



HELIOS

UNLIMITED PLM PERFORMANCE DEVELOPED BY ISD

Installation Notes

Version 2024

HELIOS

Date of issue: 20/05/2024

isdgroup.com



THE WORLD OF CAD AND PDM SOLUTIONS

TOC

Getting Started	5
System Requirements	10
System Requirements for the HELiOS Database Server	11
System Requirements for the HELiOS Vault Server	12
System Requirements for the HELiOS Client	13
Compatibility Matrix for Interfaced Applications (HELIOS)	14
System Requirements for the HELiOS Internet Server	16
System Requirements for the HELiOS Spooler	19
System Requirements for the License Server	20
Operation in Virtual Environments	21
HELIOS Client	21
HELIOS Spooler	21
License Server	21
Network licenses on Virtual Machines (VM)	21
Further Requirements for Installation	22
Installation	23
Installing the HELiOS Database Creator	25
Installing the HELiOS Vault Server	28
Installing the HELiOS Client	32
Support with the Office Interface	40
Installing the HELiOS Help	42
Installing the HELiOS Internet Servers	45
Licensing	49
Checking the operability of the individual server components of the HELiOS Internet Server	50
Troubleshooting Support	52
Installing the HELiOS Spooler	56
Installing the HELiOS Server Monitor	61
Installing the HELiOS Task Starter	63
Installing the HELiOS Article Synchronization	66
Installing the HiCAD Viewer	71
Configuration	74
Parameter Configuration for HELiOS	75
Update	76
Licensing in Case of Updates	80
Updating the Server License	80
Updating Local Licenses	81
Carrying Out the Installation	82

- Update of HELiOS** **83**
- Backups Before Performing the HELiOS Update Installation 83
- Update Installation of HELiOS 84
- ISD Update Service** **93**
- Installing the ISD Update Service 93
- Using the ISD Update Service 96
- ISD Update Service: Settings 100
- Updating the HELiOS Database (Database Schema)** **102**
- Manual Registration of Multi-CAD Add-ins** **107**
- New Mask Editor for HELiOS** **108**
- Licensing** **110**
- General Notes on Licensing** **111**
- General Information on Local (Workstation-specific) Licenses 111
- General Information on (Server-controlled) Network Licenses 111
- General Information on Commuter Licenses 112
- Installing the License Server** **114**
- Licensing via Entitlement ID (License Activator)** **120**
- AutoRequest Licenses 120
- Activate Licenses 122
- Deactivate Licenses 123
- Trial Licenses 124
- Reconstruction of Licenses 124
- Notes on the Use of Mobile Computers (Laptops) 124
- Commuter Licenses** **125**
- Checking Out Commuter Licenses, with Network Connection 125
- Checking Out Commuter Licenses, without Network Connection 128
- License Configuration** **133**
- Server Monitor** **135**
- Theft of a Workstation** **136**
- First Steps** **137**
- HELiOS at a Glance** **138**
- Start HELiOS** **139**
- What's New in Version 2024?** **141**
- How to Use the Help** **142**
- Hotline** **145**
- Copyright** **146**

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, HiCAD Viewer 32 Bit and Office Interface 32 Bit

Since HELiOS 2022 (Version 2700.0) there is no 32 Bit version available for HELiOS and the HiCAD Viewer. The HELiOS interface for a 32 Bit Office was one of the few components that was still 32 Bit on these versions. Since Microsoft has also offered a 64 Bit installation of Office since Office 2010 and many add-ins for Office are now also available as 64 Bit versions, with HELiOS 2024 we will support an Office interface only for a 64 Bit Office. If you are still using the Office interface in conjunction with a 32 Bit Office, you must uninstall your Office version and reinstall it as a 64 Bit version as soon as you update to HELiOS 2024.

Discontinuation of the Zuken E3 interface

As of HELiOS 2024 (Version 2900.0) we will no longer support the Zuken E3 interface.

Discontinuation of Oracle

As of HELiOS 2022 (Version 2700.0), 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 2600.0) on, we will no longer support Office 2010 in the HELiOS – Office interface.

Discontinuation of old Multi-CAD interfaces for HELiOS 2024

As of HELiOS 2024 (Version 2900.0), the following versions of Multi-CAD interfaces are no longer supported:

- AutoCAD 2020
- AutoCAD Mechanical 2020
- Inventor 2020
- Navisworks 2020

Discontinuation of the "old" Report Manager

From HELiOS 2024 onwards, the "old" Report Manager, i.e. the Report Manager up to 2022, will no longer be delivered with a standalone installation of the HELiOS Desktop. In a HiCAD/HELiOS installation or a HELiOS update of HiCAD, however, the "old" Report Manager is still included. From HiCAD 2025 onwards, only the "new" Report Manager as of 2023 will be supported.

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.

Mark-up und redlining

The **HiRedLine** tool allows you to add comments or modification suggestions to a HiCAD drawing, without changing the original file.

As of 2023, this tool is only available as part of a HiCAD/HELiOS installation. In case of a standalone installation of the HELiOS Desktop, starting it will no longer be possible.

Transfer HiCAD sheet structure to HELiOS

From HELiOS 2023 onwards, information on the HiCAD sheet structure, which is transferred when saving a model drawing with HELiOS, is used for printing drawings via HELiOS. For inventory data that have not yet been re-saved yet, this information is missing and printing via HELiOS is not possible.

If HiCAD is started with HELiOS after an update installation, you will get a message and you can add the HiCAD sheet structure for inventory data. [See also the information in the HELiOS Online Help.](#)

Data compatibility

When performing a HELiOS update, the update start mask shows you the HELiOS version, 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 2024 (Version 290*.*), you can only update installations from 2019 (Version \geq 2400.0) and newer. (See also [Carrying out the installation.](#))

PDF preview in HELiOS Desktop

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

As an alternative, we recommend Sumatra PDF (64-bit and the non-portable version) for HELiOS from Version 2702.3, 2800.3 and 2801.0. Before you install it, you need to uninstall all PDF Readers. During installation, click on **Options** (bottom left) and choose **Install for all users** and **Let Windows show previews of PDF documents**. You may also need to modify the hel_preview.ini configuration file if Acrobat Reader is explicitly defined there for PDF preview.

If an update to a new HELiOS version is to be avoided, **Foxit Reader** (up to max. Version 11) can be used.

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.

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.

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

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 and AutoCAD!

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 10 to Windows 11), 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, 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
- 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 2024	HELIOS 2023	HELIOS 2022
Microsoft SQL Server 2022	✓	✓	✗
Microsoft SQL Server 2019	✓	✓	✓
Microsoft SQL Server 2017	✓	✓	✓
Microsoft SQL Server 2016	✓	✓	✓
Microsoft SQL Server 2014	✓	✓	✓
Microsoft SQL Server 2012	✓	✓	✓
Microsoft SQL Server 2008 or older	✗	✗	✗

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

	HELIOS 2024	HELIOS 2023	HELIOS 2022
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. A detailed comparison of the different SQL Server editions can be found on the manufacturer's website.

System Requirements for the HELiOS Vault Server

The minimum requirements are as follows:

	HELiOS 2024	HELiOS 2023	HELiOS 2022
Processor (CPU)	64 Bit processor		
Main memory	Additionally at least 4 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. For optimal performance we recommend using an SSD drive.		
Operating system	Microsoft Windows 10 or Microsoft Windows Server 2016 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 minimum requirements for the HELiOS Client are as follows:

	HELiOS 2024	HELiOS 2023	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		

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



Please note:

- When linking a HELiOS Client to other applications such as a CAD system or office product, the minimum requirements of the respective system manufacturer must also be observed.
- If you want to use an integrated viewer, the hardware requirements of respective viewer manufacturer must be considered.
- Using the HiCAD Viewer in HELiOS from Version 2024
 - During the HiCAD installation ("**HiCAD and HELiOS**", red installation dialogue), the Active X component of the HiCAD Viewer is automatically installed. This enables the preview of HiCAD files in HELiOS.
 - On workstations on which only the HELiOS Desktop (standalone) is installed, the HiCAD Viewer must be installed separately from HELiOS 2024 and updated if necessary. This is also the case if only HELiOS is updated when using an older HiCAD version with HELiOS. Otherwise, the preview of HiCAD files cannot be displayed in HELiOS. You will find the installation of the HiCAD Viewer both on the yellow installation medium at **Tools > HiCAD Viewer** and at [Download Area > Tools Download](#).

With HELiOS 2024 the HEL_PREVIEW.INI settings file for the Viewer has also changed, which enables the configuration of the graphics windows in the HELiOS Desktop. If you want to make special settings in HEL_PREVIEW.INI, you should make these based on the new version that is also used for the new installation. You can find a description [here](#).
- Before starting a HELiOS Client, you need a HELiOS Database Server and an appropriately configured ODBC connection. Documents (in .pdf format) on installing the database system and importing and exporting the database can be found [here](#).

Compatibility Matrix for Interfaced Applications (HELiOS)

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

	HELiOS 2024	HELiOS 2023	HELiOS 2022
Operating system			
Windows 11, 64 Bit	✓	✓	✓ (as of SP1)
Windows 10, 64 Bit	✓	✓	✓
Windows 8.1 or older	✗	✗	✗
Server Operating system			
Windows Server 2022	✓	✓	✓ (as of SP1)
Windows Server 2019	✓	✓	✓
Windows Server 2016	✓	✓	✓
CAD system			
HiCAD 2024	✓	✗	✗
HiCAD 2023	✓	✓	✗
HiCAD 2022	✓	✓	✓
HiCAD 2021	✗	✓	✓
HiCAD 2020	✗	✗	✓
HiCAD 2019 or older	✗	✗	✗
AutoCAD (Mechanical)			
AutoCAD (Mechanical) 2024	✓	✓ (as of SP2, Patch 1)	✓ (as of SP2, Patch 3)
AutoCAD (Mechanical) 2023	✓	✓	✓ (as of SP2, Patch 1)
AutoCAD (Mechanical) 2022	✓	✓	✓
AutoCAD (Mechanical) 2021	✓	✓	✓
AutoCAD (Mechanical) 2020	✗	✓	✓
AutoCAD (Mechanical) 2019	✗	✗	✓
AutoCAD (Mechanical) 2018 or older	✗	✗	✗
Inventor			
Inventor 2024	✓	✓ (as of SP2, Patch 1)	✓ (as of SP2, Patch 3)
Inventor 2023	✓	✓	✓ (as of SP2, Patch 1)
Inventor 2022	✓	✓	✓
Inventor 2021	✓	✓	✓

	HELIOS 2024	HELIOS 2023	HELIOS 2022
Inventor 2020	✗	✓	✓
Inventor 2019	✗	✗	✓
Inventor 2018 or older	✗	✗	✗
Navisworks 2023	✓	✓ (as of SP2, Patch 1)	✓ (as of SP2, Patch 3)
Navisworks 2023	✓	✓	✗
Navisworks 2022	✓	✓	✓
Navisworks 2021	✓	✓	✓
Navisworks 2020	✗	✓	✓
Navisworks 2019	✗	✗	✓
Navisworks 2018 or older	✗	✗	✗
CAE-SYSTEM			
EPLAN Electric P8 2023	✓	✓ (as of Patch 3)	✗
EPLAN Electric P8 2022	✓	✓	✓ (as of SP2, Patch 1)
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	✓	✓	✓
OFFICE			
Office 2021	✓	✓	✓ (as of SP1)
Office 2019	✓	✓	✓
Office 2016	✓	✓	✓
Office 2013	✓	✓	✓
Office 2010 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:

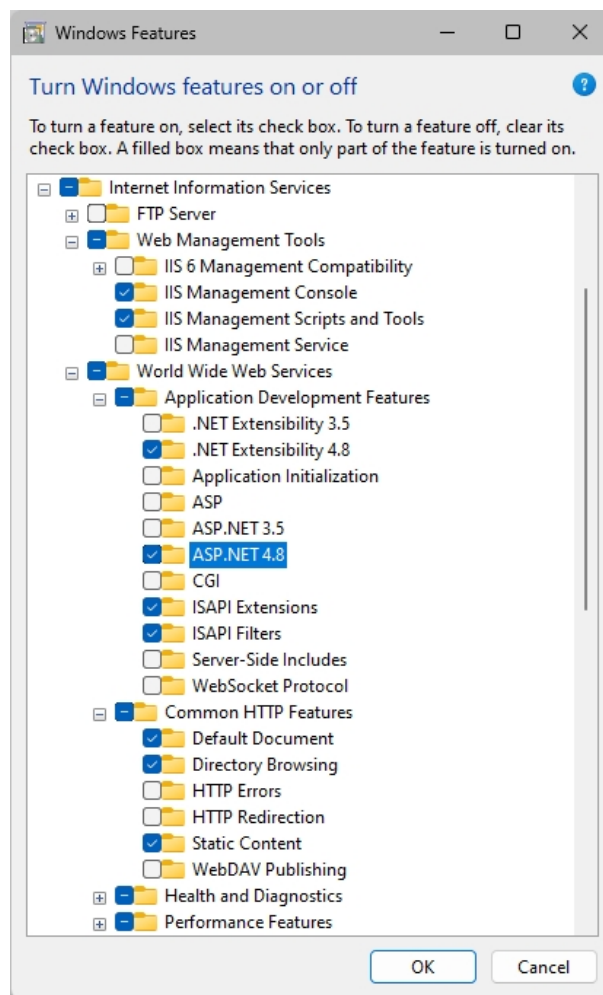
	HELiOS 2024	HELiOS 2023	HELiOS 2022
Processor (CPU)	64 Bit processor		
Main memory	Minimum: 4 GB RAM + 1 GB per simultaneous user (i.e. user working on the HIS at the same time as others)		
Hard disk	Additionally at least 2 GB free hard disk memory		
Operating system	Microsoft Windows 10 or Microsoft Windows Server 2016 or higher		
Others	<p>As a prerequisite for the installation of a HELiOS Internet Server, a HELiOS Client must be installed beforehand.</p> <p>Operation via SSL (https) requires valid certificates for the corresponding web pages of the HELiOS Internet Server.</p>		

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, blow Internet Information Services, expand the areas **Web Management Tools**, **World Wide Web Services > Application Development Features** and **Common HTTP 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.
- The HELiOS Internet Server supports the browsers Google Chrome, Firefox, Microsoft Edge and Android. The use of the HELiOS Internet Server in iOS / Safari has not yet been conclusively tested and approved by the ISD.

- The HELiOS Internet Server can interact with the Softvise Cadmium Cloud to display 3-D previews. The following components from Softvise GmbH are required for this:
 - Cadmium Cloud Server: The Cloud Server is the software component that performs the rendering of the models. Additional costs are incurred for suitable hardware on which the Cloud Server runs.
 - Import gateway for Cadmium Cloud Server: Cadmium offers various import interfaces, some of which must be licensed separately.
 - Cadmium Cloud Render Agents: Depending on the available Render Agent, 3-D visualisation can be carried out with the HELiOS Internet Server.

System Requirements for the HELiOS Spooler

The minimum requirements for the HELiOS Spooler are as follows:

	HELiOS 2024	HELiOS 2023	HELiOS 2022
Processor (CPU)	64 Bit processor		
Main memory	Additionally at least 4 GB main memory. The main memory should be dimensioned at least as large as the main memory of the client systems used. This ensures that all data to be processed by the HELiOS Spooler (which is transmitted from the client systems to the HELiOS Spooler) can be processed successfully.		
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 requires corresponding locally installed CAD, E-Tech or Office applications to execute the plot or conversion jobs. Please consider that you need appropriate licenses for the operation of these applications and that the hardware requirements of the respective system provider must be taken into account accordingly.
- The applications used by the HELiOS Spooler to process print and conversion jobs must be exclusively available to the Spooler and must not be used by other applications or HELiOS installations used simultaneously. Otherwise, job processing may be cancelled.
- In addition to the client operating systems for Windows, the above-mentioned server operating systems can also be used. Whether a server operating system must be used depends on the license conditions for the Microsoft operating system you are using. The number of permitted simultaneous device connections is decisive here. Windows 10 allows 20 simultaneous logins to the operating system. In this case, you must ensure that, in addition to the existing logins, there are sufficient free logins left that can be used by the respective print clients of the client computers.

System Requirements for the License Server

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

	HELIOS 2024	HELIOS 2023	HELIOS 2022
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		

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



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 use of a cloud server is only possible if changes to the underlying hardware can be excluded by the cloud provider. This also includes that the provider does not move the virtual server to another physical machine.
- 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.
- A Windows Server Core installation is not supported.

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 Thales© can, generally, also be used in virtual environments.

The use of a cloud server is only possible if changes to the underlying hardware can be excluded by the cloud provider. This also includes that the provider does not move the virtual server to another physical machine.

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 [here](#).

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
- HELiOS Server Monitor
- HELiOS Task Starter
- HELiOS 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.

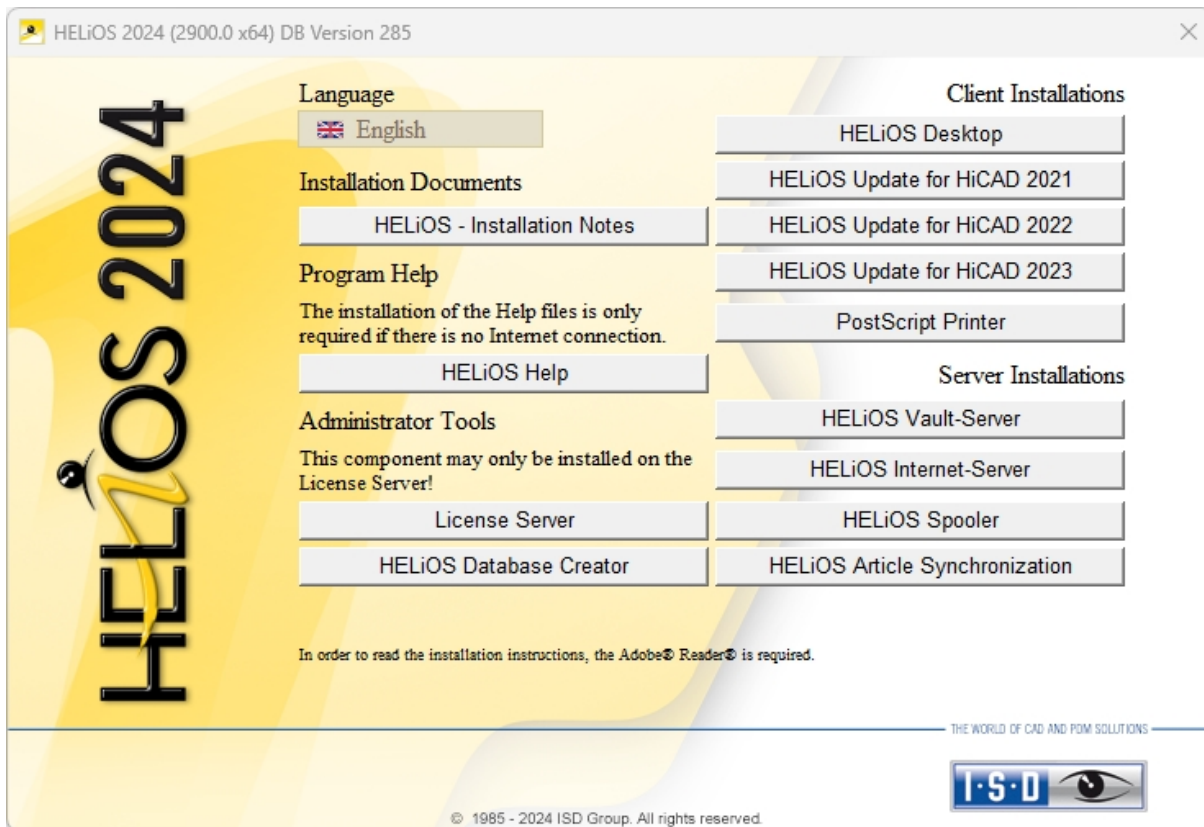
It is mandatory for the installation of HiCAD to start the **setup.exe** file from the root directory of the ISO file; only in this way it is ensured that the version will recognize the operating system, and that the matching HELiOS version will be installed.



Please note:

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

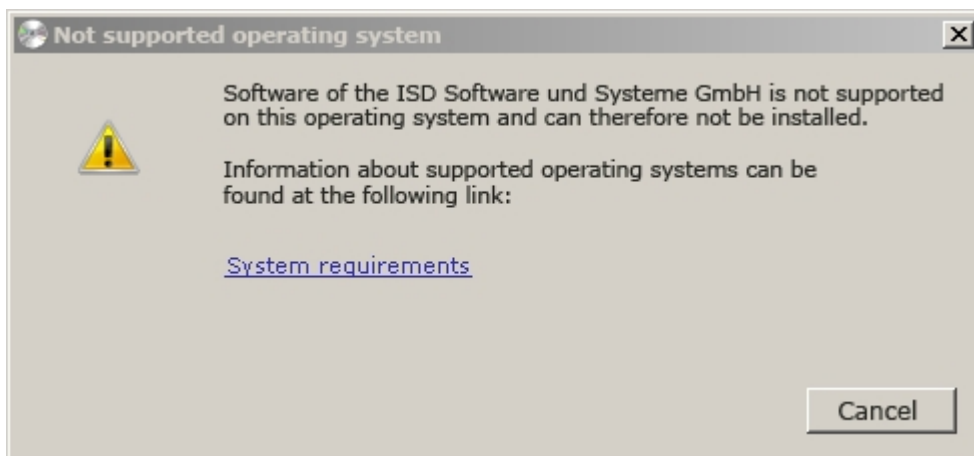
After running the **setup.exe** file, the following dialogue will be displayed:



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.

An empty HELiOS standard database is located in the **HELiOS\Databases** directory on the installation medium.

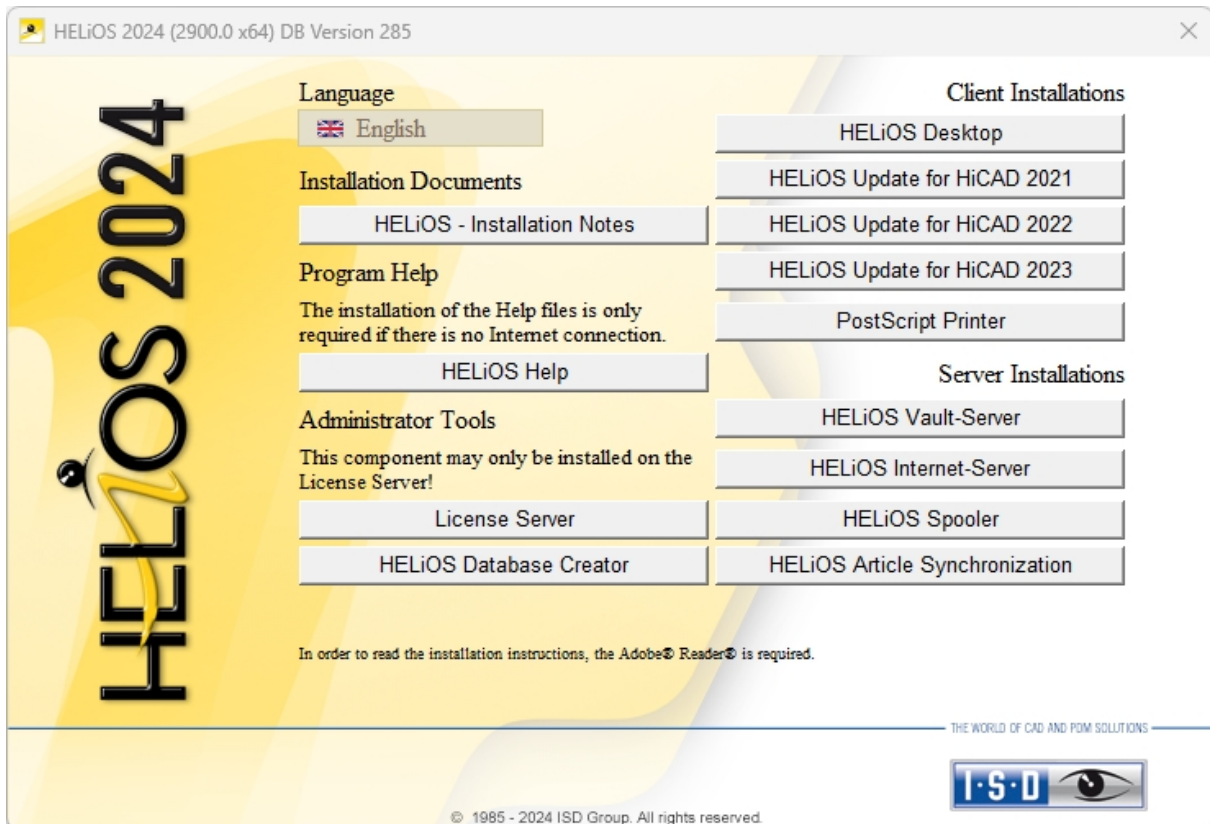


Please note:

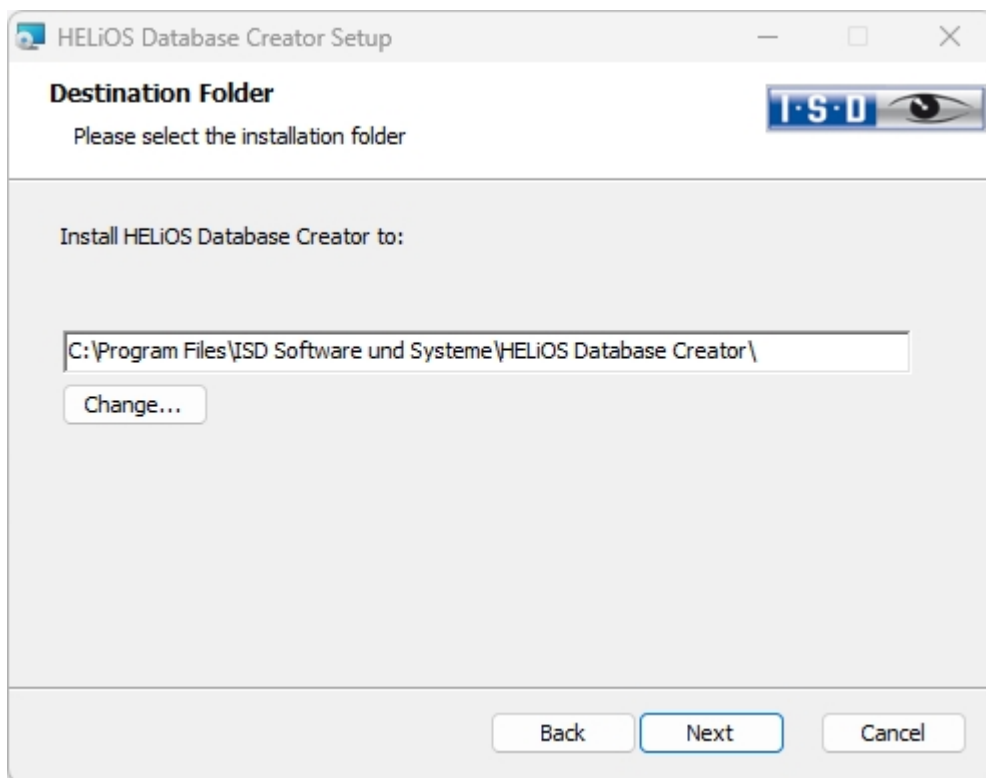
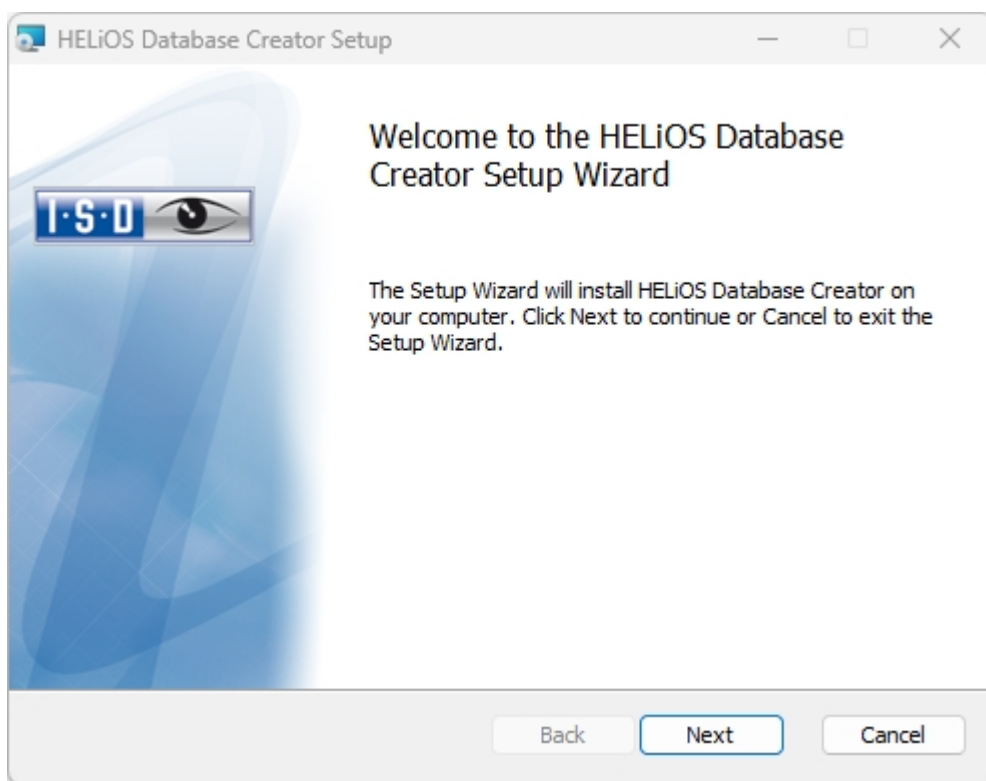
Further information about the correct procedure for the execution of the HELiOS Database Creator, as well as the previous and subsequent steps required for the setting up of a database server can be found in the user guide for the installation of the **Microsoft SQL Server**. You can find this document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

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

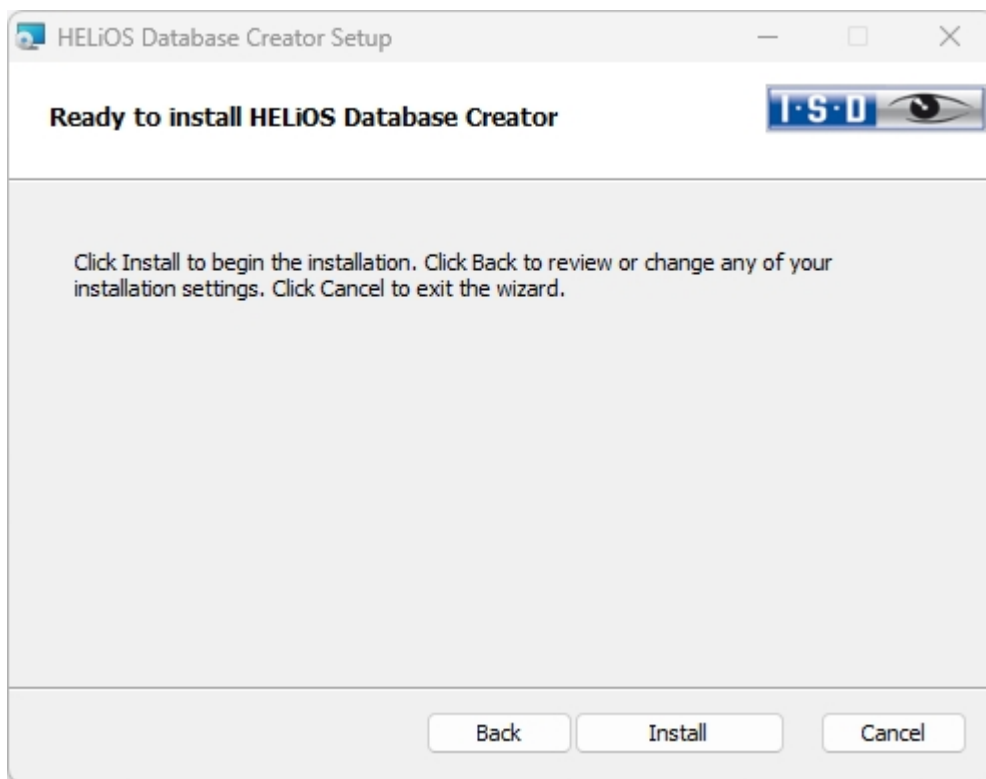
Leave this selection mask open, so that you can select the desired components one after the other.



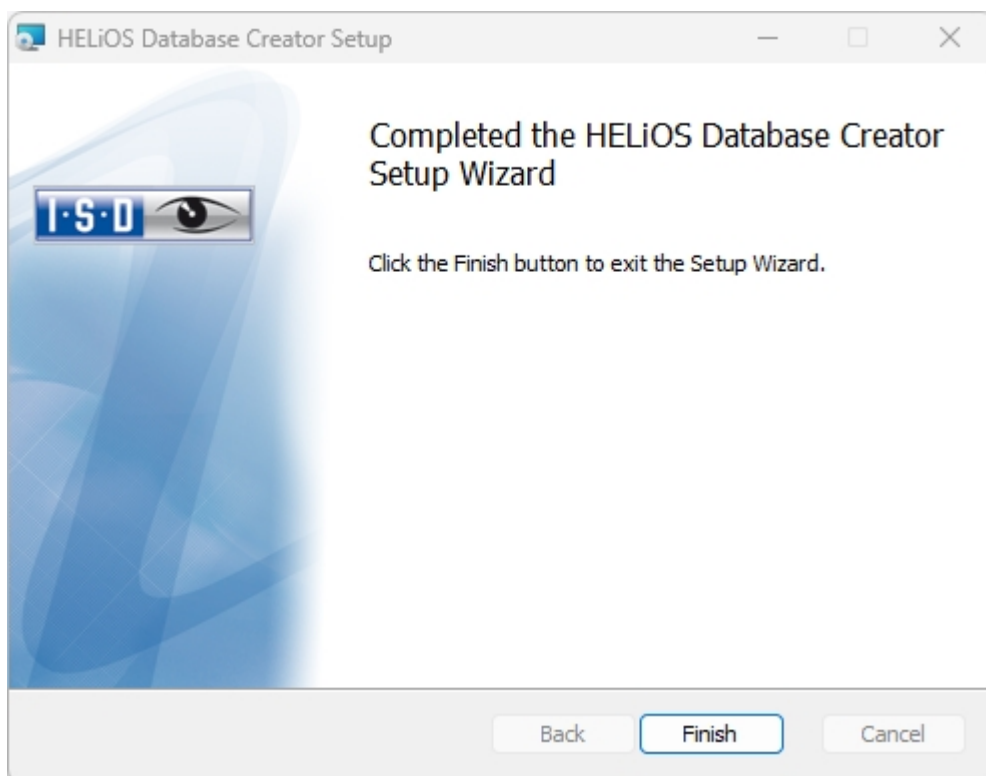
Click on the **HELiOS Database Creator** button.



