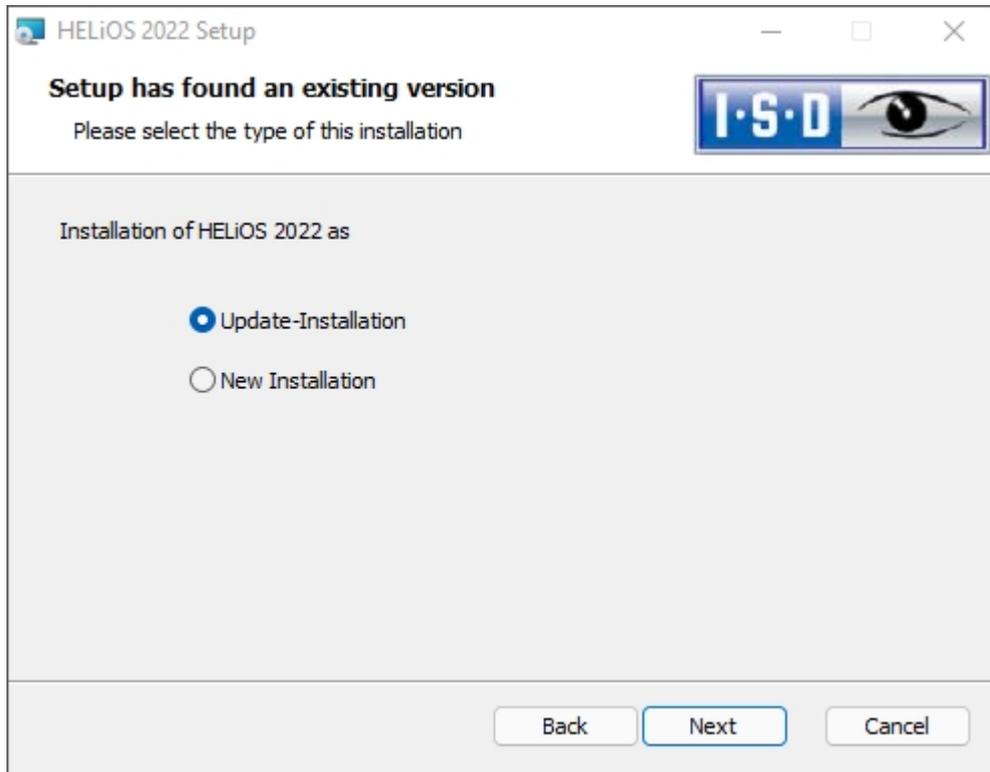
Click on the **HELiOS Desktop** button.

Before using HELiOS, Microsoft .NET Framework and the Visual C++ Runtime Libraries must be installed on the computer; if required, these packages will now be installed.

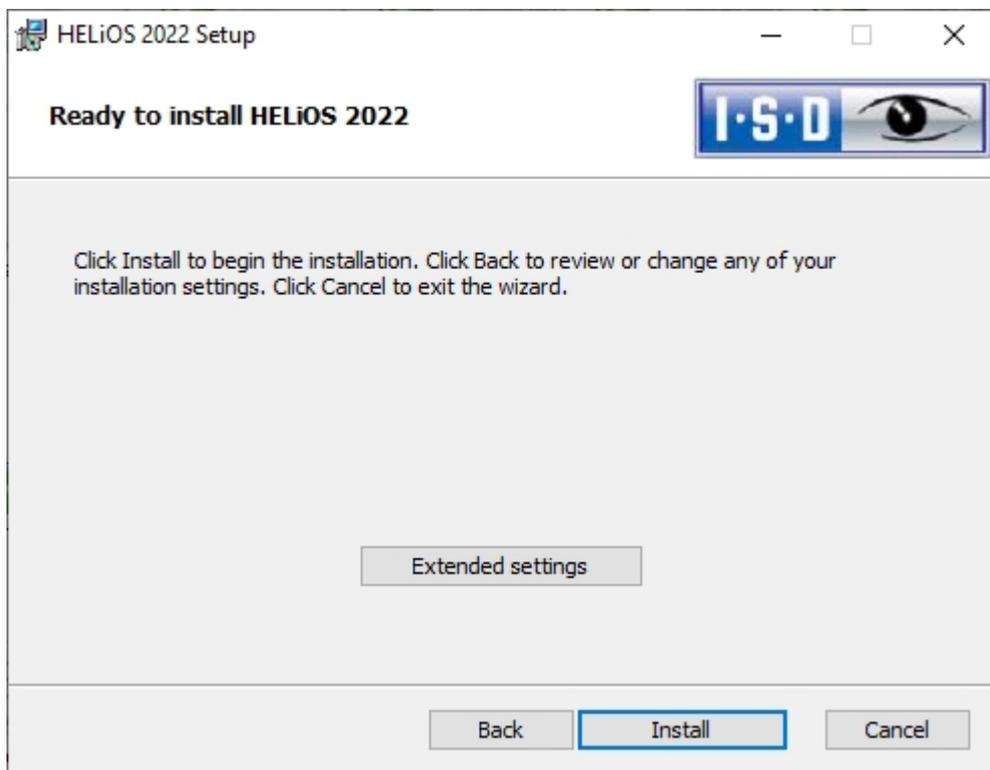


Please read the **Installation Notes** and the [Licence Agreement](#) carefully.

If the installation program finds an already installed HELiOS Version, this will be indicated in a corresponding dialogue window.



Activate the **Update-Installation** option and click **Next**.



You can now start with the installation or modify the **Extended Settings** for HELiOS.

Extended settings

HELiOS HELiOS Interfaces General

System data source

User

Password

Use Vault Server Address Port

SmartSearch-Server Activate
Configuration

Use Spooler Server

Use Application Server Address Port

Saving of configuration files Use local (computer-specific) directory
 Use central directory for configuration data

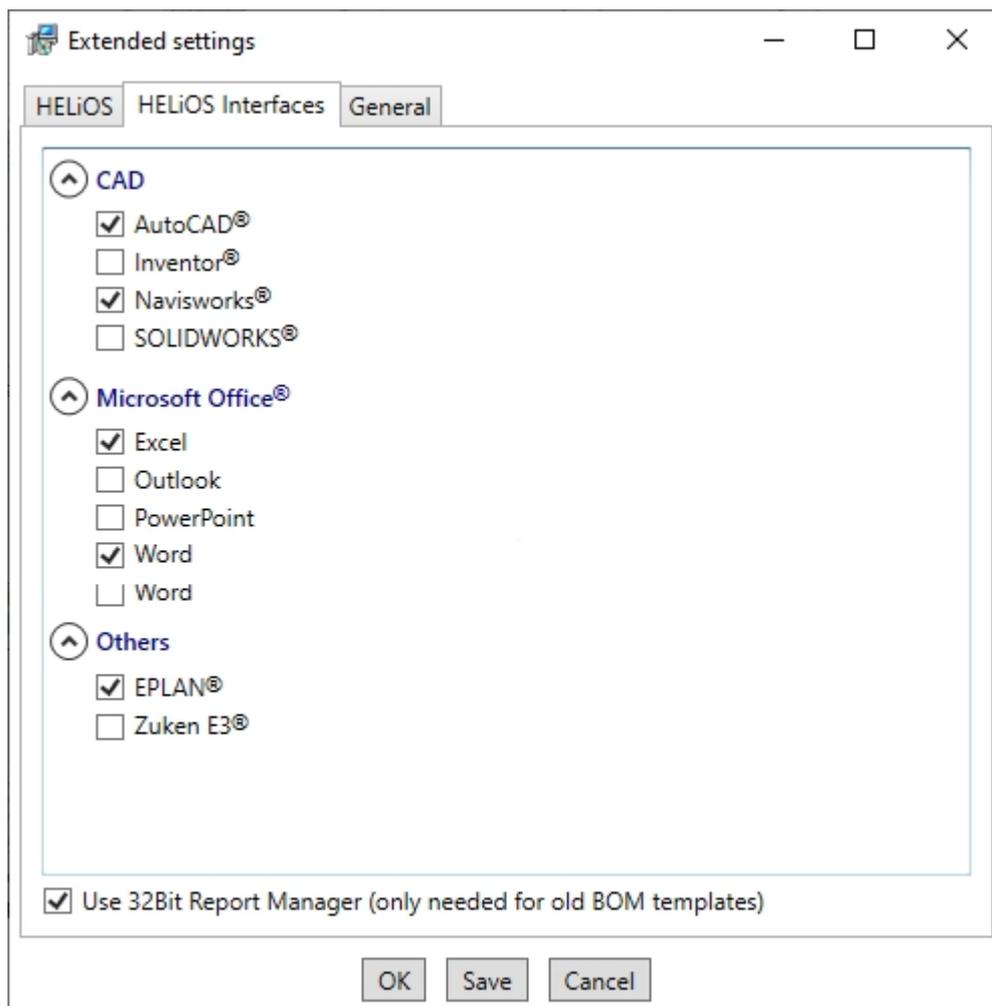
Configuration file

OK Save Cancel

In case of a new installation of HELiOS you can specify an arbitrary name for the system data source. In case of an update, the existing data source will be offered. **User** and **Password** will be identical with the ODBC login.

If you are using a Vault Server, **Use Vault Server** is activated and the **Address** and **Port** are entered. The data of the Spooler is also taken over.

Individual settings in HELiOS can be distributed to other users or workstations (see [Configuration HELiOS \(Central Distribution of Settings\)](#)). To do this, create a ZIP file in HELiOS under **HELiOS Options > MANAGE... > Export settings**. If you then select the option **Use central directory for configuration data** during the installation, you can select the ZIP file via the Windows Explorer in the selection dialogue after clicking the button.



The availability of interfaces with HELiOS depends on the programs that are installed on your computer. With the exception of the Office Interface, you can only interface 64-Bit versions to HELiOS 64-Bit versions. Multiple selection of HELiOS Interfaces is also possible. The HELiOS functions are integrated into the programs that are linked to HELiOS.

Please refer to the [Compatibility Matrix](#) to find out which interfaces to external software are supported by HELiOS.

You can also add interfaces later via the Windows Control Panel. To do this, select **Programs and Features** in the Control Panel, activate **HELiOS** and then right-click to select **Change**. The installation of HELiOS is started and you can select further software on the **HELiOS Interfaces** tab.

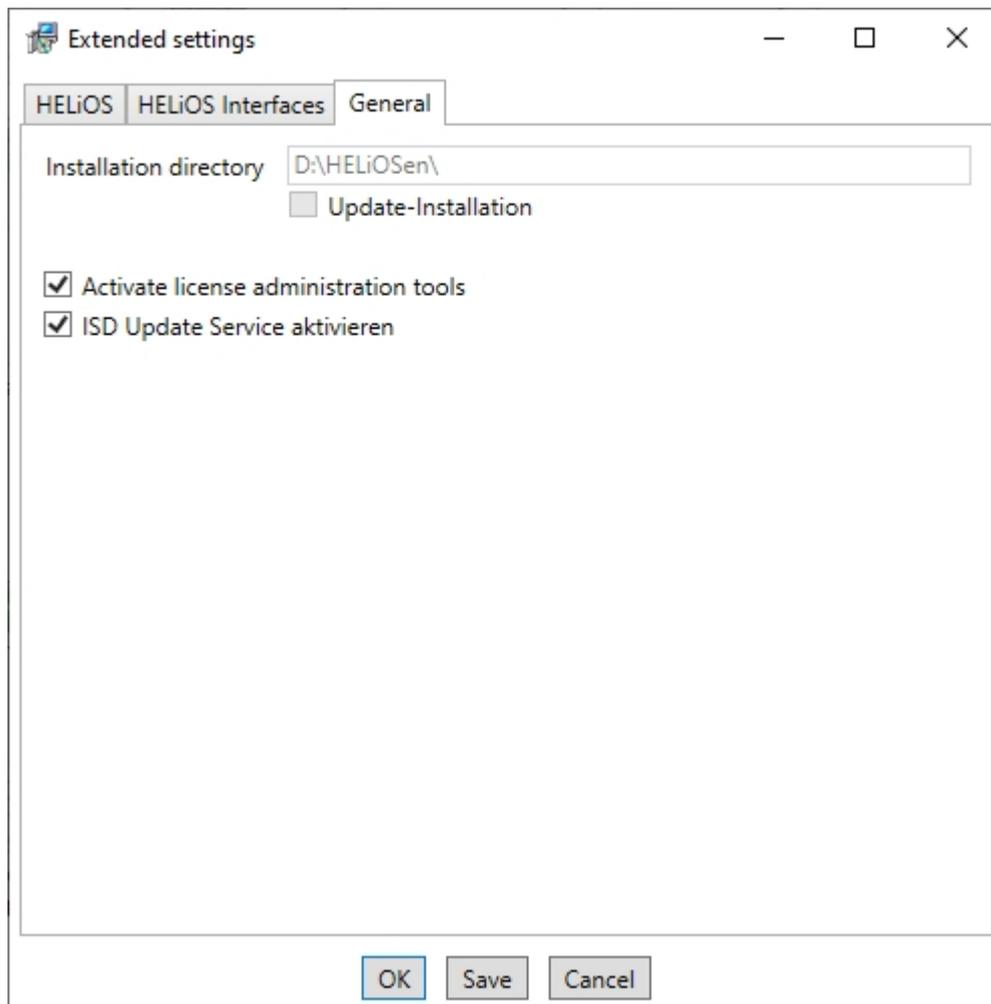
Furthermore, the tool [HeliosCouplings.exe](#) (in the /exe/ directory of the HELiOS installation) is available for establishing interfaces.



Please note:

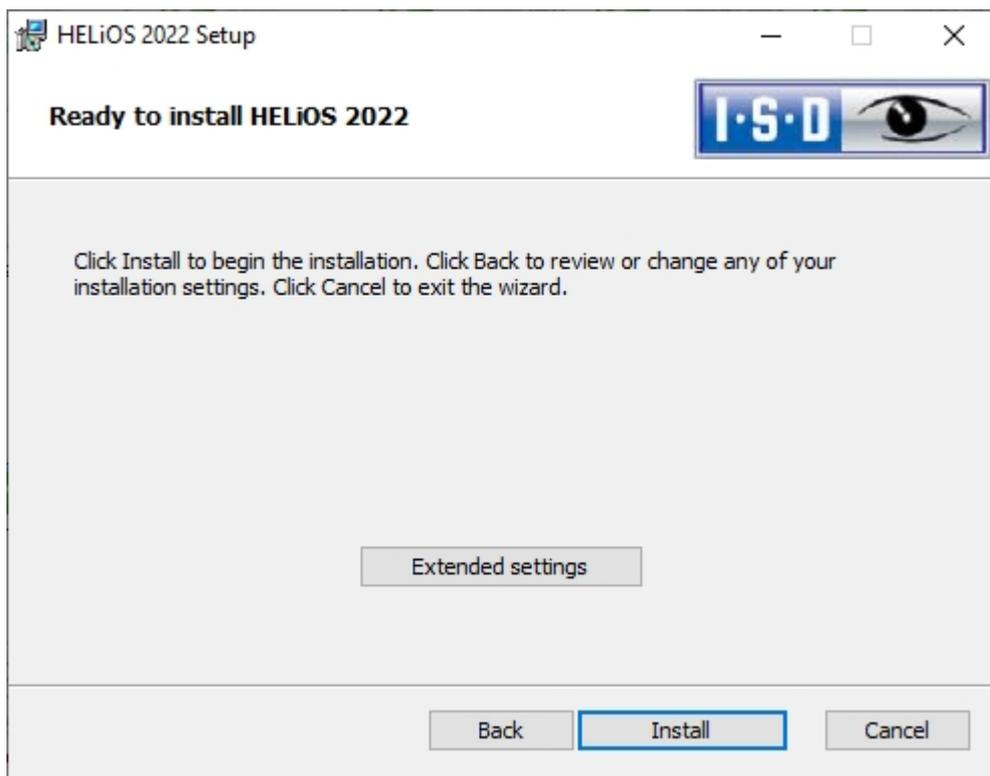
- A prerequisite for establishing interfaces with Multi-CAD software is that the corresponding software is also installed on the corresponding system.
- Establishing an interface between a 32-Bit software and a 64-Bit version of HELiOS is not possible. An exception is MS Office. Here it is generally possible to interface a 32-Bit Office to HELiOS (64-Bit).

- For EPLAN you also require the Article Synchronization Service running separately on the system. You will find the corresponding button in the HELiOS installation mask. For the configuration of the HELiOS-EPLAN interface please contact the ISD Consulting team.
- If you have installed AutoCAD and AutoCAD Mechanical, both will be considered for the interface.

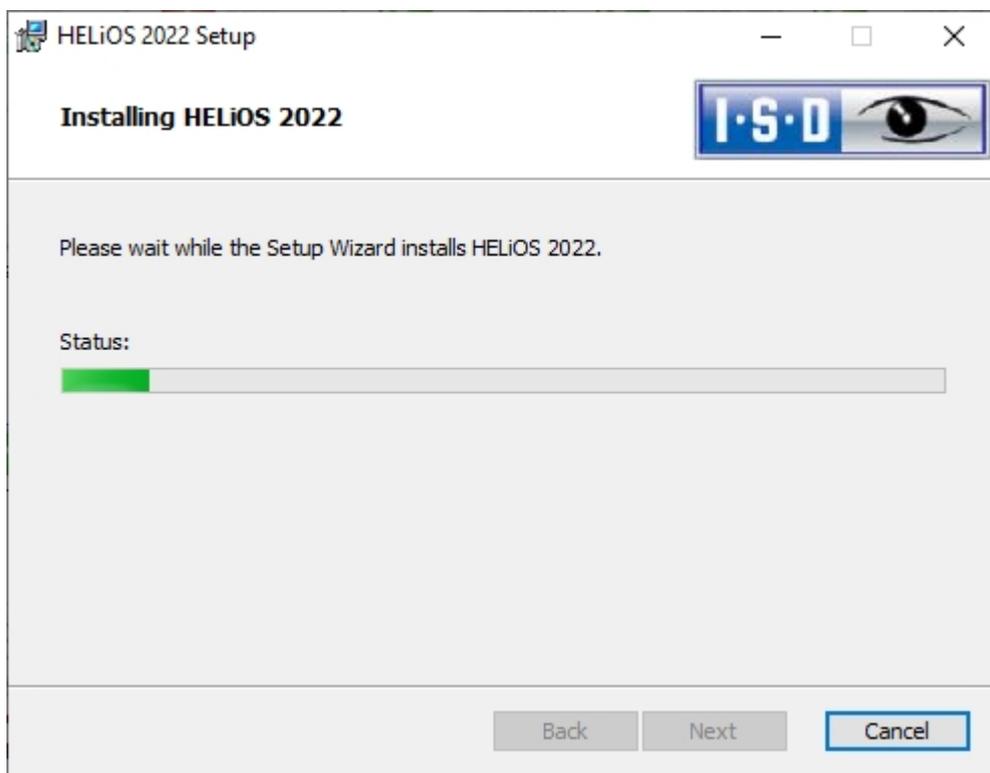


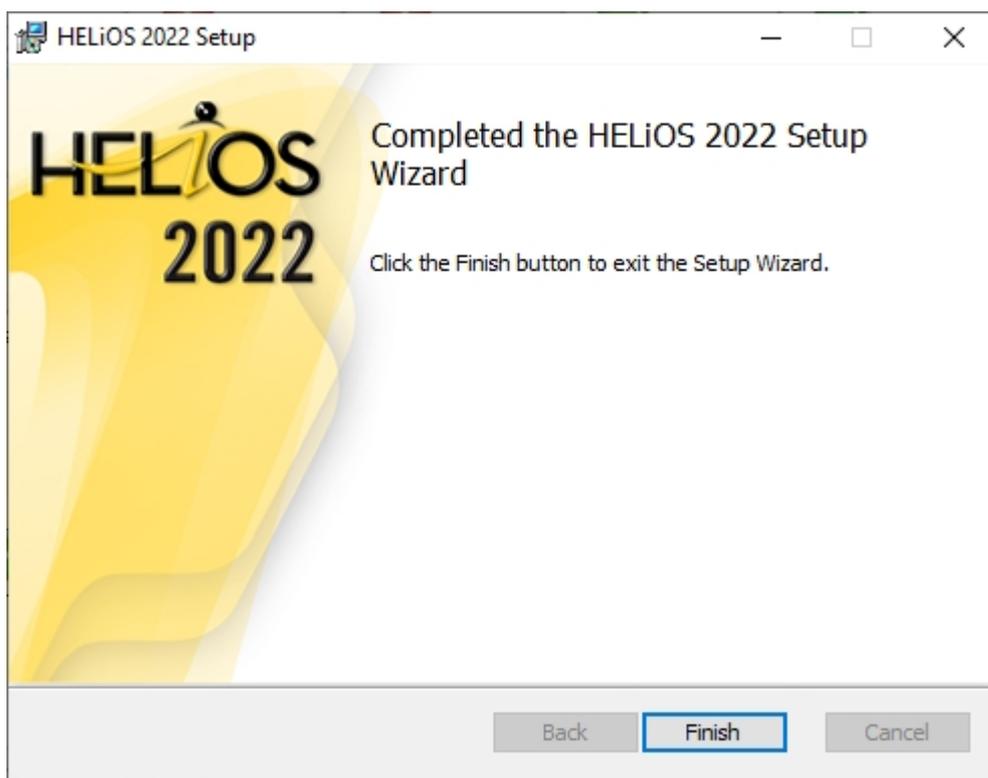
If you checkmark the **Activate ISD Update Service** option, a Hotfix will be searched on the ISD Web Server when you start HELiOS. You can also activate this option subsequently via the Windows Control Panel: There, select **Programs and Features**, right-click on **HELiOS** and select **Change**.