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.

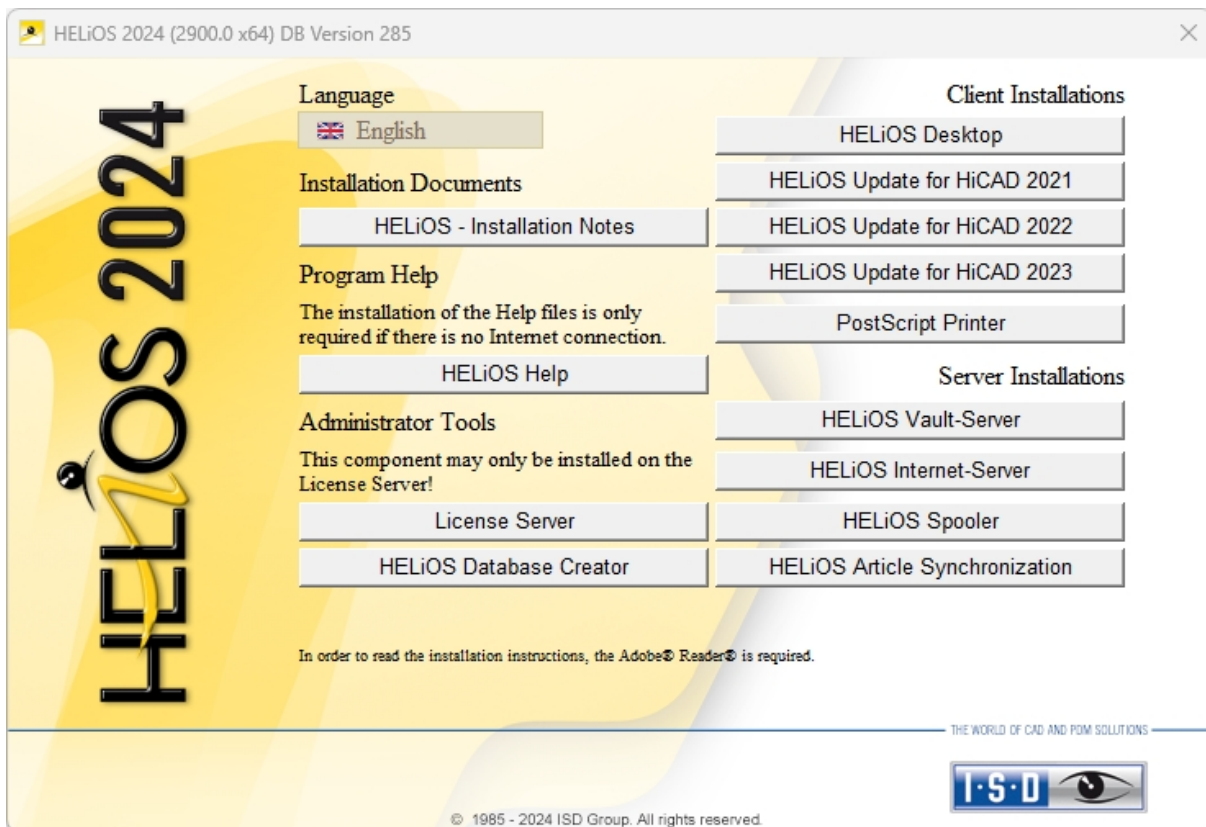
Installing the HELiOS Vault Server

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

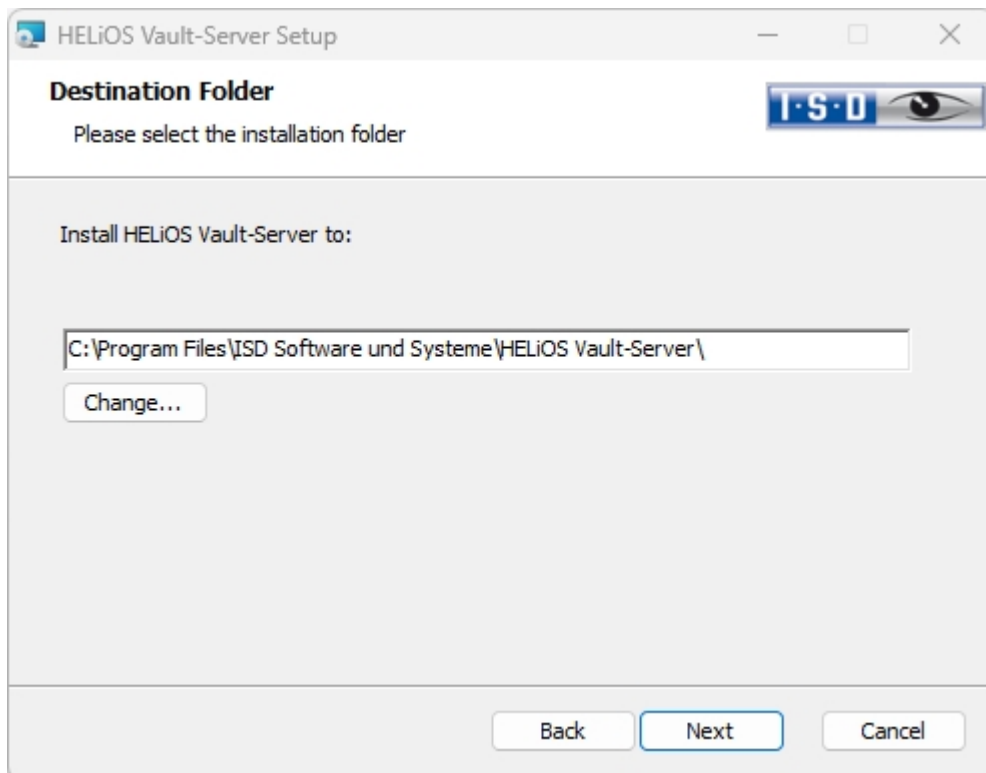
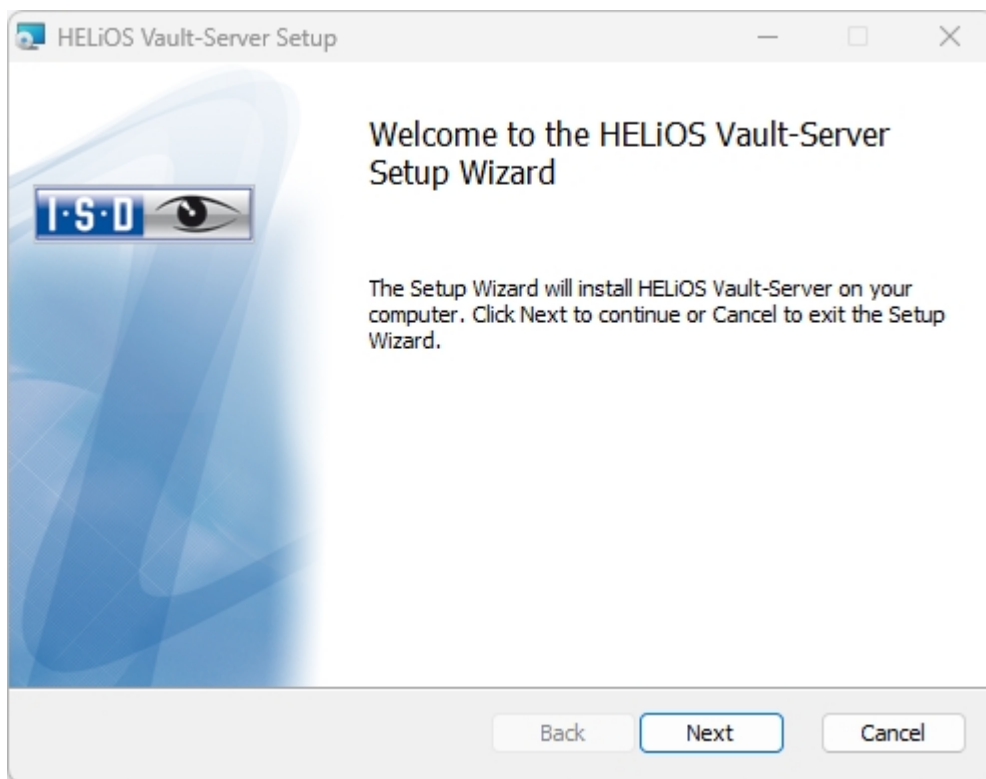
This screen remains open so that you can install the required components one after another.

 **Please note:**

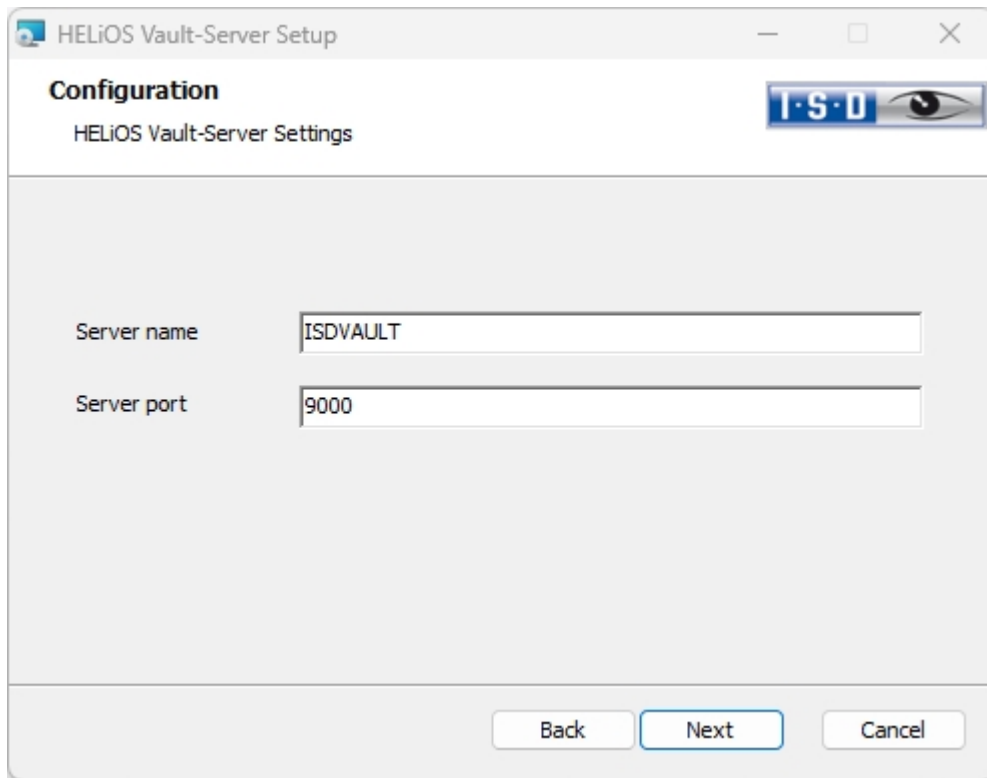
In rare cases, a manually installed older version of the Vault Server may be found which is not touched (updated) by the setup for safety reasons. In case of an error message, please contact our hotline staff. E-Mail: support@isdgroup.com



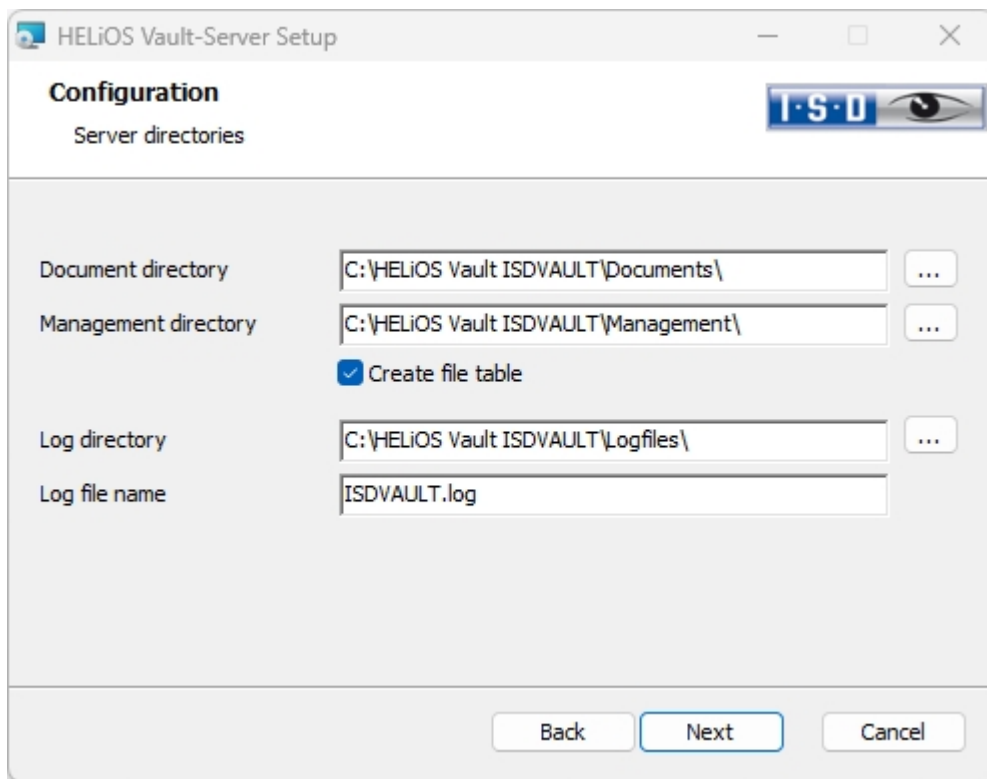
Click on the **Vault Server** button.



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.



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.

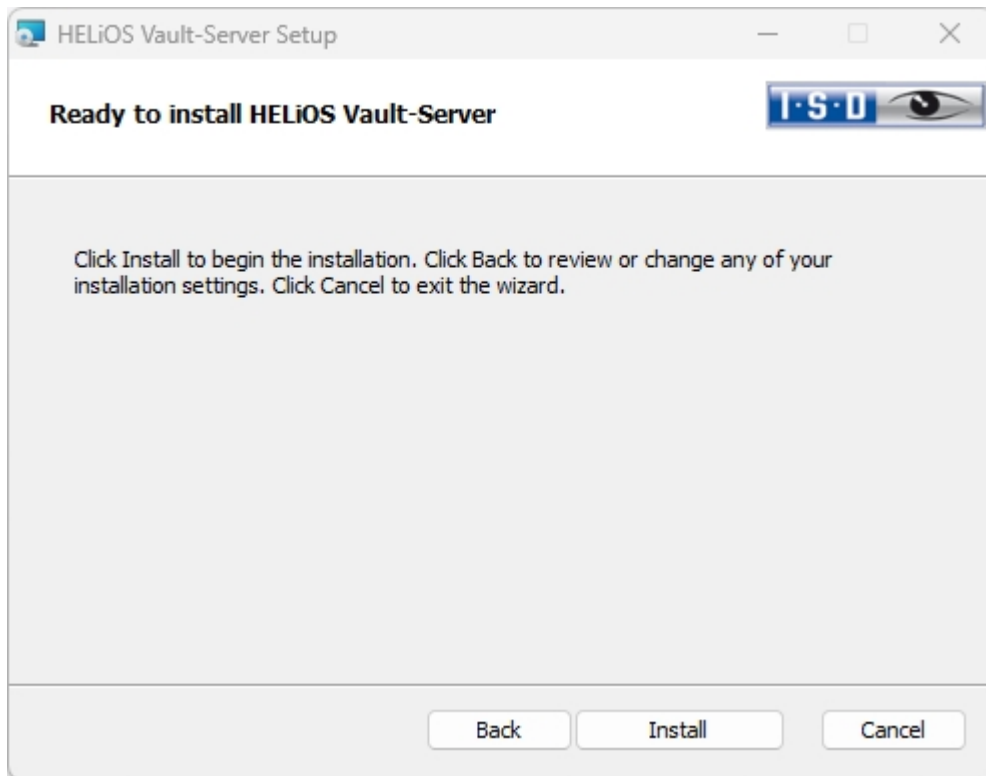


The Vault Server renames all documents that are managed in the database (e.g. SZA, DOC, XLS, ...) to *.VDF. These VDF files are saved to the Document directory.

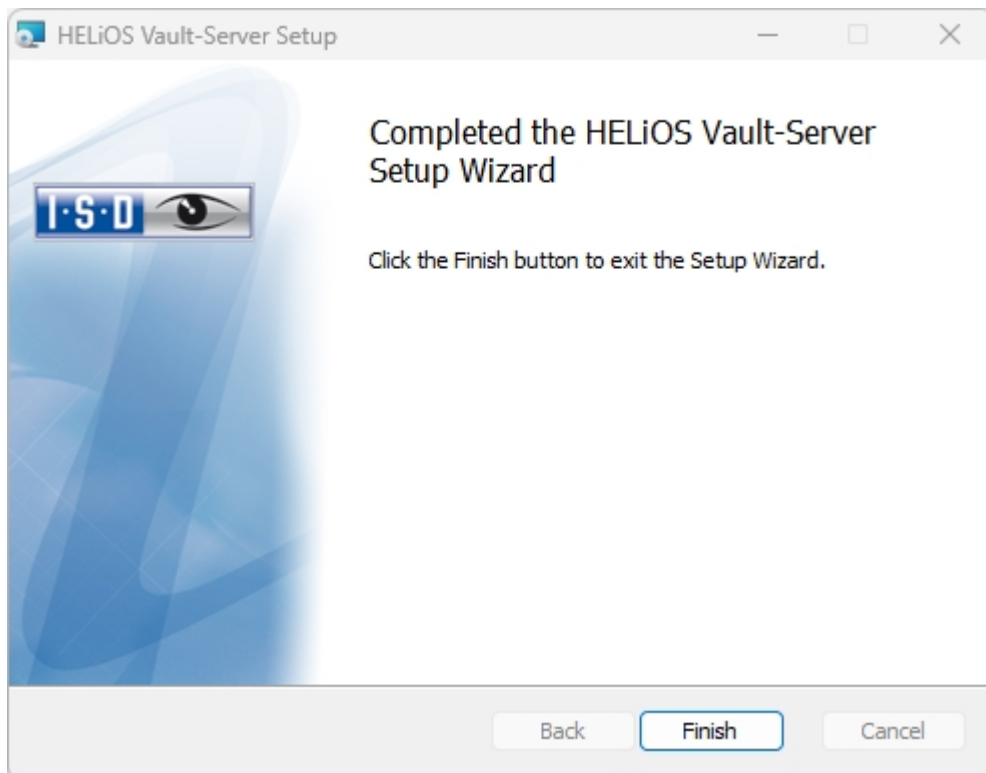
The files stored in the **Management directory** contain the assignments of the VDF file names to the “original file names”.

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**.

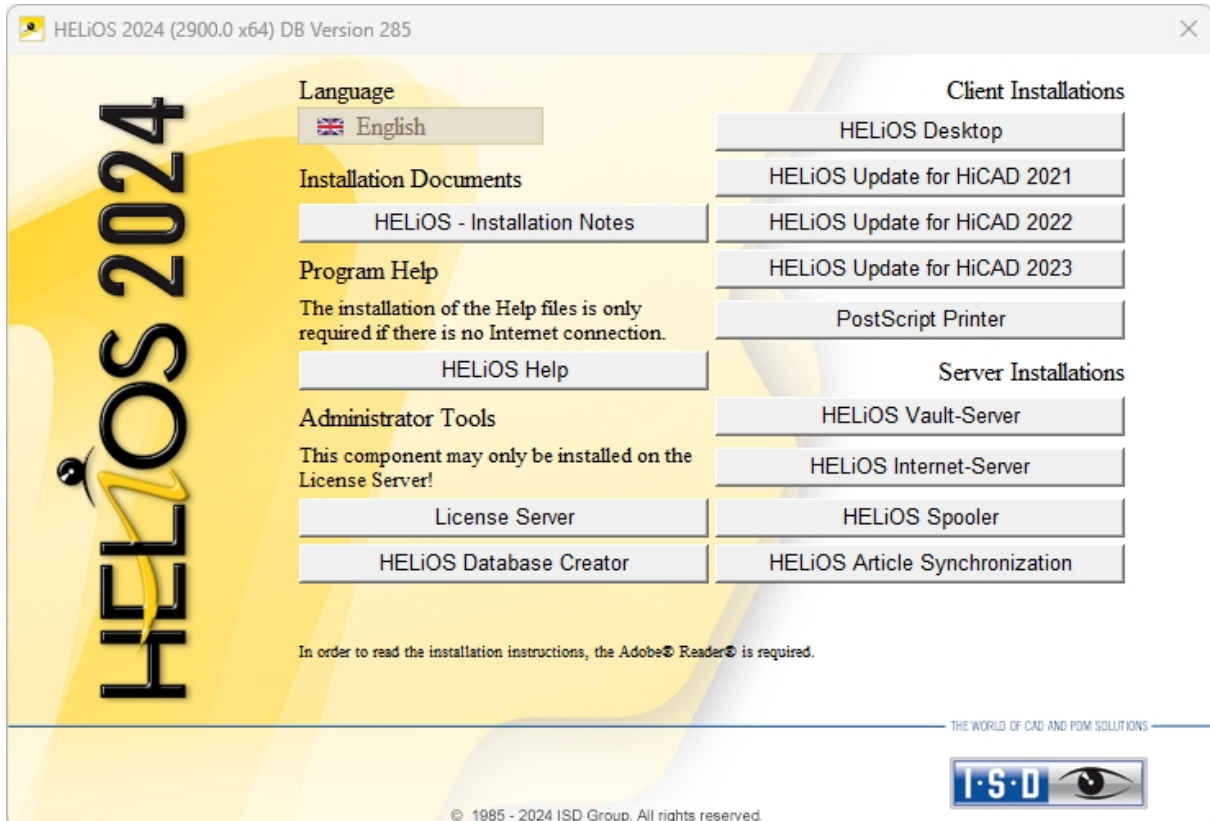


Click **Finish** to complete the installation of the Vault Server. You can now install further components from the selection mask.

Installing the HELiOS Client

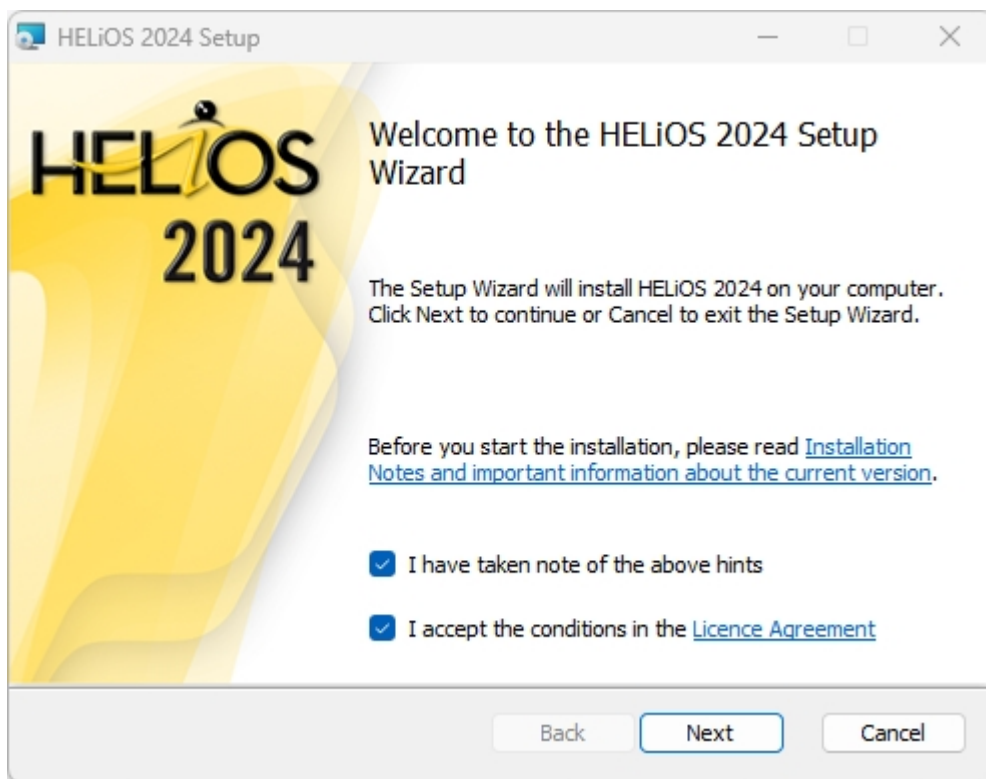
To install HELiOS, start Windows. If Windows has already been started, close all other applications and start the installation wizard.

Select a **Language** for your version.

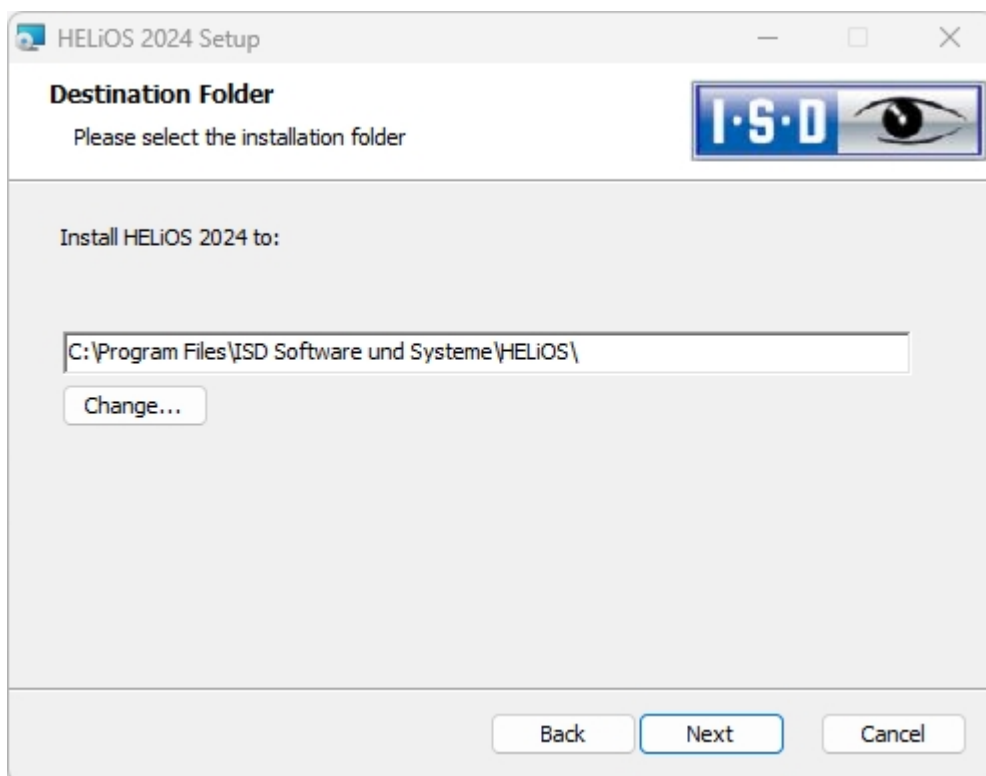


Click on the **HELiOS Desktop** button to start the installation.

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.



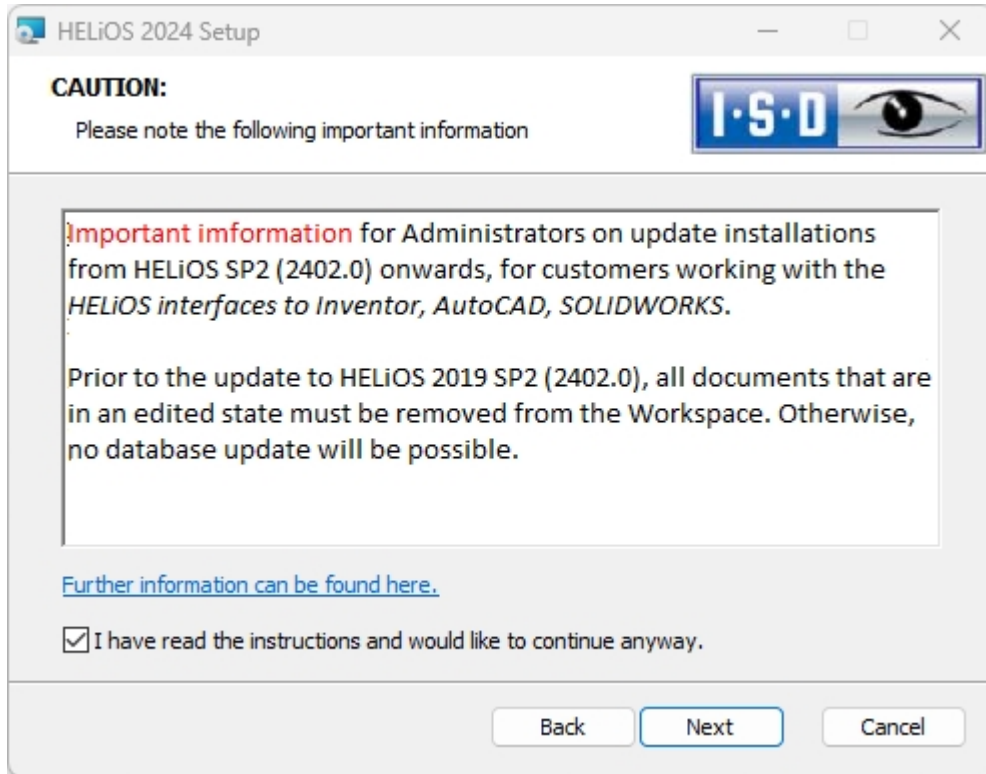
Please read the **Installation Notes** and the [Licence Agreement](#) carefully.



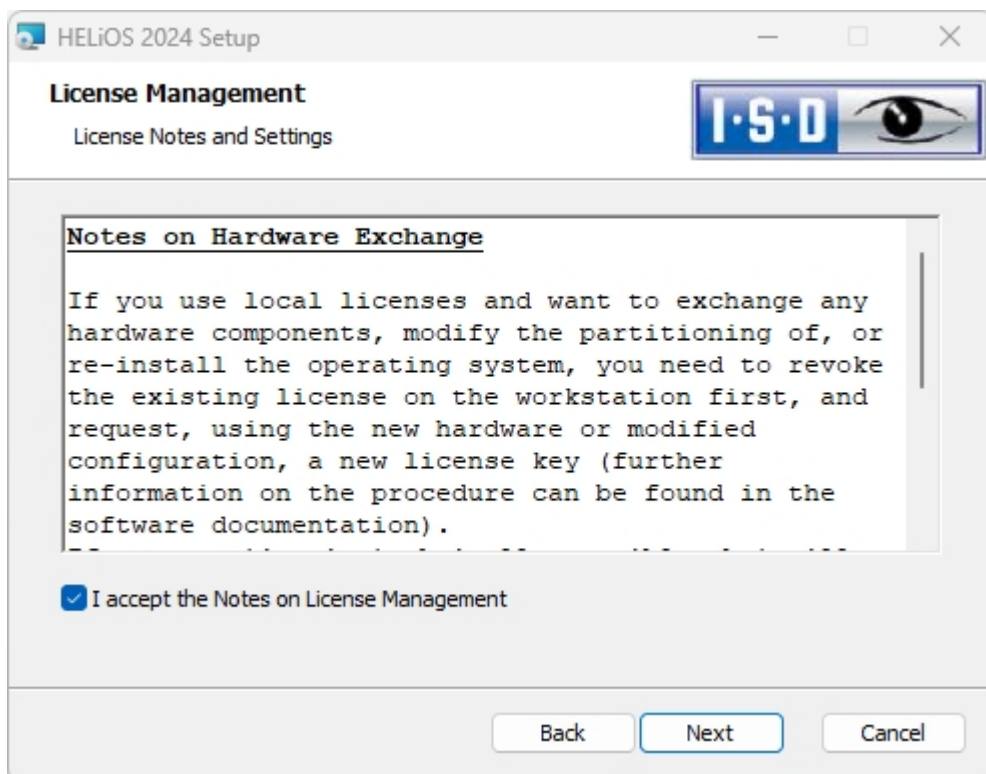
Select an installation directory. If the installation wizard finds an already installed version, it will be offered to you for updating.

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 and AutoCAD carefully and activate the checkbox . [Further information can be found here.](#)



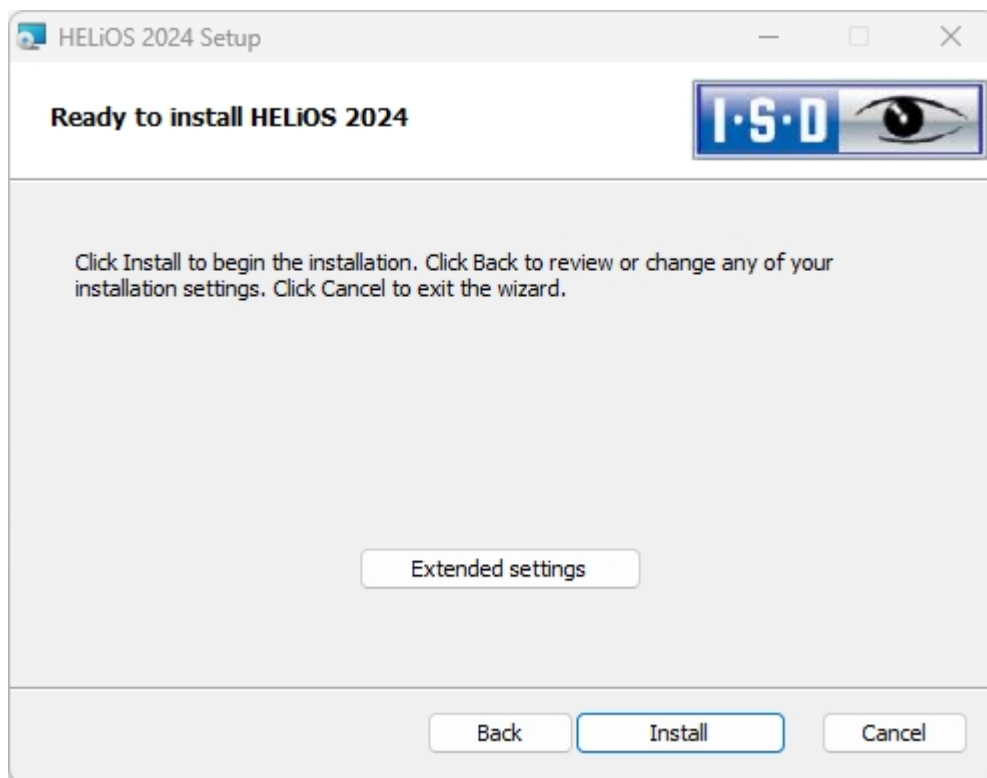
Please read the **Notes on Hardware Exchange** carefully.

Hardware Exchange

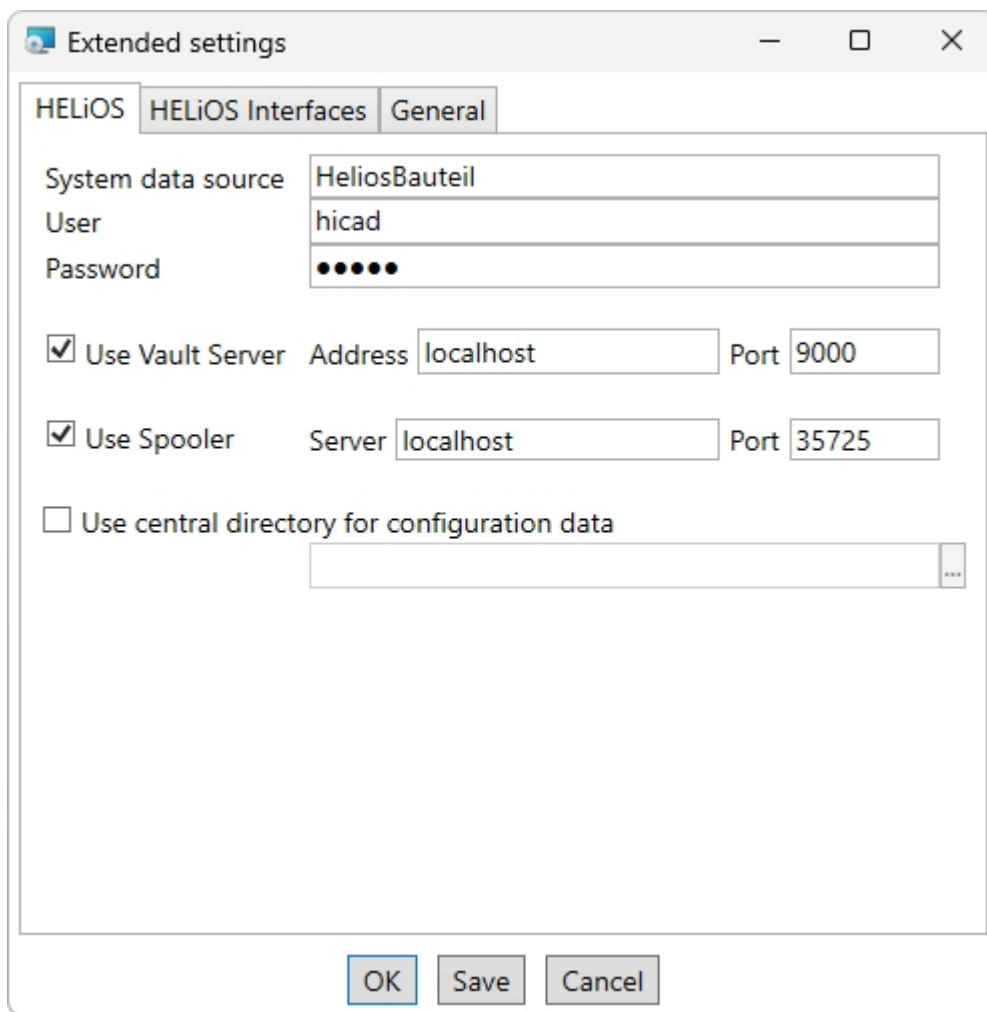
If you use local HELiOS licenses and want to exchange any hardware components, modify the partitioning of, or re-install the operating system, you need to revoke the existing license on the HELiOS workstation first, and request, using the new hardware or modified configuration, a new license key (further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





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.

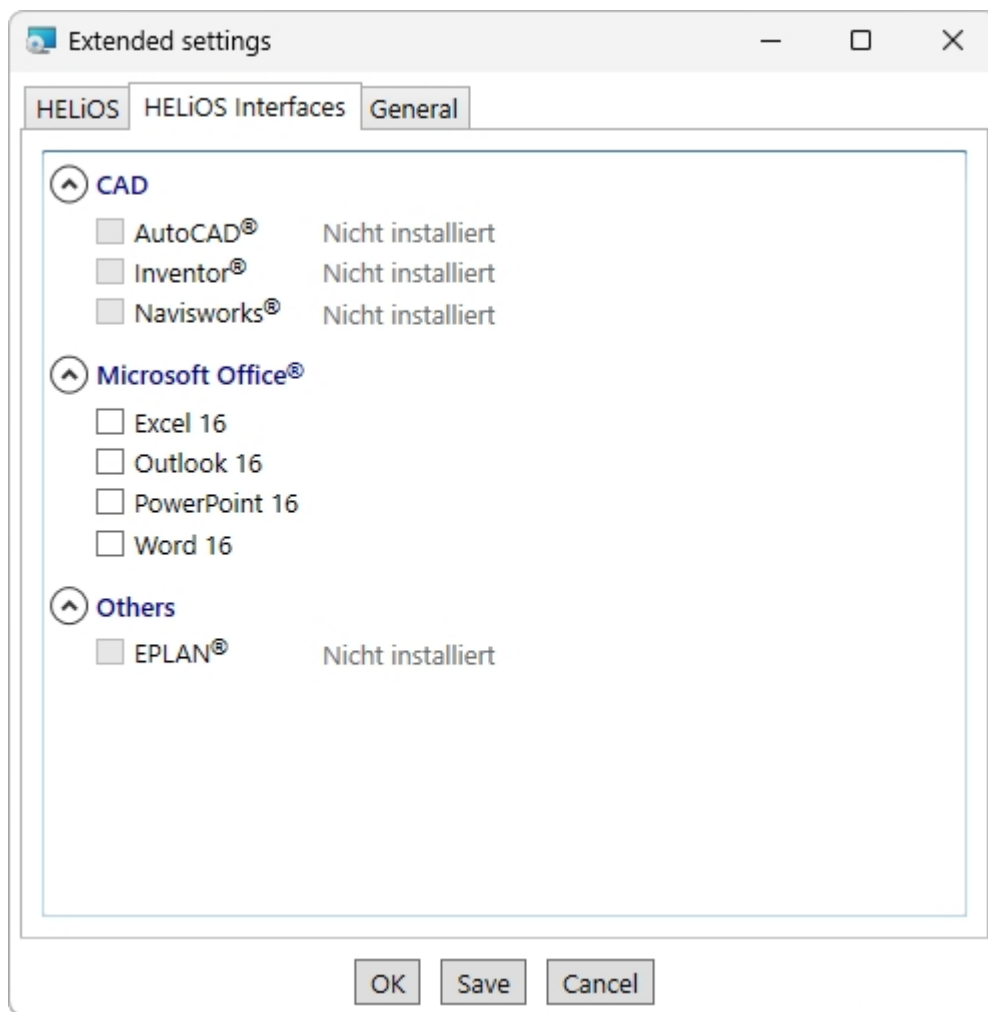
If you use a Vault Server, activate the **Vault Server** checkbox. Enter the name of the Server in the **Address** input field, and the Server Port of the Vault Server in the **Port** input field. You already entered both during the installation of the Vault Server.

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 **Port** is used for communication between Client and Spooler as well as for monitoring via the Server Monitor. 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 the HELiOS Client by clicking on the HELiOS icon  and choosing **HELiOS Options > Manage... > Export settings**.

To make the settings available to several workstations, activate the option **Use central directory for configuration data** when installing and then select the directory by clicking on the  icon. The configuration data is then provided using the [HELiOS.ConfigImport.exe](#) tool in the EXE directory of your installation.




The availability of interfaces with HELiOS depends on the programs that are installed on your computer. You can only link 64-Bit versions to HELiOS 64-Bit versions. 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) 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.

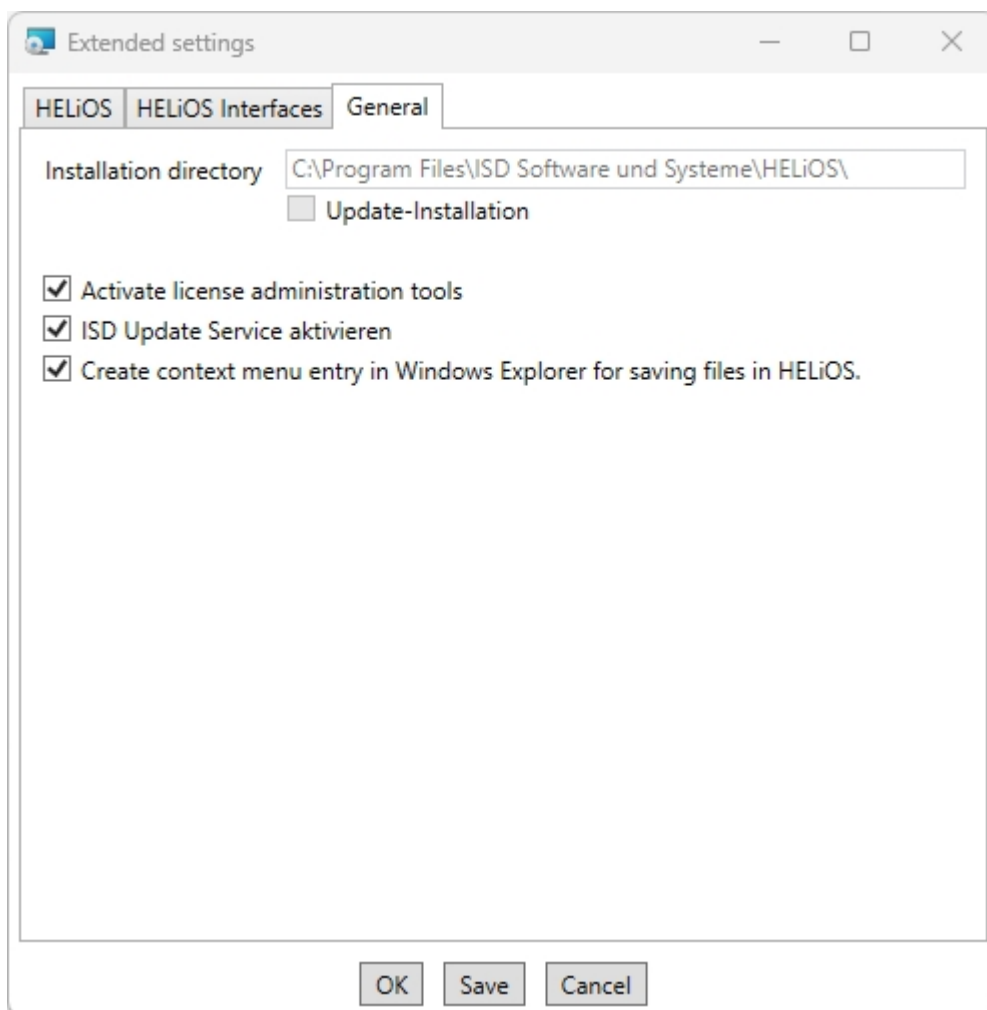
The installation automatically executes the configuration file MultiCAD.csv with the **HeliosClientConfig.exe** tool. If you work with your own .csv file, you can execute it subsequently: Start the **HeliosClientConfig.exe** tool from the \exe\ directory of your HELiOS installation, click the  button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



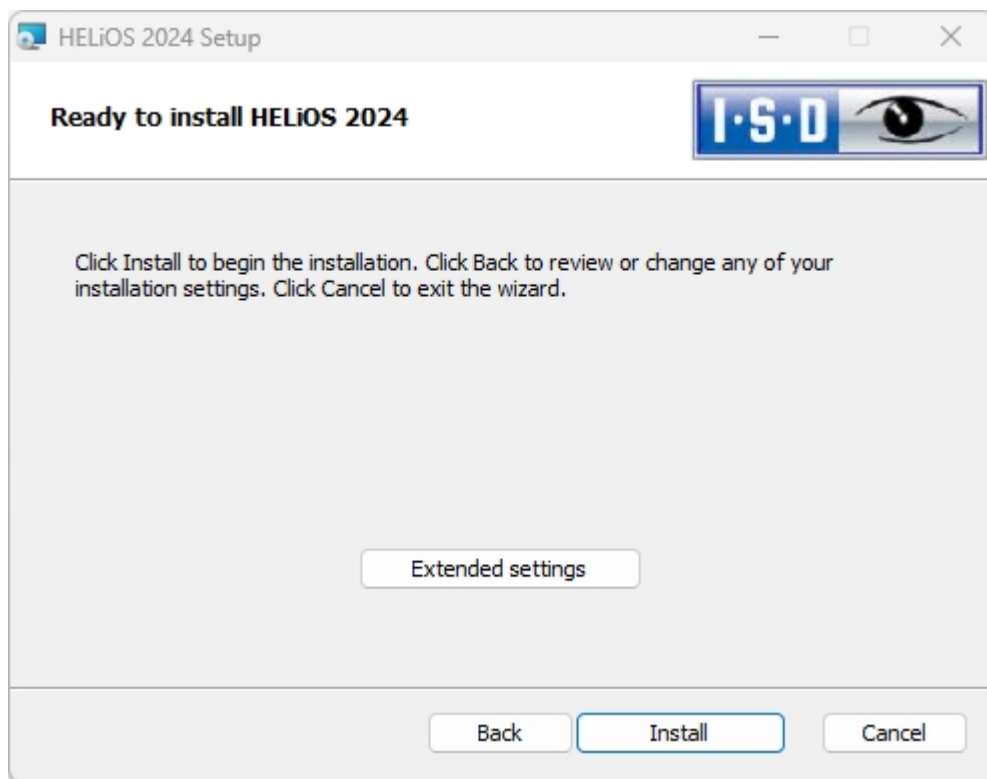
The **Activate license administration tools** checkbox must be activated for the management of server licenses.

During the installation, you decide to search for a hotfix on the ISD Webserver when starting HELiOS by activating the checkbox **Activate ISD Update Service**.

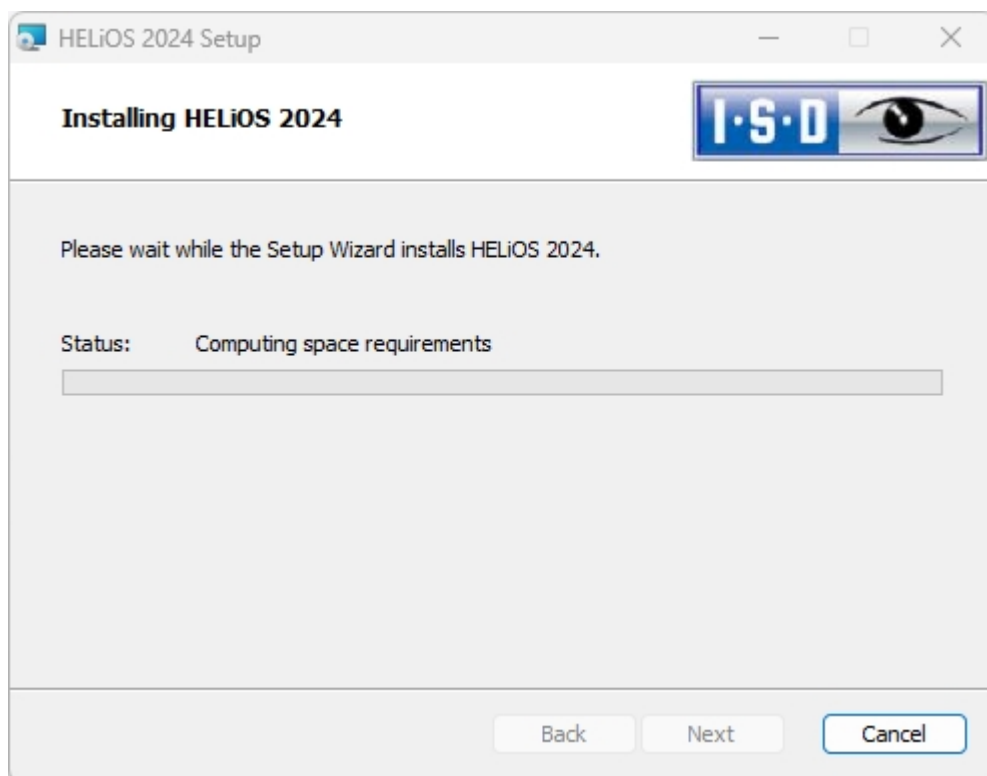
If you want the function **Save to HELiOS** to appear in the context menu of Windows Explorer, activate the checkbox **Create context menu entry in Windows Explorer for saving files in HELiOS**.

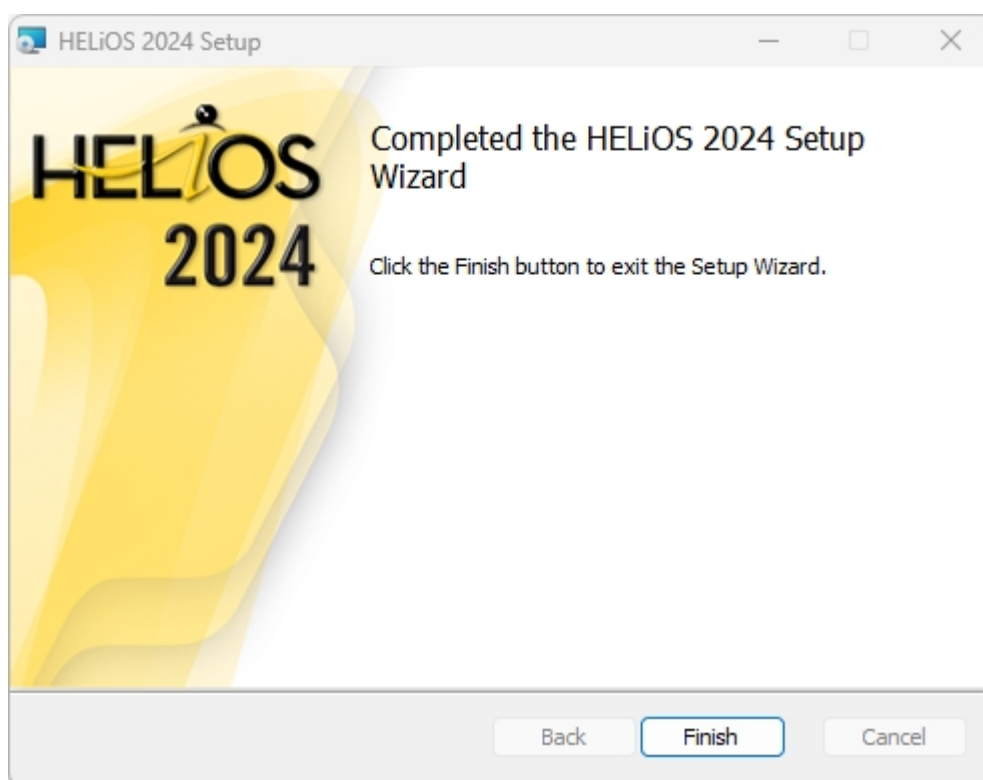
Click **Save** to save the **Extended Settings** to an **.ini file**. If you place the **.ini file** in the installation directory when installing server licenses, the settings will be applied.


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.

Support with the Office Interface

Starting the Office interface with administrator rights

Note that the interface between HELiOS and an Office application does not work if the corresponding Office application has been started via the Windows option **Run as administrator**, but HELiOS has been started as a normal user. This is because Windows prevents communication between normally running applications and applications started as administrators.

If the AddIn starts but is constantly deactivated again

In this case, there are probably contradictory entries in the registry. If the HELiOS AddIn is blocked by Office, Office stores the corresponding information in the registry. This can also cause you to have different behaviour depending on whether you start Office as an admin or normal user. Then delete the following registry keys:

- HKEY_CURRENT_USER\Software\Microsoft\Office\Outlook\Addins\HelOutlookAddIn4 (complete folder including subentries)
- HKEY_CURRENT_USER\Software\Microsoft\Office\Word\Addins\HelWordAddIn4 (complete folder including subentries)
- HKEY_CURRENT_USER\Software\Microsoft\Office\Excel\Addins\HelExcelAddIn4 (complete folder including subentries)
- HKEY_CURRENT_USER\Software\Microsoft\Office\PowerPoint\Addins\HelPowerPointAddIn4 (complete folder including subentries)

- HKEY_CURRENT_USER\Software\Microsoft\Office\Outlook\FormRegions\IPM. Note the entry HelOutlookAddIn4.HelMailFormRegion

Then start **HeliosCouplings.exe** as administrator and link the interface again..



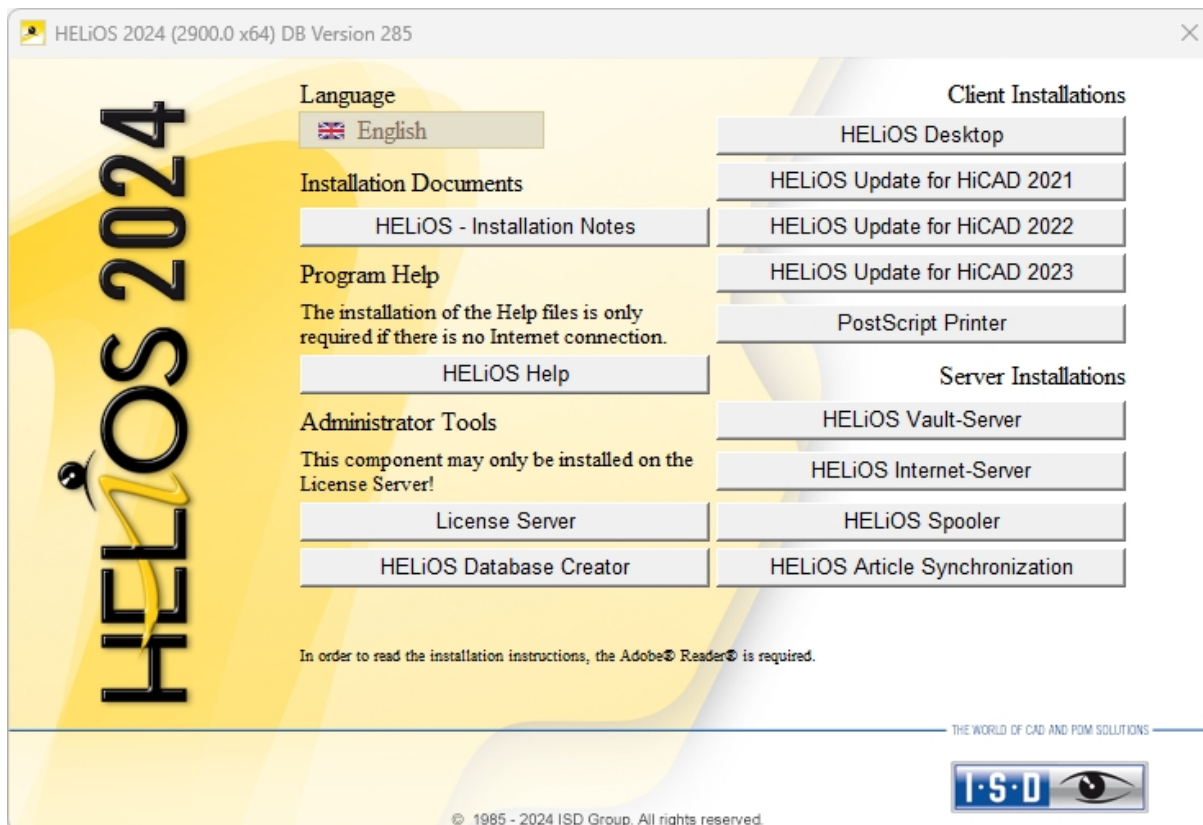
Important:

Changes to the registry should only be carried out by an administrator. In any case, the original files should be saved before making any changes!

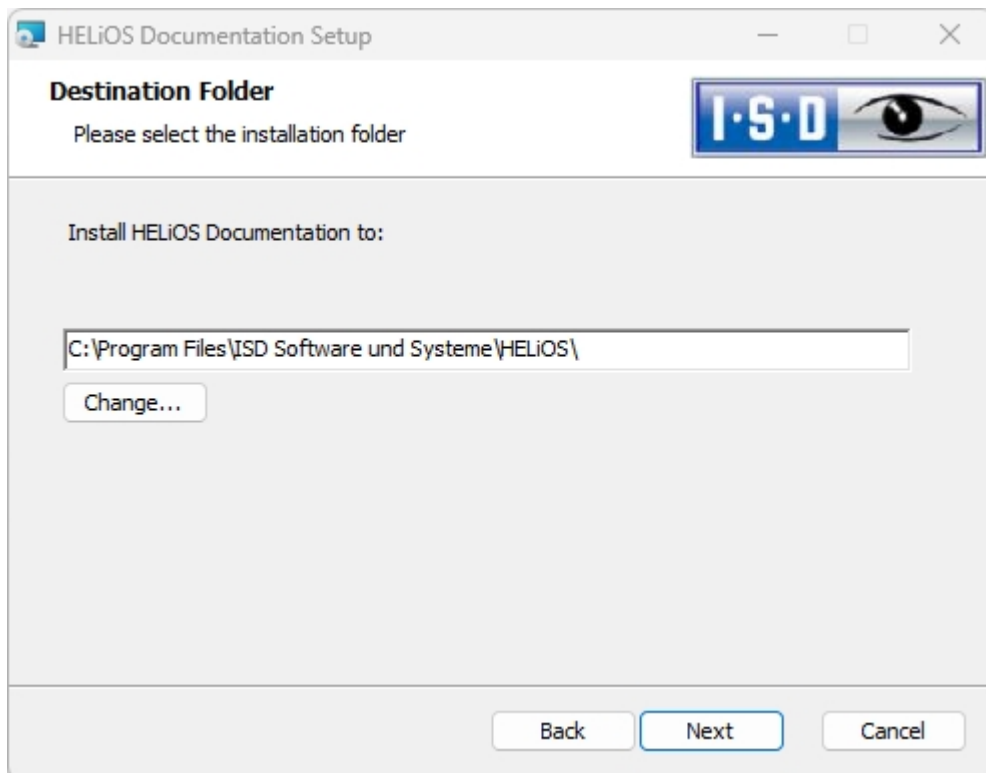
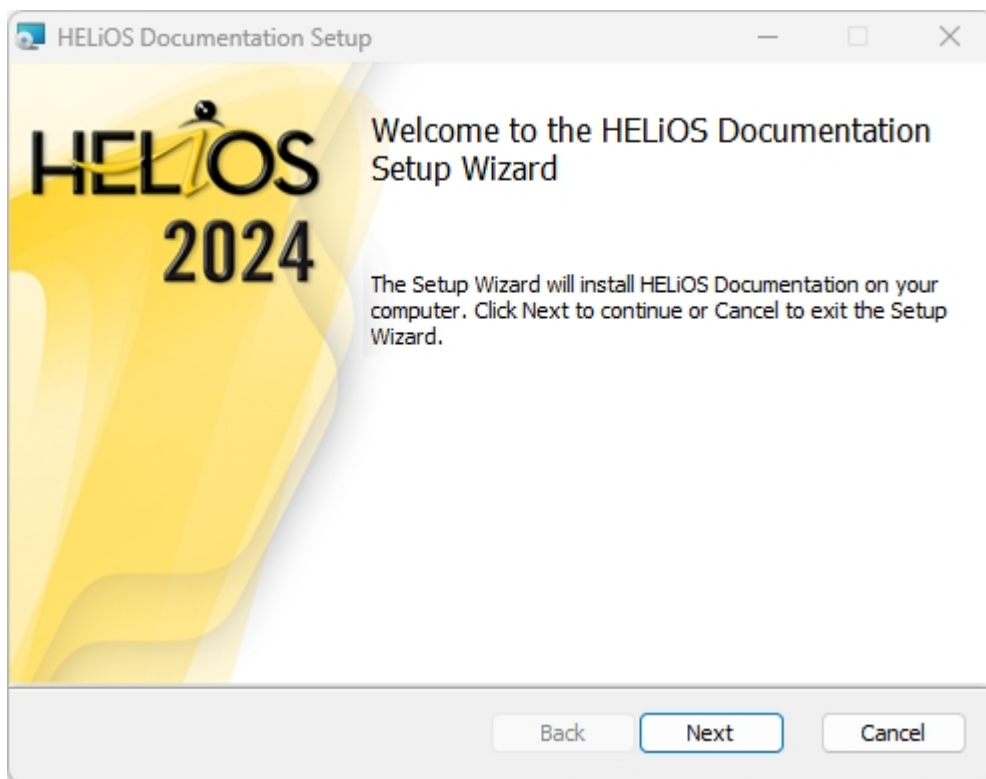
Installing the HELiOS Help

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.

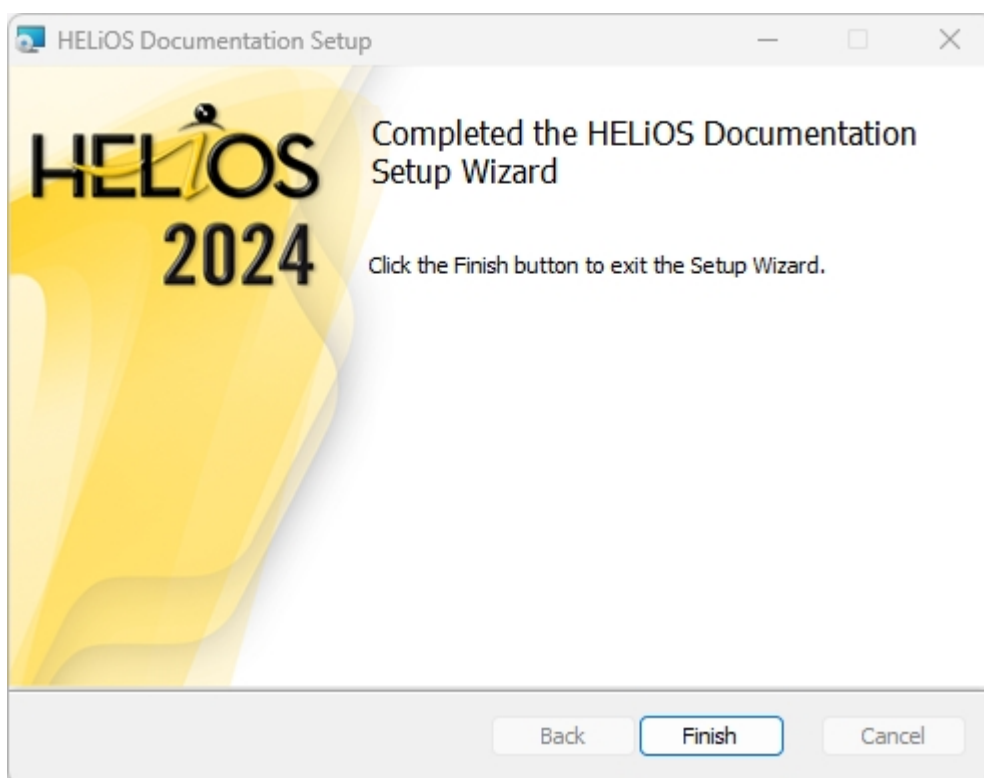
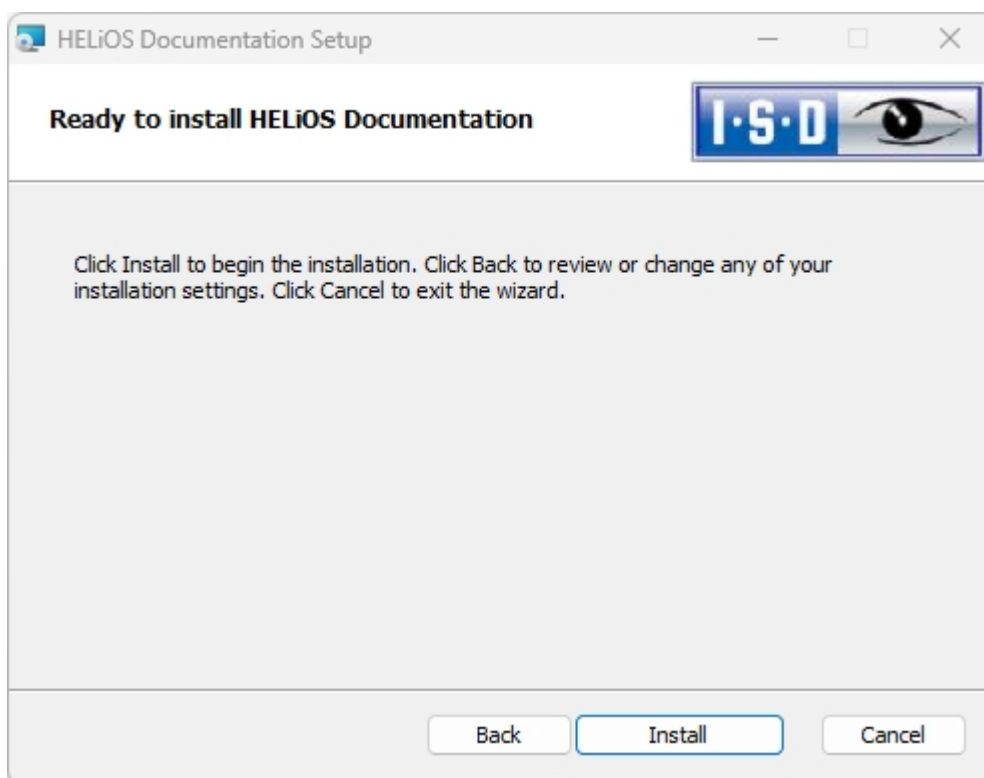
Start Windows to install the Help. If Windows has already been opened, close all other applications and start the installation wizard. Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.




Click on the HELiOS Help button.



Enter the installation directory for HELiOS.