Close the **Extended settings** dialogue with **OK**.



Click on the **Install** button.





After successful installation, you will find the HELIOS  shortcut for starting the program on the Desktop of your computer.

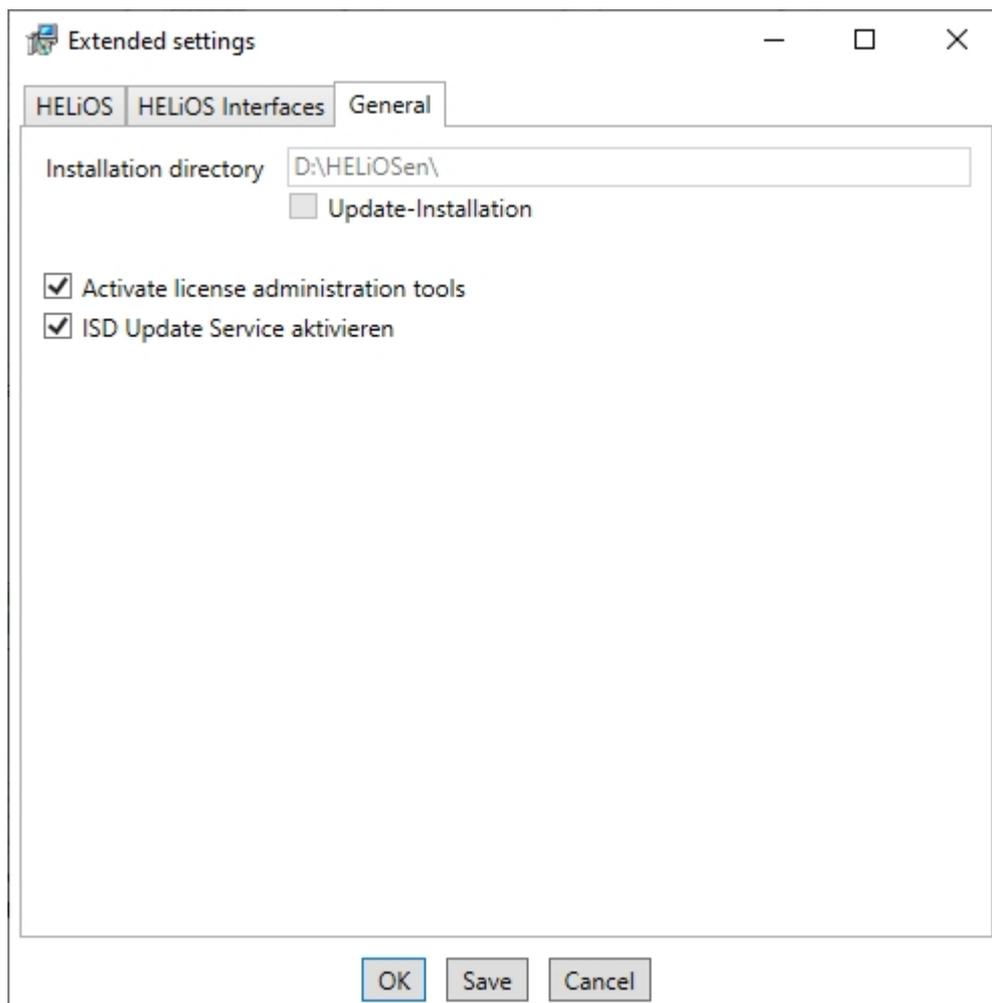
Improvements of the HELIOS functionality require an update of the database. If the database is no longer up-to-date, this will be indicated by a message when HELIOS is started. Use the program [HeliosDbUpdate.exe](#) to update the database schema.

ISD Update Service

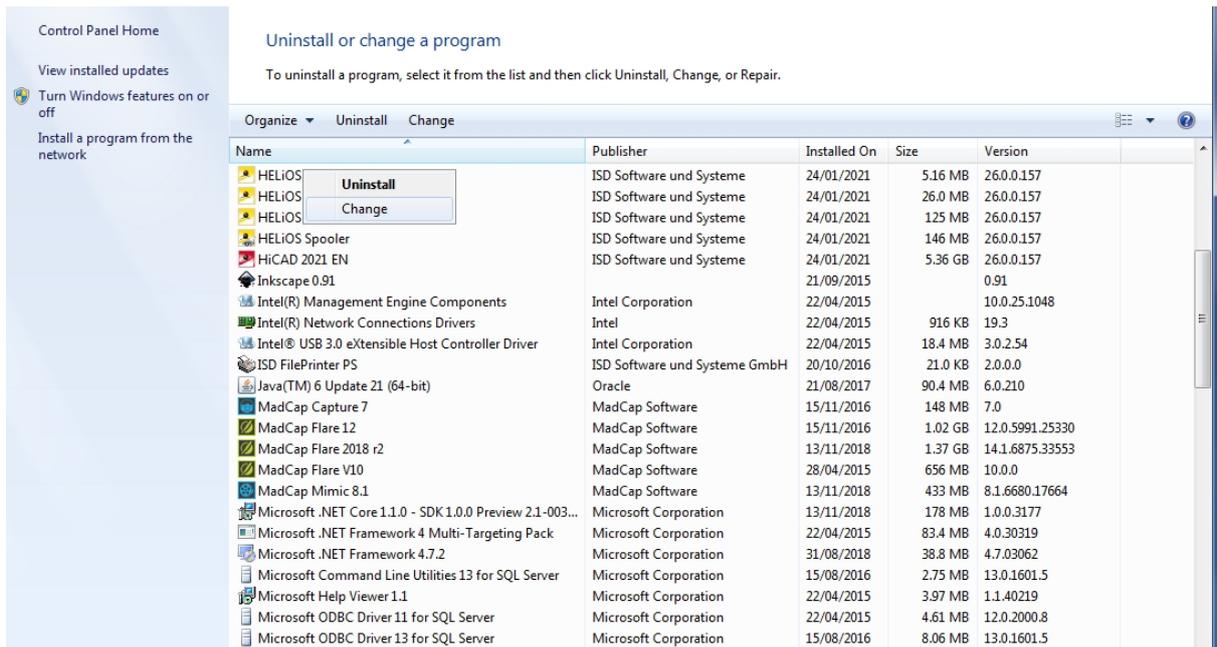
The automatic search for and installation of HELiOSupdates (Hotfixes). For this you require the program **ISDUpdateSvc.exe**, that you can either activate during installation of HiCAD or install via the Windows Control Panel afterwards.

Installing the ISD Update Service

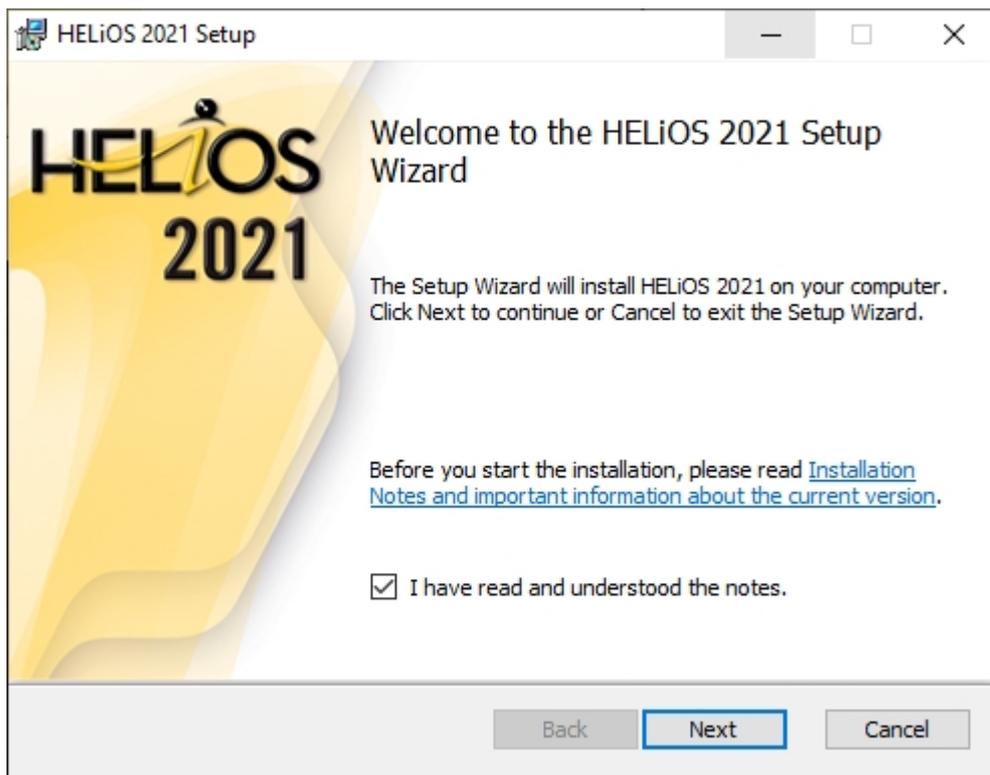
You can activate the automatic search for and installation of HELiOS updates (Hotfixes), either during the installation of HELiOS or, later, via the Windows Control Panel.

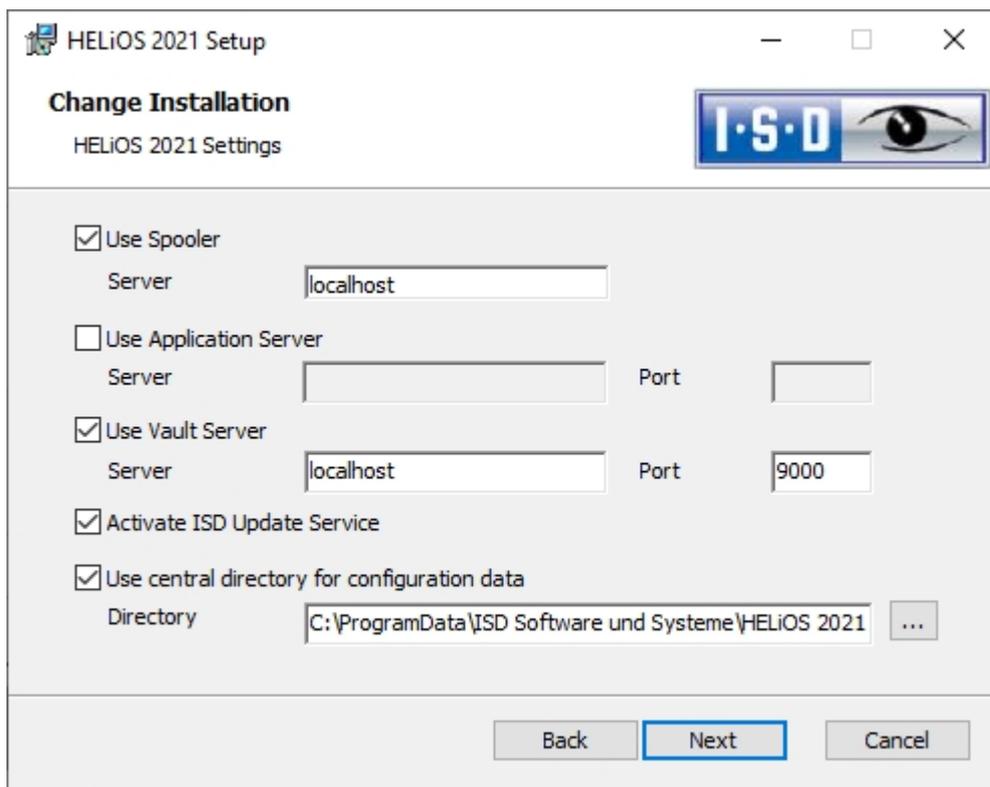


During installation you can go to **Extended settings > General** and activate the **Activate ISD Update Service** option to activate the automatic search for Updates on the ISD Server. You can also activate or deactivate this option afterwards via the Windows Control Panel.



In the Windows Control Panel, choose **Programs and Features**, right-click on **HELiOS** and choose **Change**.



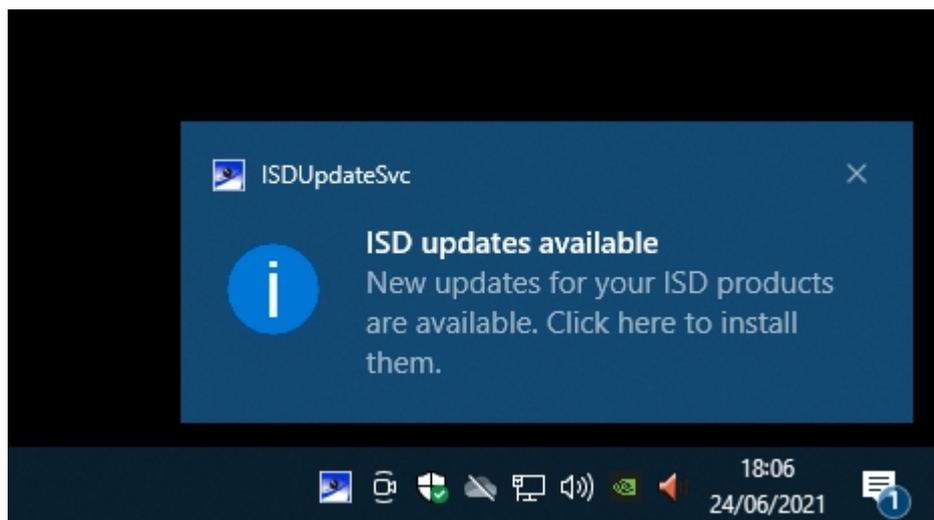


Checkmark **Activate the ISD Update Service** and click **Next**. After all options have been queried, click **Change**.

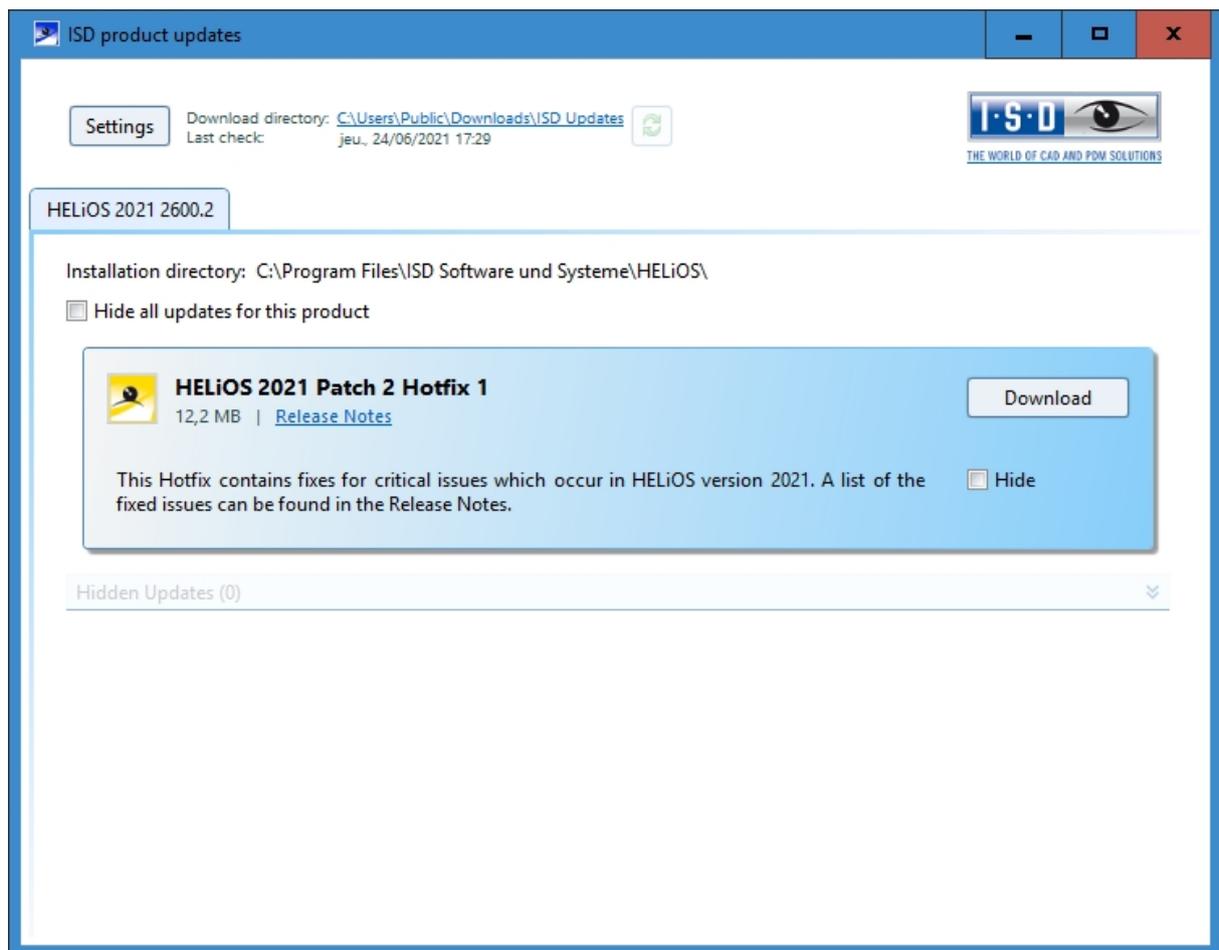
After successful installation, the program ISDUpdateSvc.exe will be located by default in directory C:\Program Files\ISD Software und Systeme\ISD Update Service

Using the ISD Update Service

If you have installed the ISD Update Service, the following message appears at the bottom right of your screen whenever a Hotfix is available:



Click on the message or double-click on the  icon at the bottom right to start the ISDUpdateSvc.exe program. You can also directly double click on the ISDUpdateSvc.exe file to start the program. Confirm the query in the Windows User Account Control dialogue window.



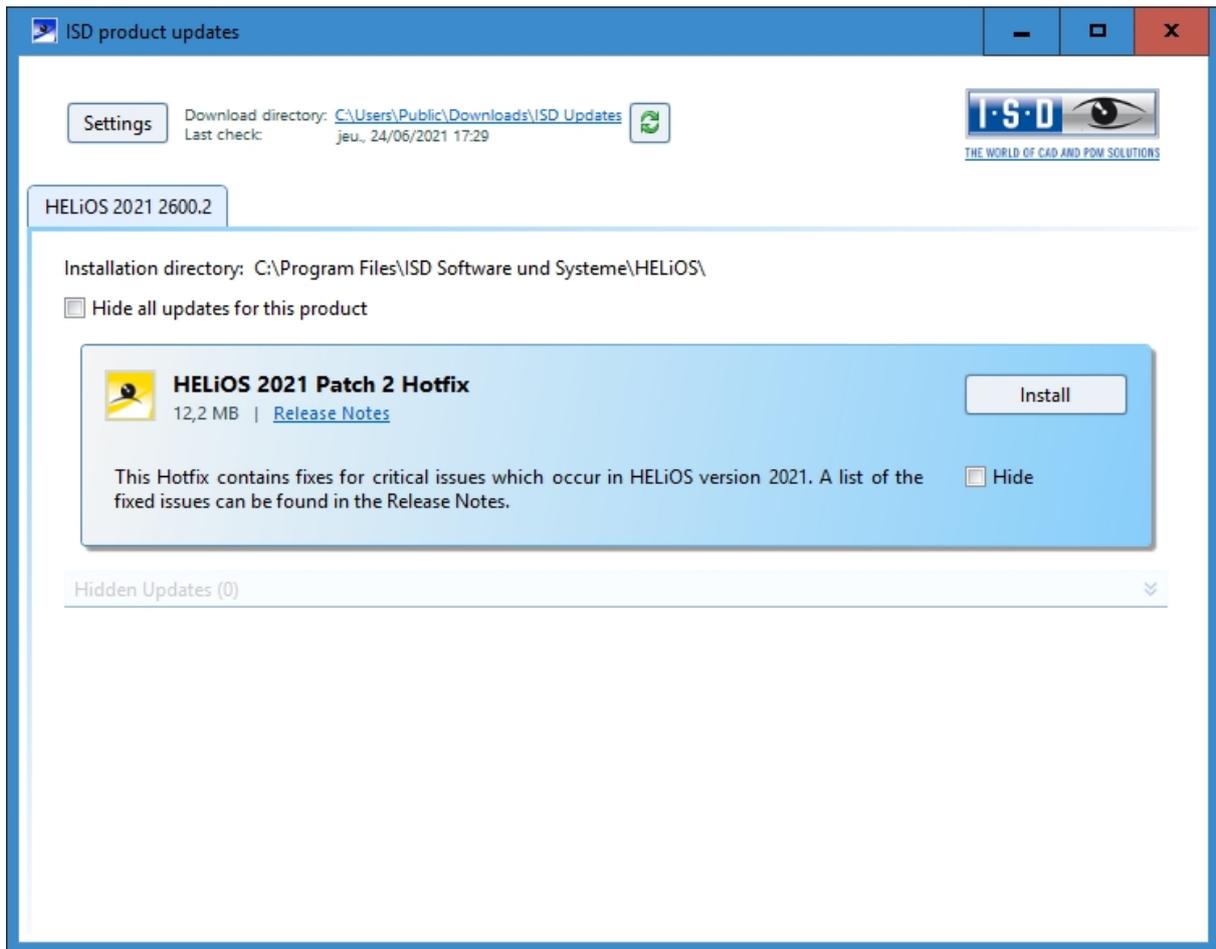
If an update is available, click the **Download** button to download it from the ISD Server to your computer. If an update should not be displayed anymore, activate the **Hide...** checkbox.