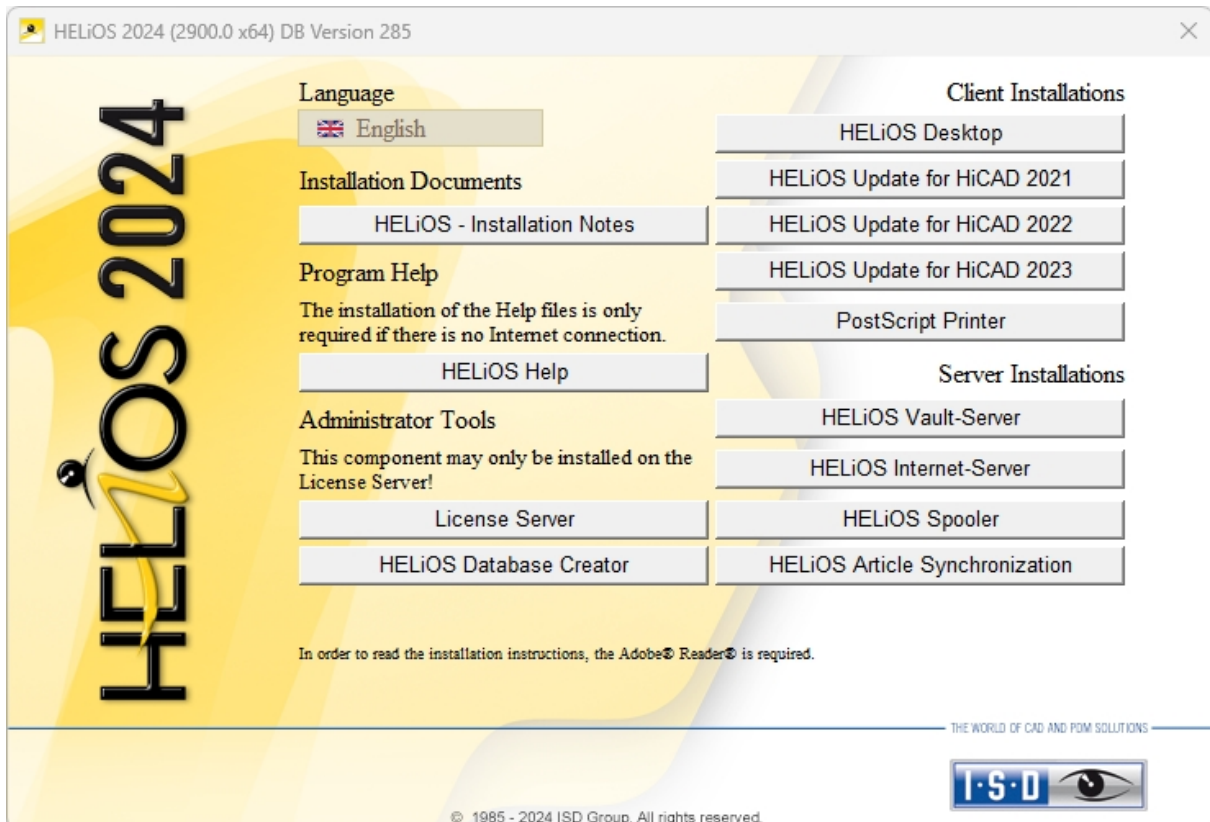
After successful installation, the Help can be found in the program folder and can be called from HELiOS .

Installing the HELiOS Internet Servers

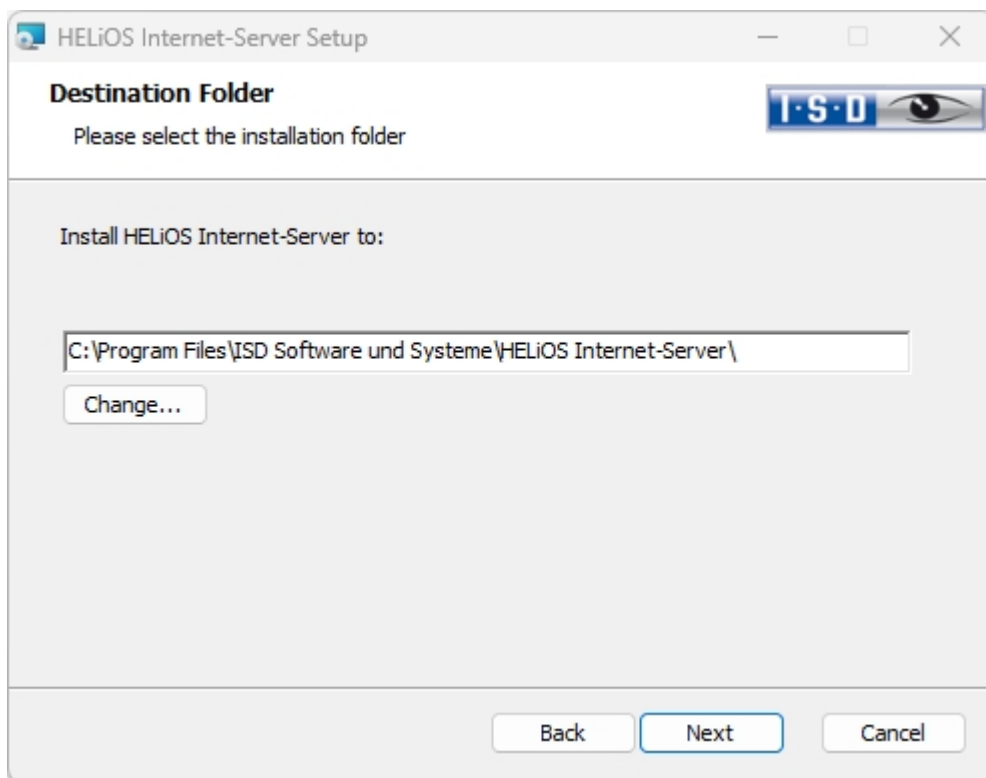
For the **HELiOS Internet Server** you require the **Microsoft Internet Information Services**. In Windows this is included, but requires a separate installation/activation that needs to be performed before installing the HELiOS Internet Server.

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.

HELiOS Internet Server setup

Server settings
Internet Server Settings

Server addresses

Host name: his.your-companyname.de SSL Certificate: HIS

Internet Server Port: 443

WebAPI Port: 30000

Server User Account

User: DEDTM0717042 Password:


Back Next Cancel

Under **Server addresses**, enter the internet address for the HELiOS internet server (e.g. his.isdgroup.com /) that can be reached from outside next to **Host Name**, and next to it select an SSL certificate for https that matches the internet address in the pull-down menu.

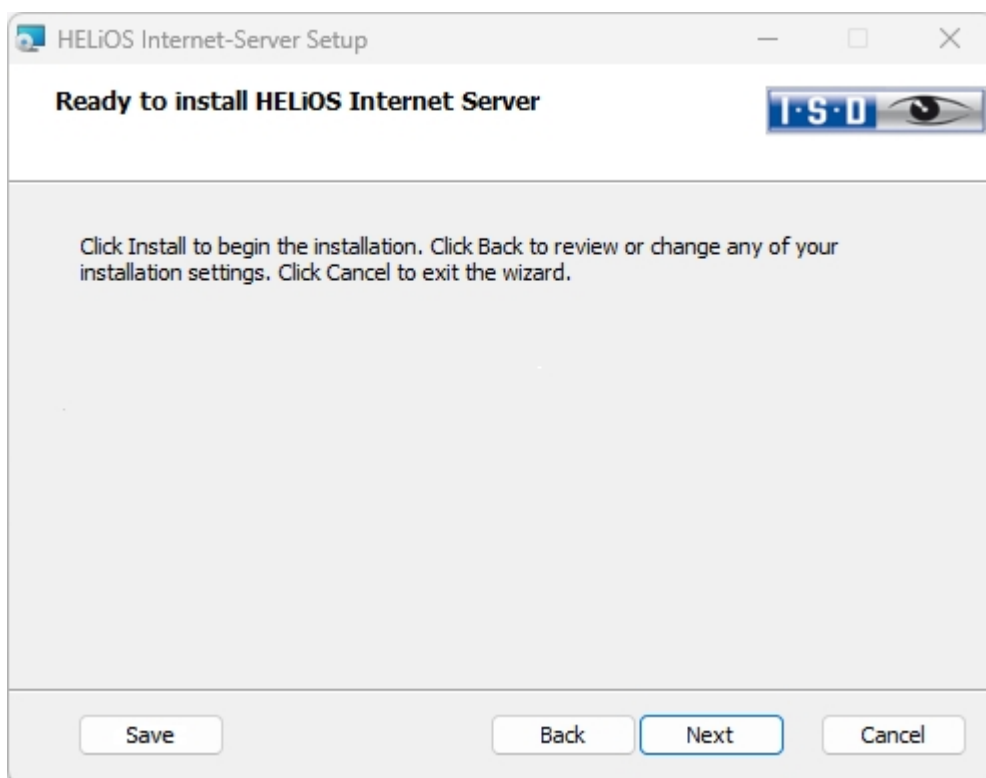
The corresponding port is entered one line below next to **Internet Server Port**, below that the **WebAPI Port**.

Under **Server User Account** enter the Windows user account with **Password** under which HELiOS functions are executed.

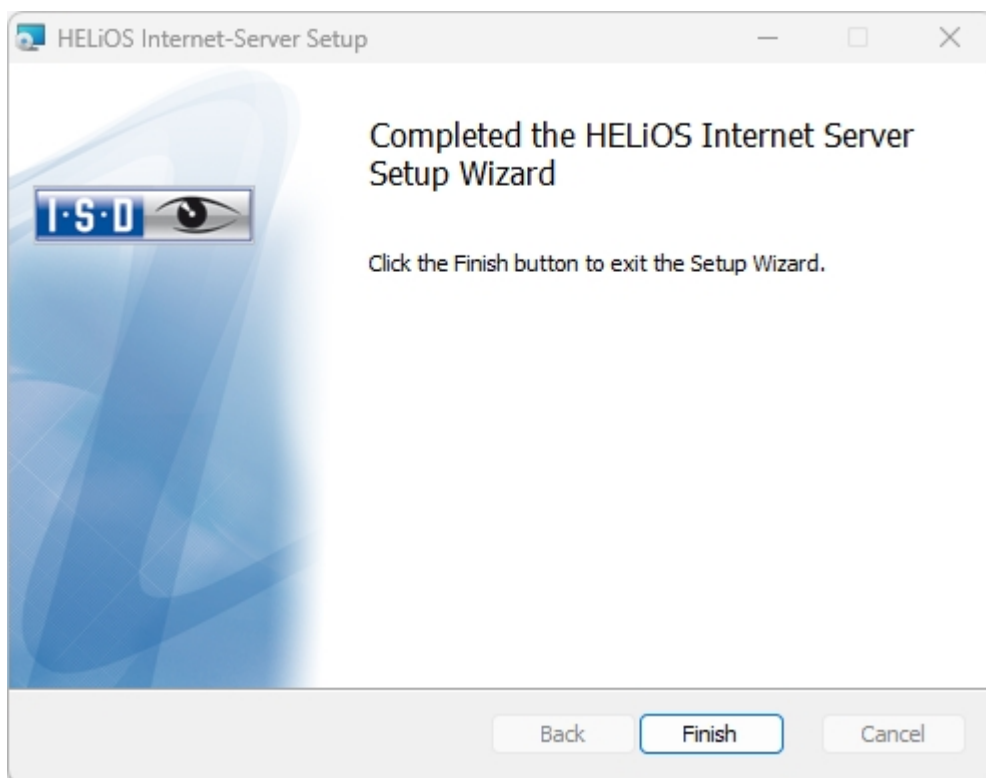
Under **E-mail connection**, enter the connection settings of the E-mail server, e.g. for sending "forgotten password" emails.

The E-mail server is set up in HELiOS Desktop by clicking on the HELiOS icon  and choosing **HELiOS Options > E-mail**, as it is configured and used across applications (i.e. not just for the HELiOS Internet Server).

Then click on **Next**.



Click **Install**.



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

Licensing

With regard to licensing, HELiOS Internet Servers distinguish between Server (the **HELiOS Internet Server** module) and Client (the **HELiOS Web Viewer** module).

- Server licensing:
 - The server license is required to start the server within the IIS environment. The server is responsible for ensuring that the HELiOS Internet Server can be called at all and that HELiOS also offers a REST API via the HELiOS Internet Server.
- Client licensing:
 - Licensing for the client corresponds to a **Concurrent-User / Floating** approach, i.e. similar to the use of a license server with multiple client installations. The client license is always used as part of a login, session by session. If one and the same HELiOS user logs on to the HELiOS Internet Server via different computers or browsers (on one and the same computer), they will use one license per session.



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](#)).
- For the preview display of SZA files via the **HELiOS Internet Server**, the **HiCAD Viewer** must also be installed in the corresponding system.

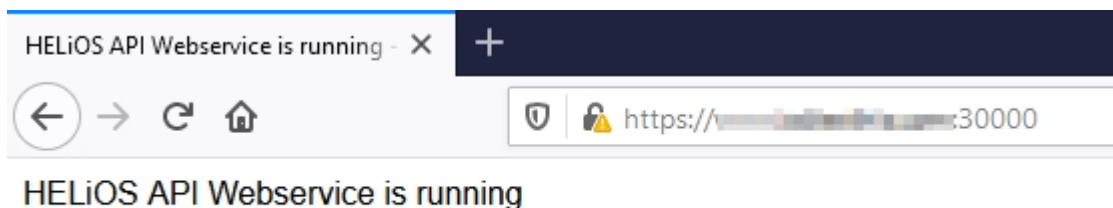
Checking the operability of the individual server components of the HELiOS Internet Server

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.



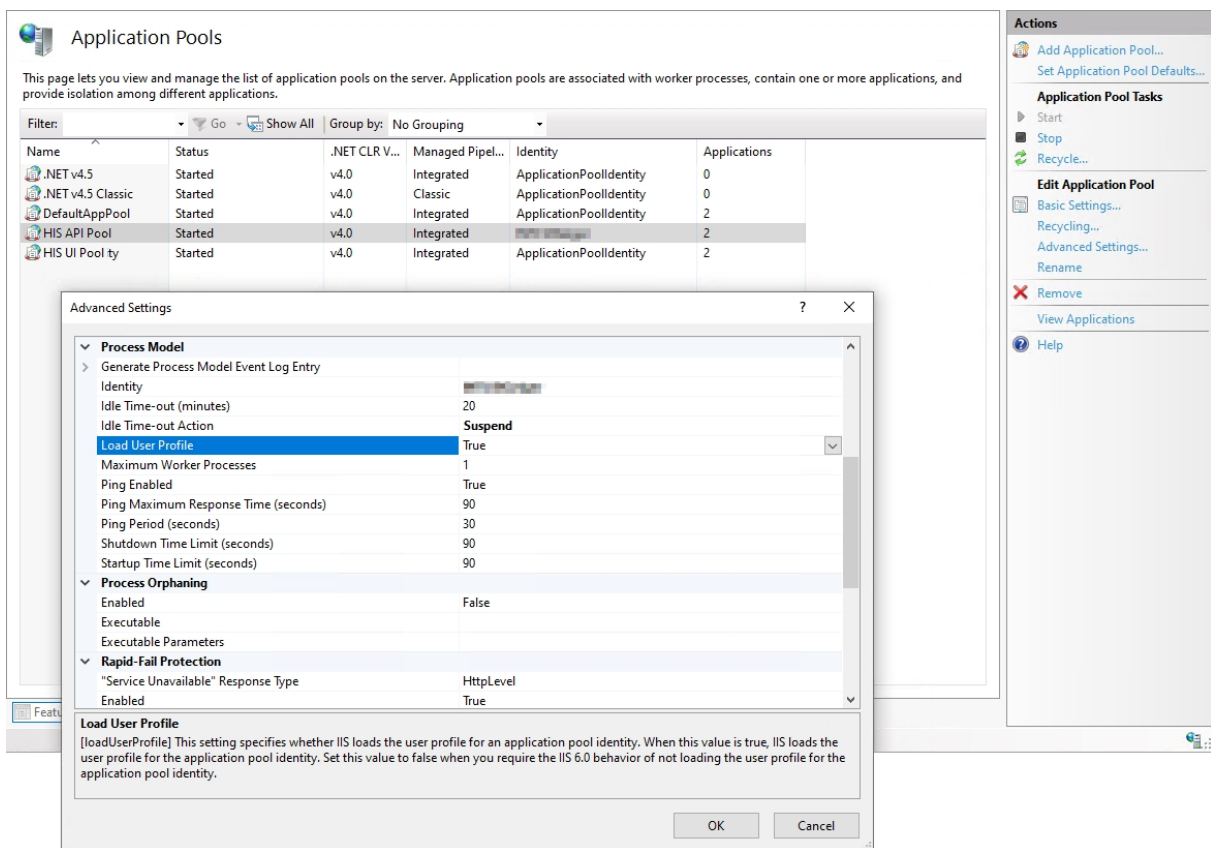
When you call up the **HELiOS API Server** in your browser, you will receive a status message that the corresponding service is running (e.g. "HELiOS API Webservice is running").



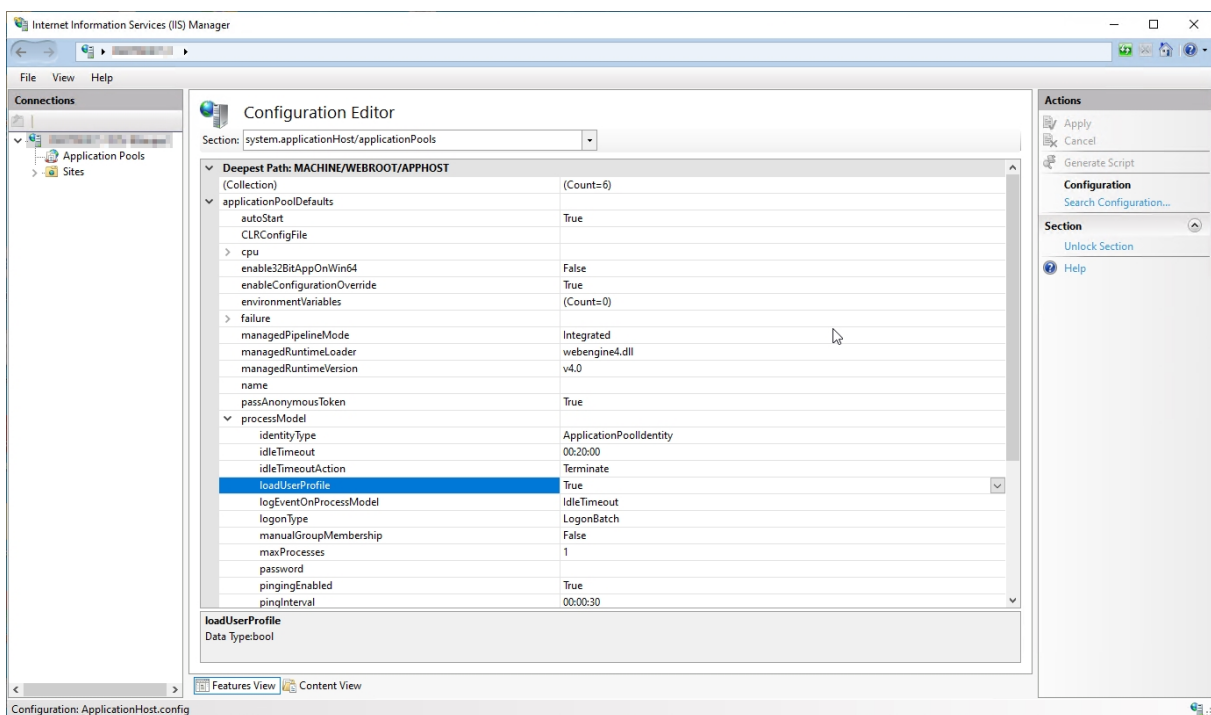
If you do not see a status message, please make sure that the **Application Pool** of the **HELiOS API Server** is not running in the user context.

Therefore, please check the following two settings in the (IIS) Manager (Internet Information Services):

- Check in the **Advanced Settings** of the **Application Pool** of the **HIS APP 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. "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?

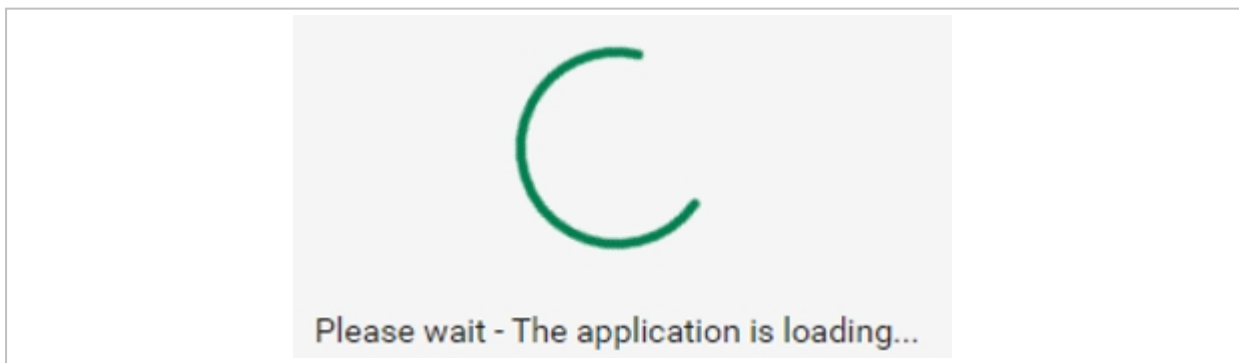
Please check whether the ODBC data source for the connection of the HELiOS Internet Server to the database has been set up as a system DSN connection. If this is not the case, remove the DSN connection in the user context and replace it with a system DSN connection.

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).

2. 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:



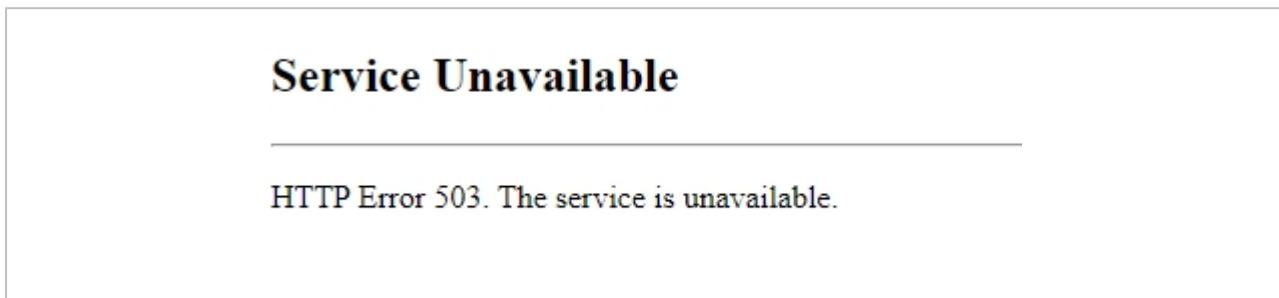
Note: When the HELiOS Internet Server is called for the first time (e.g. after restarting the server), it may take some time until the login occurs. In the background, the HELiOS core is being initialised and started. Therefore, please wait for a while and, if necessary, try logging in once more after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

How do I solve the problem?

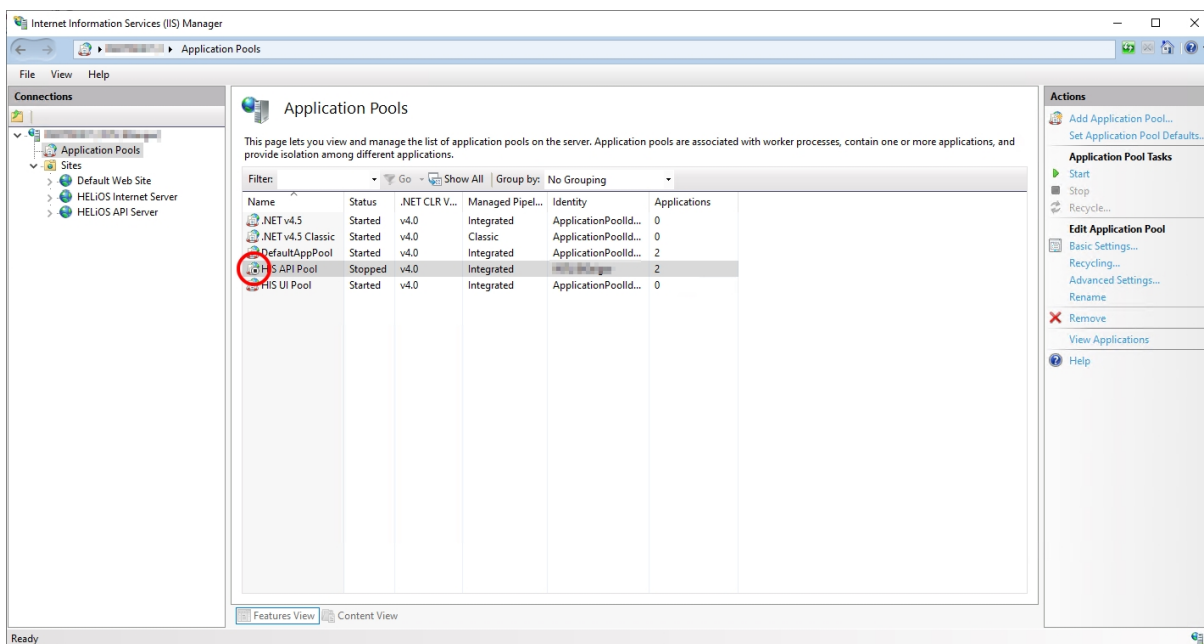
There are two situations that can cause the problem.

User data is wrong or rights are missing

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



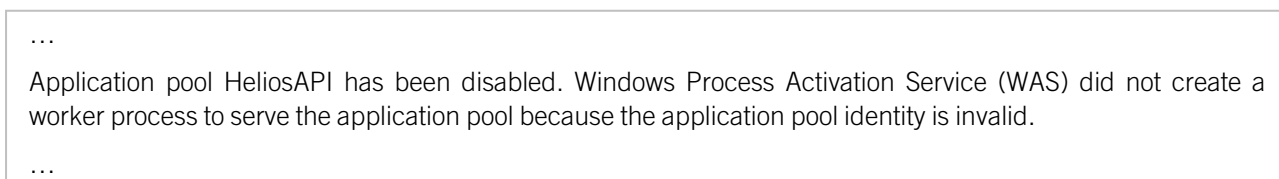
please check whether the Application Pool for the HELiOS API Server is running or if it has been terminated. This can be recognised by the icon or by the status display in the IIS Manager:



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.

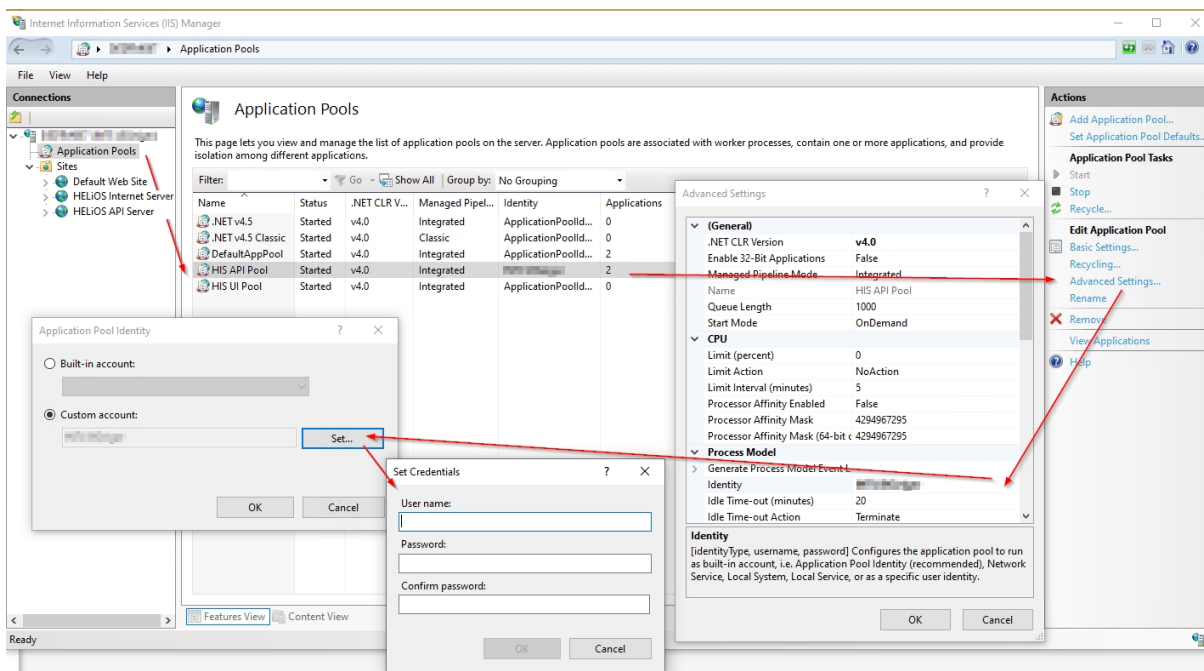
In this case, you should find a warning regarding the source WAS (Windows Process Activation Service) in the Windows Event Viewer of the server hosting the HELiOS Internet Server, located in the section "Windows Logs" / "System".

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.