The screenshot shows a window titled "ISD product updates" with a blue header bar. In the top right corner, there are standard window control buttons (minimize, maximize, close). Below the header, there is a "Settings" button and a status area showing the "Download directory" as "C:\Users\Public\Downloads\ISD Updates" and the "Last check" time as "jeu., 24/06/2021 17:29". To the right of this is the ISD logo with the tagline "THE WORLD OF CAD AND PDM SOLUTIONS".

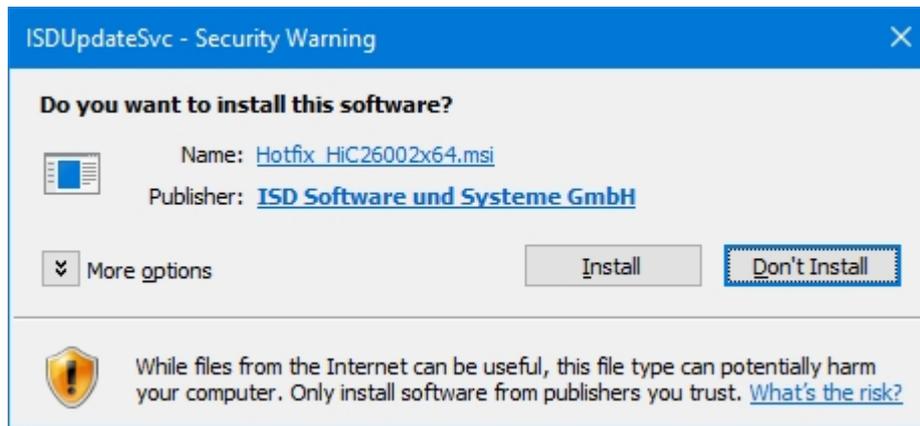
The main content area is titled "HELIOS 2021 2600.2" and shows the "Installation directory" as "C:\Program Files\ISD Software und Systeme\HELIOS\". There is a checkbox labeled "Hide all updates for this product" which is currently unchecked.

A single update is listed: "HELIOS 2021 Patch 2 Hotfix 1" with a size of "12,2 MB" and a link to "Release Notes". The update is in a "Downloading.." state, indicated by a green progress bar. A "Hide" checkbox is present to the right of the update description.

Below the update list, there is a section for "Hidden Updates (0)" with a downward arrow icon.



After downloading of the Hotfix, click **Install**.



Confirm the Windows Security Warning with **Install**.

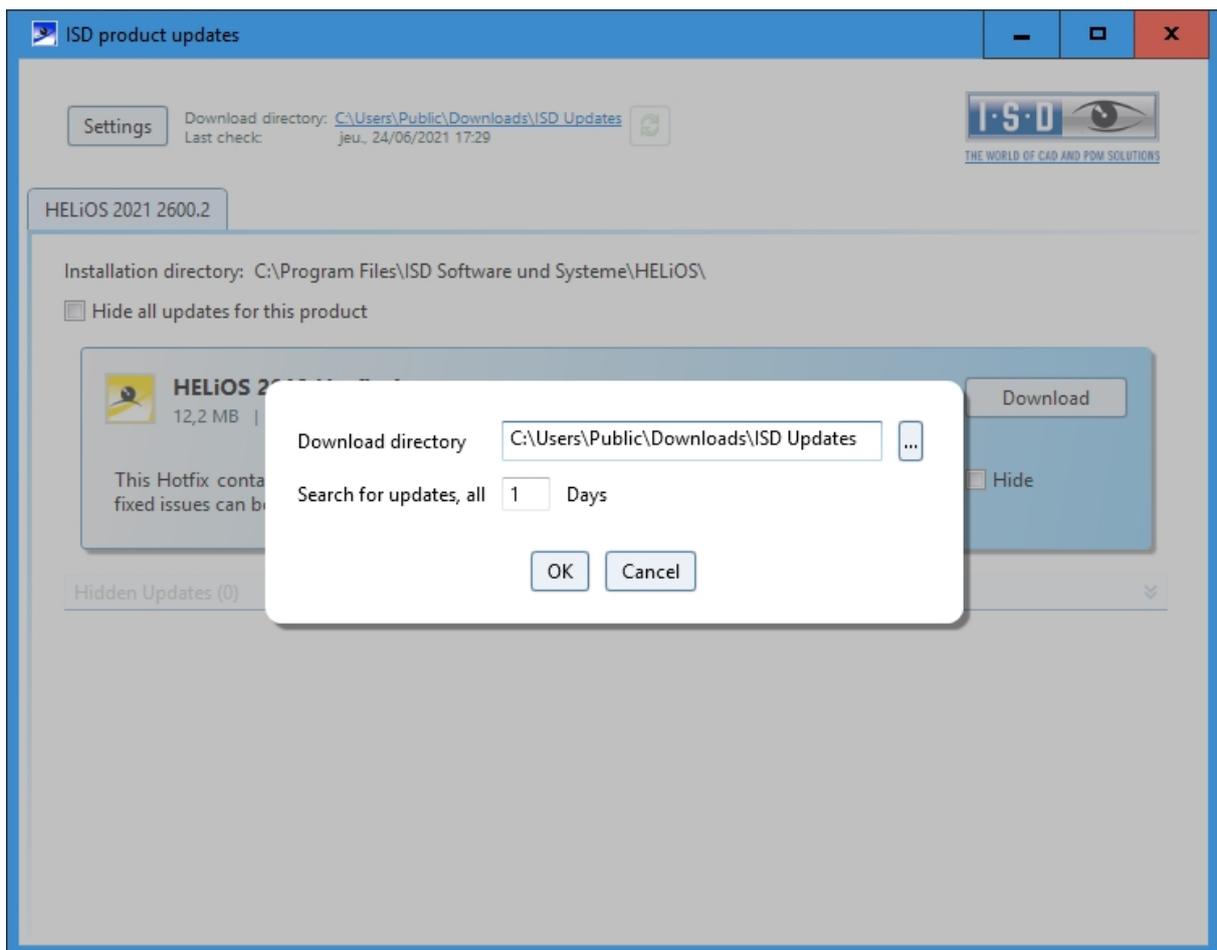
Follow the instructions on the screen to install the update.

The HELiOS Info window indicates the current HELiOS version number (incl. build number) and the numbers of installed hotfixes. To display the Info window, click **Help Topics and Information**  on the top of HELiOS Desktop and then select **HELiOS Desktop**.



ISD Update Service: Settings

If you have installed the ISD Update Service, you can, after calling the program (with the  icon at the bottom right on the Windows Taskbar, or by double-clicking on the file ISDUpdateSvc.exe), configure the search and the installation with the **Settings** button.

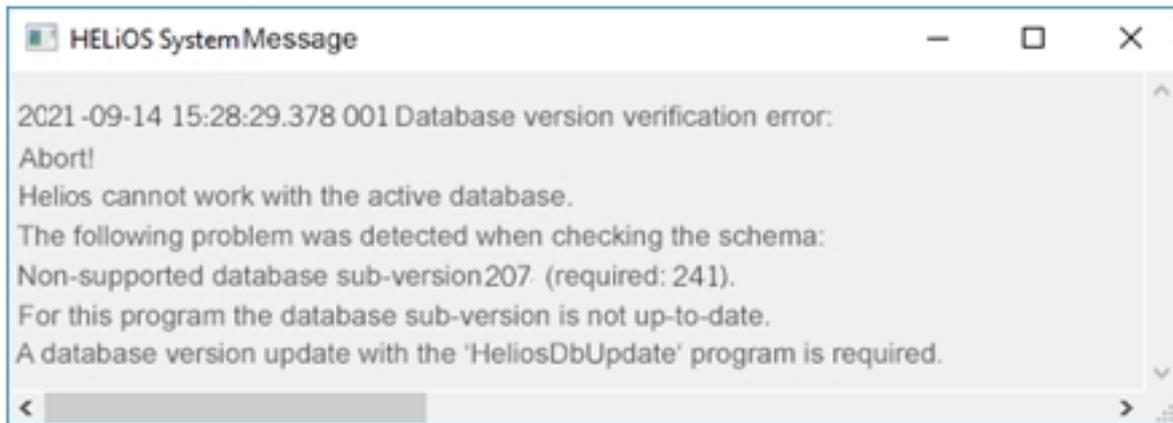


Via the **Settings** button you can specify the download directory for Updates and a time interval for the search for updates.

You can use the  icon to start the search for updates manually.

Updating the HELiOS Database (Database Schema)

Improvements of the HELiOS functionality require a regular updating of the database; if the database version is no longer up to date, HELiOS displays the following message (version numbers may vary) when it is started:



To update the database schema, use the program **HeliosDbUpdate.exe**.

HELiOS Data base schema

As existing datasets with non-compliant conditions may cause conflicts during the central update process of the HELiOS delivery database, you should consider the following:

1. **Do a database backup:** You should make sure that a backup of your HELiOS database has been created before the update. This can be done with the HELiOS Database Creator or via your SQL server application. Please contact the ISD hotline if you have any questions or need support for your individual system architecture.
2. **The log file of the update:** If any conflicts occur during the update, they are traced in the log file **HeliosDbUpdate.txt** (in the system path %appdata%\ISD Software and Systems\HeliosDbUpdate\). Have this file ready if you contact the ISD hotline for troubleshooting and successful updates.



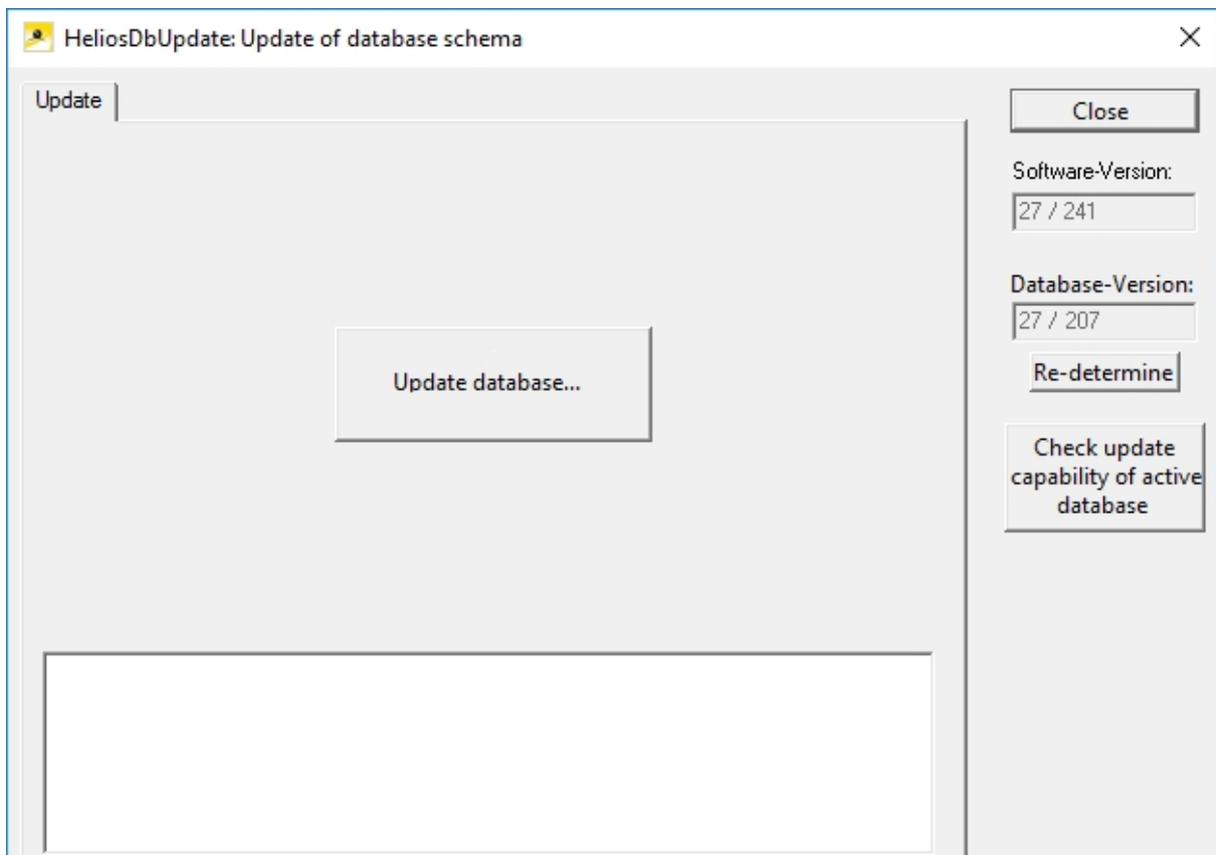
Please note:

- It is mandatory to make a database backup before the update, as the update can normally only be reverted by importing the backup.
- After an update, access is only possible with the appropriate HELiOS version. A mixed operation with HELiOS versions requiring an older database schema is not possible.
- The update must be performed once and applies to all HELiOS installations.
- As of HELiOS 2022 SP 1 (Version 2701), HeliosDbUpdate.exe no longer supports databases older than sub-version 212 (corresponds to the database delivered with HELiOS 2013, Version 1800). In this case, use an older version of HeliosDbUpdate.exe or contact the Consulting department of the ISD.

- The responsible administrator should always be informed prior to the update, in order to enable a coordinated conversion.
- In some cases, a window with the message "The designations of the database attributes must be updated." will be displayed during the update process. In such cases, the language-dependent standard designations for attributes will be updated. This applies only to standard designations of attributes which have not been changed or created by the user, i.e. only for attributes according to the default settings. This means that designations that were assigned via Attribute Editor by the user will remain unchanged in the process.
- When updating a HELiOS version older than HELiOS 2022 Service Pack 2 (version 2702) to a newer one, an extended range of functions for deriving projects and folders is implemented. Please note that folders created via action lists of the workflow management or containing subfolders created via action lists cannot be derived. If corresponding folders are found in your database when updating the database schema, you will receive the following message:
 - "The functions for deriving project and folder structures have been extended. Currently it is not possible to derive folders which were created via action lists or which contain folders created via action lists with these functions. Since such folders exist in your database, please contact the ISD Consulting department to see to what extent adjustments will be necessary in the future."

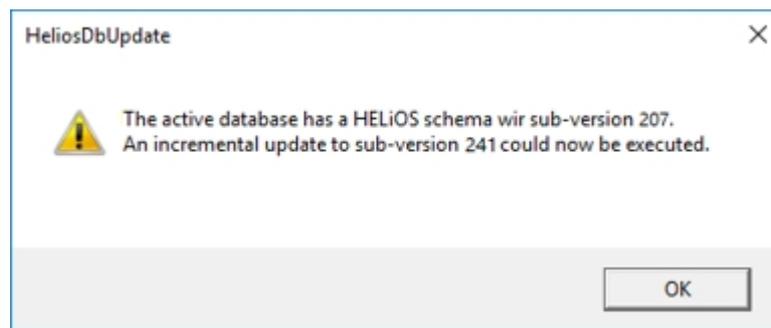
The update can be performed from any HELiOS workstation with a database connection. The **HeliosDbUpdate.exe** program is used for this purpose. It can be started via the Windows Explorer, or similar programs, from the exe directory of the HELiOS installation.

The following mask (software and database version may vary) will be displayed after starting the program:

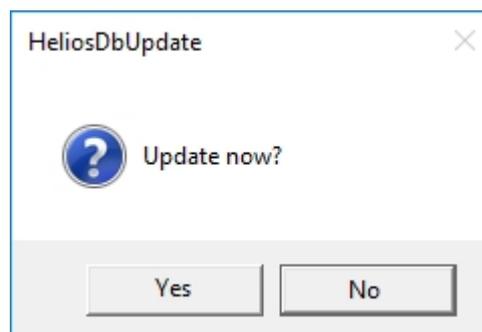


Click the **Update database...** button to start the update.

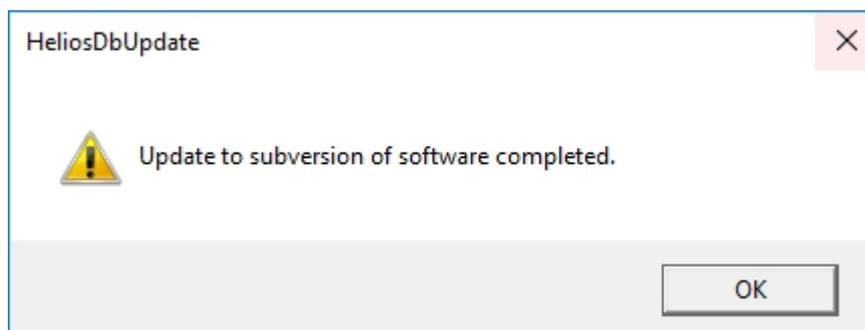
The following message (version numbers may vary) will be displayed after clicking the button.



If you confirm this message with **OK**, another confirmation prompt is displayed.



Confirm with **Yes** to perform the update. After a successful update, the following message will be displayed.



A further check can be carried out by clicking the **Re-determine** button in the main window of the program, after confirming this message with **OK**.

After a successful update, software version and database version should be identical.

 **Please note:**

If you use HiCAD and HELiOS together it may occur after an update of HiCAD that according to the error message for verification of your database version the number of the required sub-version is lower than that of the current one, which is, according to the message, not supported.

In this case, please contact our Hotline:

Tel: 02 31 / 97 93 - 166

Fax: 02 31 / 97 93 - 101

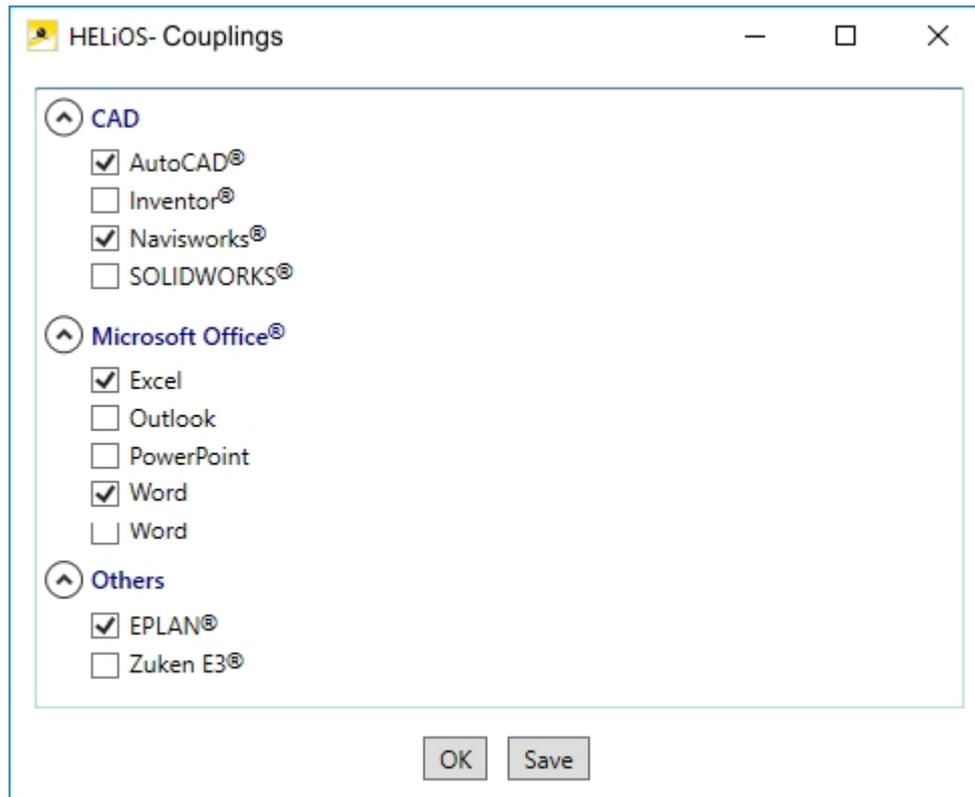
E-Mail: support@isdgroup.com

Manual Registration of Multi-CAD Add-ins

If you use both HiCAD and HELiOS on your system in mixed operation it is not possible (as opposed to the standalone version of the HELiOS Desktop) to establish an interface between HELiOS and further CAD or CAE software via an update or modification installation.

To do so you can use the **HeliosCouplings.exe** tool (in the /exe/ directory of the HiCAD installation).

It can be used to activate interfaces with AutoCAD, Inventor, SOLIDWORKS or EPLAN.



Activate the checkbox of the required software and confirm with **OK**. The interface will then be activated.

The respective software has to be installed in the system.

New Mask Editor for HELiOS

The Mask Editor (as of HELiOS 2020) has been completely revised. Besides a modern ribbon design, which also supports operation at high resolutions, the basis for a further expansion of the masks and the editor has been laid.

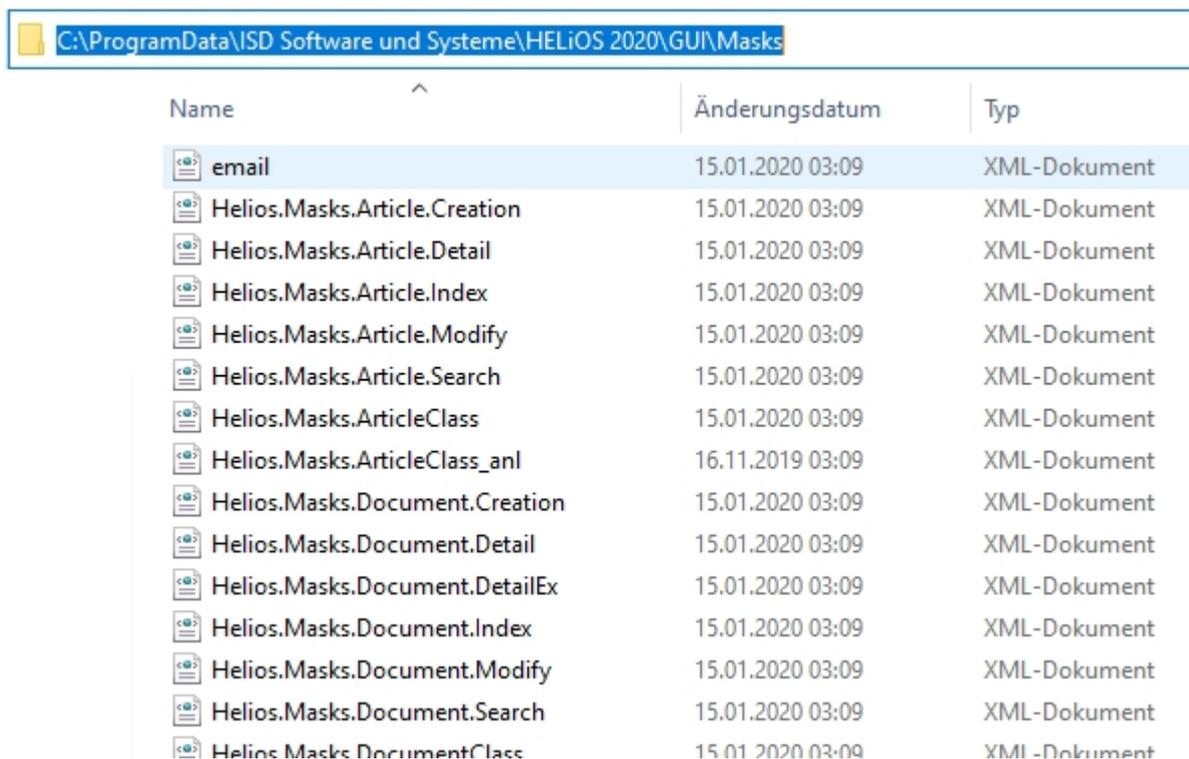
The revision of the mask editor has also led to a conversion of the mask format to XML. Mask files are now managed outside the installation directory.

New mask format and central mask configuration

In HELiOS 2020, the previous mask format has been changed from .msk to .xml, parallel to the revision of the mask editor. In addition, mask files are now managed outside the installation directory, resulting in some changes in the system architecture that administrators should urgently consider:

The masks of older versions that were previously stored in the \sys\ directory of the installation are automatically converted to the new XML format by an update installation of an older HELiOS version to HELiOS 2020 (V 2500.0) or higher and stored at **%Programdata%**.

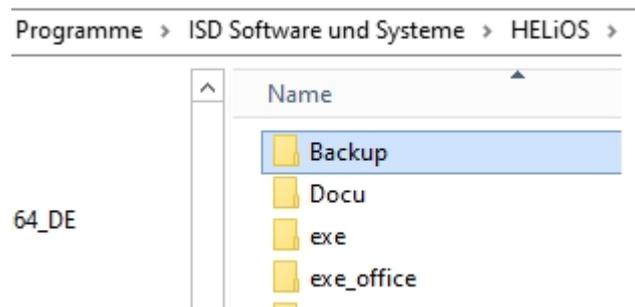
At **%Programdata%**, the masks are stored in a version-specific path, i.e. for HELiOS 2020 this path could look like this: "C:\ProgramData\ISD Software und Systeme\HELiOS 2020\GUI\Masks". In a later version, the version identifier in the path will be correspondingly higher.



Name	Änderungsdatum	Typ
email	15.01.2020 03:09	XML-Dokument
Helios.Masks.Article.Creation	15.01.2020 03:09	XML-Dokument
Helios.Masks.Article.Detail	15.01.2020 03:09	XML-Dokument
Helios.Masks.Article.Index	15.01.2020 03:09	XML-Dokument
Helios.Masks.Article.Modify	15.01.2020 03:09	XML-Dokument
Helios.Masks.Article.Search	15.01.2020 03:09	XML-Dokument
Helios.Masks.ArticleClass	15.01.2020 03:09	XML-Dokument
Helios.Masks.ArticleClass_anl	16.11.2019 03:09	XML-Dokument
Helios.Masks.Document.Creation	15.01.2020 03:09	XML-Dokument
Helios.Masks.Document.Detail	15.01.2020 03:09	XML-Dokument
Helios.Masks.Document.DetailEx	15.01.2020 03:09	XML-Dokument
Helios.Masks.Document.Index	15.01.2020 03:09	XML-Dokument
Helios.Masks.Document.Modify	15.01.2020 03:09	XML-Dokument
Helios.Masks.Document.Search	15.01.2020 03:09	XML-Dokument
Helios.Masks.DocumentClass	15.01.2020 03:09	XML-Dokument

This conversion or directory is not dependent on whether the local or central directory was selected for the interface configuration (see below).

The old configuration file can then be found in a **Backup** directory that was created below the installation folder.



The new masks at **%Programdata%** should not be overwritten in any case, because these are the "delivery status", which may be updated by later update installations. If masks are edited and changed with the mask editor, they are stored at **%Appdata%** and are called up by HELiOS when working in corresponding masks from this directory.



Important:

This means: If masks are to be distributed uniformly to different workstations, they must be saved under **%Appdata%** and not (!) under **%Programdata%**.

Mask Converter

During the update installation - starting from an installation earlier than HELiOS 2020 - the tool `MskToXmlUpdate.exe` is placed in the `exe` directory of the HELiOS installation. This tool is used by the installation program when updating to HELiOS 2020 for automatically converting masks in the old MSK mask format to the new XML mask format. The images contained in the masks are also copied together with the masks.

If necessary, this tool can also be used to convert old mask files to the new XML mask format at a later date. To do this, the tool must be started as administrator from the Windows command line as follows

MskToXmlUpdate **-BACKUPPATH=**path name **-MSKPATH=**path name

A path must be specified for both the **BACKUPPATH** and **MSKPATH** parameters.

BACKUPPATH

Here the directory must be specified to which the "old" MSK/BMP files are to be moved after conversion.

After the conversion, a conversion log with the name `_MskToXmlResult.txt` is saved in this directory.

MSKPATH

Here the directory has to be entered containing the files to be converted.

Example:

MskToXmlUpdate **-BACKUPPATH=C:\helios\sys\backup_msk** **-MSKPATH=C:\helios\sys**

The files are automatically converted into the file `%PROGRAMDATA%` of HELiOS, for instance `[...]\ProgramData\ISD Software und Systeme\HELiOS 2020\GUIMasks`.

Licensing

- General Notes on Licensing
 - ...for Local Licenses
 - ...for Network Licenses
 - ...for Commuter Licenses
- Installing the License Server
- Licensing via Licensing ID (License Activator)
 - AutoRequest Licenses
 - Activate Licenses
 - Deactivate Licenses
 - Trial Licenses
 - Reconstruction of Licenses
 - Notes on the Use of Modbile Computers (Laptops)
- Commuter Licenses
 - Checking Out Commuter Licenses, with Network Connection
 - Checking Out Commuter Licenses, without Network Connection
- License Configuration
- Server Monitor
- Theft of a Workstation

General Notes on Licensing

HELiOS can be activated via 3 types of licenses:

- Standalone Licenses (Local Licenses)
- Network Licenses
- Commuter Licenses



Please note:

- A static IP address is required for a correct operation of the License Server.
- If you activated a license while the WLAN card is switched on, this license will only be valid and visible when the WLAN card is switched on.
- In the HELiOS directory DOCU you can find an Online Help for the Licence Manager. You start the Help by calling the LICENSEMANAGER.HTML file in the folder Docu\tools\Licensemanager.
- In the ISD Wiki at [Product Know-how > Whitepaper](#) you can find the PDF document [Use case: Checkout Licenses](#).

General Information on Local (Workstation-specific) Licenses

If you choose local licensing, the activation will be directly locked to the hardware of the workstation on which your HiCAD and HELiOS Desktop program is installed.

The ISD will send you an E-mail containing the Entitlement ID for local licenses (standalone). This ID will be required for the activation and deactivation of the licenses and software modules. Please keep the Entitlement ID! Without this ID you cannot activate or deactivate any licenses! In case of a defect, no reconstruction of licenses will be possible without the Entitlement ID! After installing HELiOS, you activate the licenses by means of the **License Activator** in the **ISD License Manager**.

General Information on (Server-controlled) Network Licenses

If you choose network (server-controlled) licensing, the license will be directly locked to the hardware of the server that centrally manages the HELiOS licenses. These licenses can be used on any workstation in your network that is connected to this server.

The ISD will send you an E-mail containing the Entitlement ID. If you have several network servers, e.g. at several locations, you will receive one Entitlement ID for each network server. This ID will be required for the activation and deactivation of the licenses and software modules. Please keep the Entitlement ID! Without this ID you cannot activate or deactivate any licenses! In case of a defect, no reconstruction of licenses will be possible without the Entitlement ID! You activate/deactivate the network licenses by means of the **License Activator** in the **ISD License Manager**.

To be able to use network licenses, a License Server needs to be installed on a computer without HELiOS.

The license server enforces and manages licensing in multi-user environment. It keeps track of all the licenses and handles requests from network users who want to run a HiCAD/HELiOS application, granting authorization to the requesters, or denying requests if all licenses are in use.

The license server must not be installed on the same computer on which an ISD software product (HELiOS) is installed, as both product share system data concerning the licensing information. Formerly, such parallel install-

ations of license servers and ISD products were performed in cases where a customer occasionally wanted to transfer the license to another computer (Remote Commuter License).



Important:

Installations of license servers and ISD products on the same computer are no longer covered by the warranty. The ISD group advises you strongly not to perform such installations. A static IP address is required for correct operation of the license server.



General Information on Commuter Licenses

Individual licenses can be checked out from the server and locked to a workstation within or outside the network (so-called “commuter licenses”). This enables you to continue working at a different location, without being connected to the license server (unless your HELiOS installation requires a connection to a database server). For this purpose you define a specific period during which you want the license to be available on a selected workstation. For this period, this license will be blocked on the license server. After expiry of this period, the license will be made available on the license server again. It is also possible to manually return this license to the server before expiry of the defined period, if the workstation is connected to the server. Licenses for one workstation can be checked out for at least one day, with the counting beginning at 1:00 AM on the day following the checkout date.

If you want to replace/exchange your license server, you need to deactivate all licenses first.

Practical Examples of Network Licensing

- Let us assume that three licenses have been activated on your server. Monday morning (11.00 am) you suddenly need to see a customer for design tasks, and you know that you will still be on-site at the customer’s facility on Tuesday. You therefore check out a license for 24 hours on 11.00 am. This means that you can use this license until Tuesday night, 11.59 pm, from your mobile workplace. After expiration of this period, the license is automatically made available again on the server. If you manage to finish your work on Tuesday at midday, you can go back to your office and return the license to the server somewhat earlier.
- Similar situation as the one described above, with the difference that you are not in your office on Monday, 11.00 am. In such cases you can generate a hardware ID, enabling your colleagues in the office to check out a license for you. This license is sent to you by E-mail and can then be activated. In contrast to the previous

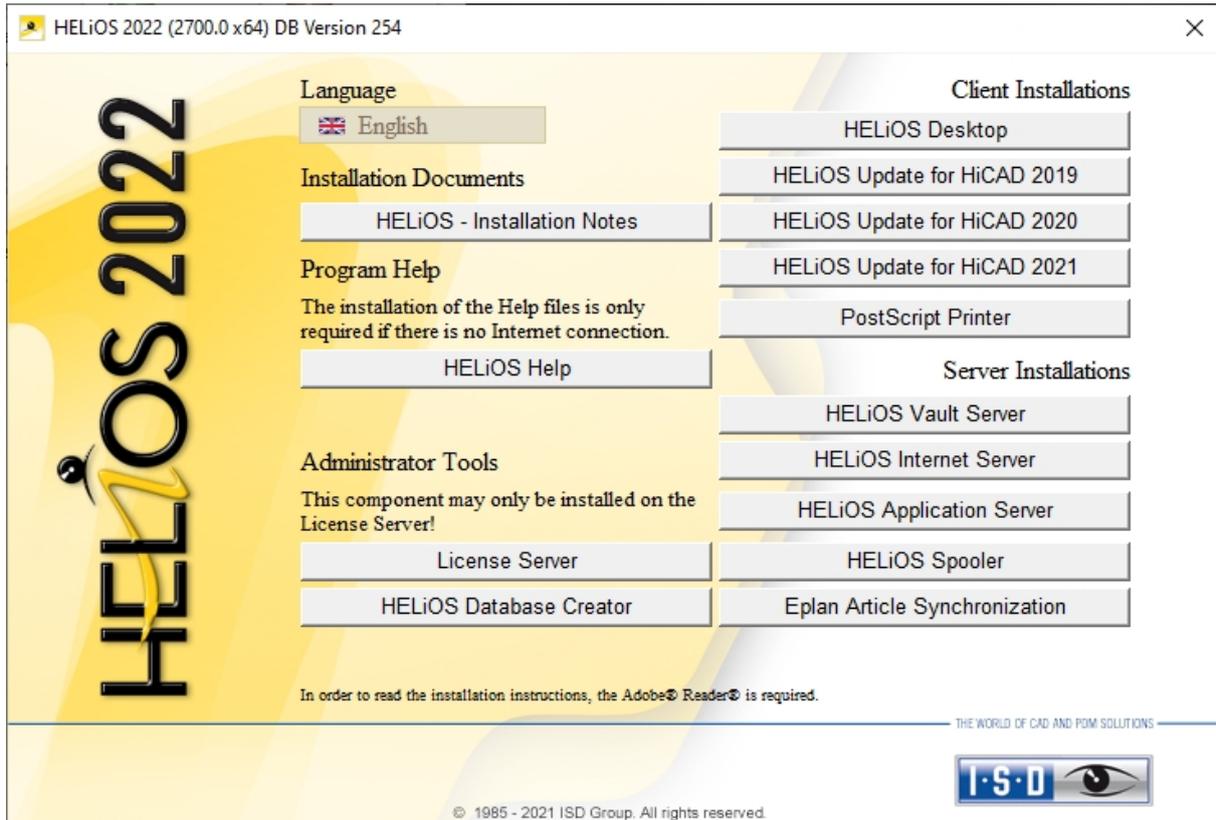
example, this license is exclusively available to you for a fixed period of time and cannot be returned to the server before expiration of this period.

Installing the License Server

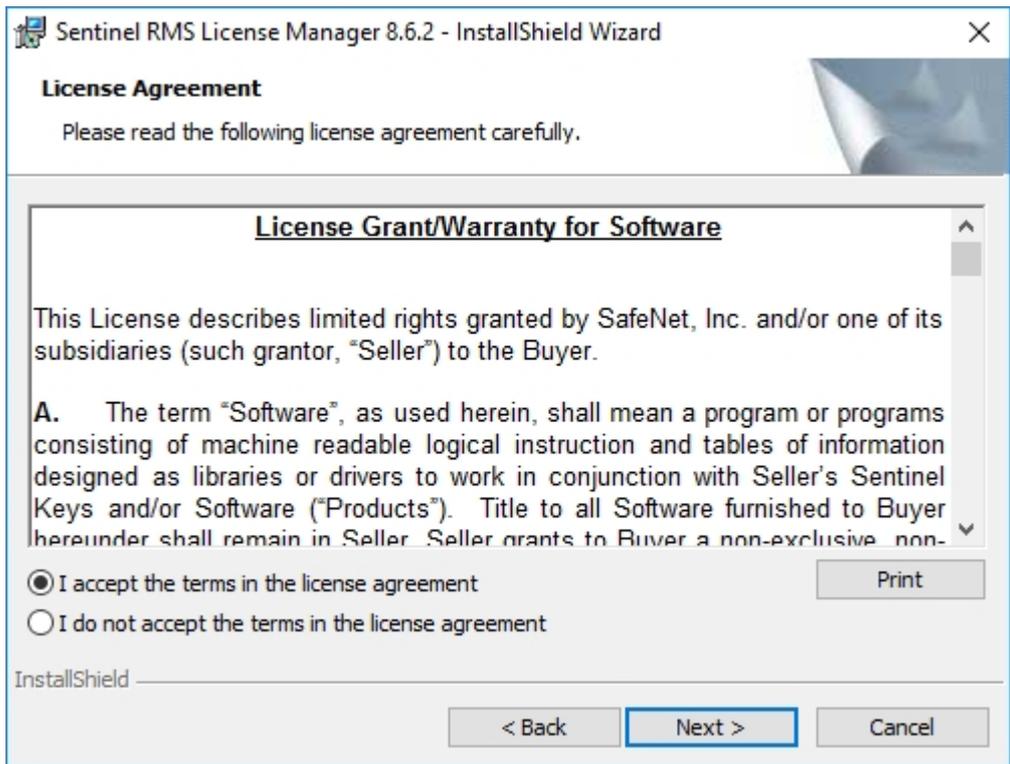
If you want to perform a HELiOS update to Version 2022 and use a license server (i.e. work with network licenses), you require Version 8.6.2 of the License Server. If you have installed an older version, you need to uninstall it before re-installing the License Server.

To install the License Server, start Windows. If Windows has already been opened, close all other applications and start the installation wizard.

Leave the selection mask open, open, so that you can select the desired components one after the other.



Click on the **License Server** button.



Sentinel RMS License Manager 8.6.2 - InstallShield Wizard

Customer Information

Please enter your information.

User Name:

Organization:

Install this application for:

Anyone who uses this computer (all users)

Only for me (Doku)

InstallShield

< Back Next > Cancel

Sentinel RMS License Manager 8.6.2 - InstallShield Wizard

Destination Folder

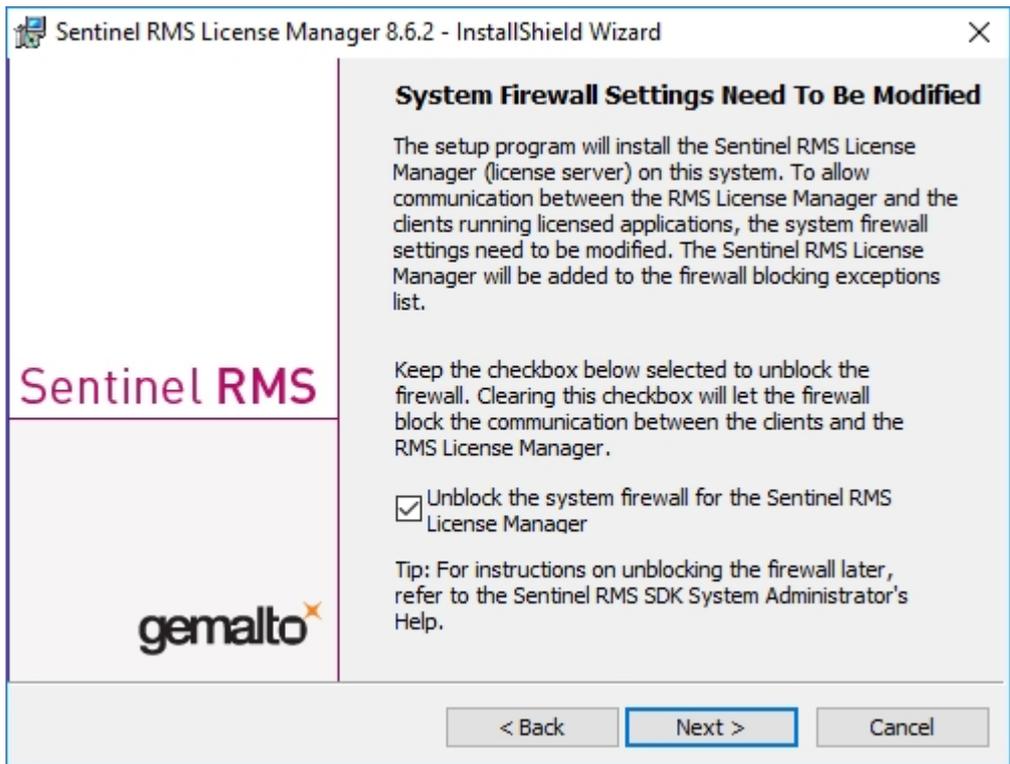
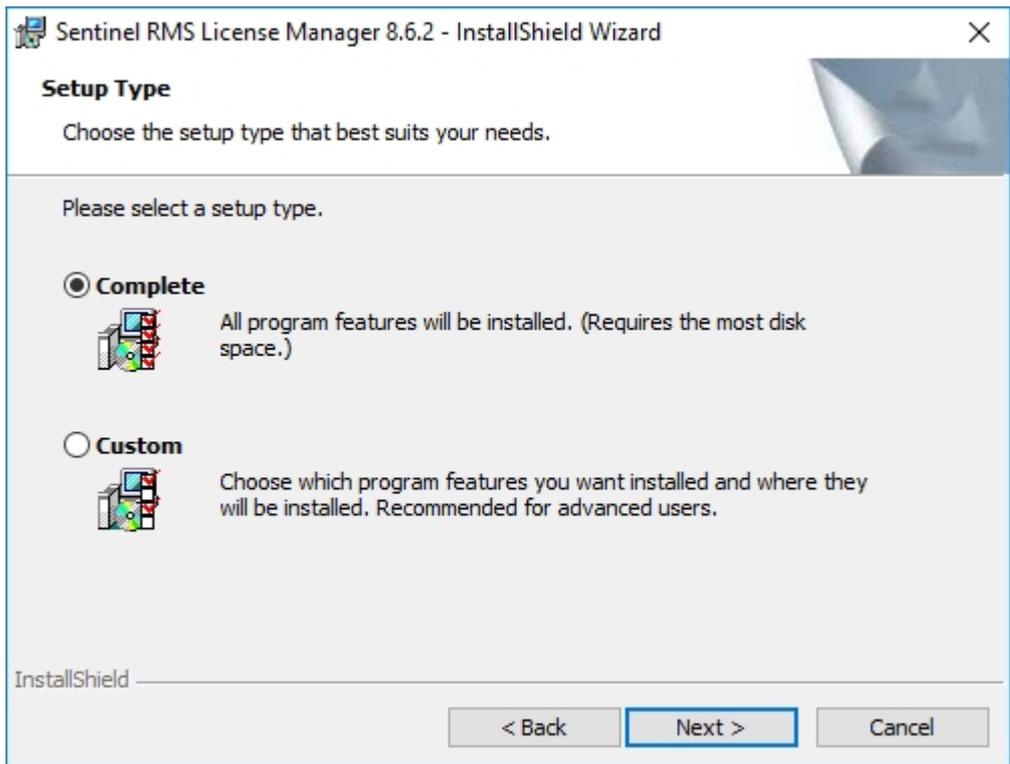
Click Next to continue installing to the following folder, or click Change to install to a different folder.