3. 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)
```

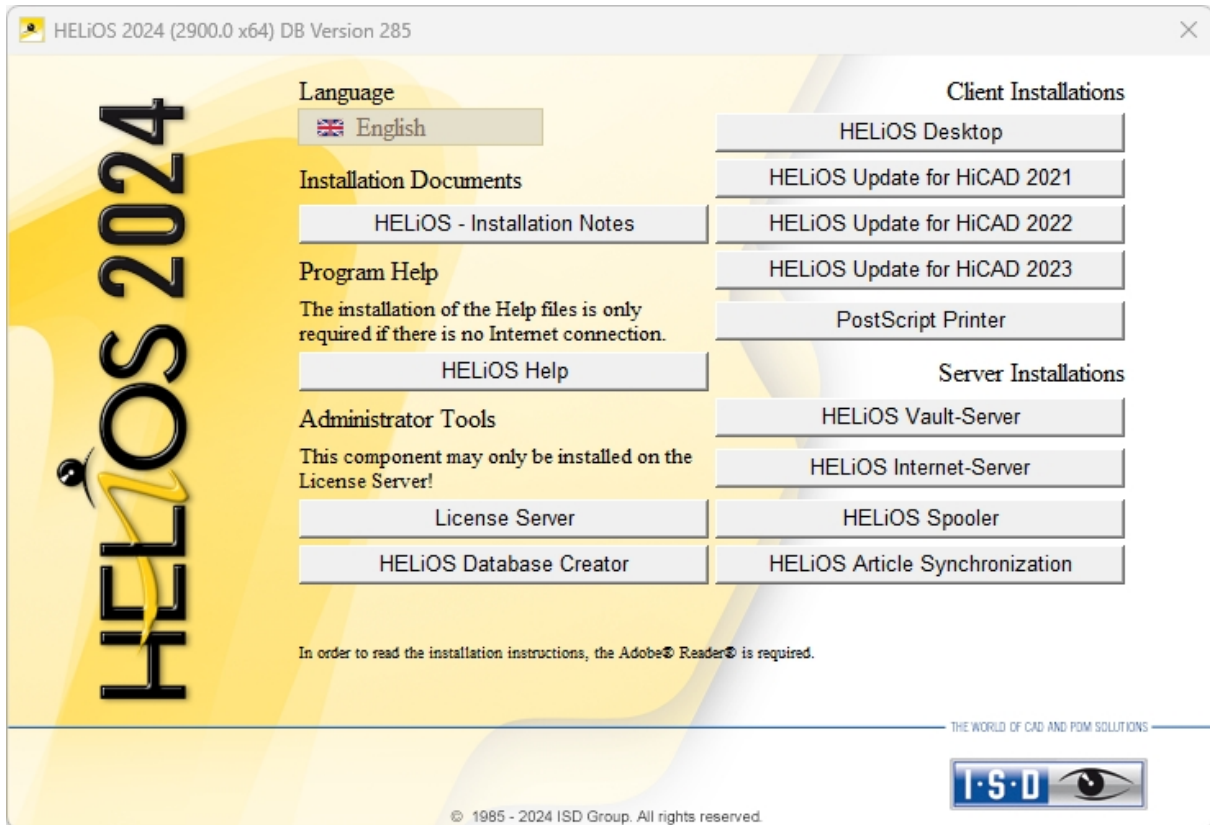
appears there. If this is the case, it indicates problems with the creation of a cryptographic key in the C:\Users\All Users\Application Data\Microsoft\Crypto\RSA\MachineKeys folder. If no keys for other relevant applications are stored there, you can delete the folder as an administrator. Afterwards, 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.

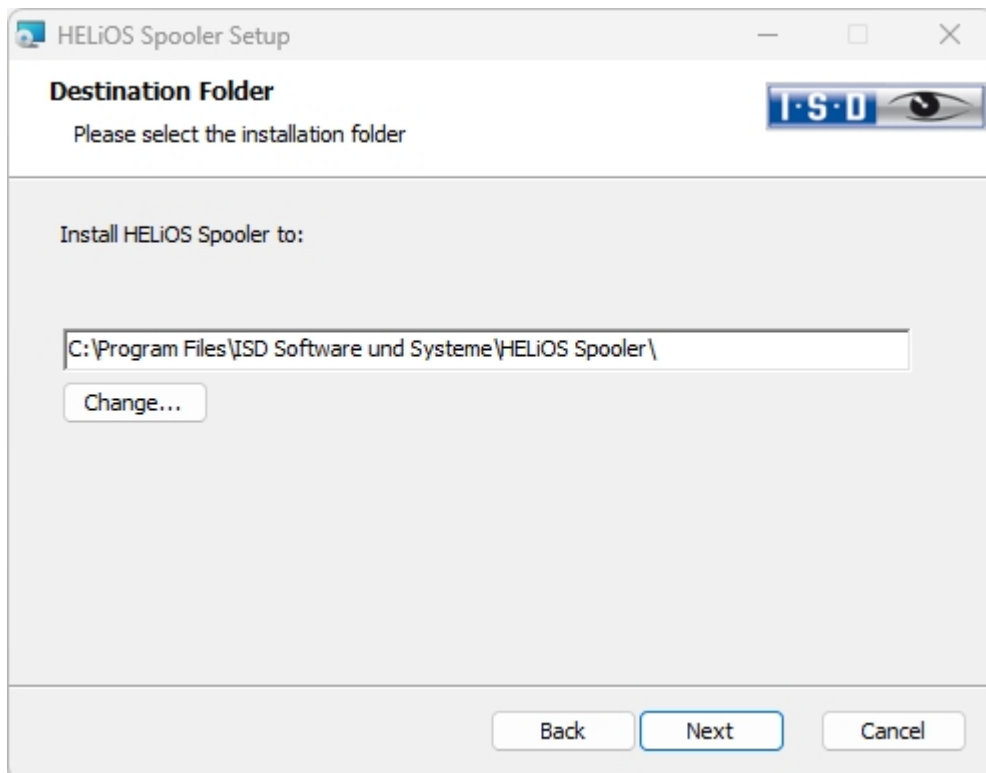
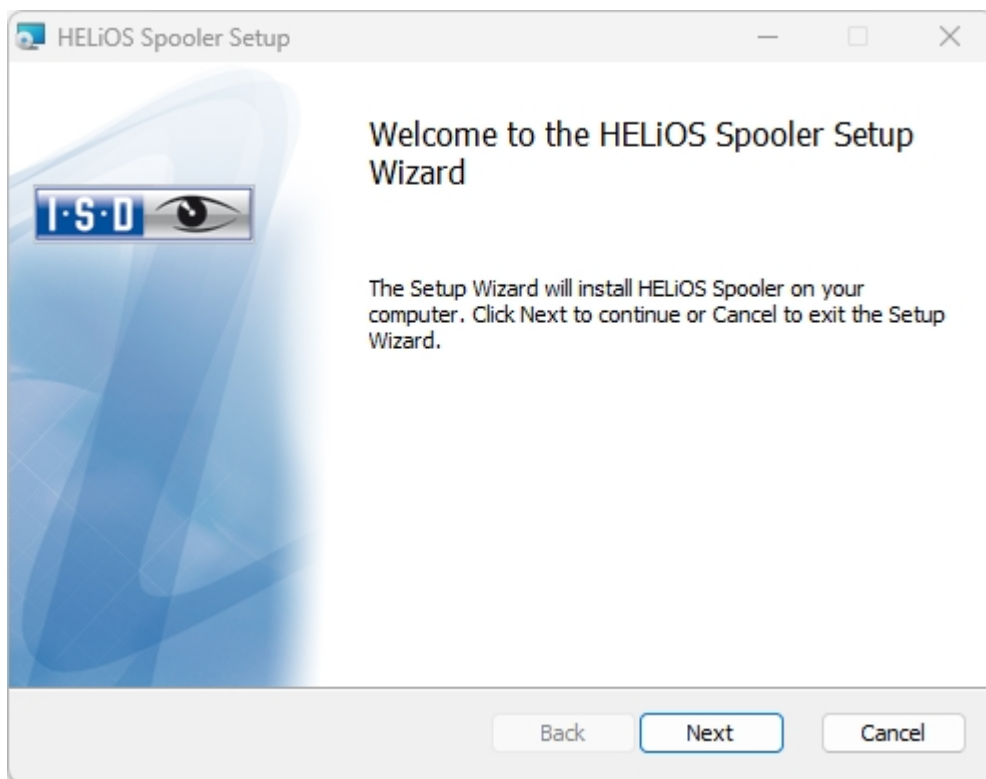
Installing the HELiOS Spooler

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

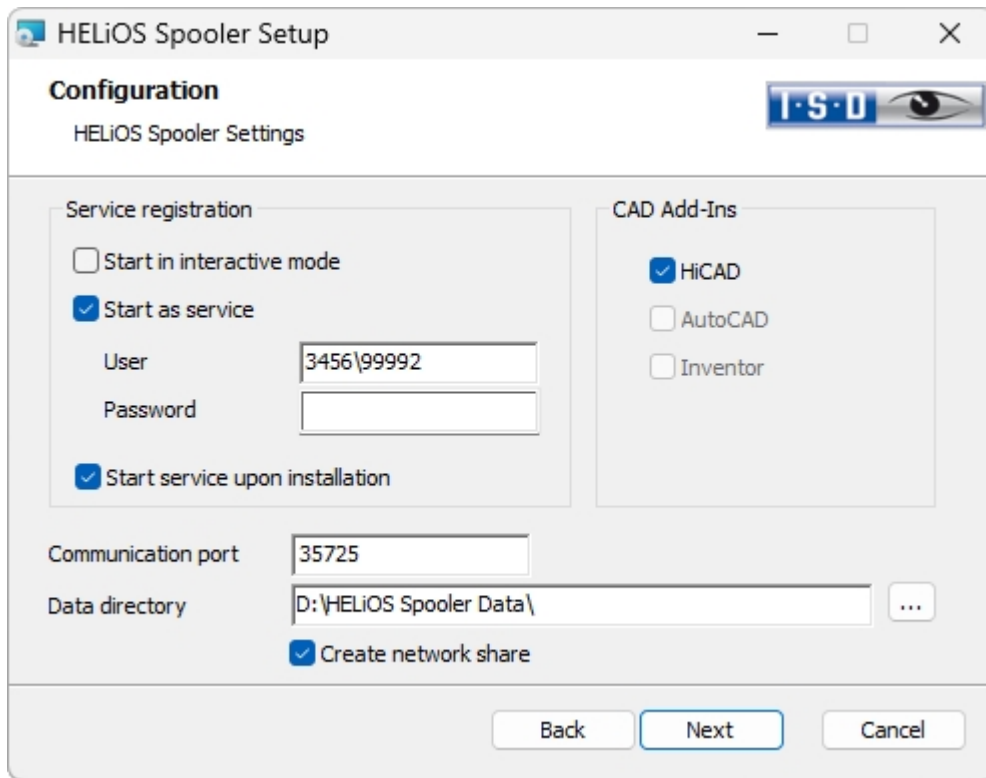
Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.



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.

Should you encounter any problems,, we therefore recommend choosing the **Start in interactive mode** option during installation. 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.

The **Communication port** is used for communication between client and spooler as well as for monitoring via the Server Monitor.

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**.

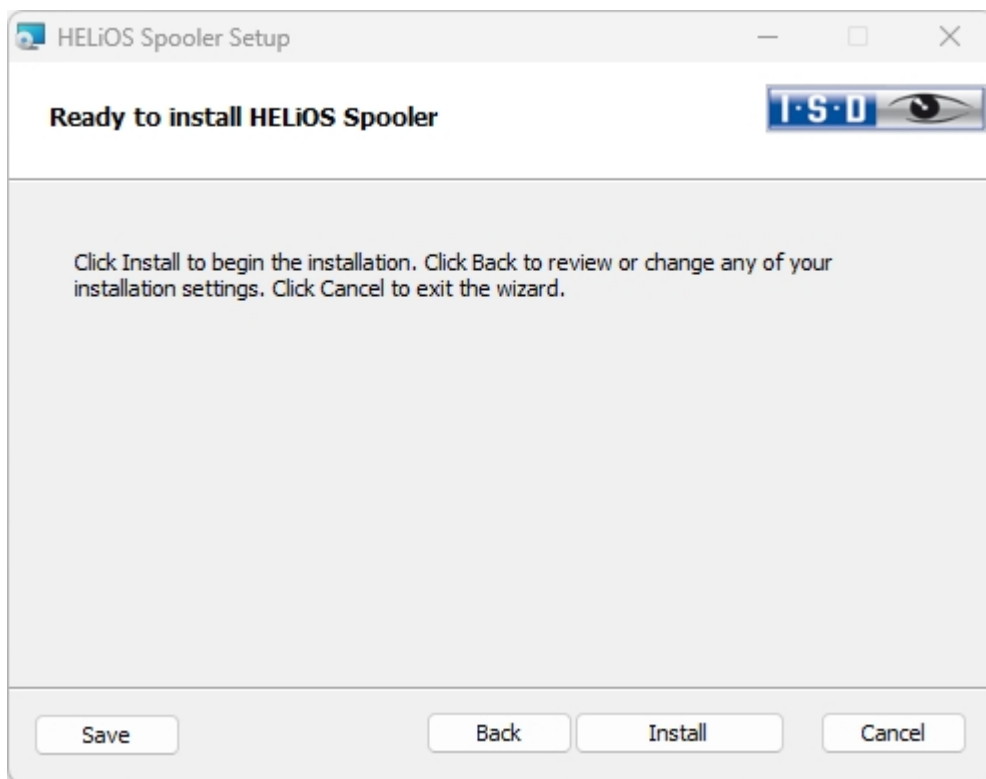
The screenshot shows the 'HELiOS Spooler Setup' dialog box with the 'Database connection' tab selected. The title bar includes the HELiOS logo and a close button. Below the title bar, the text 'Database connection' and 'Settings for connection with HELiOS DB' is displayed. A 'T.S.O.' logo with an eye 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'; 'Show all HELiOS users' is a checked checkbox; '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 field containing 'localhost'; and 'Port' is a text field containing '9000'. At the bottom of the dialog, there are three buttons: 'Back', 'Next', and 'Cancel'.

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

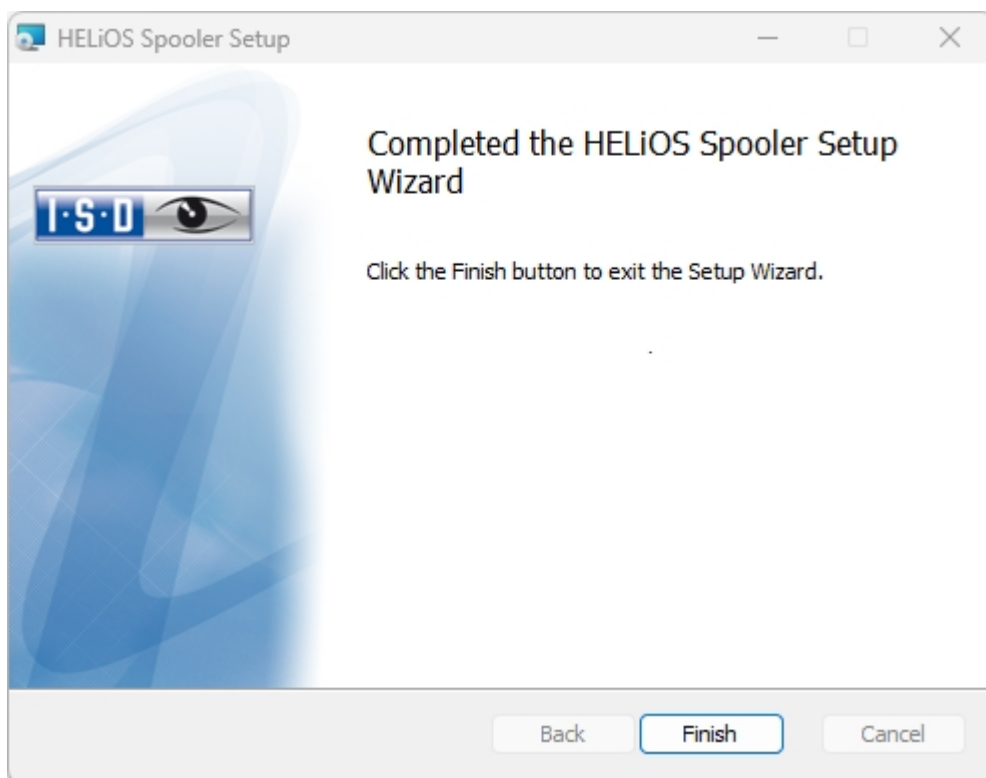
For **System data source** you have to select the corresponding ODBC database connection. Here the **HELiOS User** is selected, over which the spooler runs. It is important that this user has admin rights and is also assigned to the **HELiOS Group** of "PDM administrators" here. Otherwise you will get an error message. Then you will be asked for the login of the database user. This is the login of the (SQL) database system.

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**.

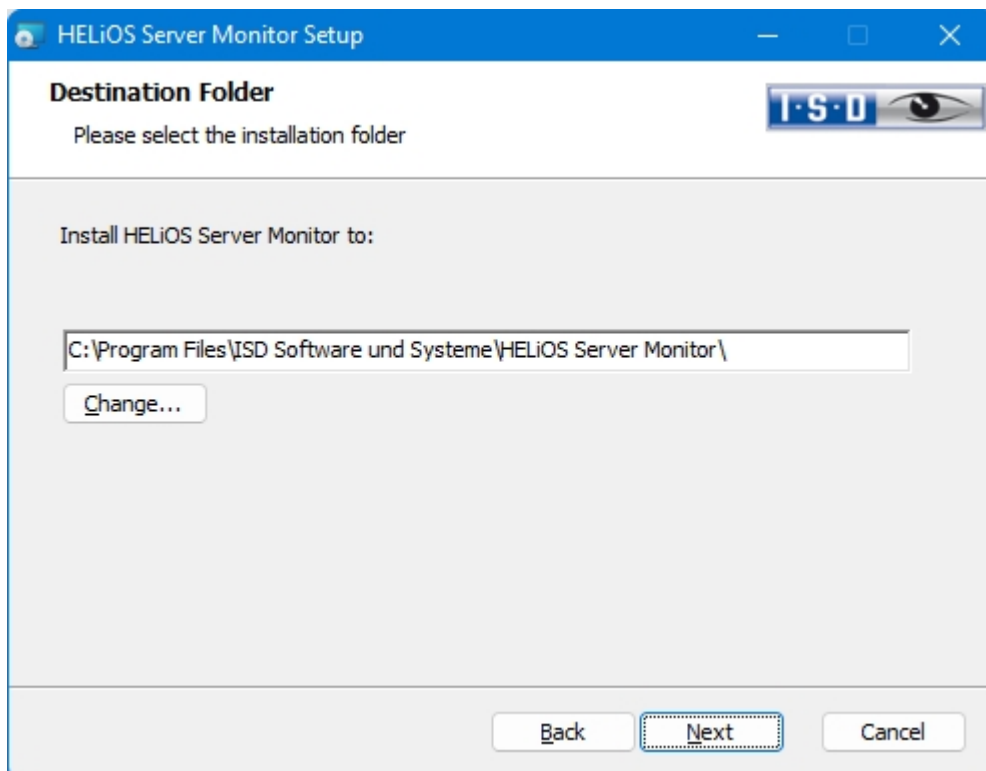
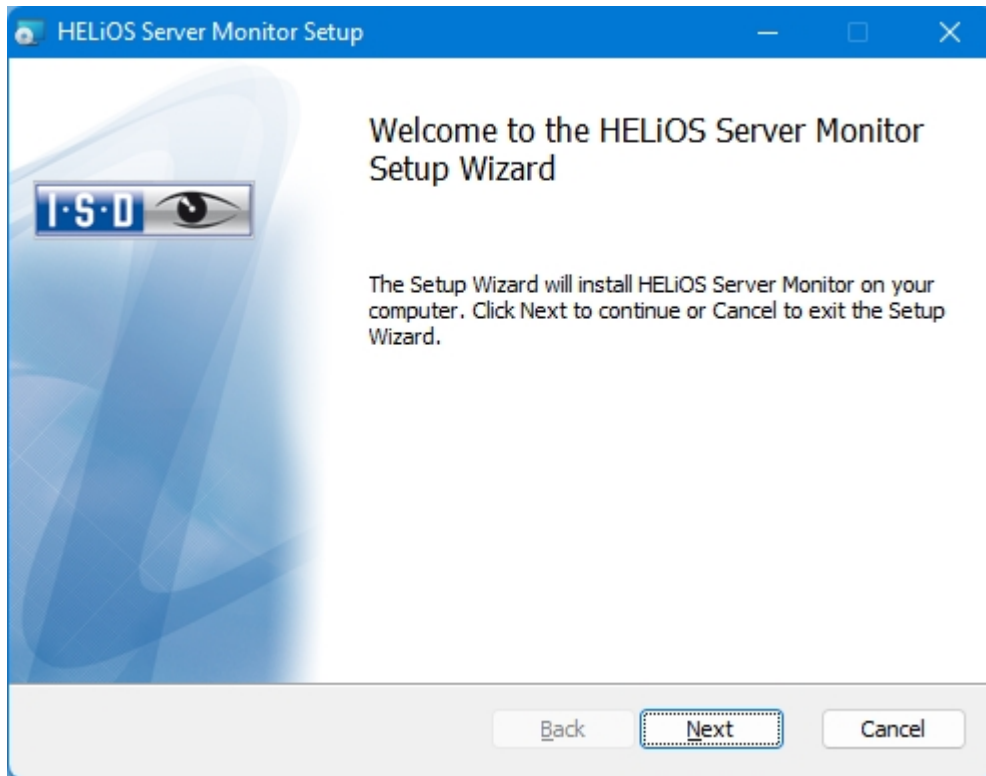


Click **Finish** to complete your installation.

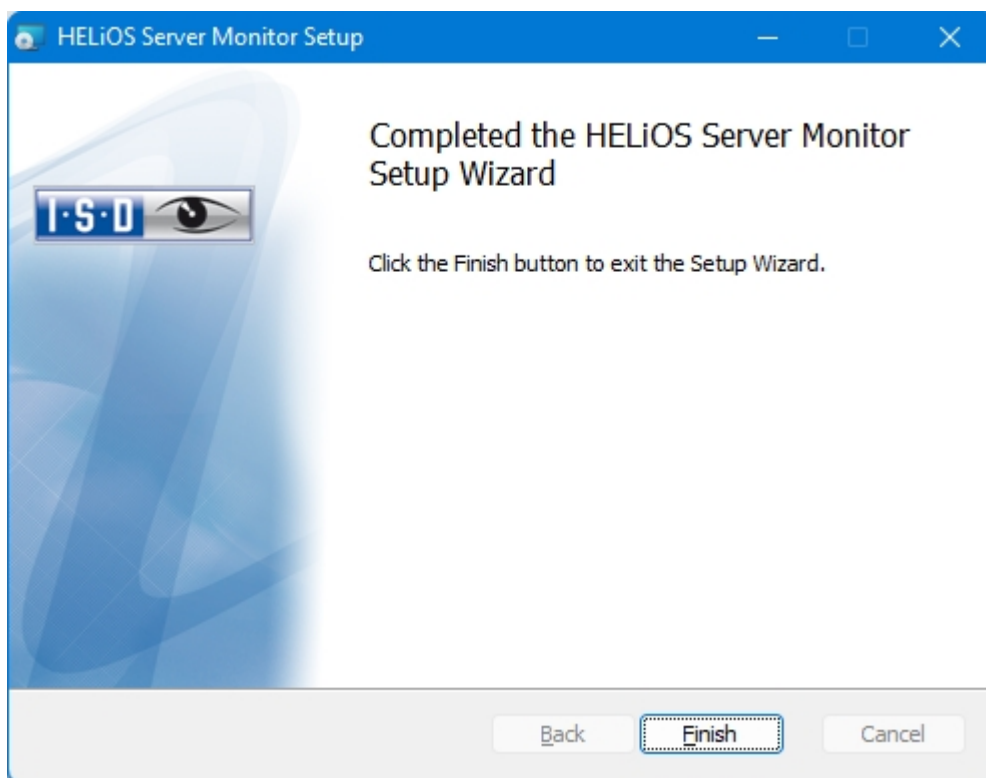
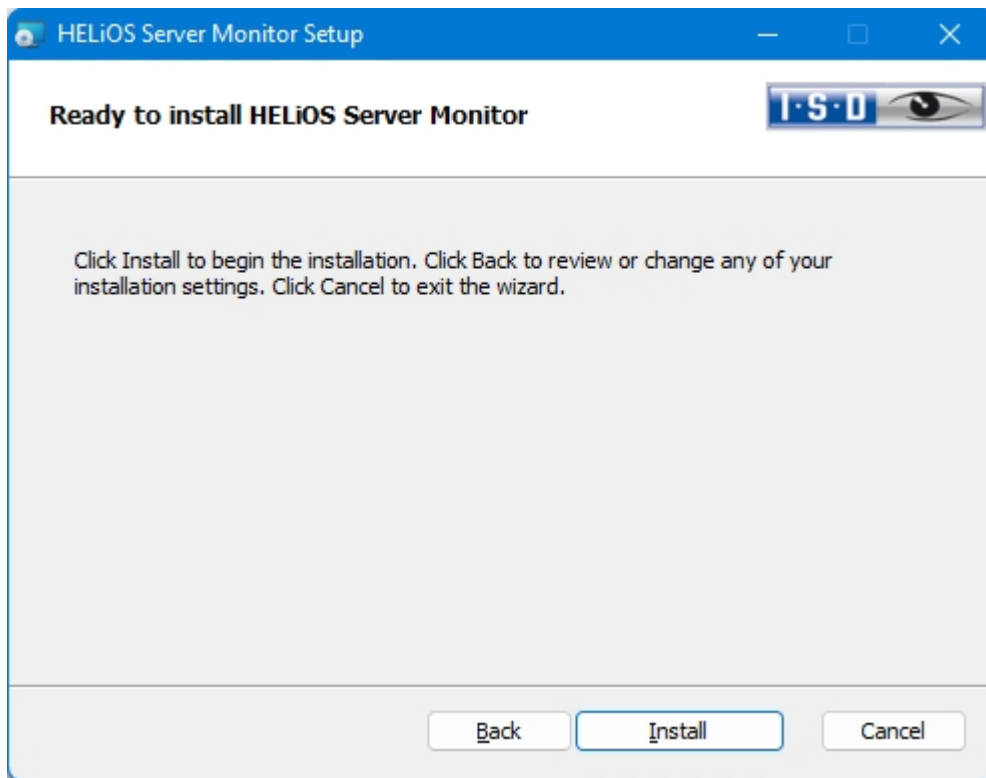
After successful installation, the HELiOS Spooler can be found in the program folder.

Installing the HELiOS Server Monitor

With the **Server Monitor** you have the possibility to monitor the runnability of your HELiOS server applications. You start the installation of the **Server Monitor** by double-clicking the SETUP.EXE file from the **Tools > ServerMonitor** directory of your installation medium.



Specify the installation directory.

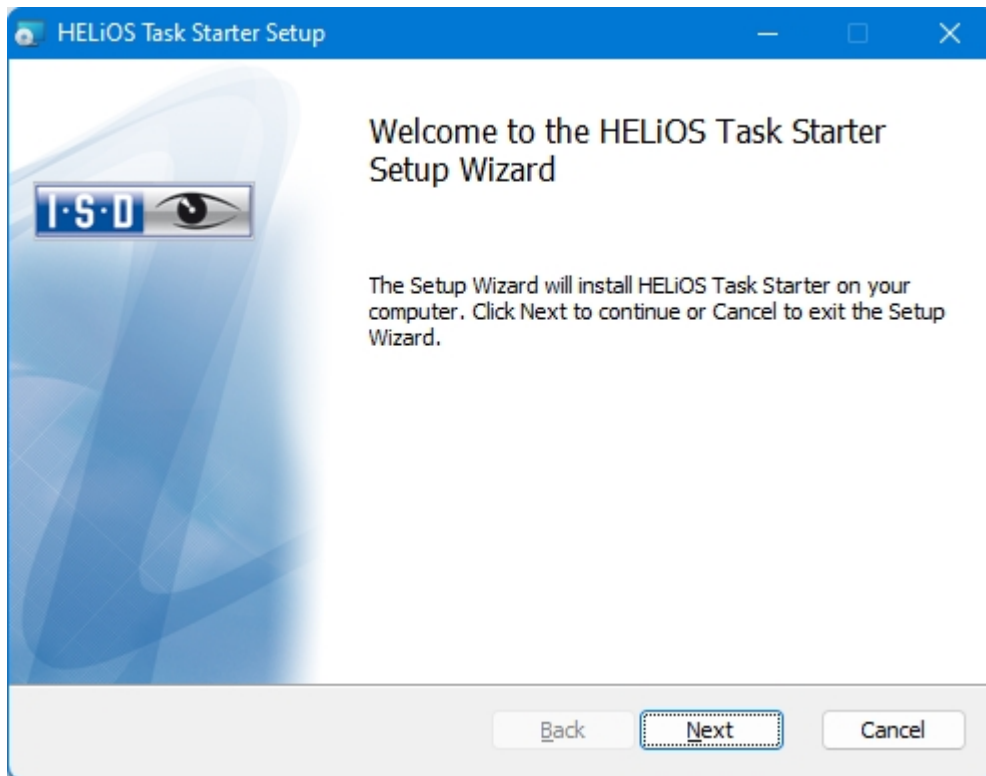


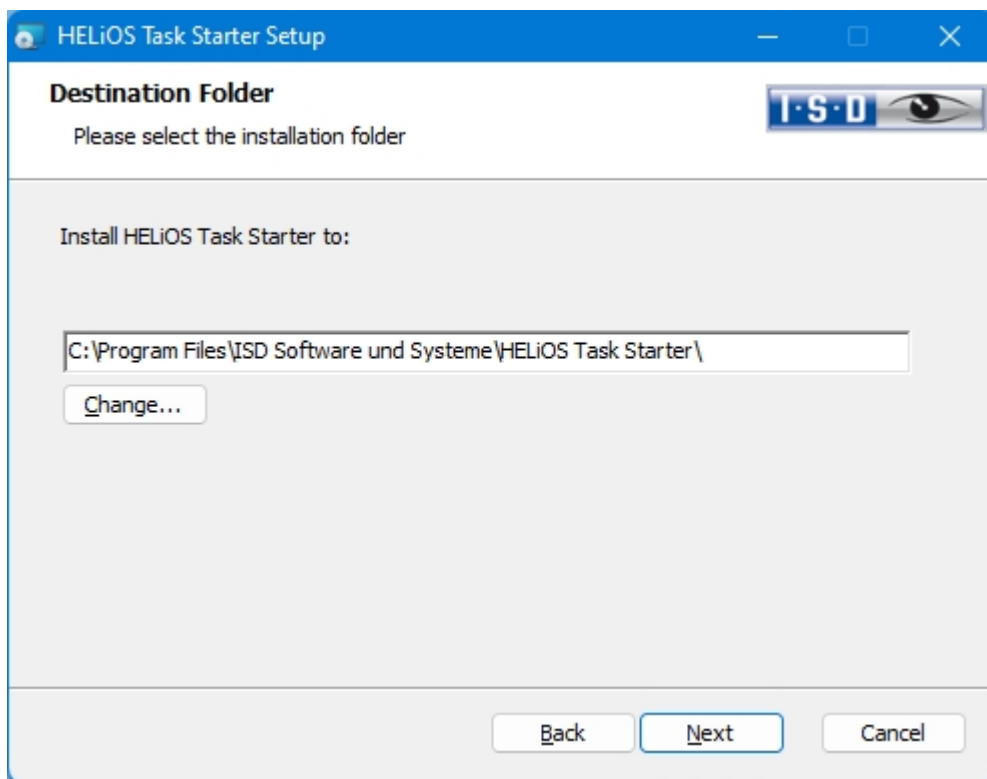
After the installation you start the monitoring with a double click on the **ServerMonitor.exe** file (EXE directory). The running monitoring by the Server Monitor is displayed in the Windows notification area.

Installing the HELiOS Task Starter

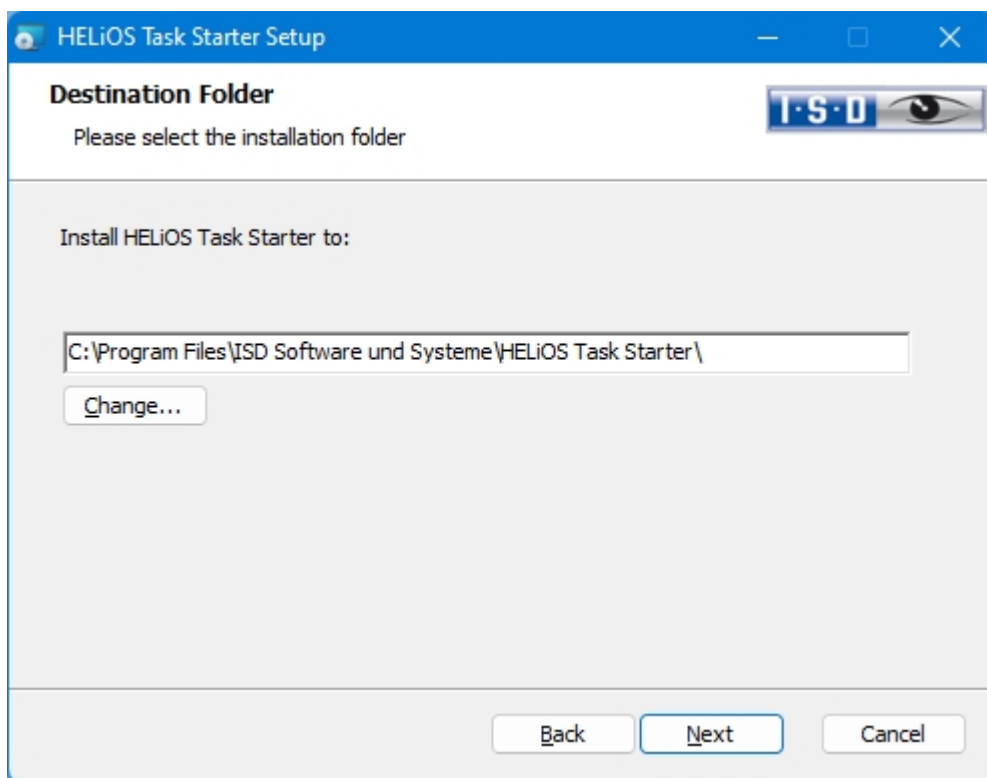
The **HELIOS Task Starter** is a tool with which HELiOS services such as the HELiOS Spooler can be automatically restarted after termination or after a crash (e.g. due to interruption of the database connection or network access).

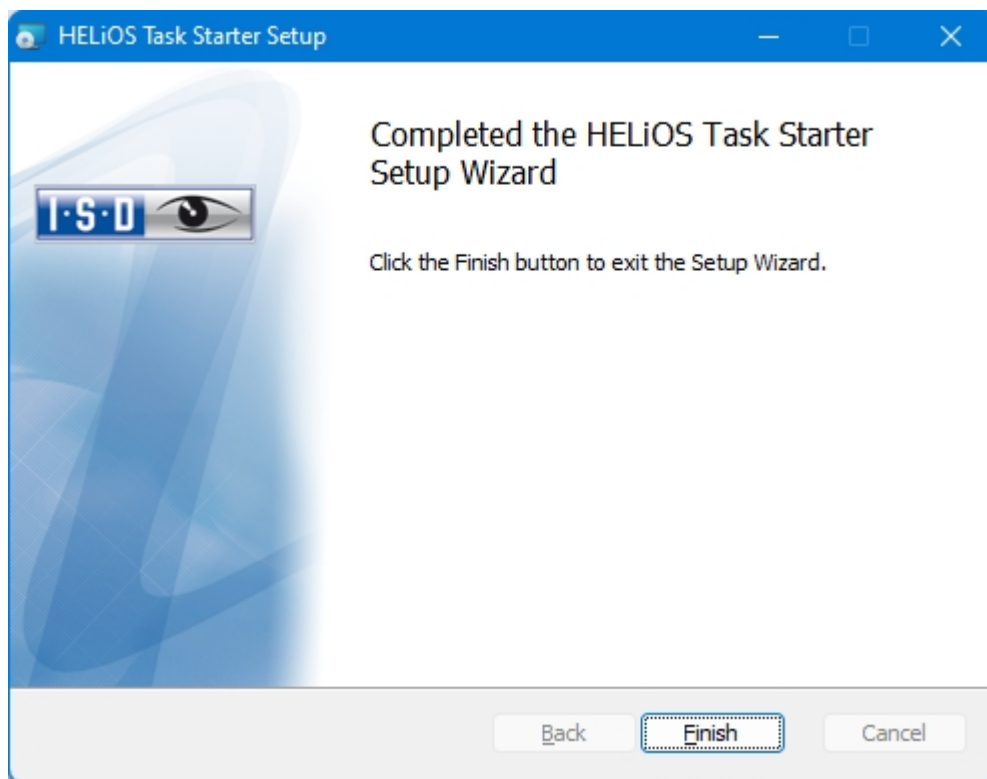
You start the installation of the **HELIOS Task Starter** with a double click on the file SETUP.EXE from the directory **Tools > TaskStarter** of your installation medium.





Specify the installation directory.





After the installation, the **HELIOS Task Starter** must be configured (see HELiOS online help). To do this, edit the file **TaskStarter.config** (%programdata%\ISD Software und Systeme\HELIOS Task Starter <Version>\). Then enter the service in the Windows task scheduler. If you have any questions, please contact the ISD Consulting team.

Installing the HELiOS Article Synchronization

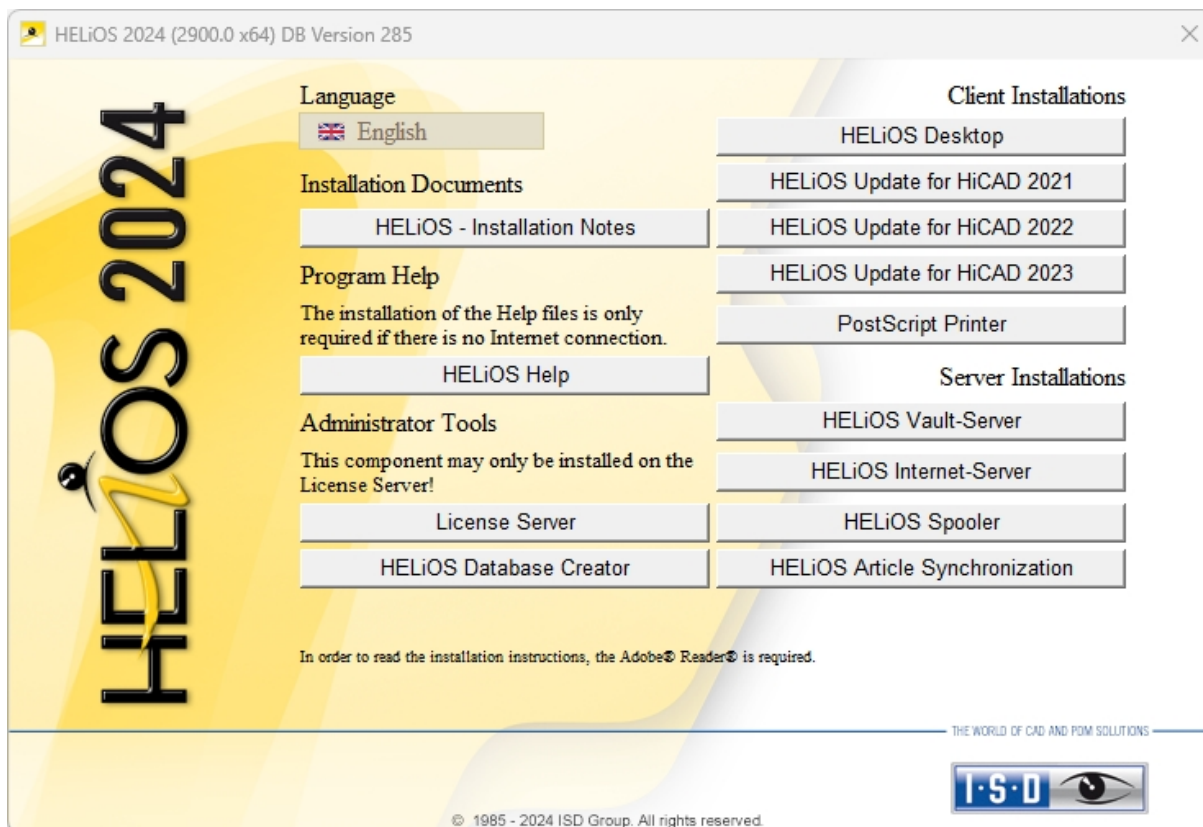