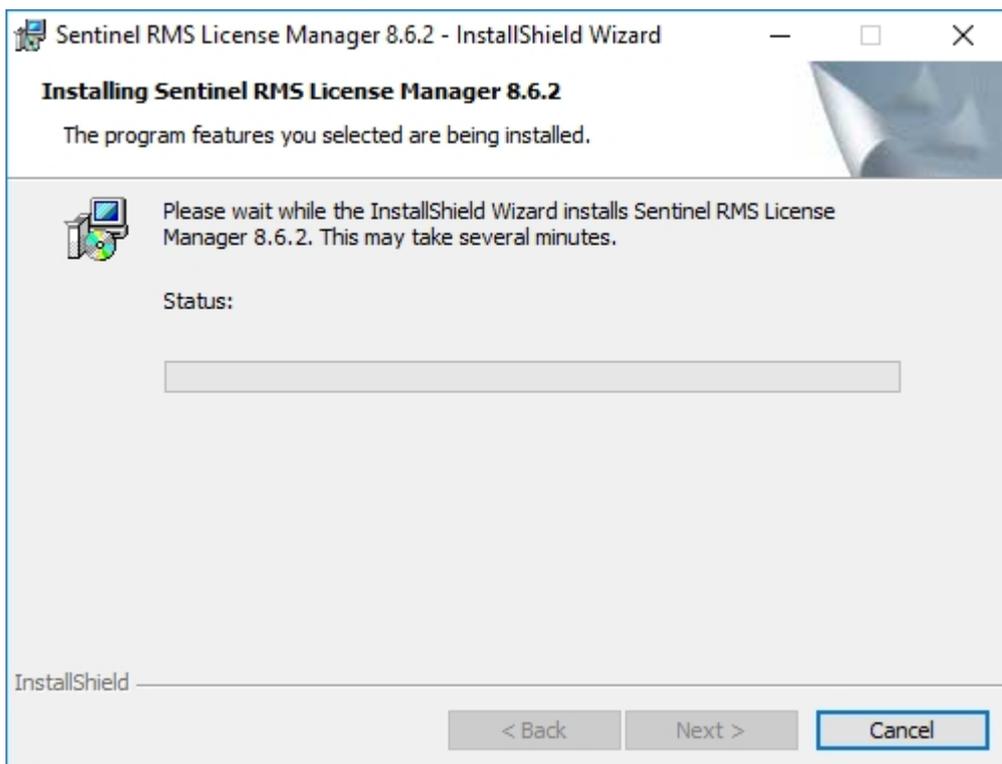
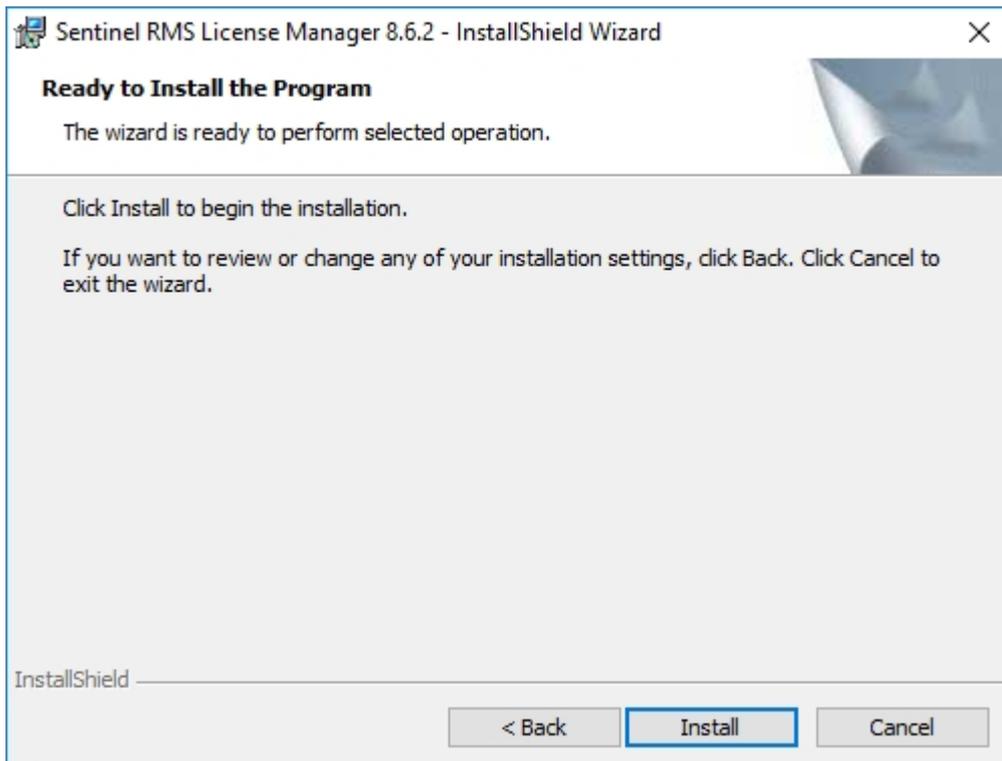
 Install Sentinel RMS License Manager 8.6.2 to:
 C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel RMS License Manager\

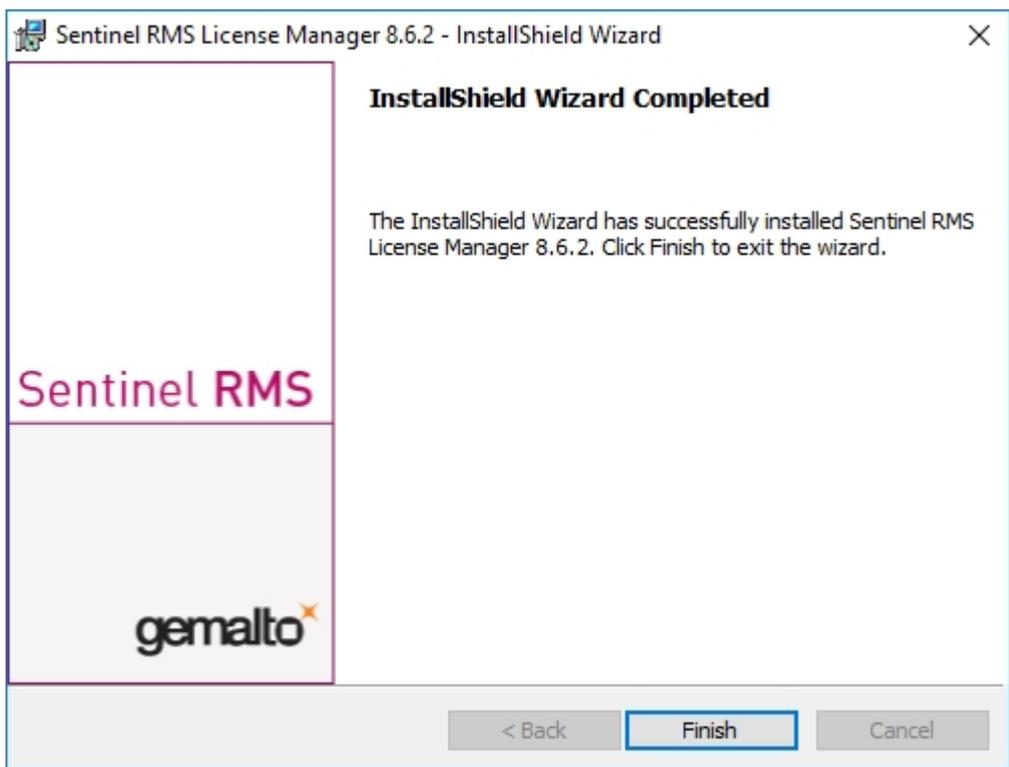
Change...

InstallShield

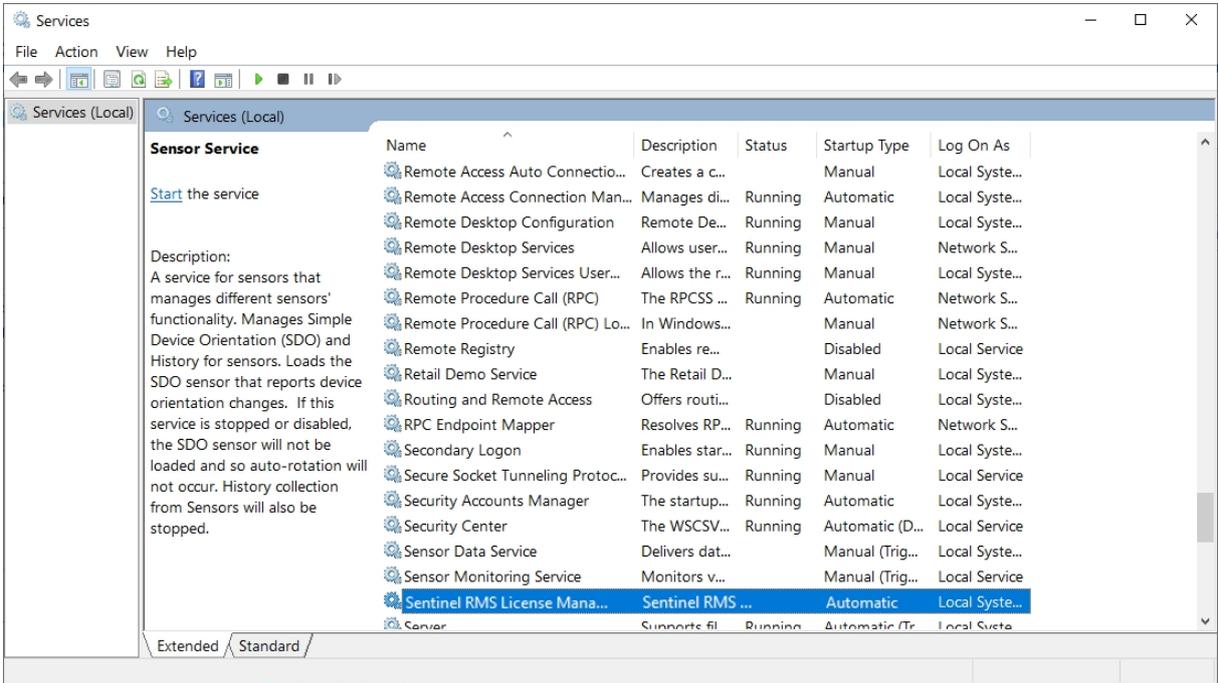
< Back Next > Cancel







After successful installation you will find the Server (Sentinel RMS License Manager) under Services. From here you can also start and end the License Server.



Important:

To ensure that the HELIOS Client will find the correct License Server, an environment variable LSFORCEHOST should be set on each Client using network licenses. The value HOSTNAME, respectively the IP address of the License Server is assigned to the variable.

Licensing via Entitlement ID (License Activator)

The ISD License Manager significantly facilitates the communication between the customer and the ISD during licensing.



Important:

For the activation of HELiOS 2022 the ISD License Manager 4.0 will be required.

AutoRequest Licenses

When acquiring a HELiOS license, you will obtain one Entitlement ID for local licenses (Standalone) and another one for network licenses (Network). If you have several network servers, e.g. at different locations, you will obtain one Entitlement ID for each network server. These numbers will be required for the activation and deactivation of the licenses and the software modules.

Von: ISD Group | Licensing [<mailto:activation@isdgroup.com>]
 Gesendet: Dienstag, 14. September 2021 13:30
 An: info@mustermann.com
 Betreff: ISD - Entitlement Certificate

Dear Herrn Mustermann,

Congratulations! An entitlement has been created/modified for you with the following details:

Click [here](#) to obtain information on the license activation procedure.

Entitlement Details			
EID:	cd14e6c7-c78d-cc8a-a05c-0a114ccccc60b6	Start Date:	09/22/2021
Customer:	Mustermann GmbH	End Date:	Never expires
Contact:	info@mustermann.com		

Associated Products and Features							
Product Name	Item number	Quantity	Remaining quantity	Start Date	End Date	Status	License type
HiCAD Spooler	E102SPO001 2799.0	1	1	09/22/2021	Never expires	Enabled	Network
HiCAD steel engineering package	E103ATS2004 2799.0	1	1	09/22/2021	Never expires	Enabled	Network
HiCAD steel engineering suite premium	E103STB2010 2799.0	1	1	09/22/2021	Never expires	Enabled	Network
HiCAD Integration Module	E180CAH2001 2799.0	2	2	09/22/2021	Never expires	Enabled	Network
HELiOS engineer from V2300	E181HEL2010 2799.0	2	2	09/22/2021	Never expires	Enabled	Network
HELiOS Spooler Client	E183PMC2005 2799.0	1	1	09/22/2021	Never expires	Enabled	Network
HELiOS Spooler	E183SPO2001 2799.0	1	1	09/22/2021	Never expires	Enabled	Network
HiCAD Point Cloud	F107PUW2001 2799.0	1	1	09/22/2021	Never expires	Enabled	Network
Master License	MasterLic 2799.0	15	15	09/22/2021	Never expires	Enabled	Network

For further assistance, contact us using the following details:
 Contact No. - +49-(0)231-9793-0
 Email - support@isdgroup.com
 Sincerely,
 ISD Software und Systeme GmbH Team

2016 SafeNet, Inc. All Rights Reserved.



Important:

Please keep the Entitlement ID! Without this number you cannot activate or deactivate licenses. In case of a system crash a reconstruction of the licenses cannot take place without the Entitlement ID.

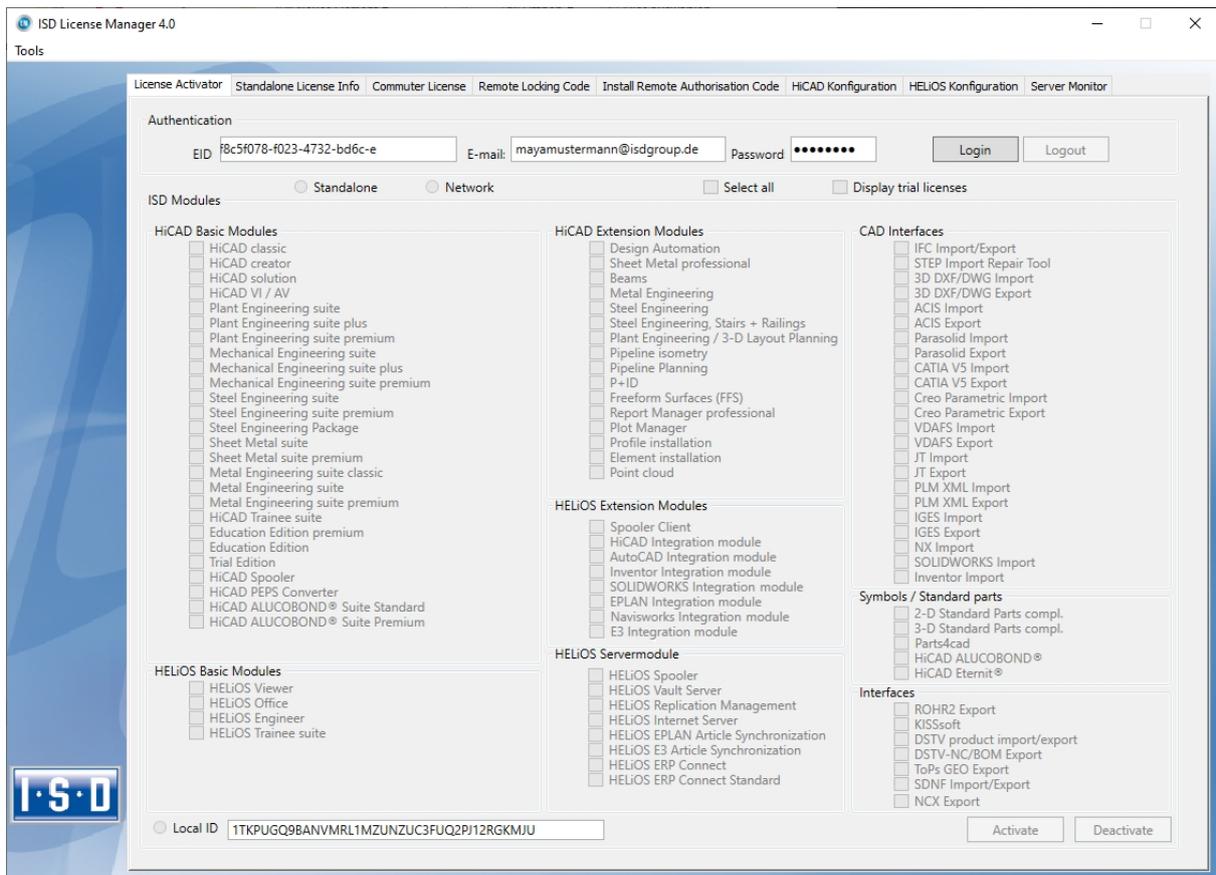
After installing HELiOS you can find the program in the Windows Start menu at **ISD Software und Systeme > Administration**. Please note that for the execution of some functions, administrator rights are required.

The range of functions of the **ISD License Manager** depends on the activation of the License Administration Tools option. The information about this setting is entered in the Registry and can also be changed there subsequently if desired (please contact the Hotline).



Important:

To activate/deactivate Network Licenses, always start the ISD License Manager via the Windows Start menu: Select **Start > All programs > ISD Software und Systeme GmbH > Administration**. To avoid errors when activating/deactivating licenses, perform an update of the new **ISD License Manager** and/or the **License Administration Tools** beforehand.



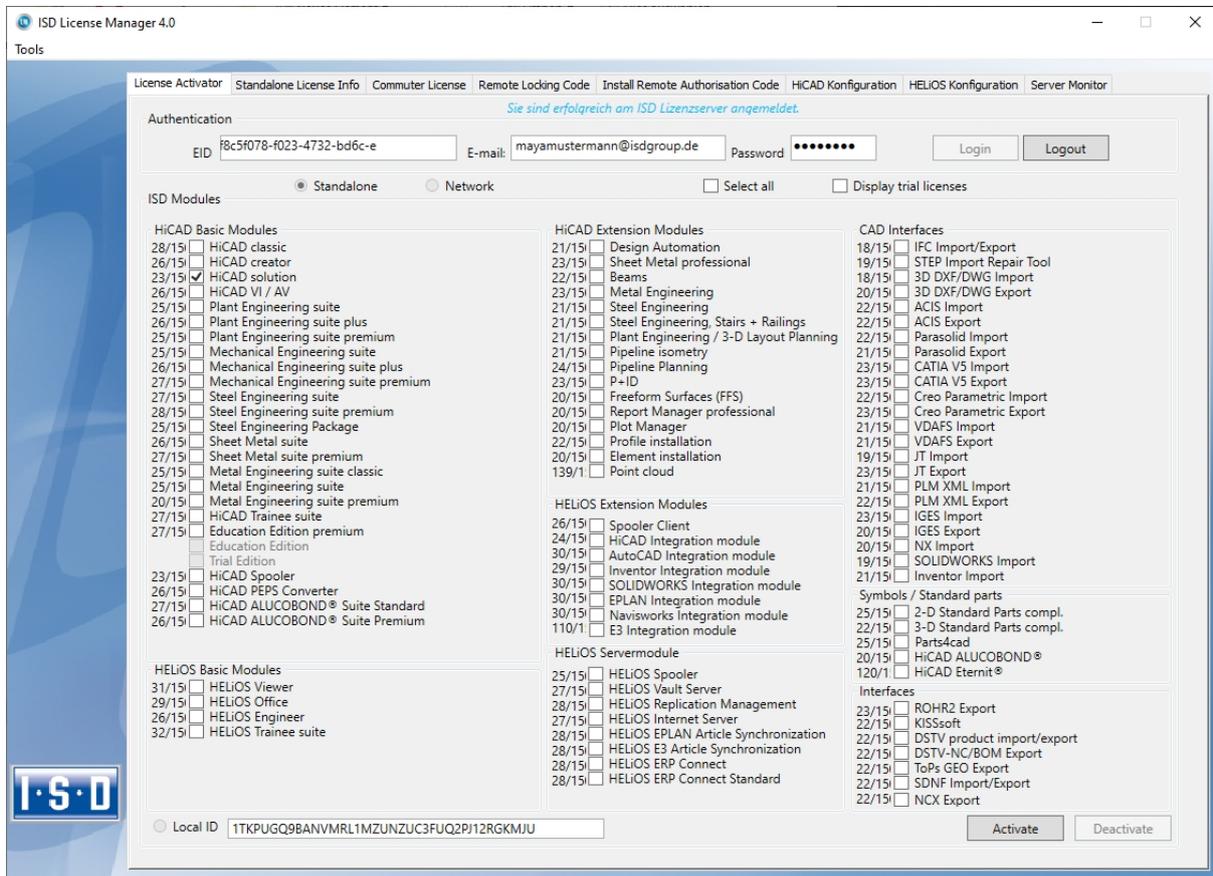
Activate the **License Activator** tab and enter the **Entitlement ID**, your **E-mail address** and your **Password**. New customers obtain their password from the ISD Hotline. With this password you can also access the Download Area.

After entering the data, click **Login**. The ISD License Manager connects to the ISD License Server and the acquired licenses will be displayed.

This process may take several minutes. You can then activate the licenses.

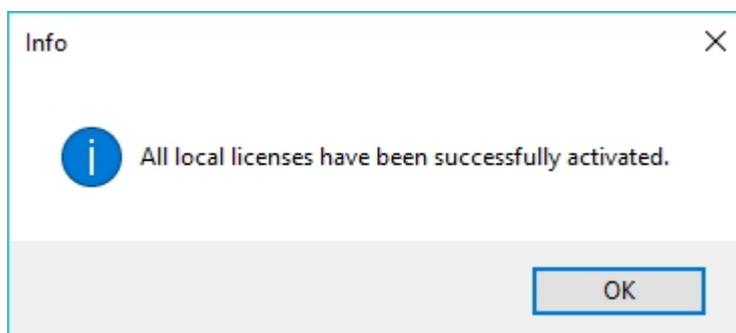
Activate Licenses

After successful Login the number of available licenses and the number of acquired licenses are indicated next to each module.



Select the modules to be activated and click **Activate** to start the activation. For Server Licenses the modules are already pre-selected.

After successful activation a message showing you that all licenses have been successfully activated will be displayed:



You can then log out and work with the HELIOS modules.

In addition, you will receive an E-mail informing you about the deactivated modules.

For Network Licenses, all modules will always be activated or deactivated (for further information about the operation of the License Manager, please read the Online Help for the License Manager).

Deactivate Licenses

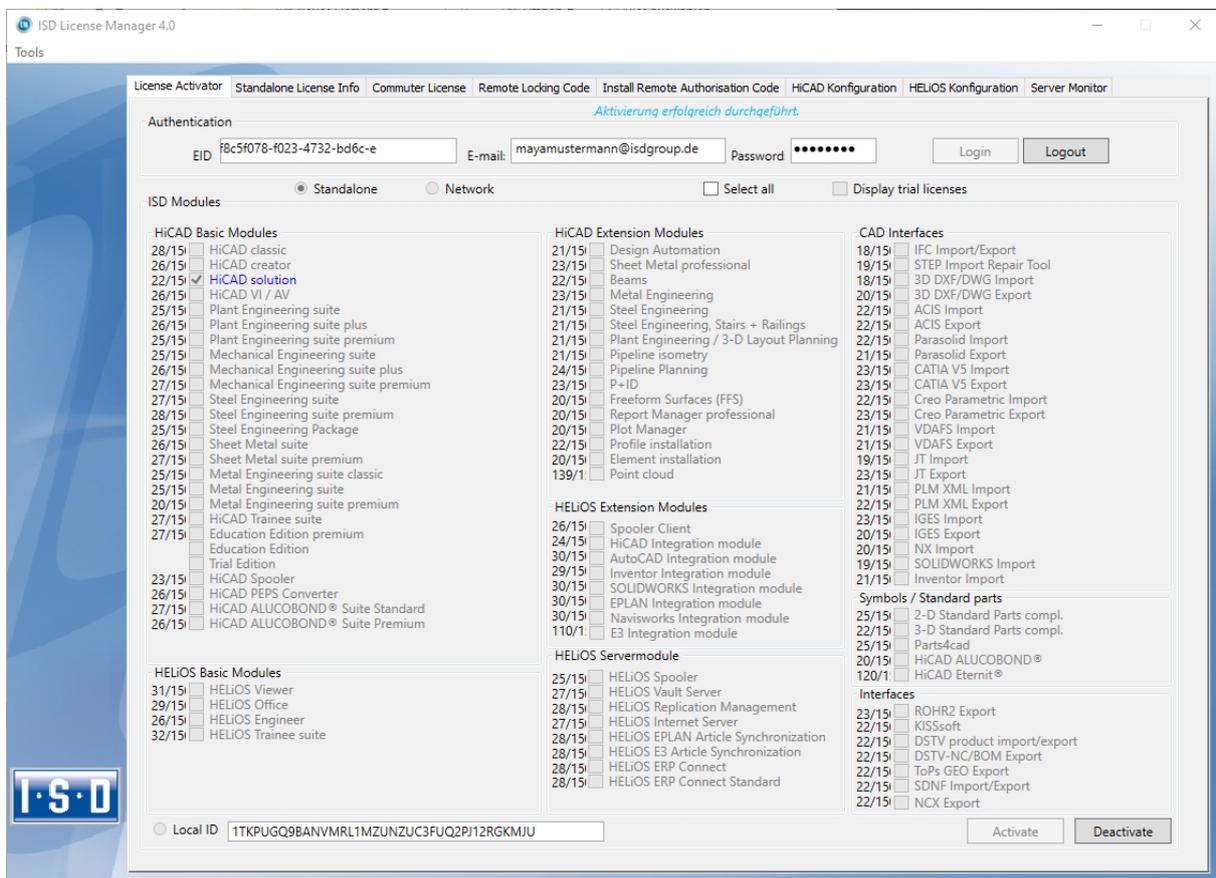
A deactivation of licenses for modules will be required in the following situations:

- Exchange of hardware or changing of hard disk partitioning
- Update of the operating system (e.g. from Windows 8 to Windows 10)
- For updates within one version no deactivation will be required
- Transfer of local modules from one workstation to another
- Acquisition of further modules, or return of hired licenses
- Switch from local licenses to network licenses

Please note the following: All workstations with modules having the same Entitlement ID need to be deactivated completely before a redistribution of the module licenses can take place.

Close all HELiOS applications before deactivating local licenses or logging onto the License Manager.

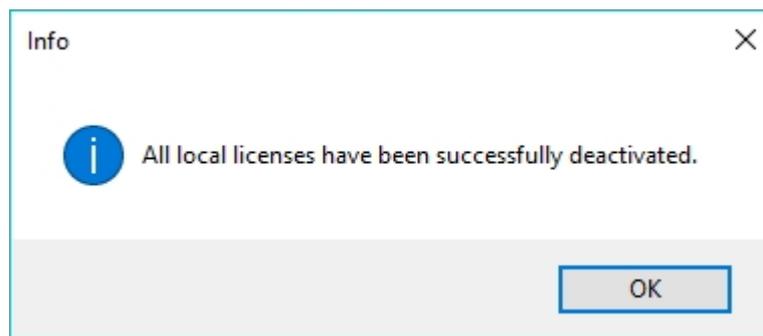
After starting the ISD License Manager the activated modules will be highlighted in a different colour.



Click the **Deactivate** button to revoke the activation of the modules.

A selection is not possible, as you need to deactivate all modules, no matter whether local licenses or network licenses. The deactivation process must not be disrupted, e.g. by a logout or the closing of ISD License Manager!

After successful deactivation the following message will be displayed.



Trial Licenses

If you select **Display trial licenses** after login, you will be also shown, besides all trial licenses with a limited period of validity, all purchasable licenses which are not simultaneously available as trial licenses.

Reconstruction of Licenses

As all licenses are stored on the ISD Server, you can, in case of an interrupted connection or an accidental deletion of licenses, restore all licenses by logging in with your Entitlement ID. The restoring will only function if the hardware was not changed (see Deactivate Licenses).

Notes on the Use of Mobile Computers (Laptops)

If you use a computer with WLAN card, Please make sure that the WLAN card is either always switched on, or always switched off.

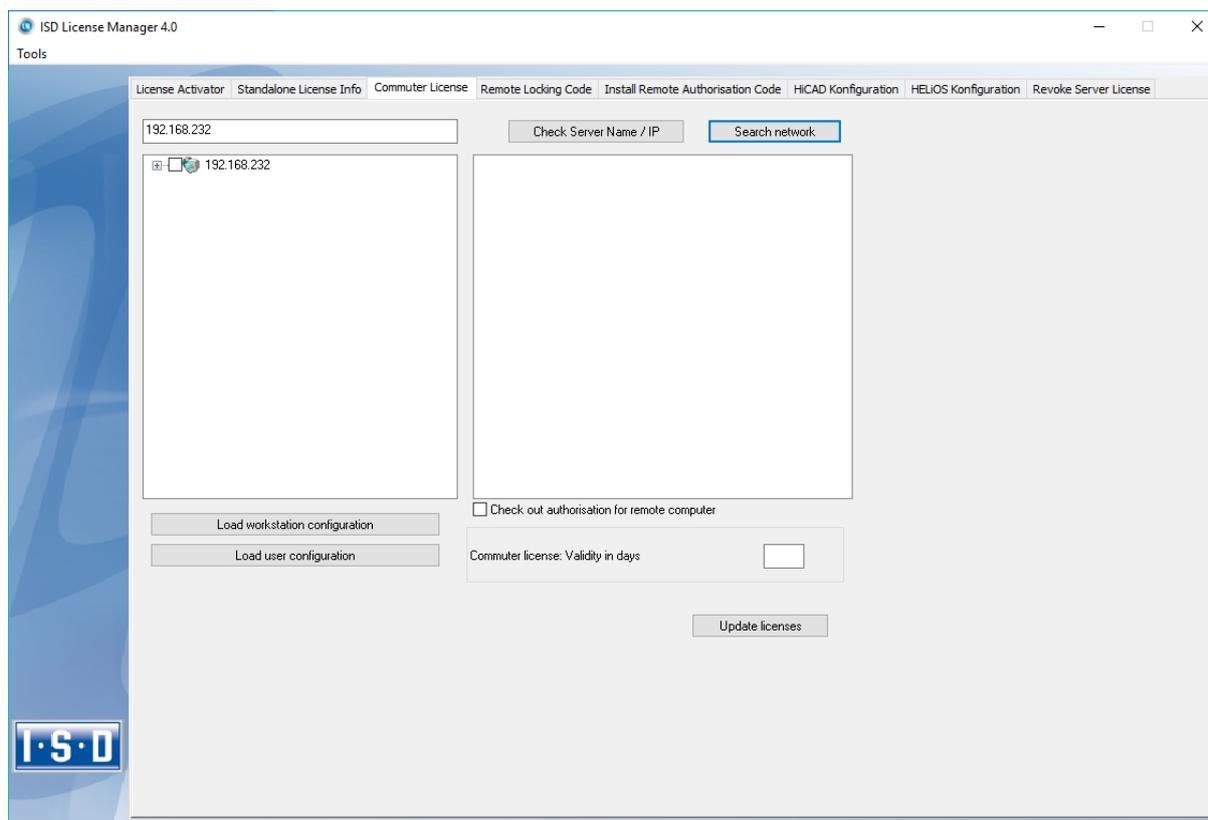
Commuter Licenses

Commuter licenses enable you to use network licenses even if the workstation is not connected to the Server. There are two ways of receiving commuter licenses:

- Checking Out Commuter Licenses, with Network Connection
- Checking Out Commuter Licenses, without Network Connection

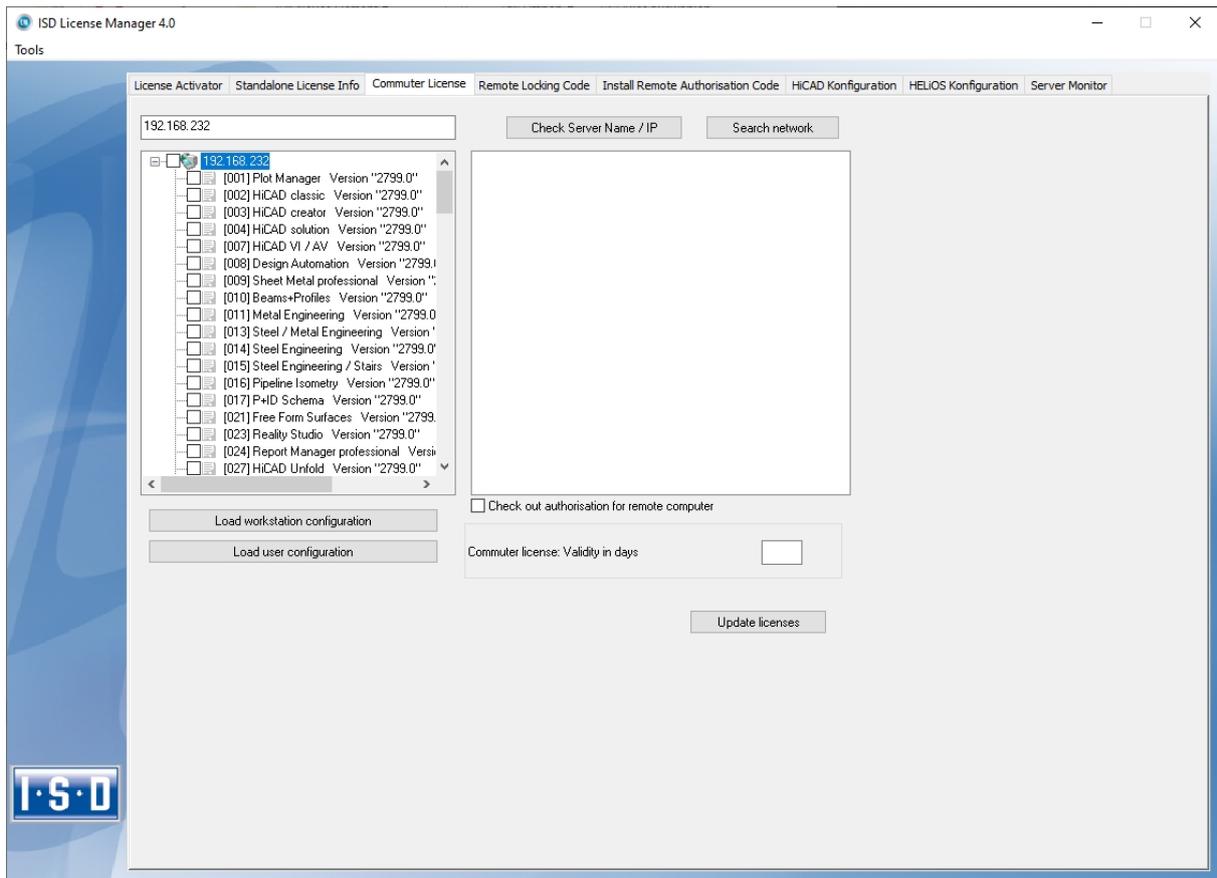
Checking Out Commuter Licenses, with Network Connection

Start the **ISD License Manager** (while a connection to the Server still exists). Switch to the **Commuter License** tab.

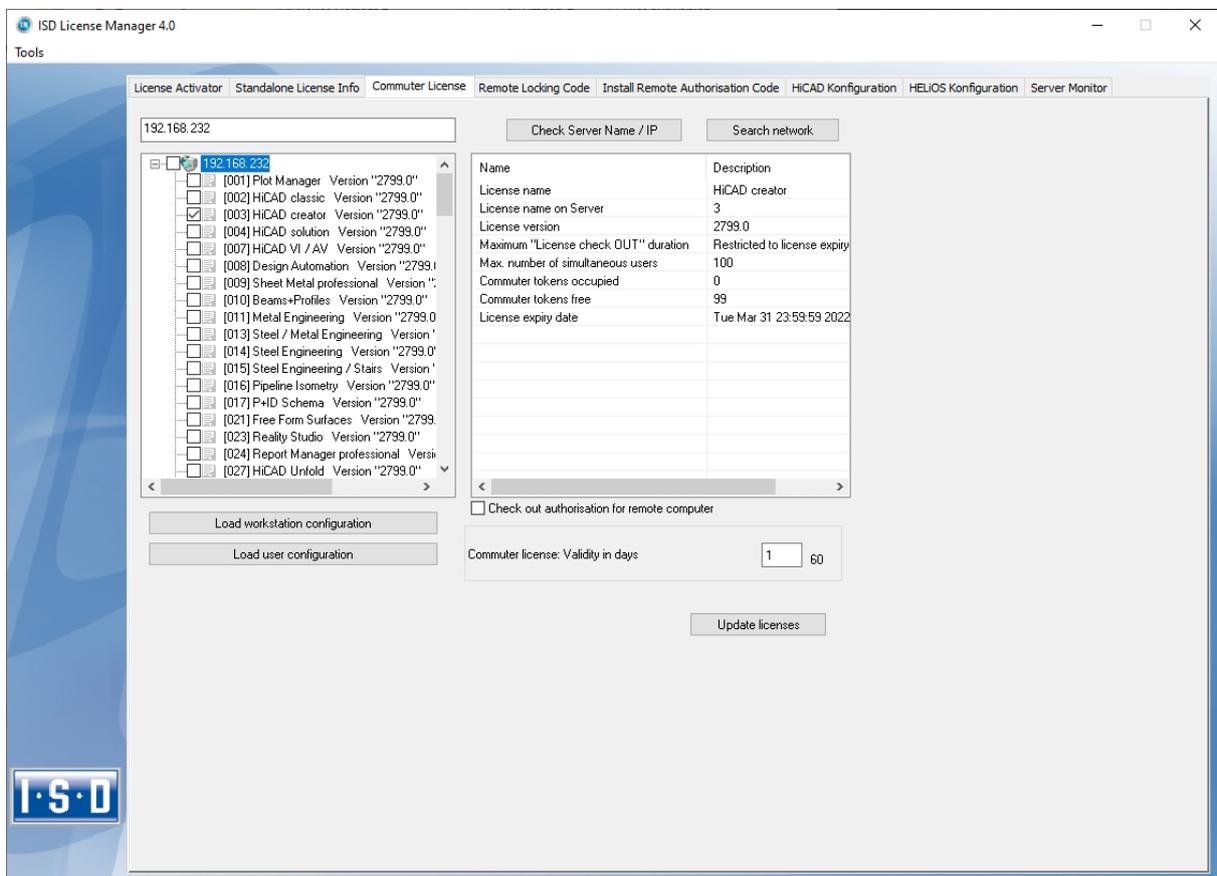


If you have set the system environment variable `LSFORCEHOST`, the entered License Server will be displayed as the preselected server upon start. Use the **Search network** button to automatically search for License Servers.

Expand the tree structure of the found Server by a click on the "+"-sign. The result looks as follows:



Select the required licenses by activating the corresponding checkboxes on the left hand side.

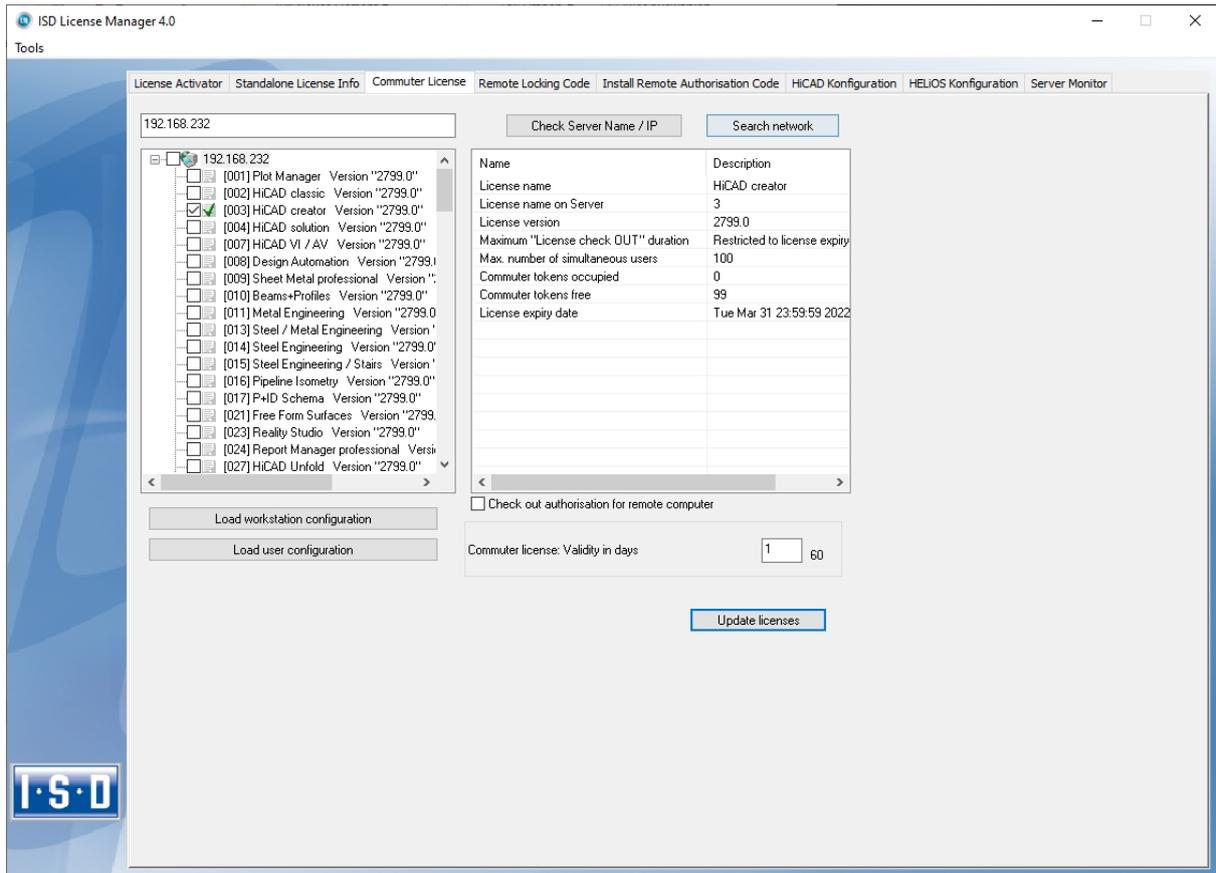


On the right hand side, information on the selected license is displayed.