In addition to the interface (e.g. from EPLAN), which you activate during the installation of HELiOS in the **HELiOS Interfaces** tab of the **Extended settings** window, the **article synchronization service** running separately in the system must also be installed. This service synchronizes the part information from EPLAN, for example, with the HELiOS part masters. In both systems the article number of the respective other system is stored so that the connection between EPLAN article and HELiOS article can be established at any time. The HELiOS article synchronization can be found as a button in the selection window of the HELiOS installation.



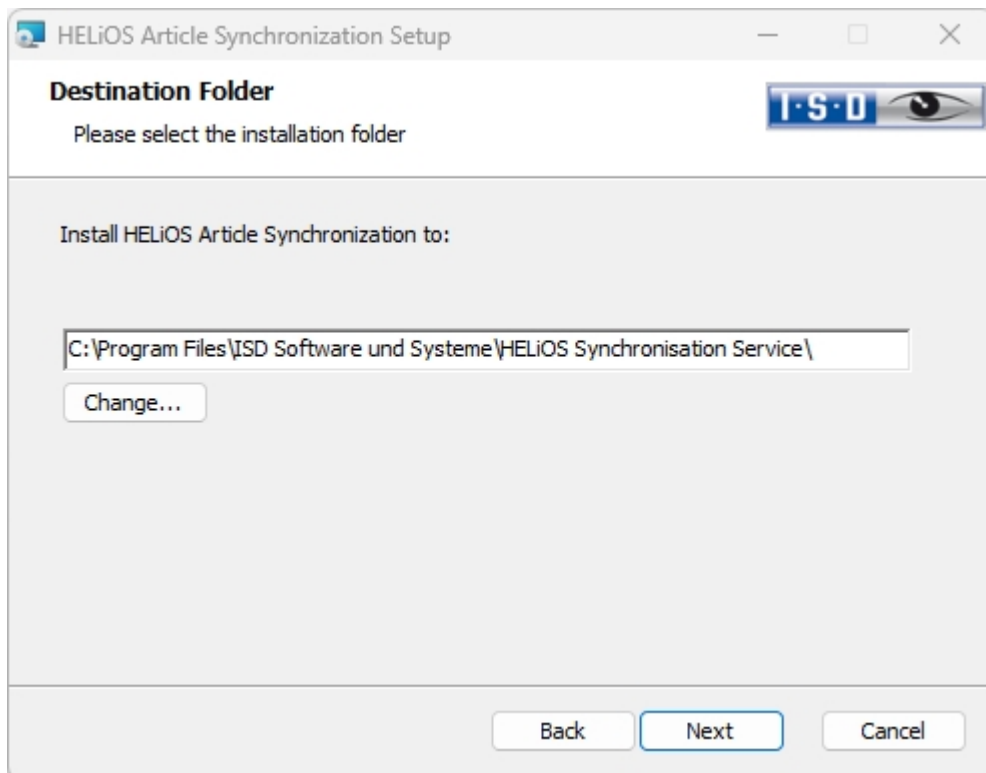
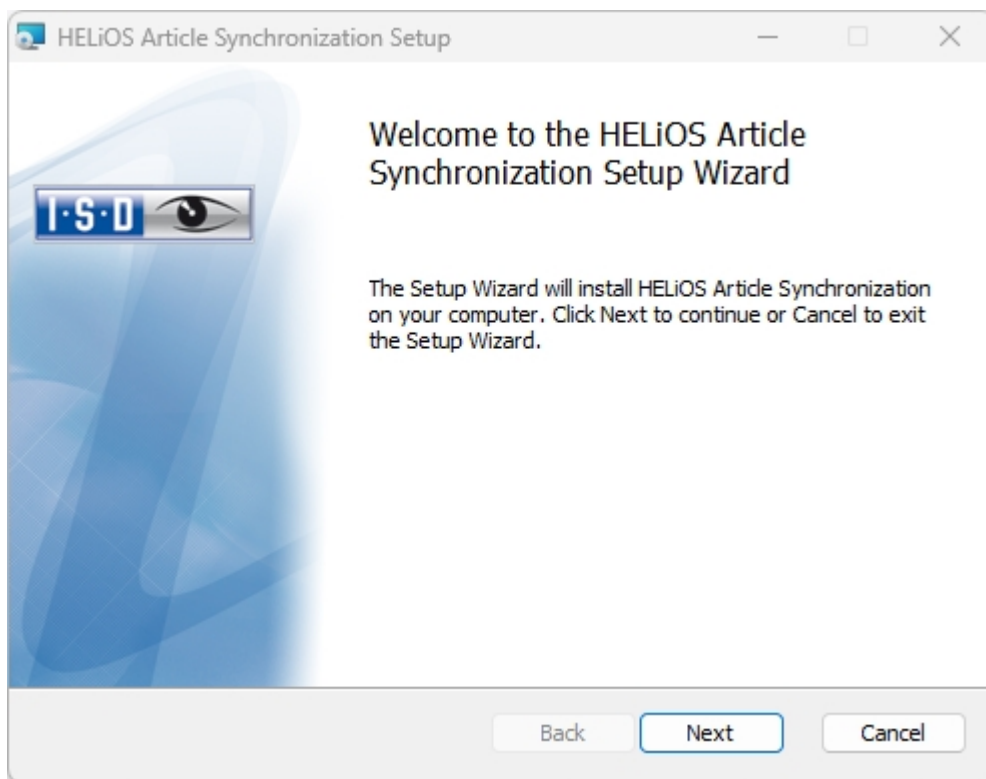
Please note:

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

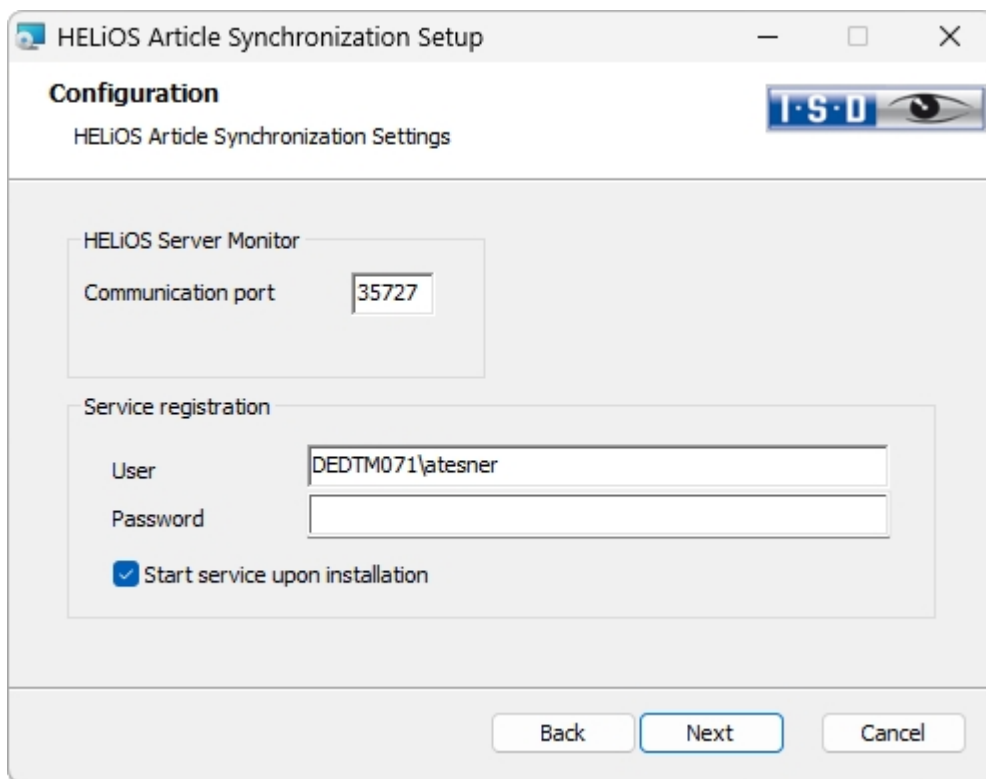
To install the HELiOS Spooler, please start Windows. If Windows has already been started, please close all other applications. Insert the DVD in your DVD drive. The installation wizard will then be started automatically.



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

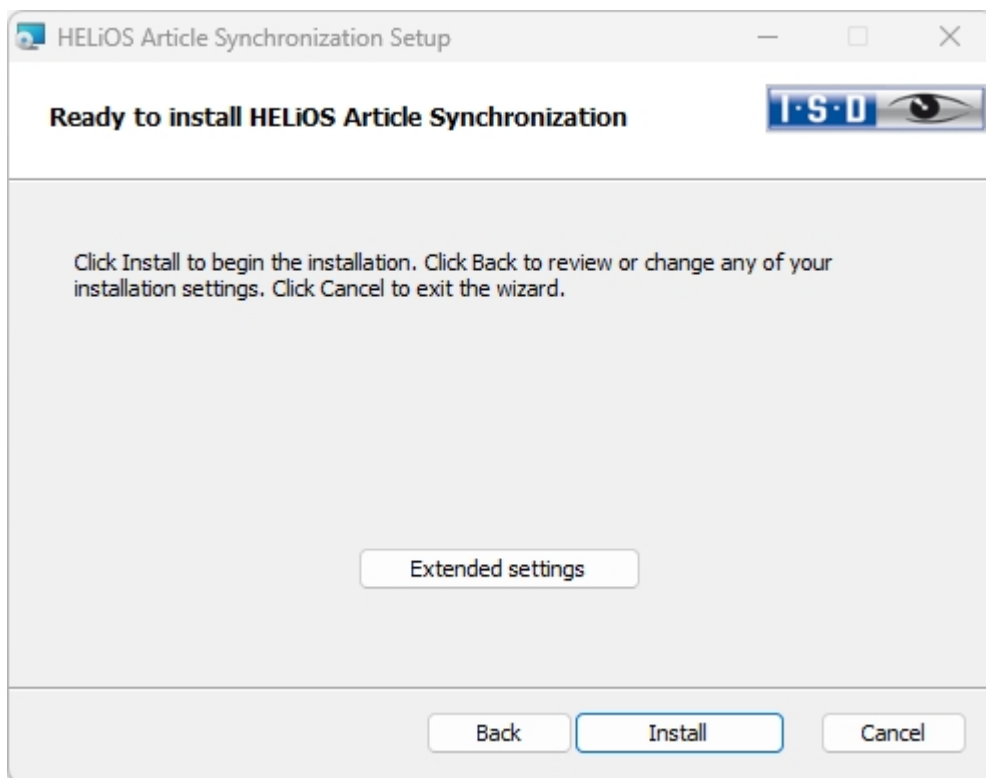


Specify the installation directory for the software.



Choose the interfaced program and, in the **User** field, enter the User login for HELiOS, (or a user account) with access to HELiOS.

The Server Monitor uses the **Communication port** 35727. If this is occupied by another application, you can change the communication port here.



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

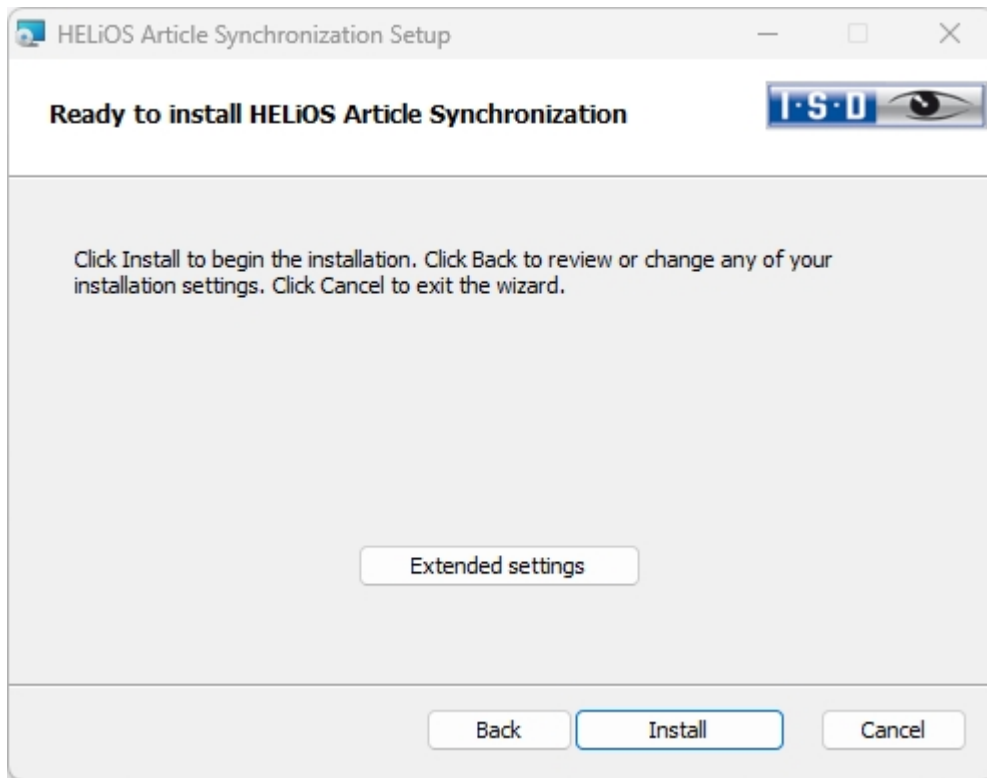
Password ●●●●●●

Use Vault Server Address localhost Port 9000

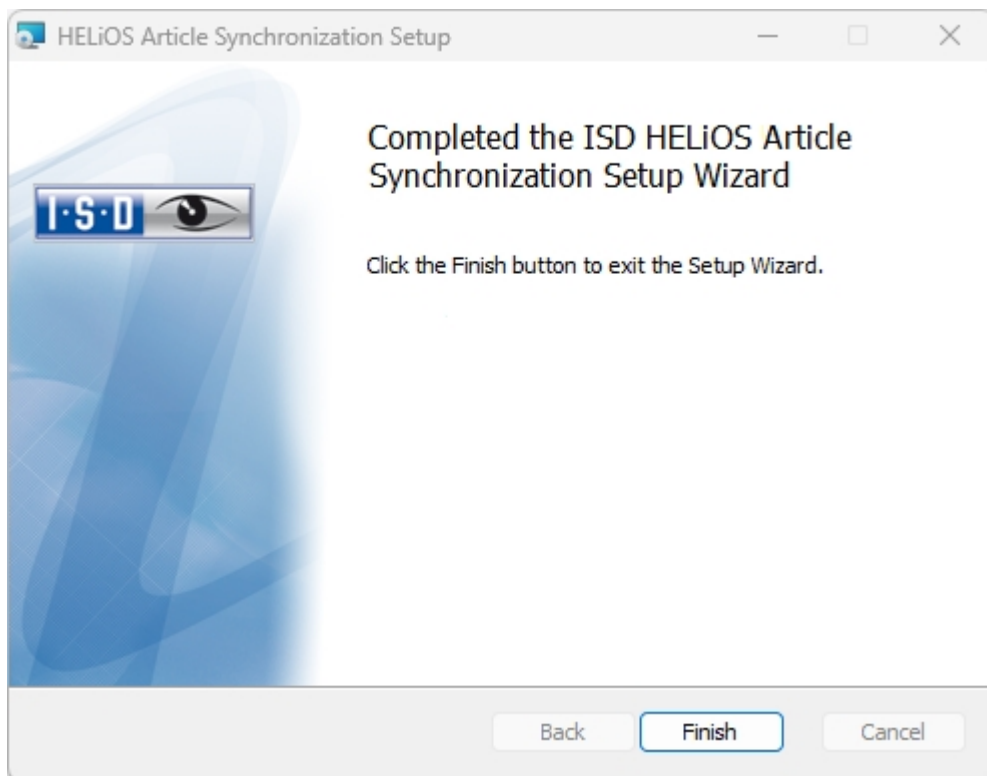
OK Save Cancel

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 menu of your interface will contain the **Synchronize articles with HELiOS** function in the **PDM** menu.

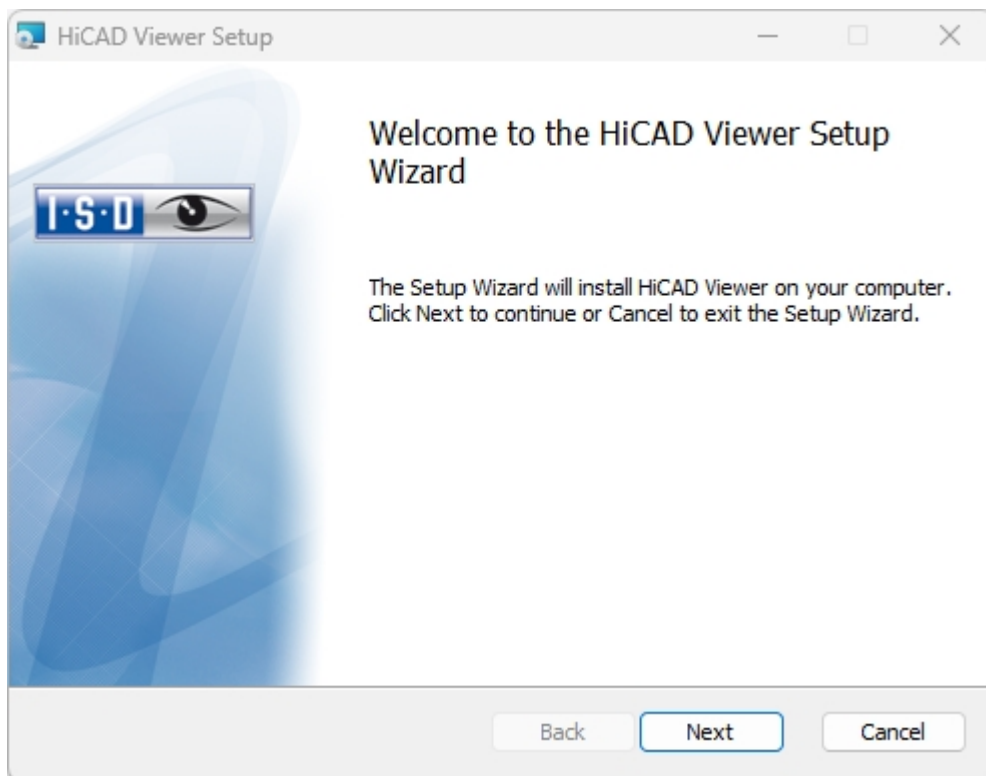
After installation, the **HELiOS Configuration Editor** tool is available in the **Program Files\ISD Software and Systems\HELiOS Synchronisation Service\exe** directory to make settings for managing the service and directories. For further information, please refer to the online help for the HELiOS / EPLAN interface.

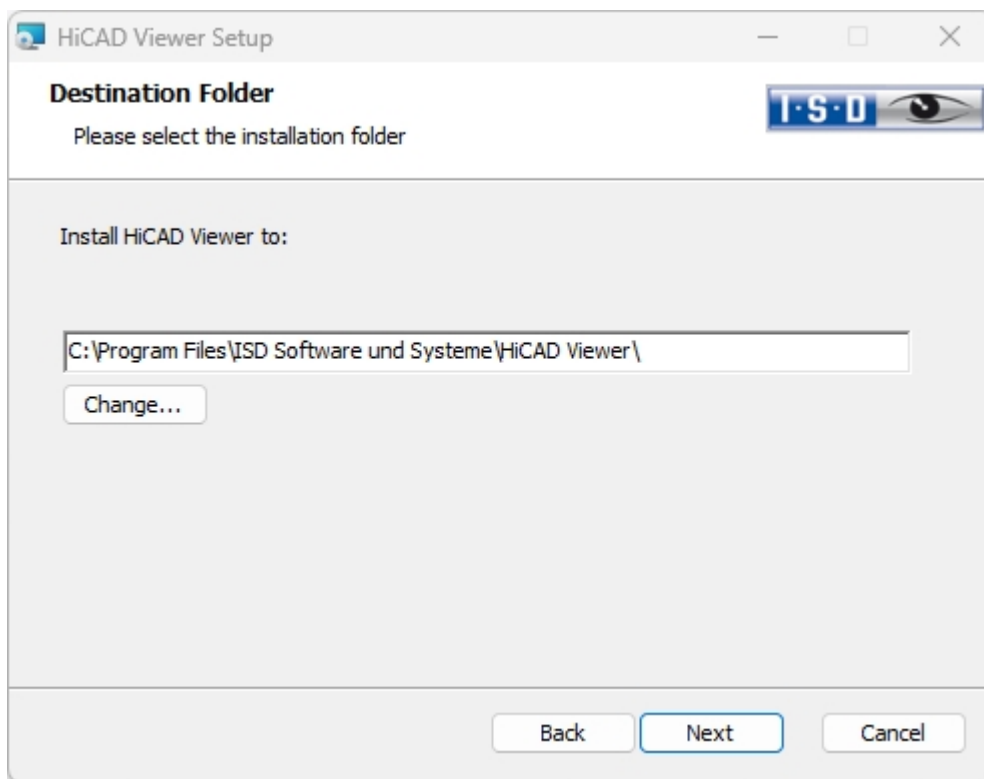
Installing the HiCAD Viewer

Using the HiCAD Viewer in HELiOS from Version 2024

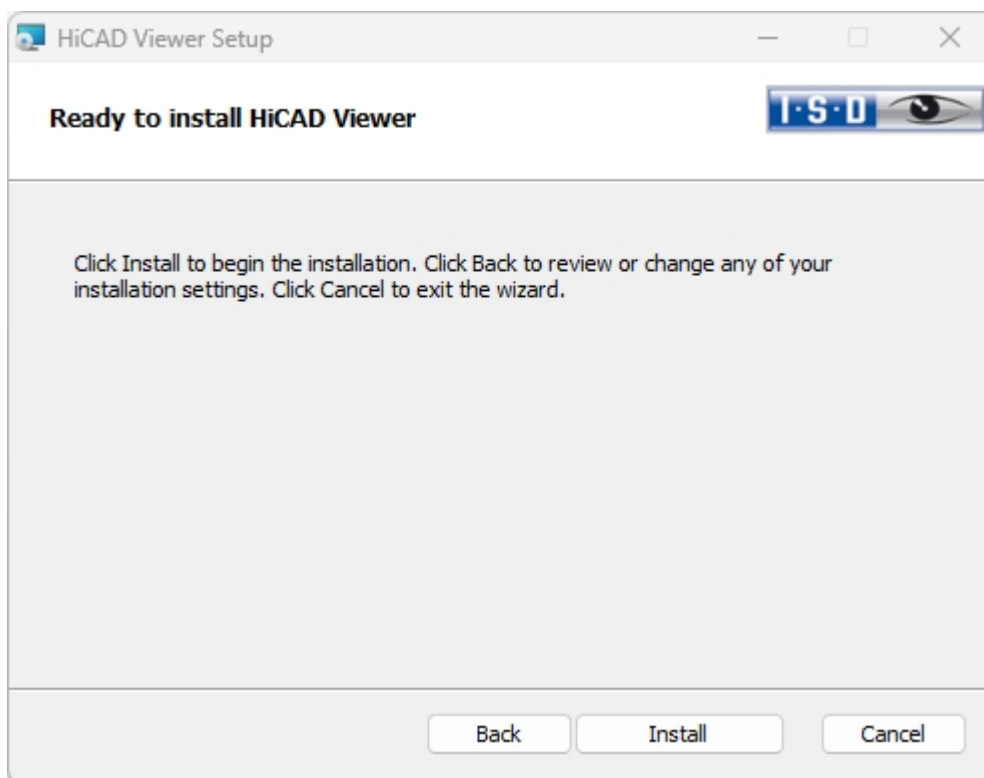
- During the HiCAD installation ("**HiCAD and HELiOS**", red installation dialogue), the Active X component of the HiCAD Viewer is automatically installed. This enables the preview of HiCAD files in HELiOS.
- On workstations on which only the HELiOS Desktop (standalone) is installed, the HiCAD Viewer must be installed separately from HELiOS 2024 and updated if necessary. This is also the case if only HELiOS is updated when using an older HiCAD version with HELiOS. Otherwise, the preview of HiCAD files cannot be displayed in HELiOS. You will find the installation of the HiCAD Viewer both on the yellow installation medium at **Tools > HiCAD Viewer** and at [Download Area > Tools Download](#).

With HELiOS 2024 the HEL_PREVIEW.INI settings file for the Viewer has also changed, which enables the configuration of the graphics windows in the HELiOS Desktop. If you want to make special settings in HEL_PREVIEW.INI, you should make these based on the new version that is also used for the new installation. You can find a description [here](#).

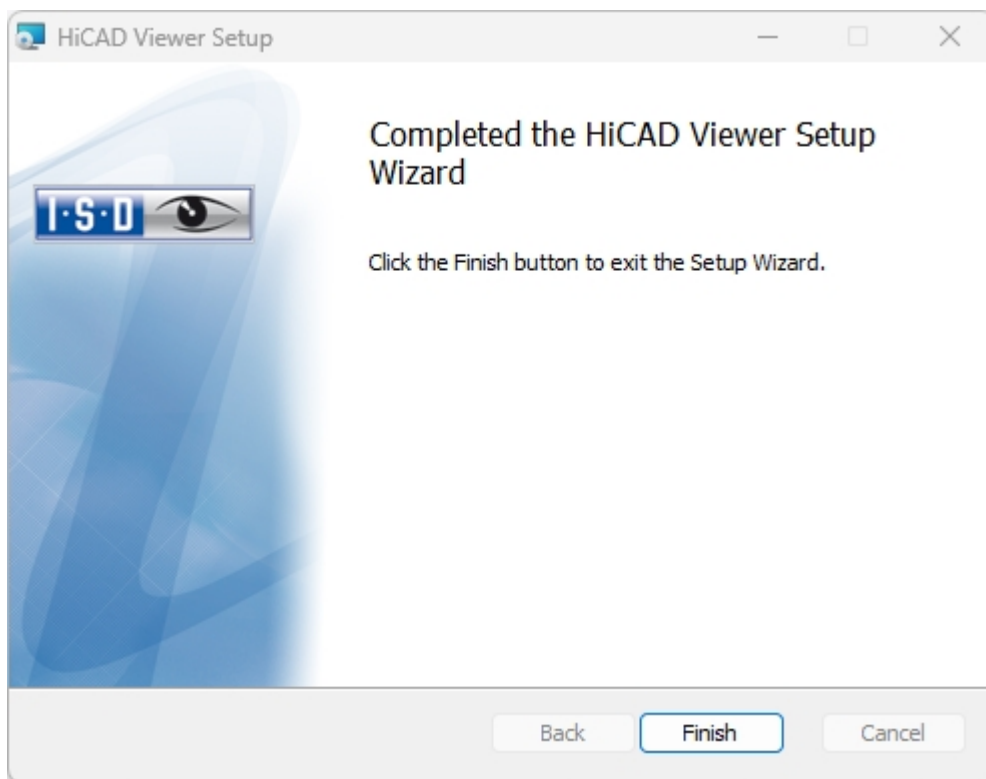




Enter the installation directory for the software.



Click **Install**.



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


Configuration

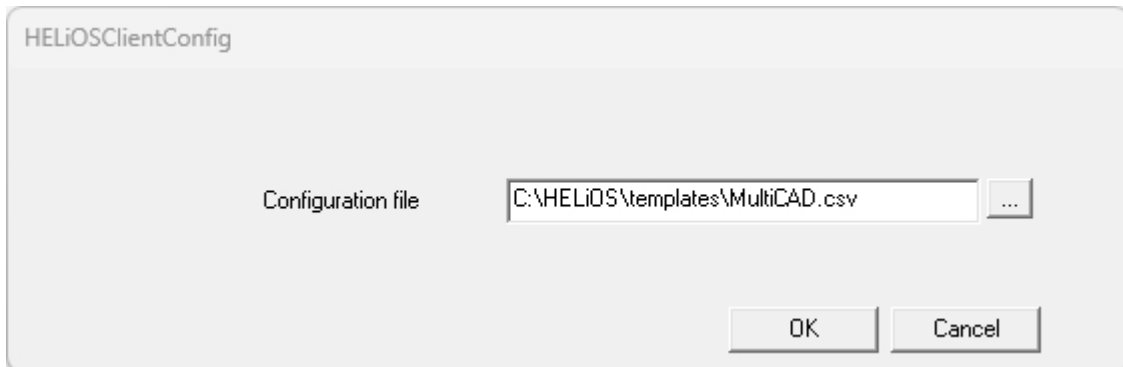
Company- or user-specific requirements can be conveniently adapted to the configuration.

- Parameter Configuration for HELIOS

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 version, 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 2024 (Version 290*. *), you can only update installations from 2019 (Version \geq 2400.0) 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.

Important update notes for attribute mapping in title blocks

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.

HELiOS List attributes

The database version 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 version 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 and AutoCAD!

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](#).

User-defined columns in catalogue tables

Until now, the creation of user-defined columns was only possible for tables in the **Factory standards** catalogue. From HiCAD 2024 this is supported for tables in all catalogues. For this purpose, the table function **New column** has been extended. With this extension, the columns CUSTOM1 to CUSTOM9, which were previously predefined for this purpose (before HiCAD 2024), are no longer needed and have been removed from the table.

During a catalogue update, however, only empty CUSTOM columns are removed from the tables.

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.

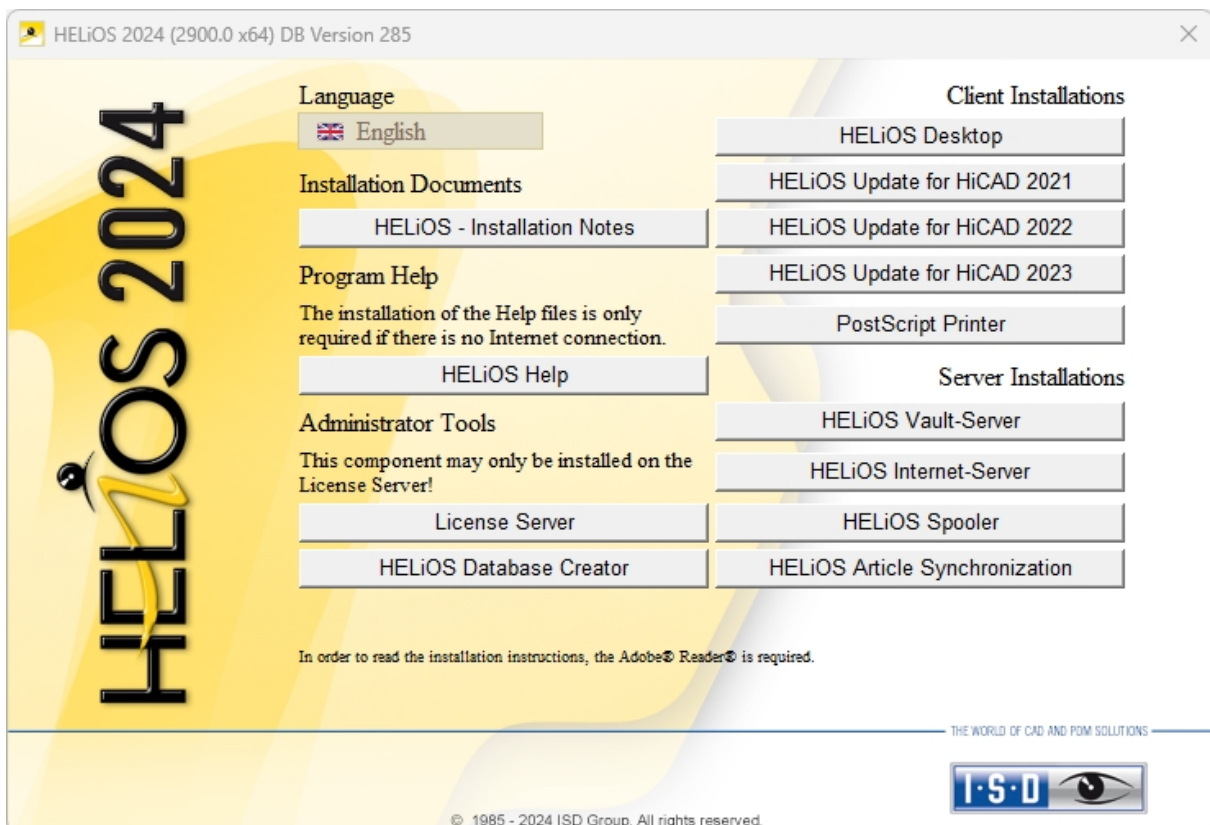
Updating the Server License

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 2024.

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 2024. 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 2024, 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 2024 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 [Update form](#) 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 2024, you need to deactivate the local licenses of the old version on your workstation. After installing HELiOS 2024, 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 2024 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 [Update form](#) 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.

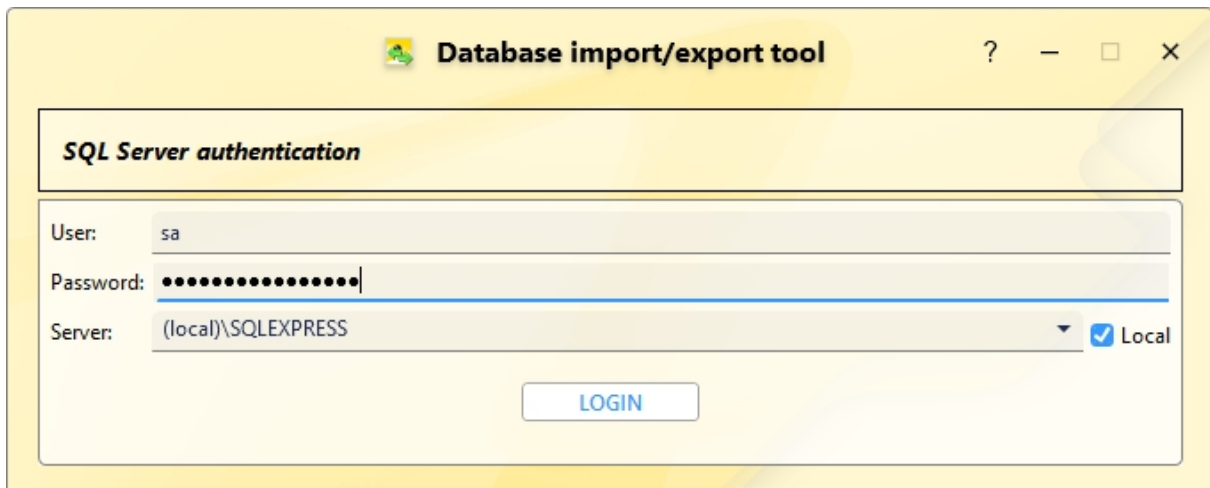
Since the effort of an update increases with the number of skipped versions, we generally recommend an installation by the ISD. This also saves the user from having to familiarize themselves with the Update Installation topics and ensures that nothing will be forgotten.

Update of HELiOS

The ISD recommends performing an Update Installation when switching from an old version to HELiOS 2024 or for the installing of Service Packs and Patches. Before the update, create a backup of the [HELiOS Database](#).

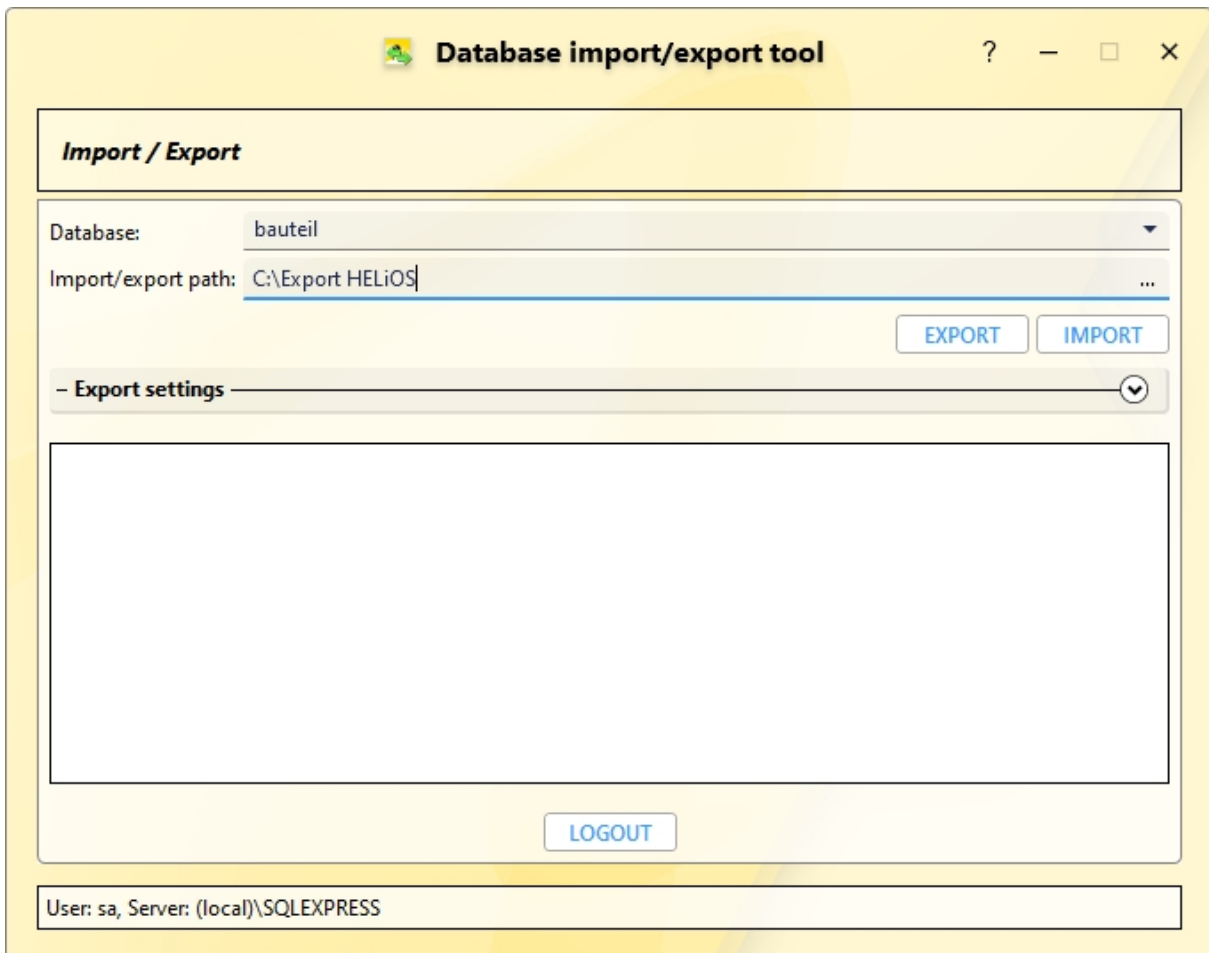
Backups Before Performing the HELiOS Update Installation

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**.

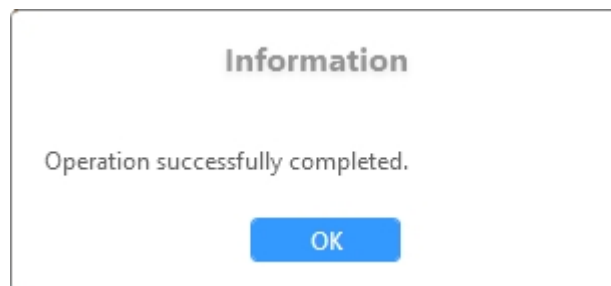


The screenshot shows a window titled "Database import/export tool" with a yellow background. Inside the window, there is a section titled "SQL Server authentication". Below this title, there are three input fields: "User:" with the text "sa", "Password:" with a series of black dots, and "Server:" with the text "(local)\SQLEXPRESS". To the right of the "Server:" field, there is a dropdown arrow and a checked checkbox labeled "Local". Below these fields is a blue button labeled "LOGIN".

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**.

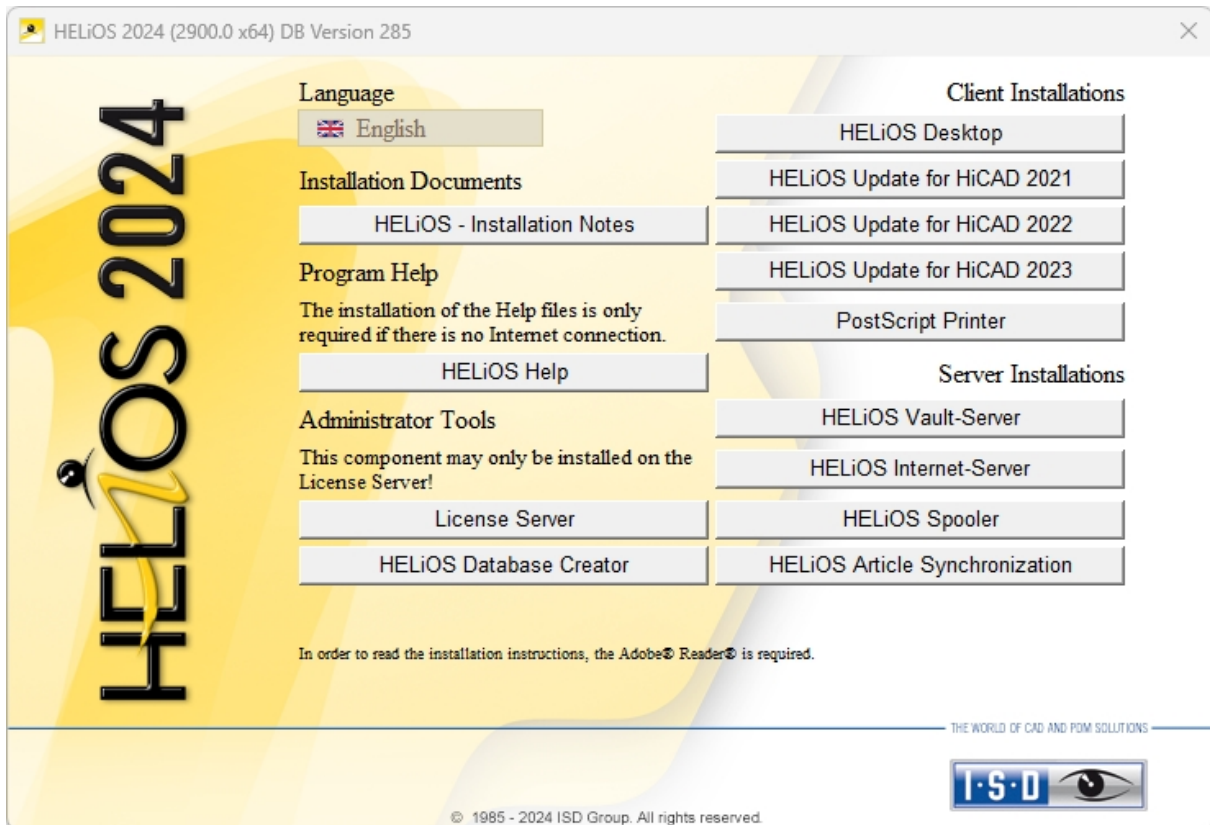
The log file of the procedure can be found at %Appdata%\Roaming\ISD Software und Systeme\HELiOS%\Datenbankname%_Helios_Export.log and the configuration can be found at %Appdata%\Roaming\ISD Software und Systeme\Helios.DBImportExport\DBImportExportConfig.

Update Installation of HELiOS

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

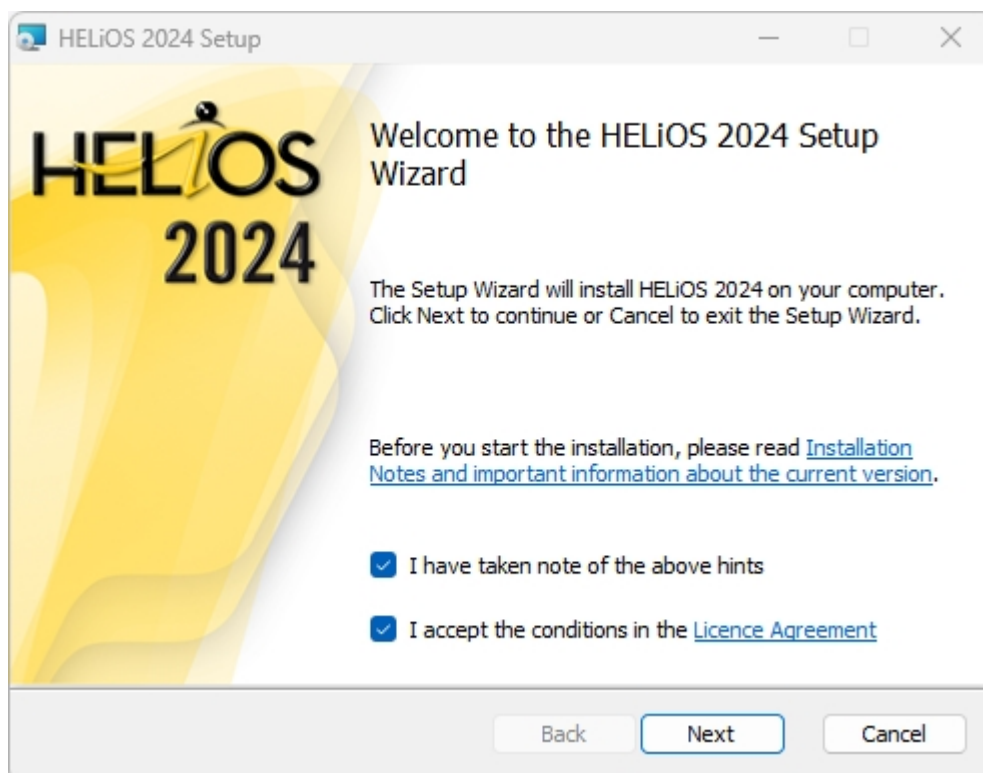
Close all other applications and start the installation wizard. For the installation, it is essential to start the **setup.exe** file from the root directory of the ISO file; this is the only way to ensure that the installation wizard recognises the operating system correctly and installs the appropriate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

Then select the language of the version.



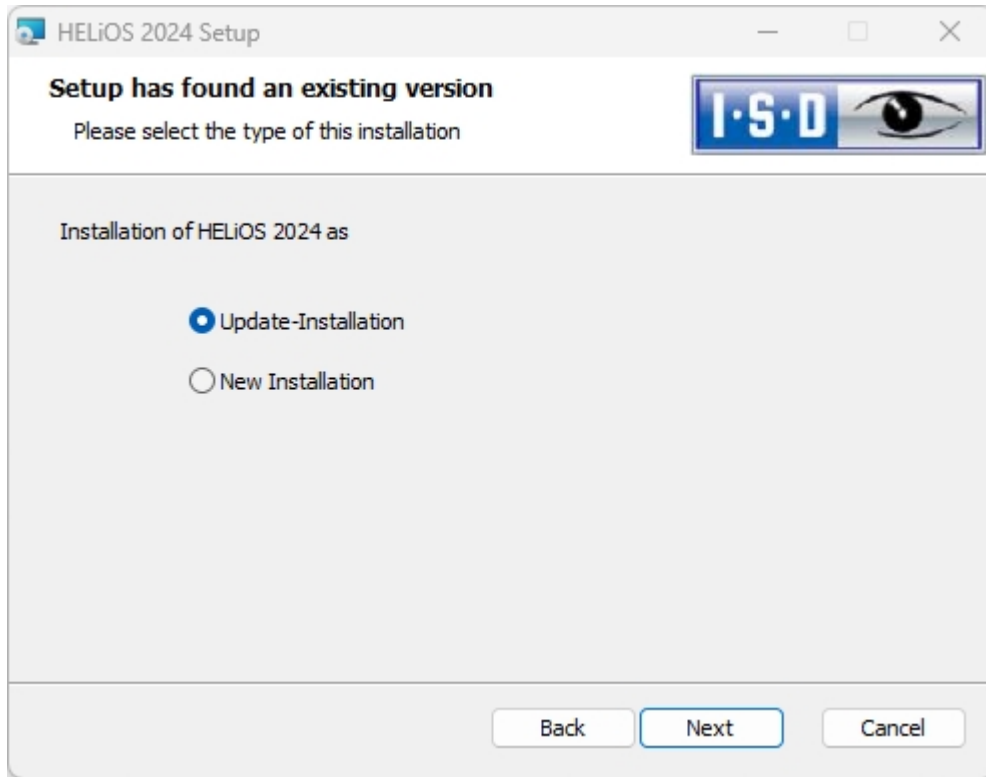
Click on the **HELiOS Desktop** or the **HELiOS Update for XXXX** button (XXXX = year).

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.

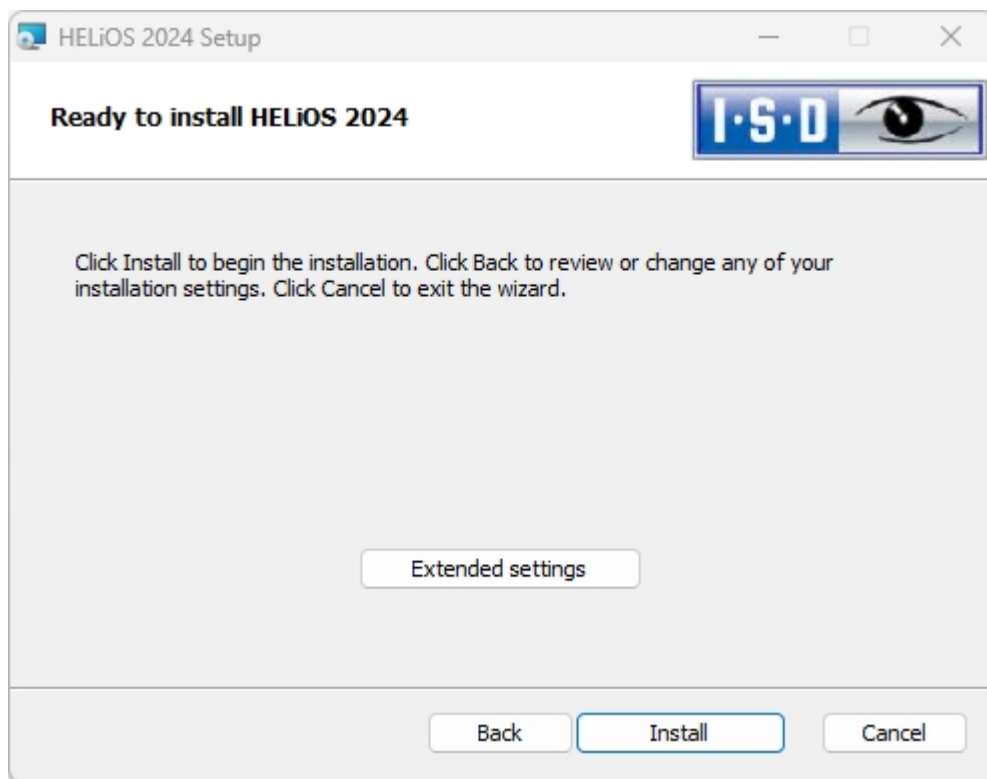


Activate the **Update-Installation** option and click **Next**.

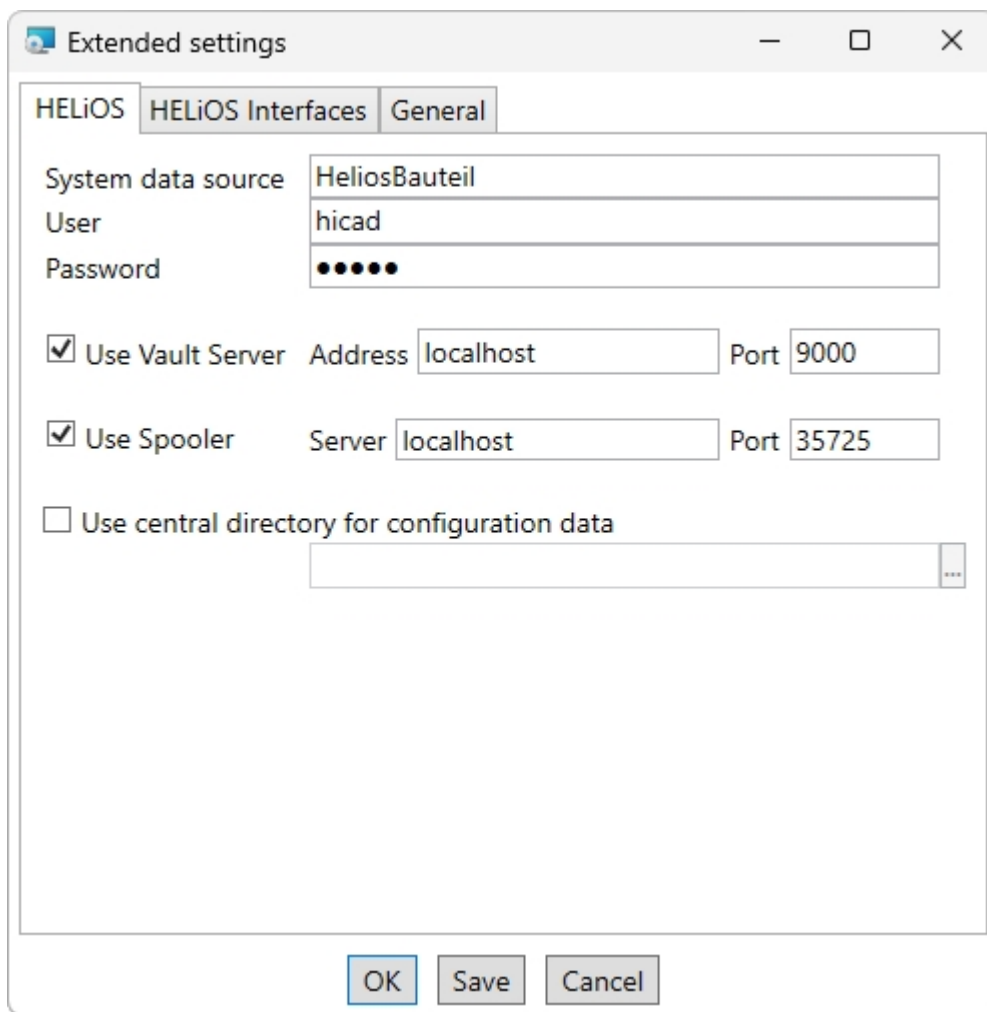


Please note:

As of HELiOS Version 2800.0, information on the HiCAD sheet structure is used for printing drawings (*.SZA) via HELiOS. This information is transferred to HELiOS by HiCAD as of Version 2601.6 or 2702.3. If you are using an older HiCAD version, you will not be able to print your drawings via HELiOS after the HELiOS update. Therefore, depending on the update variant, you will be asked whether you still want to proceed with the update installation.





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

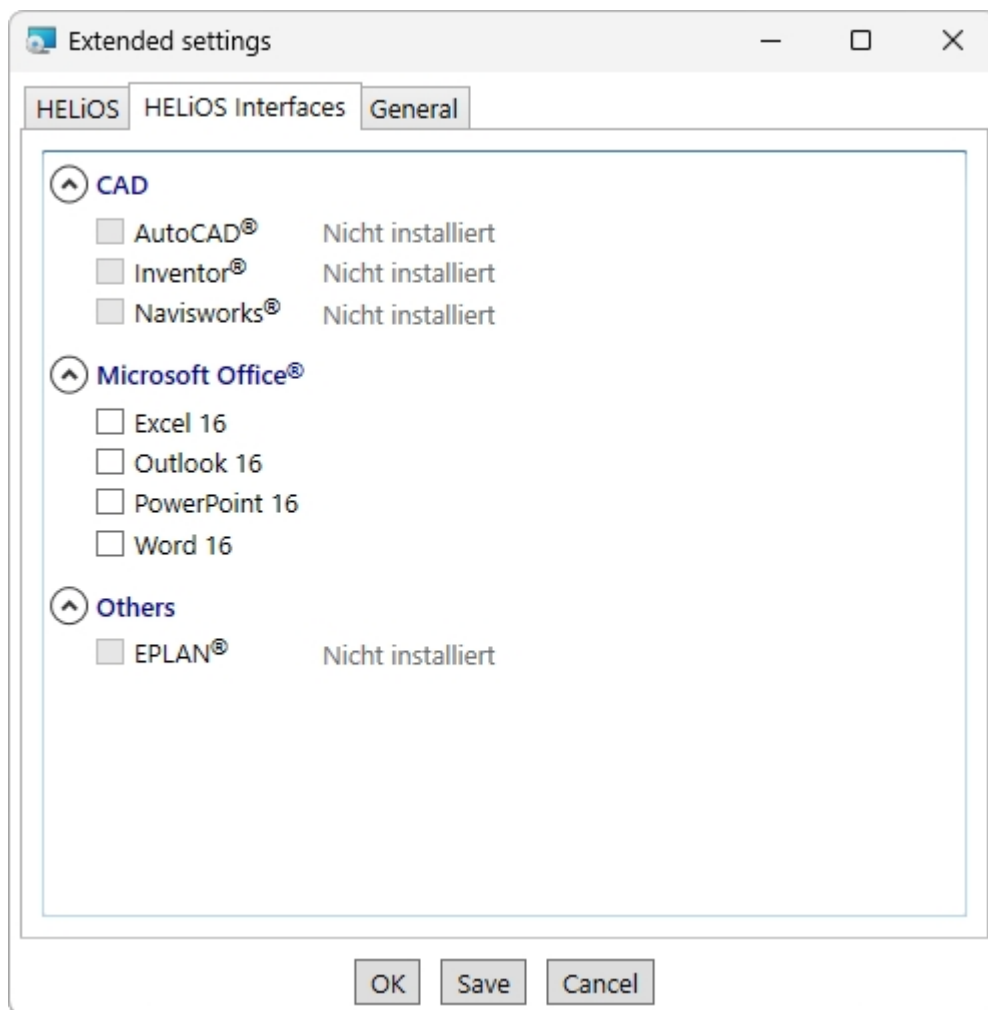


In case of a new installation of HELIOS you can specify an arbitrary name for the system data source. In case of an update, the existing data source will be offered. **User** and **Password** will be identical with the ODBC login.

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 the HELIOS Client via the HELIOS icon  > HELIOS Options > [Manage...](#) > [Export settings](#).

To make the settings available to several workstations, activate the option **Use central directory for configuration data** when installing and then select the directory by clicking on the  icon. The configuration data is then provided using the [HELIOS.ConfigImport.exe](#) tool in the EXE directory of your installation.