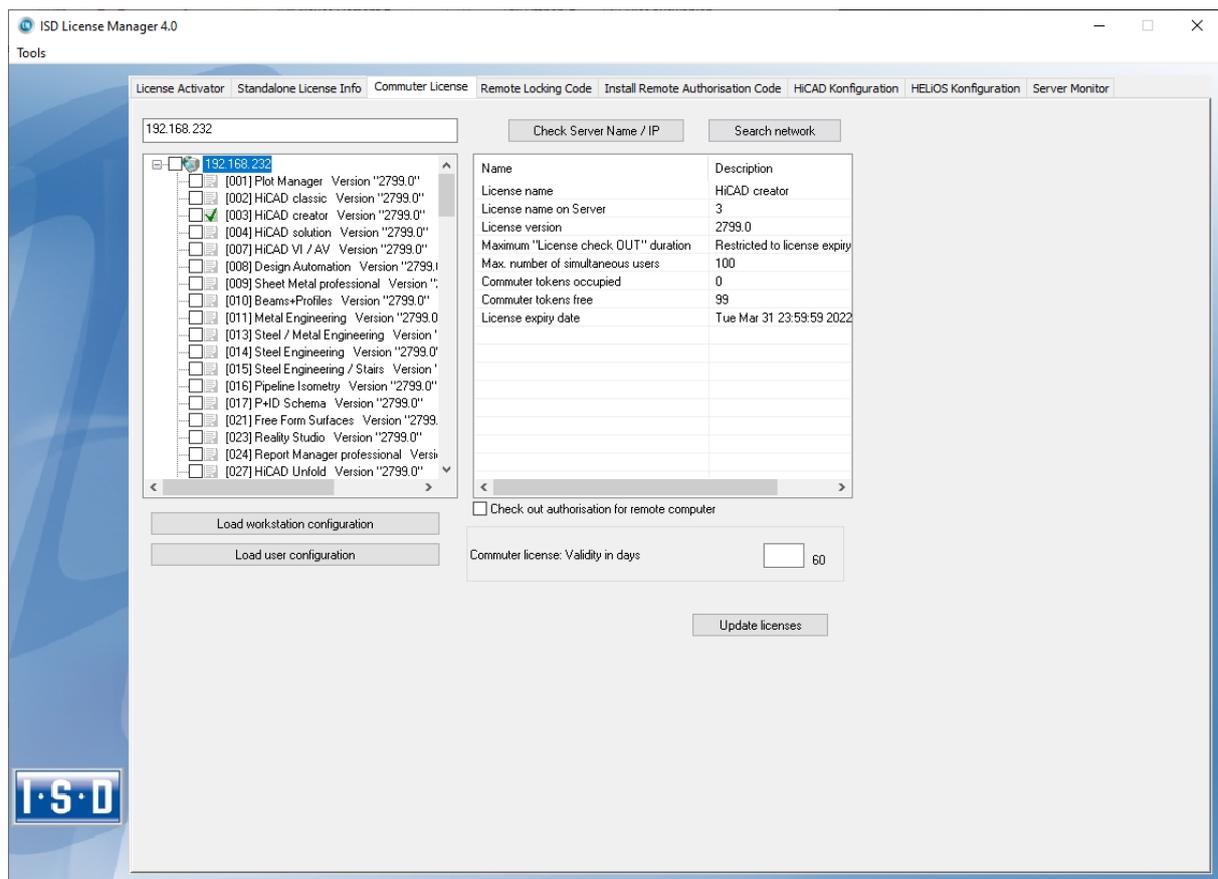
In the **Commuter license: Validity in days** field, you enter the number of days that you want the commuter licenses to remain checked out from the Server. The maximum number of days is 60. By default (or if a “0” is entered), the value is set to 1.

For reasons of safety you should check out the licenses only for the required period! If a commuter license is lost, e.g. because of theft or a defect of the client computer, the license on the Server cannot be used any more before expiry of this date.

After entering the expiry date for the commuter licenses, click the **Update licenses** button. The Commuter licenses are checked out from the Server.



All selected licenses are now checked out from the Server and you possess all rights on your computer for the specified validity period for the commuter licenses. This means that you are enabled to work network-independent. The checked out licenses are no longer available to the other computers on the network.



You can however also return the commuter licenses before their expiry date. To do this, you need to connect to the Server, deactivate the checkboxes on the left and click the **Update licenses** button. All licenses are now made available on the Server and locked on your computer, i.e. you can now only use HELIOS if there is a connection to the License Server. The licenses made available again can now also be used from other workstations.

Checking Out Commuter Licenses, without Network Connection

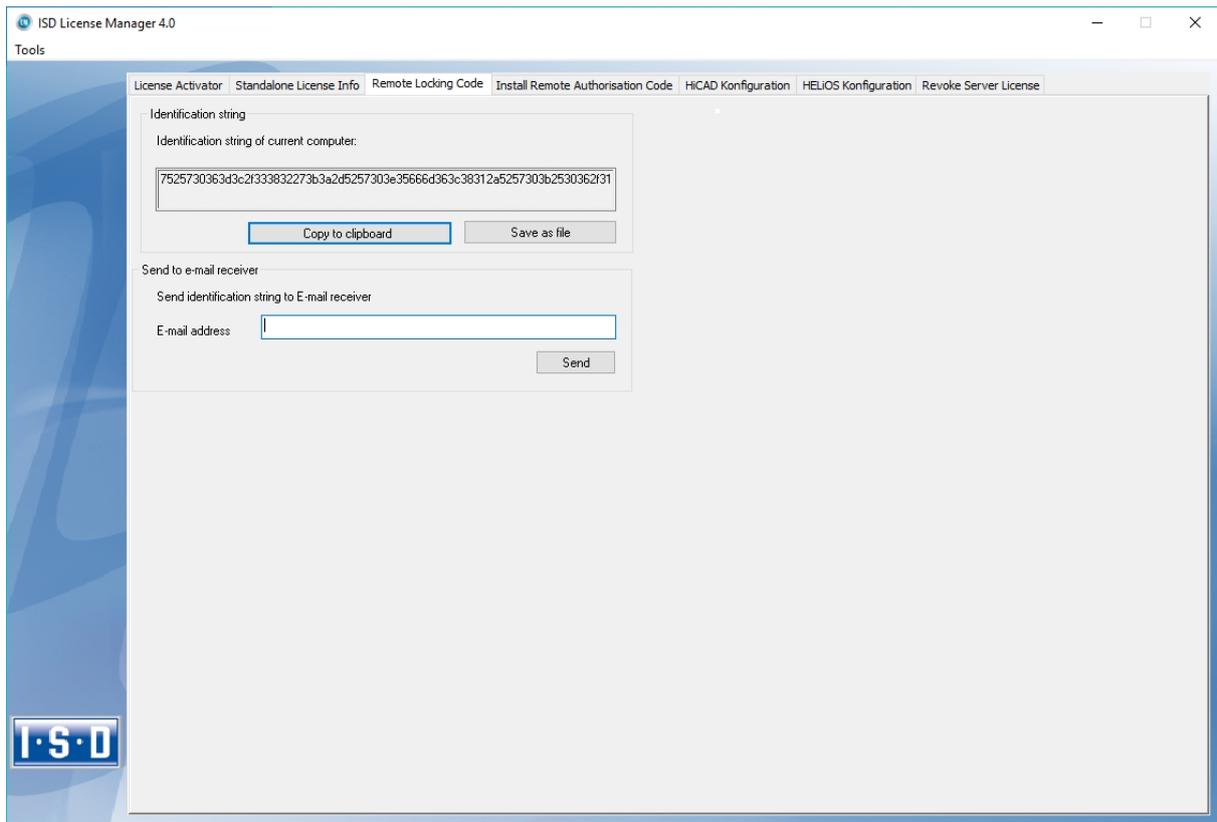
Commuter licenses can also be drawn from the License Server without an existing network connection. For this **Administrator rights** are required.

Commuter licenses checked out in this way cannot be returned to the License Server! This means that the commuter licenses that have been checked out from the Server are only (automatically) made available again after their expiry date.

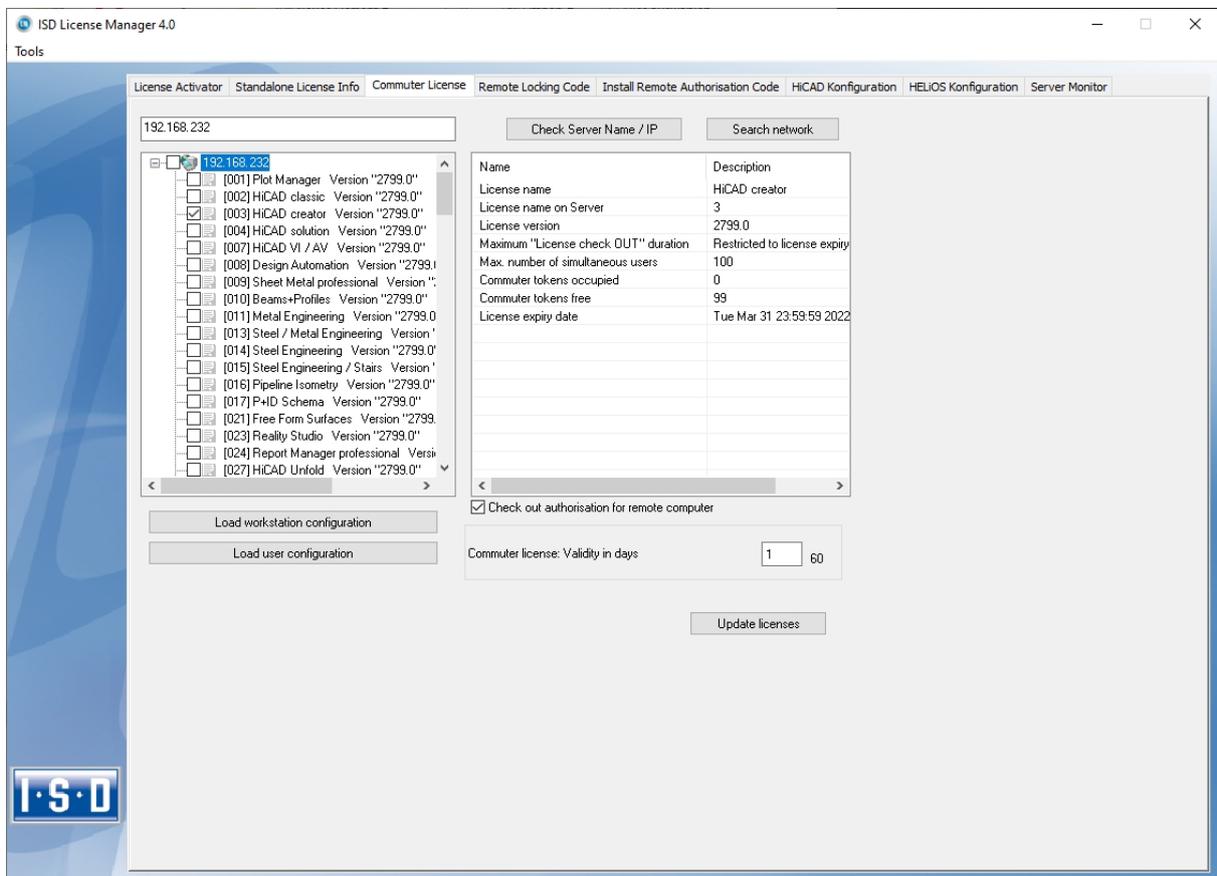
Several steps are required for checking out without network connection - by the Administrator having a network connection to the License Server, as well as by the Client (that is, your laptop) having no network connection to the License Server.

As long as commuter licenses are checked out in this way, it is not possible to update the network licenses on the server. The same applies when buying new modules/licenses and changing the configuration.

The Client starts the **ISD License Manager** tool, switches to the **Remote Locking Code** tab.

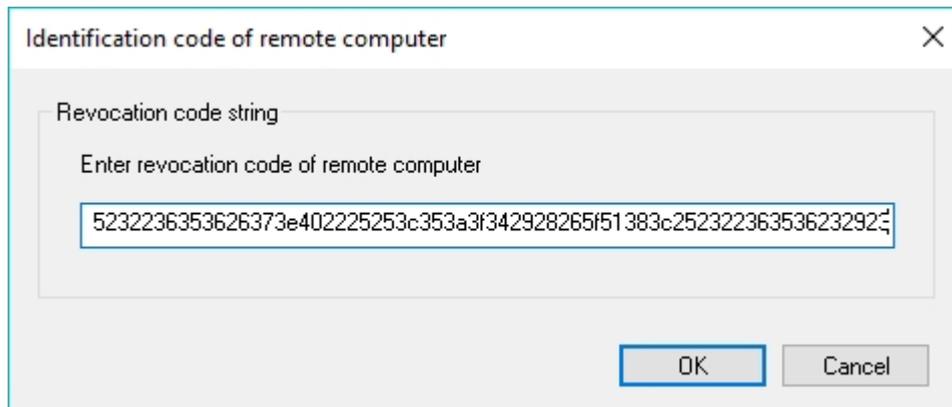


Then, the Client sends the generated character set to the Administrator (via E-mail or over the phone).
 The Administrator starts the **ISD License Manager** and switches to the **Commuter License** tab.

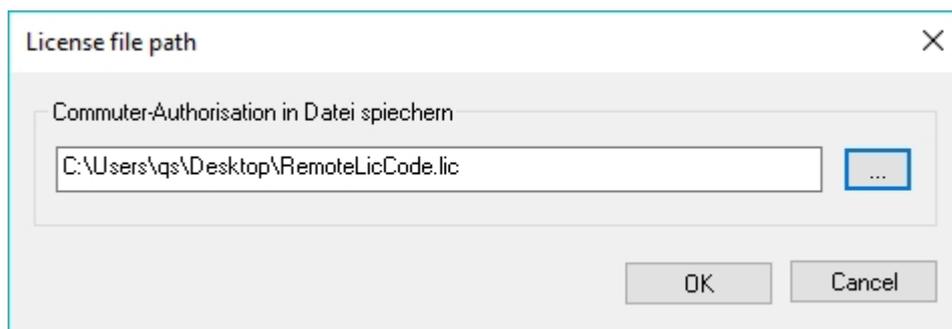


The License Server will be selected, and the required licenses (modules) are activated in the left window. In the **Commuter license: Validity in days** field, you enter the number of days that you want the commuter licenses to remain checked out from the Server. The maximum number of days is 60. By default (or if a "0" is entered), the value is set to 1. To checkout a remote commuter license the administrator now needs to activate the **Check out authorisation for remote computer** checkbox . Administrator rights are required for this.

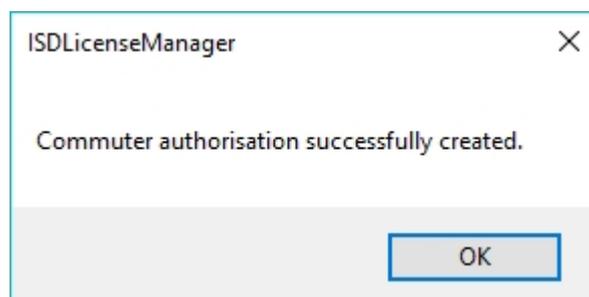
A click on the **Update licenses** button opens a new dialogue window, in which the administrator enters the character set received from the Client



After selecting **OK**, another dialogue opens.

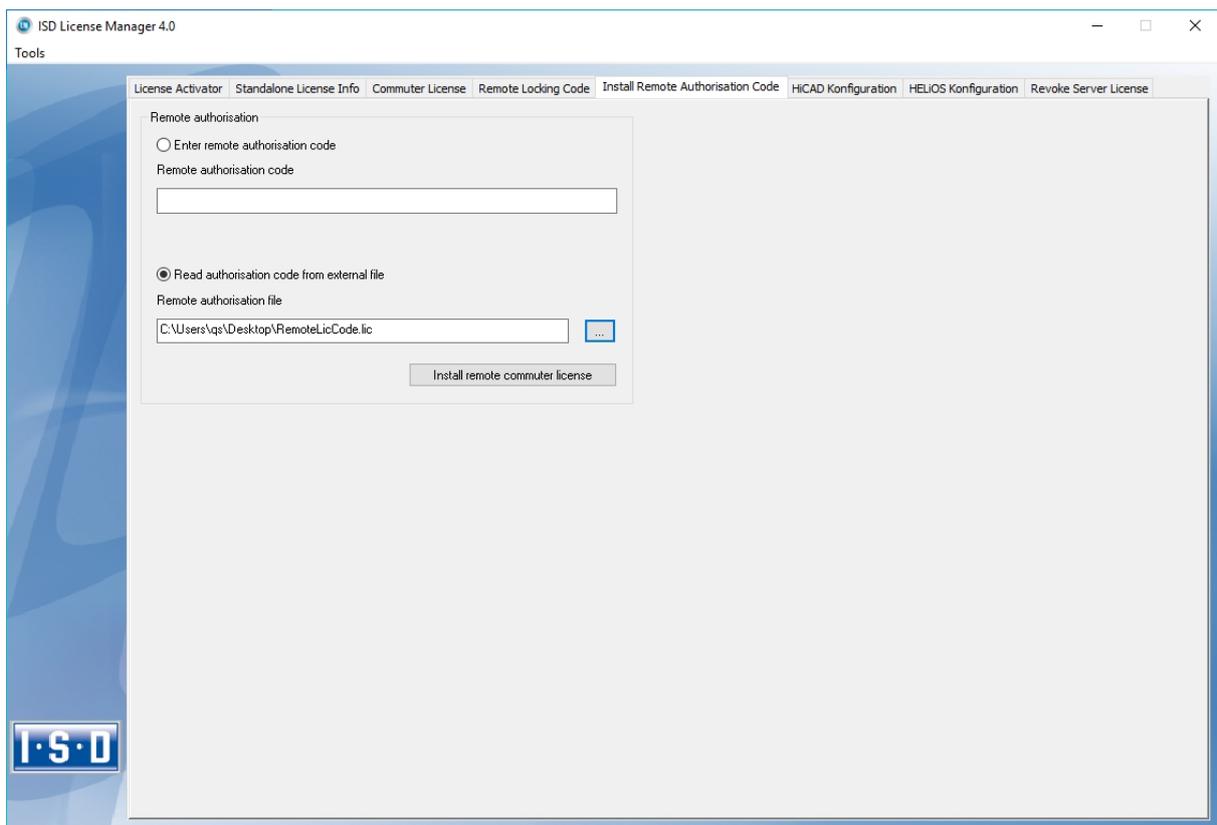


Here the Administrator enters the target path and the file name for the licenses to be swapped out. Make sure that a unique file name is used, for example, by including in the file name the host name of the remote computer and the expiry date.

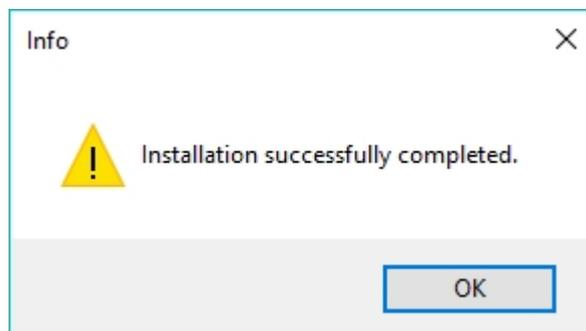


Click **OK** to check out the commuter licenses from the License Server and swap them out to a file, e.g. RemoteLicCode.lic.

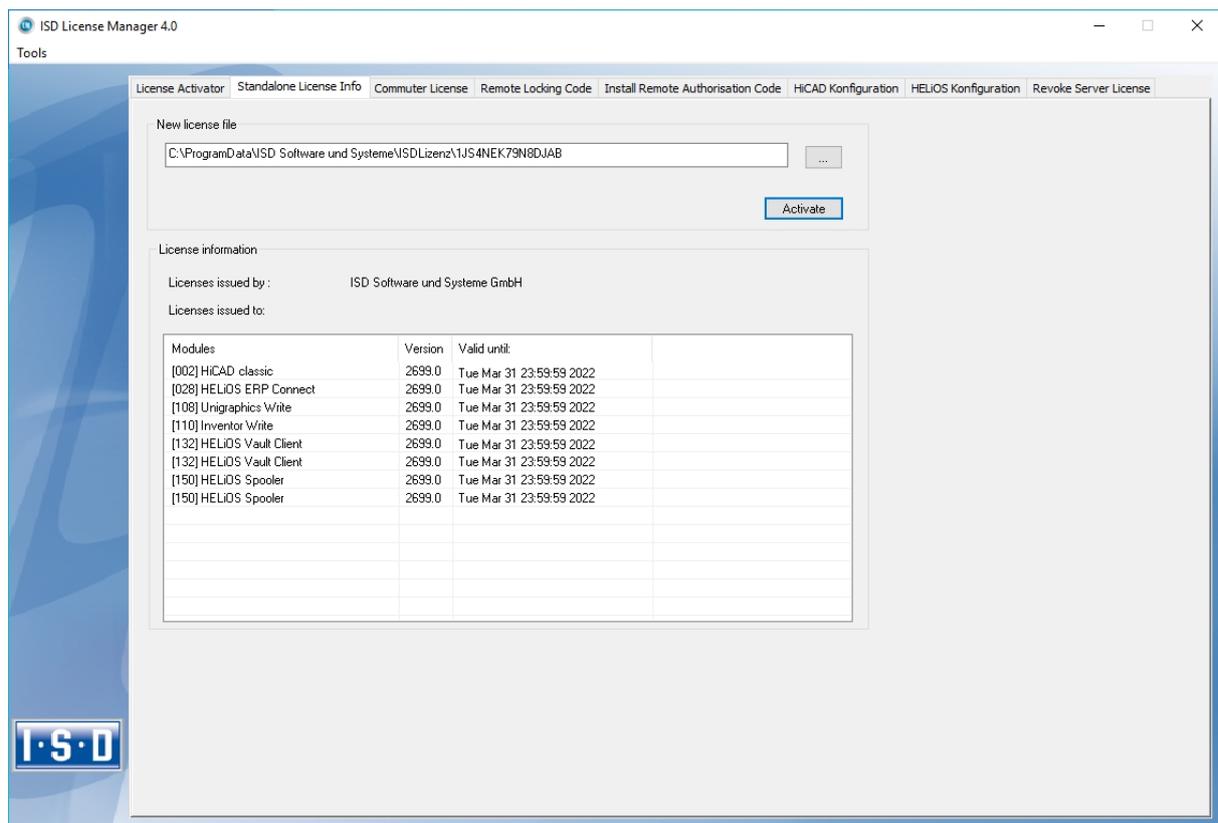
After receiving the file with the commuter licenses, the Client starts the **ISD License Manager** again and activates the **Install Remote Authorisation Code** tab.



Now the Client can install the received commuter licenses directly via file selection or via copying of the file contents. Click the **Install Remote Commuter License** button to install the Commuter Licenses on the Client.



After successful installation, the Client must switch to the **Standalone License Info** tab.

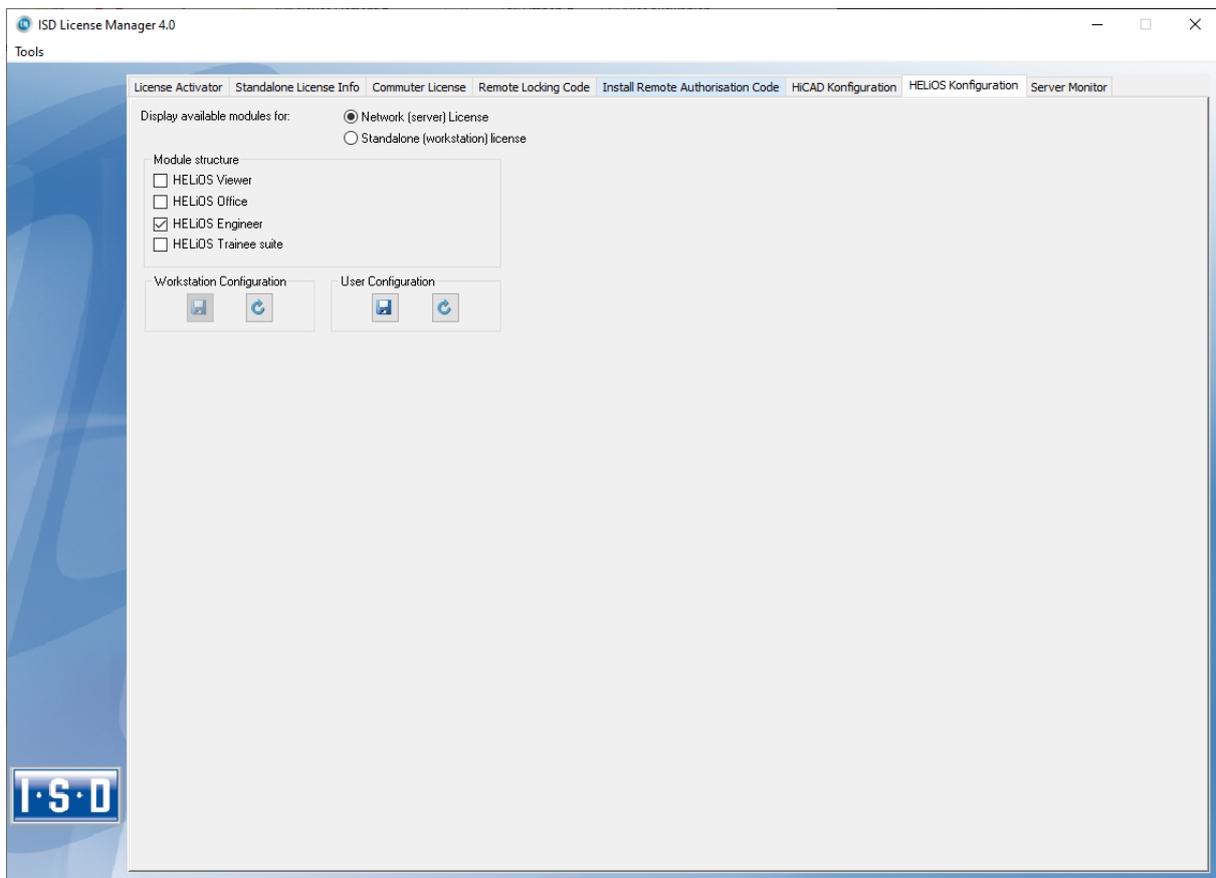


To update, the Client must click on the **Activate** button. The information which licenses are installed locally on the computer will then be provided to the Client.

License Configuration

Some cases may require the use of only certain specific licences on a computer. Example: On the License Server HELiOS Office and HELiOS Engineer licenses are available. On one Client, HELiOS is to be started with a HELiOS Office license; on another Client, with a HELiOS Engineer license. If the selected license is no longer available, an application start is no longer possible.

If there are several basic modules in a standalone (workstation) license (to which also the Commuter Licenses belong), it is mandatory to make a pre-configuration and save it as workstation configuration. If no pre-configuration is possible, the HELiOS configuration tab will be displayed before the start of HELiOS. If the selected configuration does not match the available licenses, a warning message will be issued, with a list of available licenses. After this, the configuration selection will be displayed again.



On the **HELiOS Configuration** of the **ISD License Manager** tool you have the option to save a workstation or user configuration for individual Clients.

- **Save as workstation configuration:** This configuration will be saved for all users of this computer. When HELiOS is started, the selection window is no longer displayed (administrator rights are required for this).
- **Save as user configuration:** This configuration is only saved for the current user. When HELiOS is started, the selection window with the saved configuration is always displayed.

These license configurations apply to network licenses and standalone (workstation) licenses.

Server Monitor

With the ISD License Manager tab **Server Monitor** you are allowed (as far as you are able to execute ISD License Manager) to view detailed information as follows:

- Listing of available modules with module description (e.g. “Element Installation”). Relevant is the License Server which the user is connected with.
- Apart from the module description, the maximum amount of available licenses as well as allocated licenses is displayed.
- You can open up the available modules and here the users using the respective license are displayed.
- The listing of users using a license also shows which user is connected with the License Server and which user uses a Commuter License.

By listing the licenses you can easily see who blocks licenses and, for example, easily speak to them in case if you need a license.

In the installation program, the tab **Server Monitor** is activated by clicking on the option **Activate license administration tools**.

The screenshot shows the ISD License Manager 4.0 interface with the 'Server Monitor' tab selected. The window displays a tree view of licenses and their usage by various clients. The license information is as follows:

License ID	Module Name	Version	Available Licenses	Allocated Licenses
SRV001	HICAD Spooler	2799.0	1	100
[001]	HICAD Spooler	2799.0	1	100
[002]	HICAD Classic	2799.0	1	100
[003]	HICAD Creator	2799.0	1	100
[004]	HICAD Solution	2799.0	18	100
[067]	SDNF	2799.0	17	100
[068]	NCX	2799.0	17	100
[069]	HELIOS Dokumentenverwaltung	2799.0	0	100
[070]	HELIOS Viewer	2799.0	1	100
[071]	HELIOS Bauteile- und Stücklistenmanagement	2799.0	0	100
[075]	HELIOS Maskeneditor	2799.0	0	100
[079]	HELIOS Office	2799.0	7	100
[080]	HELIOS Engineer	2799.0	0	100
[081]	HELIOS Engineer	2799.0	8	100

Below the license information, the 'Server Monitor' tab displays a list of clients using the licenses, including their client name, host name, start time, and whether they are using a Commuter License. For example, for the [004] HICAD Solution license, the following clients are listed:

Client	Host	Start	Commuter
qs:1	Test-10	24.09.2021 08:18:16	False
FR:1	DE73	24.09.2021 08:17:08	False
CS:1	DE55	24.09.2021 08:16:54	False
ea:1	P62	24.09.2021 08:16:30	False
SG:1	DE49	24.09.2021 08:15:27	False
mk:1	DE57	24.09.2021 08:14:21	False
HA:1	DE36	24.09.2021 08:13:57	False
HM:1	DE16	24.09.2021 08:00:46	False
qs:1	Test-11	24.09.2021 07:58:20	False
Tester:1	Test-04	24.09.2021 07:50:14	False
ap:1	DE28	24.09.2021 07:42:33	False
Tester:1	Test-02	24.09.2021 07:37:32	False
MH:1	DE64	24.09.2021 07:30:01	False
cm:1	DE53	23.09.2021 17:33:33	False
sm:1	DE68	23.09.2021 17:31:31	True
IS:1	DE62	23.09.2021 16:44:56	False
MD:1	DE04	23.09.2021 14:59:22	False
MM:1	DE21	23.09.2021 08:03:56	False

Other clients listed include [070] HeliOS Viewer (client HM:1, host DE16, start 24.09.2021 08:00:47, commuter False) and [081] HeliOS Engineer (clients ea:1, SG:1, HA:1, HM:1, ap:1, IS:1, BD:1, qs:1, hosts P62, DE49, DE36, DE16, DE28, DE62, DE66, Q5, start times from 24.09.2021 08:16:31 to 23.09.2021 09:08:13, all commuter False).

Theft of a Workstation

The user is responsible for appropriately insuring the HELiOS workstations against theft. If desired, we can tell you the reinstatement value of your software. If a workstation is stolen, you will need a new license. In such cases, please send us the police report of the theft first. We will then provide you with a license for a limited period of time, and submit an offer for a new license to you. The ISD will send you the new license after clarification of the case with your insurance and receipt of your payment for the license fee.

First Steps

- HELiOS at a Glance
- Start HELiOS
- What's New in Version 2022?

HELIOS at a Glance

On the way to the finished product, invested time, spent costs and product quality can only be optimised if all departments of a company cooperate efficiently. This requires a well-structured and efficient exchange of information between the parties involved in the production process - from Manufacturing, Purchasing and Service to Marketing and Sales.

HELIOS is a state-of-the-art PDM/PLM system providing all essential tools for an error-free gathering, management and distribution of the data required for the production process chain. Once saved, these data can be re-used within the entire company and for the complete product life cycle. HELIOS manages and controls all process cycles by regulating and monitoring the processing and transfer of these data.

By combining Product, Process and Peripherals Management in a single system, HELIOS becomes the central “knowledge reservoir” of your company and guarantees transparent and secure processes.

HELIOS can be interfaced with your CAD system or used as a stand-alone system, the so-called HELIOS Desktop - either as a single workstation or at different locations.

Thanks to its modular structure, HELIOS can be optimally adapted to company-specific requirements.

Start HELiOS

Start the HELiOS Desktop by double-clicking on the HELiOS.EXE file in the \HELiOS\exe directory or via the HELiOS icon  on the Desktop of your computer.

Default setting is the project-independent start. Please note that the list view in the right-hand window will not be shown when you start HELiOS Desktop for the first time. Select a project first and display the list view via **View** and then **Lists**.

If you have not closed HELiOS correctly during your last session, you will receive an error message from the Vault Server.

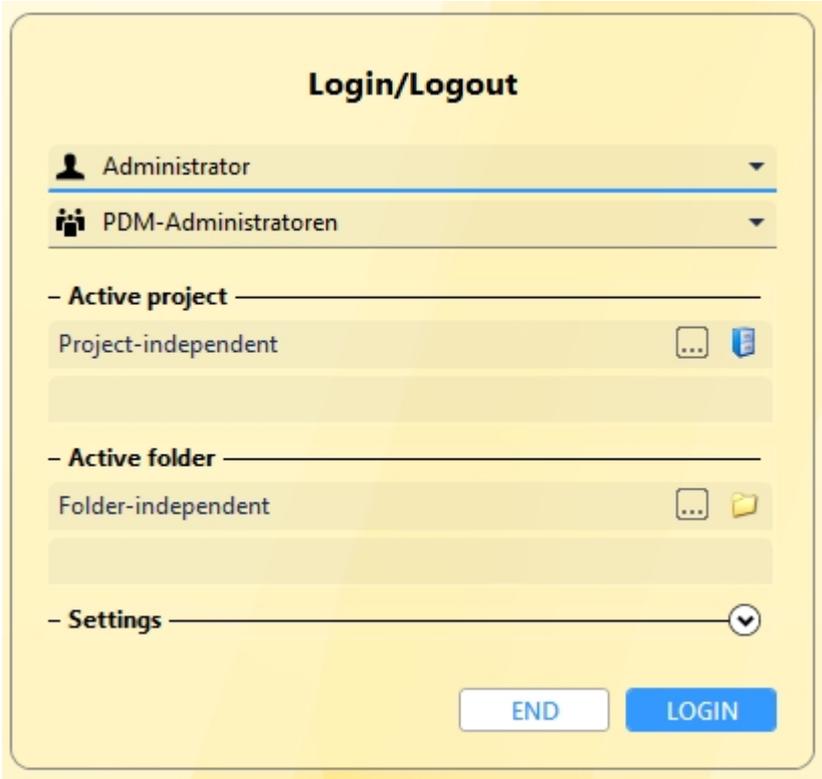
To make the best possible use of the numerous new features and enhancements offered by HELiOS, check out the videos explaining the new and changed HELiOS functionalities. From now on we will provide you with such videos with each Major Release and Service Pack to keep you constantly informed in the best possible way.

You can configure the display of the **News window** at the bottom left. Please note that you can configure the display of the News window at the bottom left. We recommend using the **Show most recent news** option to ensure that you will never miss any news about HELiOS. If you selected the **Show never** option, you can call the News window again

at any time and change the display option by clicking on the  symbol at the top right and selecting **Show news**.

Login

The HELiOS User Management is based on the User Management of Windows. If several users are registered with the same Windows User Name in EDBSETUP, a login mask will appear when starting HELiOS Desktop.



Login/Logout

 Administrator

 PDM-Administratoren

- **Active project** _____

Project-independent  

- **Active folder** _____

Folder-independent  

- **Settings** _____ 

Name and active group enable the user to login with the rights guaranteed by the User Management.

If you select a project from the **Active project** drop-down list, this project will be opened after starting HELiOS Desktop. If you select the project-independent setting, all documents will be displayed.

Start the HELiOS Desktop with **Login**.

To ensure that a specific project will be opened after starting HELiOS Desktop, you need to specify a Start Project. On the Ribbon, activate the **Tools** tab, then select **Options**, activate in the dialogue the **General** tab and choose a start project.

Switch user

Use the **Switch user**  function for a renewed login while working with HELiOS Desktop, e.g. to work with different rights without having to exit the program.

Activate the **Switch user**  function via the QuickAccess toolbar. Select a different user. Change the active project if required and confirm the new settings with **Login**.

What's New in Version 2022?

An extensive overview of all changes and enhancements of HiCAD 2022 can be found in the **What's new?** topic of the Help. You can also click on the  button in the Help.

An overview in PDF format will be displayed if you click on the  button in the Download area of the ISD Wiki.

How to Use the Help

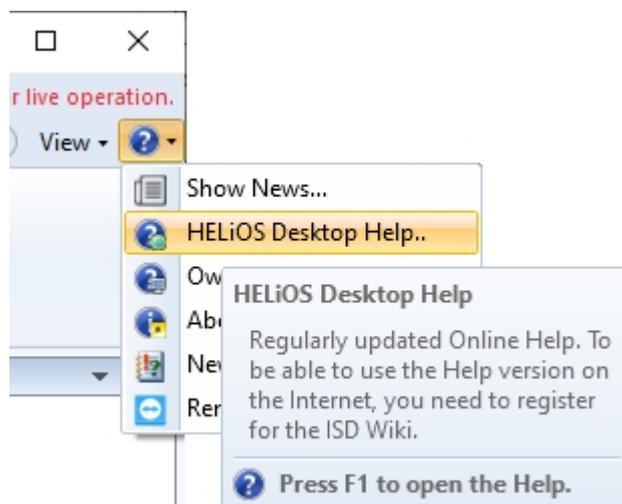
The Online Help provides you with information, descriptions and examples on all functions and techniques which are available in HELiOS.

 **Please note:**

The scope of available functions may vary, depending on the configuration of your HELiOS product. This means that some of the functions described in the Online Help may not be available in your version.

The Help is available both locally (status of the installation DVD) and on the Internet (regularly updated) at help.isdgroup.com. Both versions of the Help can be called from HELiOS.

Click on the  button to call the HELiOS Help.



Choose  > **HELiOS Options** to determine which version of the Help will be used.

 **Please note:**

If you move the cursor over a function on the Ribbon and press the **F1** key, the Help page for that specific function will be displayed.

To be able to use the Internet version of the Help, you need to register for the ISD's new company Wiki once. This will not only give you access to the new Help, but also provide you with many other information which will be made available shortly in the ISD Wiki (Forum, Download area etc.)

Click **Sign up** in the login window of the Online Help to register. If you have already been registered, enter your access data and click **Login** to get directly to the start page of the Online Help.

ISD Online Help

Login

Username *

Password

> Login

[Forgot password?](#)

New to the ISD Group? [Sign up now.](#)

After clicking **Sign up** in the Login window of the Online Help, enter the data required for the ISD Wiki in the dialogue window. Confirm the security prompt and click the **Sign up** button.

Create ISD account

You are a new user?

Simply fill out the form below and click on Register in order to access the desired ISD Group services.

Password policies: Your new password has to be between 8 and 16 characters long. We recommend that you use additional characters for increased security. Assigning the username as password poses a security risk and should be avoided.

Company / Educational institution*	Customer number
<input type="text"/>	<input type="text"/>
Salutation*	
<input type="text" value="-"/>	
First name*	Last name*
<input type="text"/>	<input type="text"/>
Postal code*	Country*
<input type="text"/>	<input type="text" value="-"/>
Phone number*	E-mail address*
<input type="text"/>	<input type="text"/>
Password*	Confirm password*
<input type="text"/>	<input type="text"/>

By creating an ISD account you agree to the ISD Group's **privacy policy**.*

Register

Required fields are marked with a * (star).

After successful registration the dashboard of the ISD Wiki will be displayed. A message indicates whether you have been authenticated as an ISD customer.

If you could be identified as an ISD customer, you can now directly launch the Online Help using your registration data.

If you could not be identified as an ISD customer, please perform the steps described in the message.



Important:

By default the Online Help has been selected after installation. If you prefer using the local Help, start the Installation Wizard again and click on the **HELIOS Help** button.

Hotline

Even after implementation, the support team of the ISD ensures competent support of their customers. Besides support over the phone, all current means of communication such as Fax, E-mail and Internet can be used. If any problems could not be solved in this way, our staff in all our offices will be there to help you at your company if required.

	Germany	Netherlands	Austria	Switzerland
Phone	+49 (0)231 9793-166	+31 (0)73 6153-888	+43 (0)732 21 04 22-28	+41 (0)32 624 13-47
E-Mail	support@isdgroup.com			
Service hours	From Monday to Thursday: between 8:00 am and 5:00 pm On Friday: between 8:00 am and 3:00 pm	From Monday to Friday: between 8:00 am and 5:00 pm	From Monday to Thursday: between 8:00 am and 5:00 pm On Friday: between 8:00 am and 3:00 pm	From Monday to Thursday: between 8:00 am and 5:00 pm On Friday: between 8:00 am and 3:00 pm

If all lines are busy, a voice mail system will be activated, allowing you to leave a message. Our staff will call you back as soon as possible. If a line becomes available during the recording of your message, your call will be accepted immediately. It is our ambition to solve your problems as quickly as possible and let you have the solution via phone or E-mail. A problem diagnosis will be made on the spot, and the existing problem will be dealt with and eliminated as fast as possible.

In cases where your problem cannot be solved immediately, we will call you back after analyzing the situation. Depending on the level of difficulty our Hotline will also bring in the Development department.

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