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. 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.

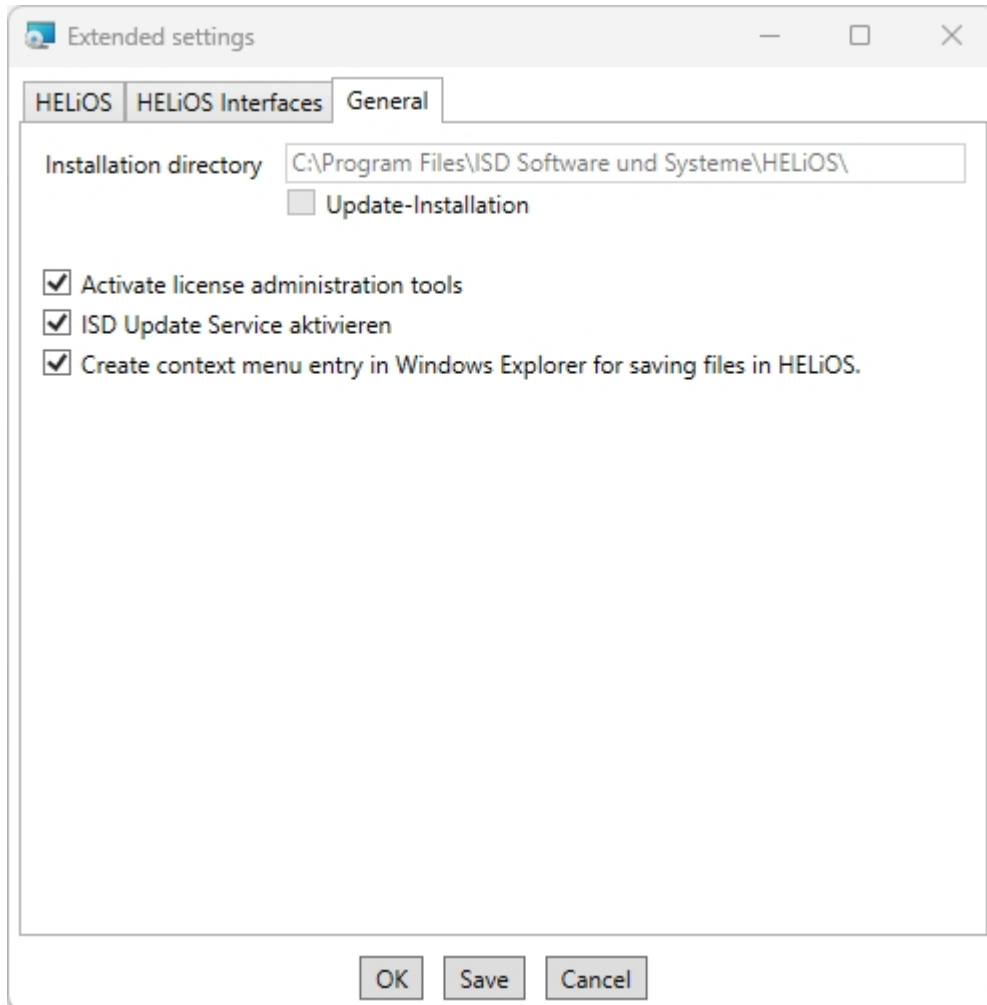
Furthermore, the tool [HeliosCouplings.exe](#) (in the /exe/ directory of the HELiOS installation) is available for establishing interfaces.



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

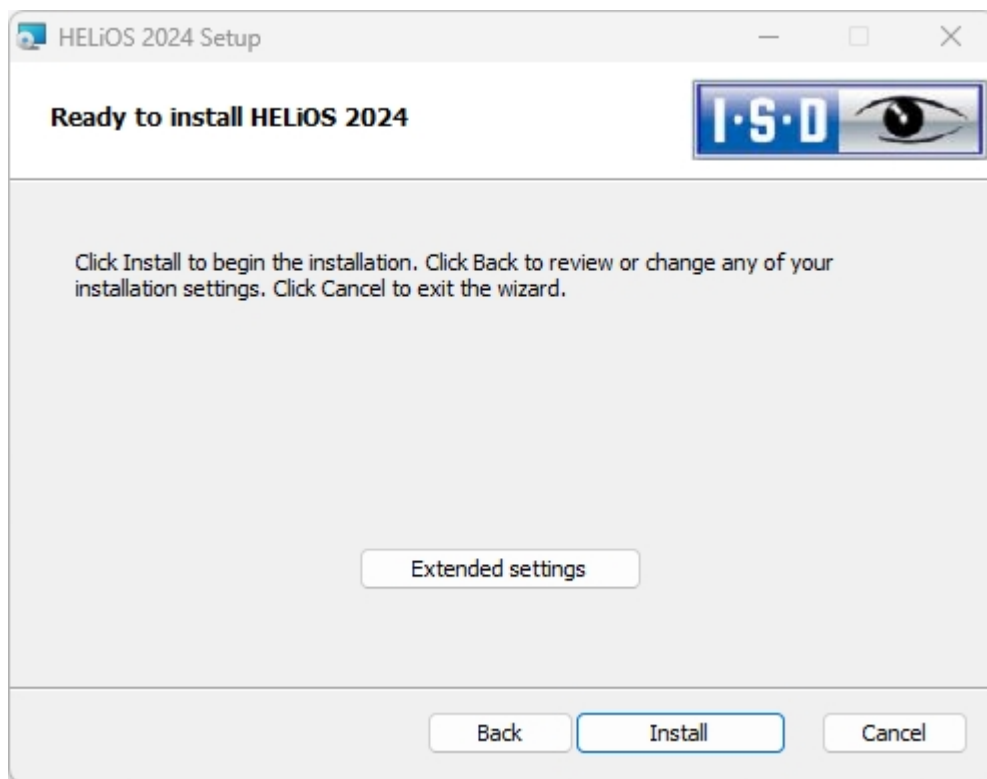
- For EPLAN you also require the Article Synchronization Service running separately on the system. You will find the corresponding button in the HELiOS installation mask. For the configuration of the HELiOS-EPLAN interface please contact the ISD Consulting team.
- If you have installed AutoCAD and AutoCAD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

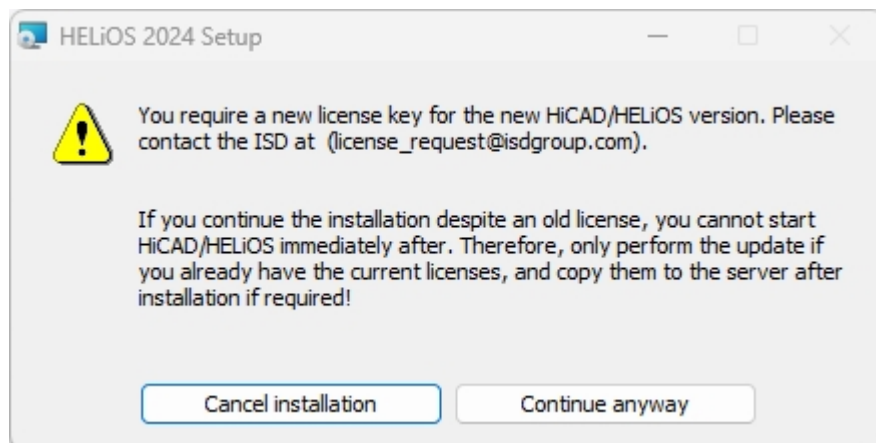
If you want the function **Save to HELiOS** to appear in the context menu of Windows Explorer, activate the checkbox **Create context menu entry in Windows Explorer for saving files in HELiOS**.

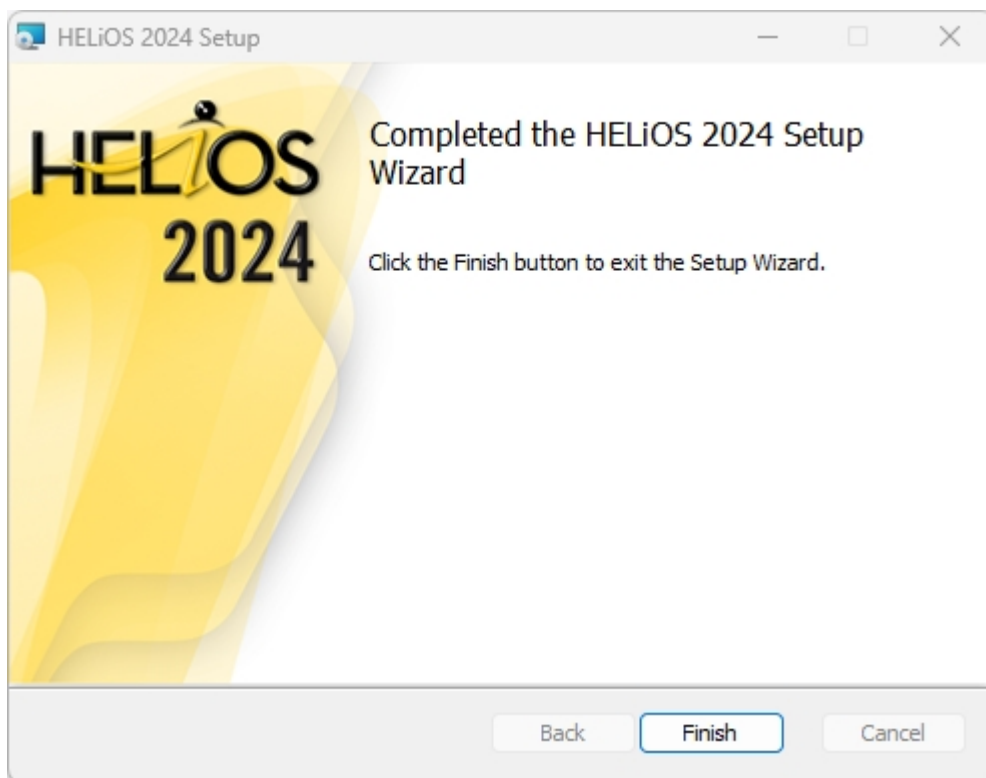
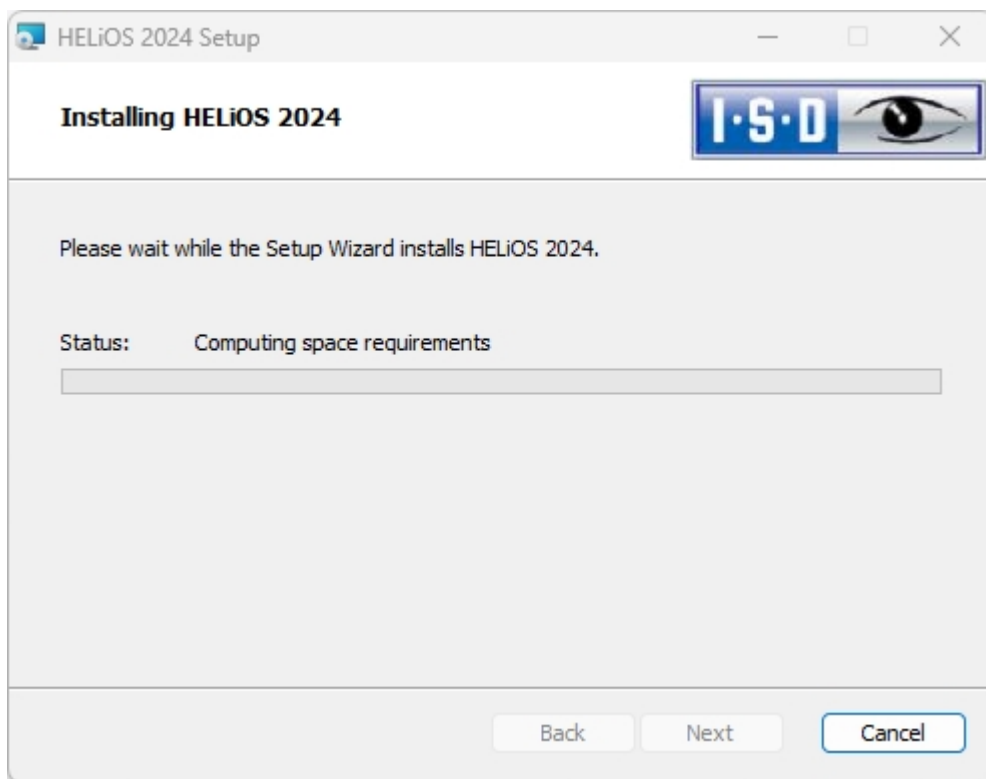
Close the **Extended settings** dialogue with **OK**.




Click **Install**.

You will now be informed that you need a new license key for the new version.





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

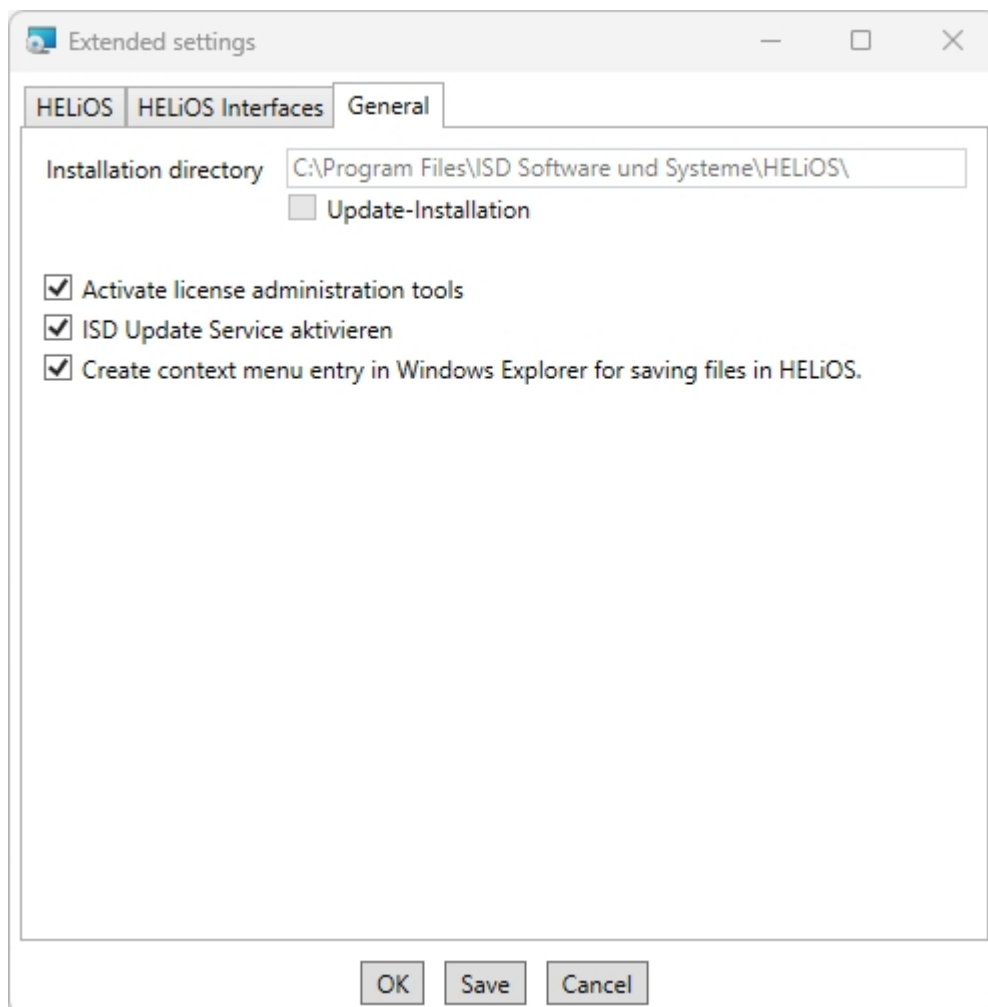
Improvements of the HELiOS functionality require an update of the database. If the database is no longer up-to-date, this will be indicated by a message when HELiOS is started. Use the program [HeliosDbUpdate.exe](#) to update the database schema.

ISD Update Service

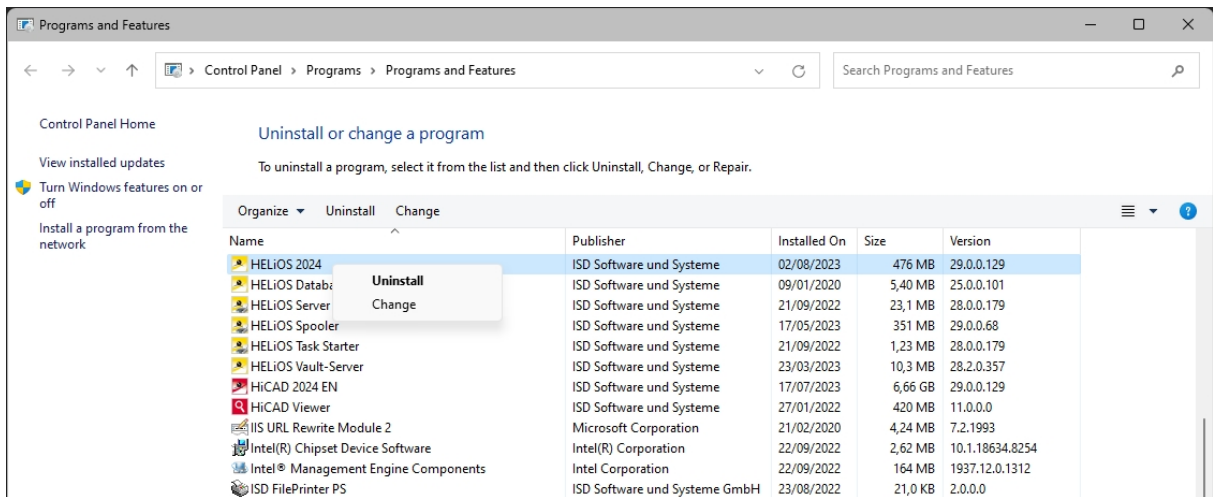
The automatic search for and installation of HELiOSupdates (Hotfixes). For this you require the program **ISDUpdateSvc.exe**, that you can either activate during installation of HiCAD or install via the Windows Control Panel afterwards.

Installing the ISD Update Service

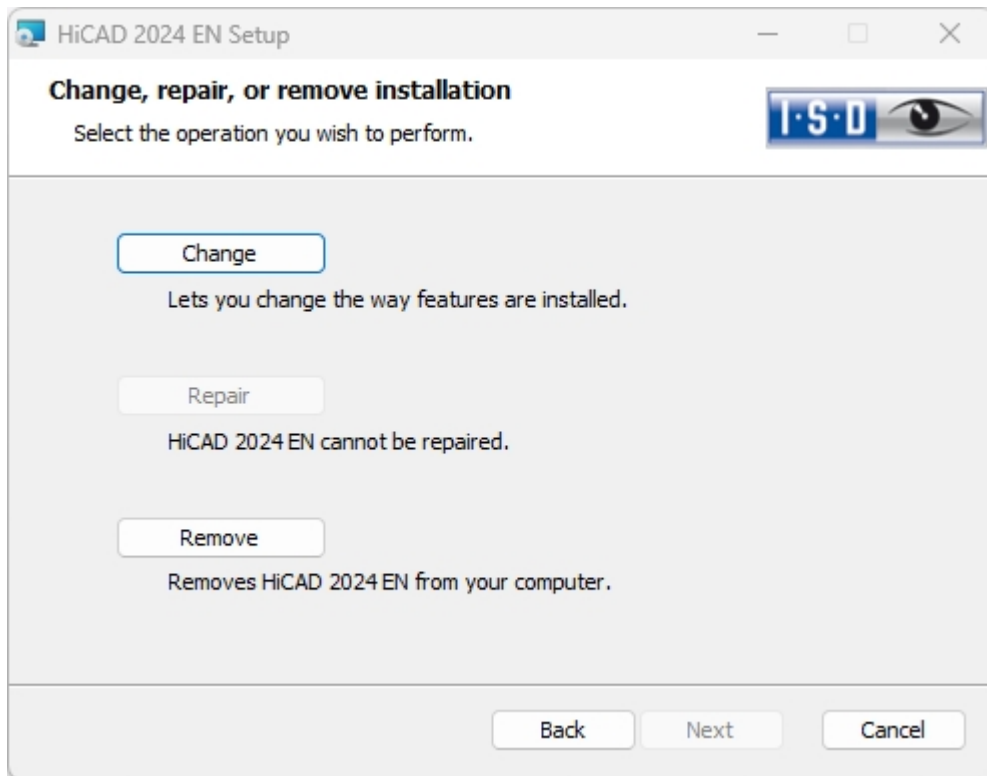
You can activate the automatic search for and installation of HELiOS updates (Hotfixes), either during the installation of HELiOS or, later, via the Windows Control Panel.

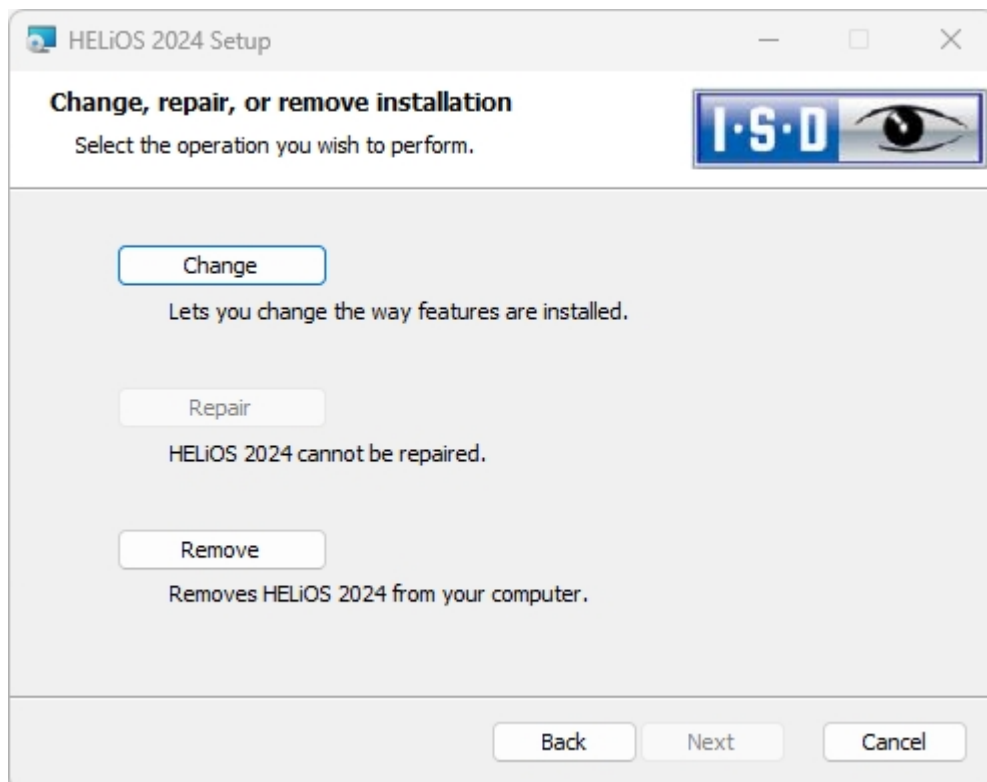
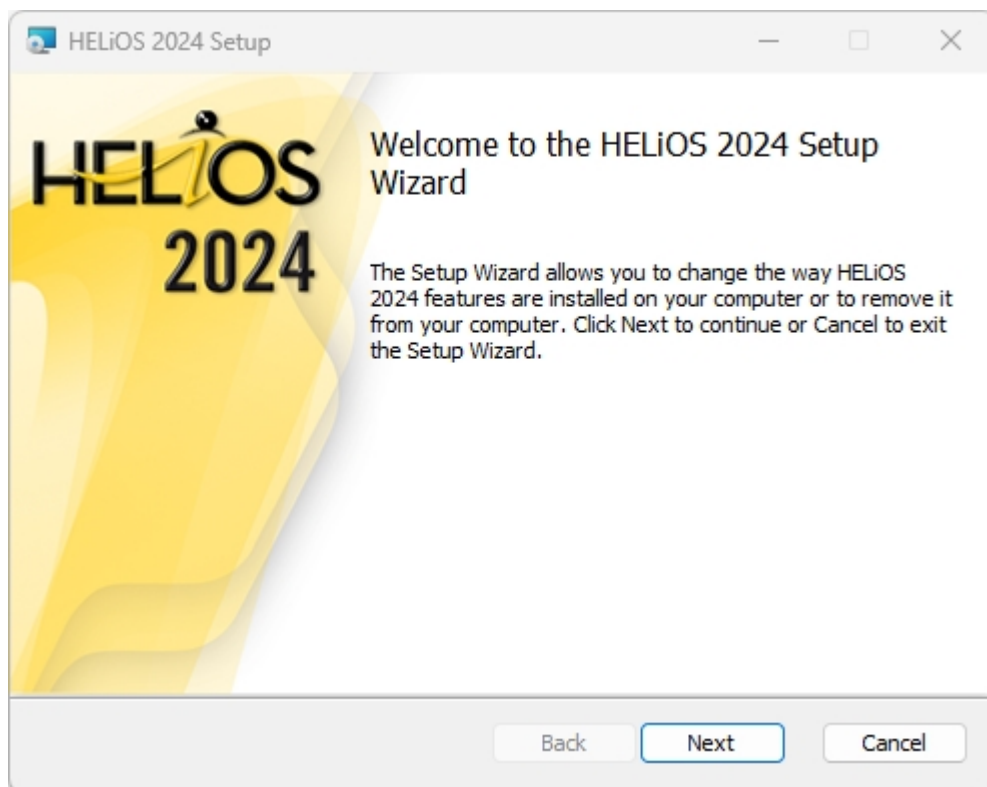


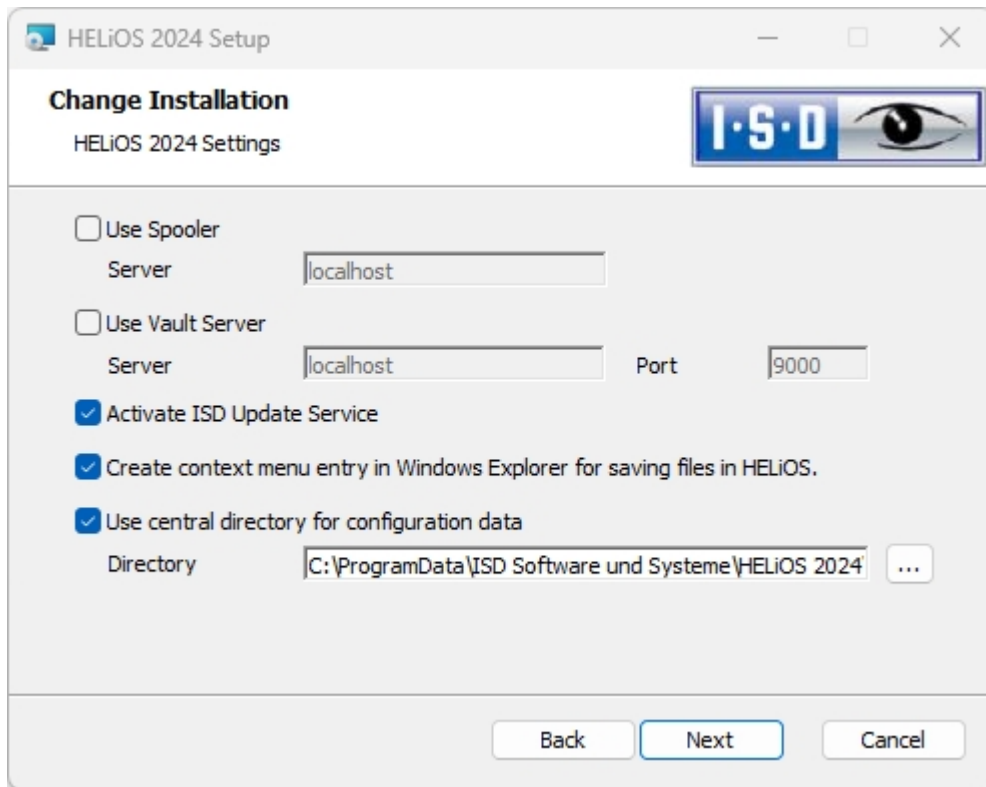
During installation you can go to **Extended settings > General** and activate the **Activate ISD Update Service** option to activate the automatic search for Updates on the ISD Server. You can also activate or deactivate this option afterwards via the Windows Control Panel.



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





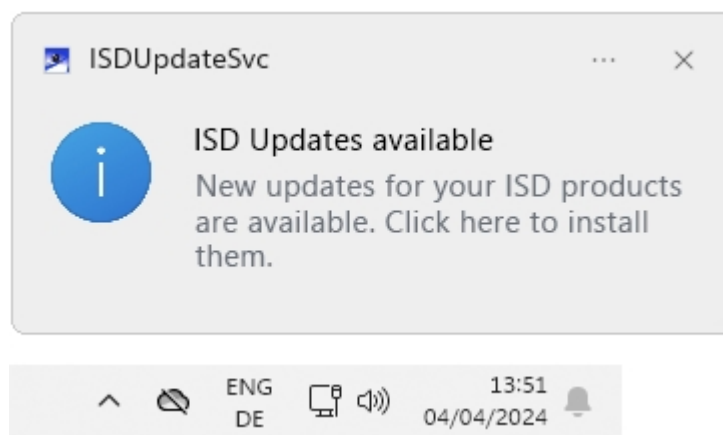



Checkmark **Activate the ISD Update Service** and click **Next**. After all options have been queried, click **Change**.

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

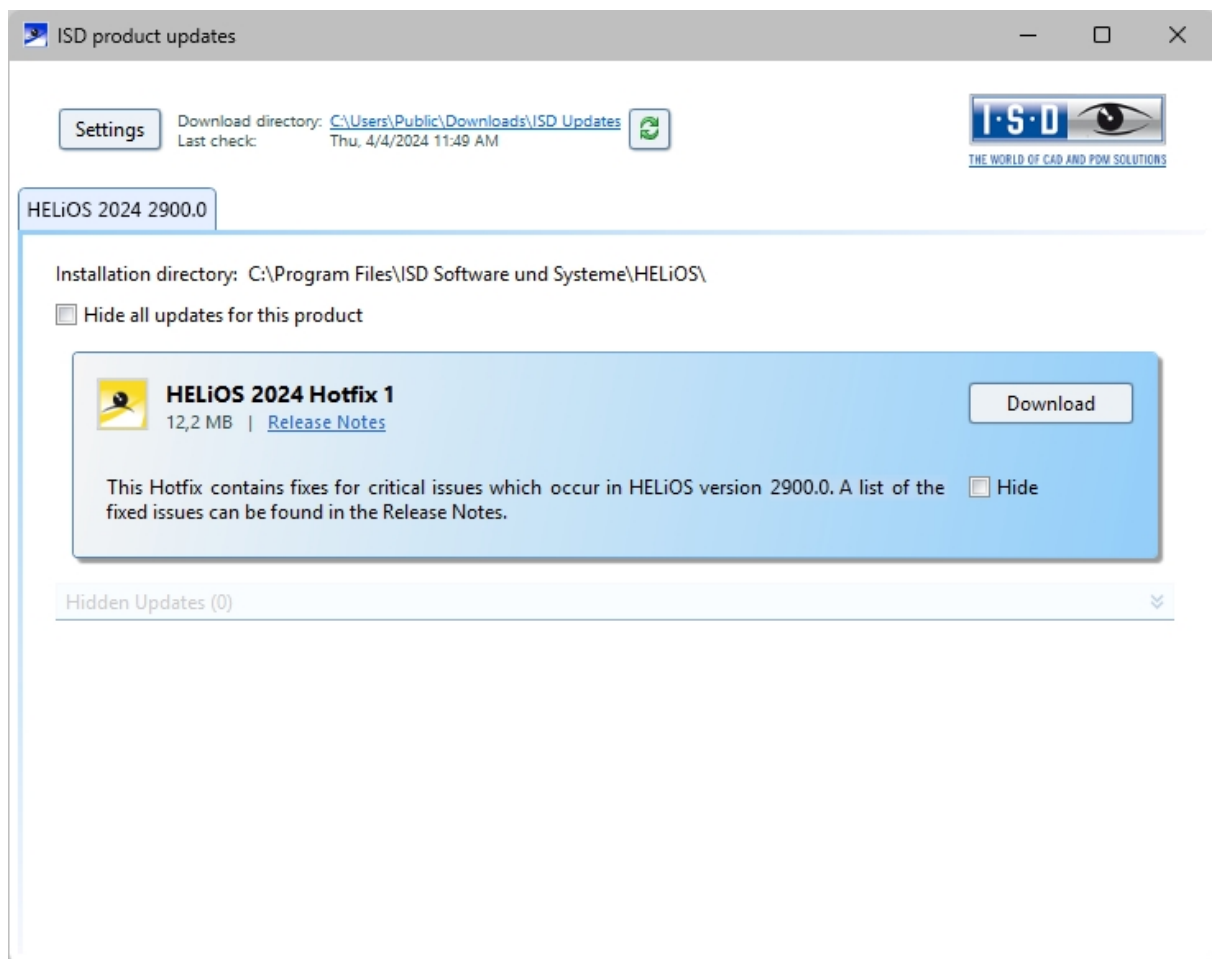
Using the ISD Update Service

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. In addition to the Hotfix, Major Release and Service Pack are also displayed here. However, unlike the Hotfix, you cannot download and install these here.

ISD product updates

Settings Download directory: <C:\Users\Public\Downloads\ISD Updates> Last check: Thu, 4/4/2024 11:49 AM

HELiOS 2024 2900.0

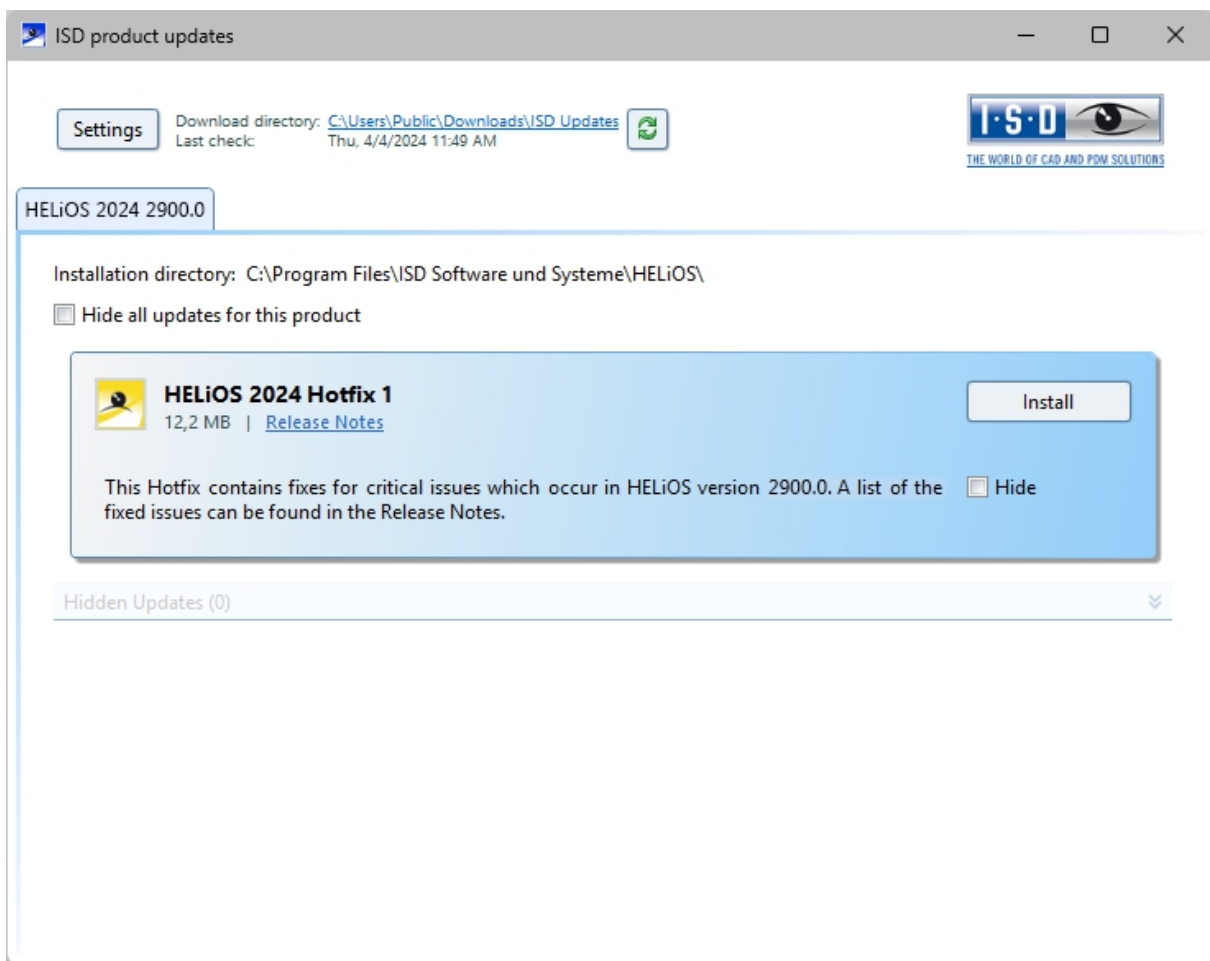
Installation directory: C:\Program Files\ISD Software und Systeme\HELiOS\

Hide all updates for this product

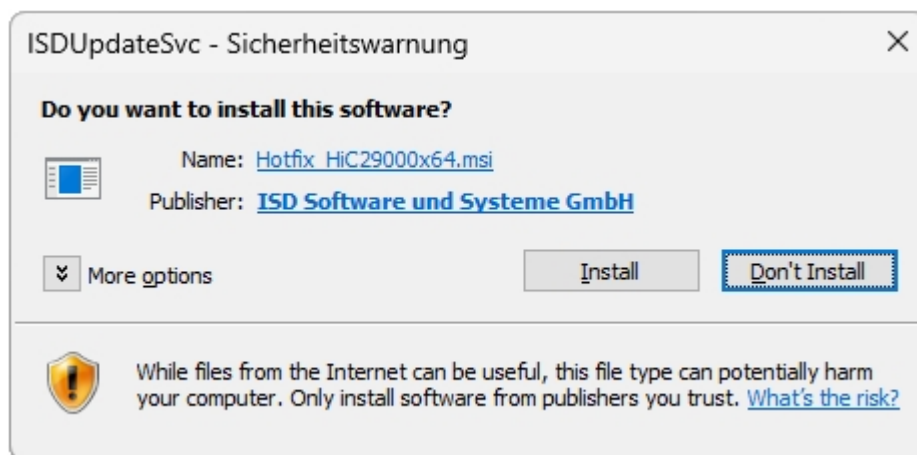
HELiOS 2024 Hotfix 1 12,2 MB | [Release Notes](#) Downloaded..

This Hotfix contains fixes for critical issues which occur in HELiOS version 2900.0. A list of the fixed issues can be found in the Release Notes. Hide

Hidden Updates (0)




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




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

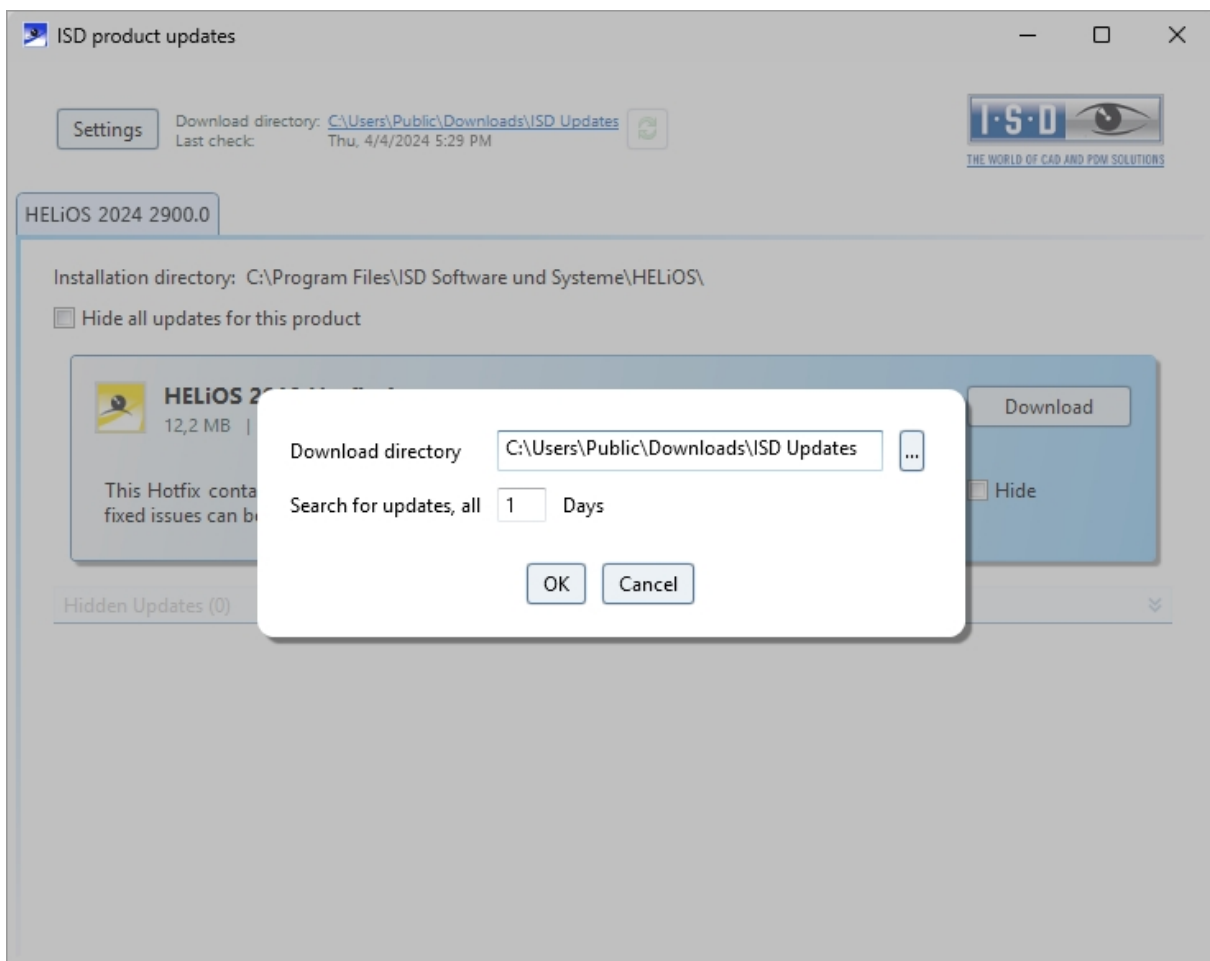
Follow the instructions on the screen to install the update.

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.

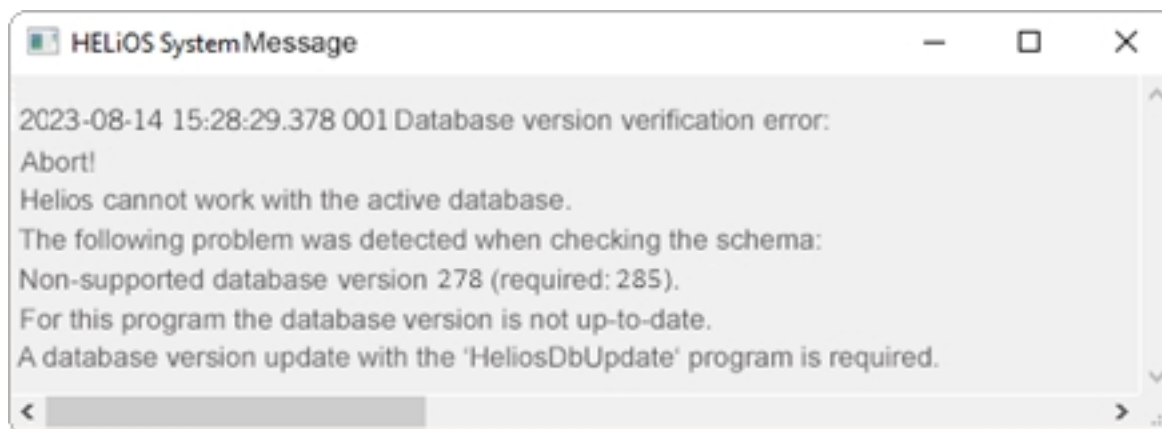


Via the **Settings** button you can specify the download directory for Updates and a time interval for the search for updates.

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.



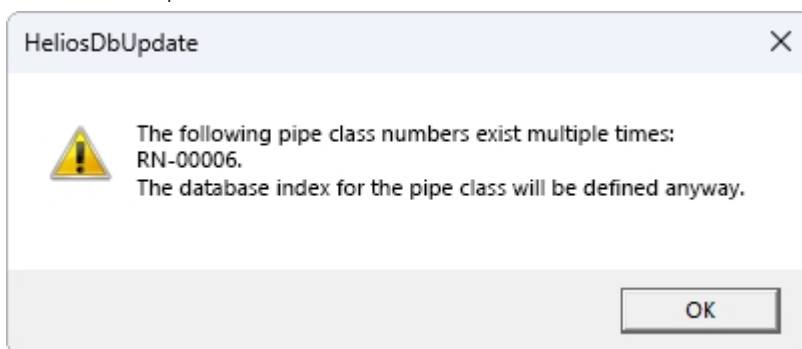
Please note:

- 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 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."

- If you have pipe classes with identical pipe class numbers (RKLname), this will be displayed during a database version update.

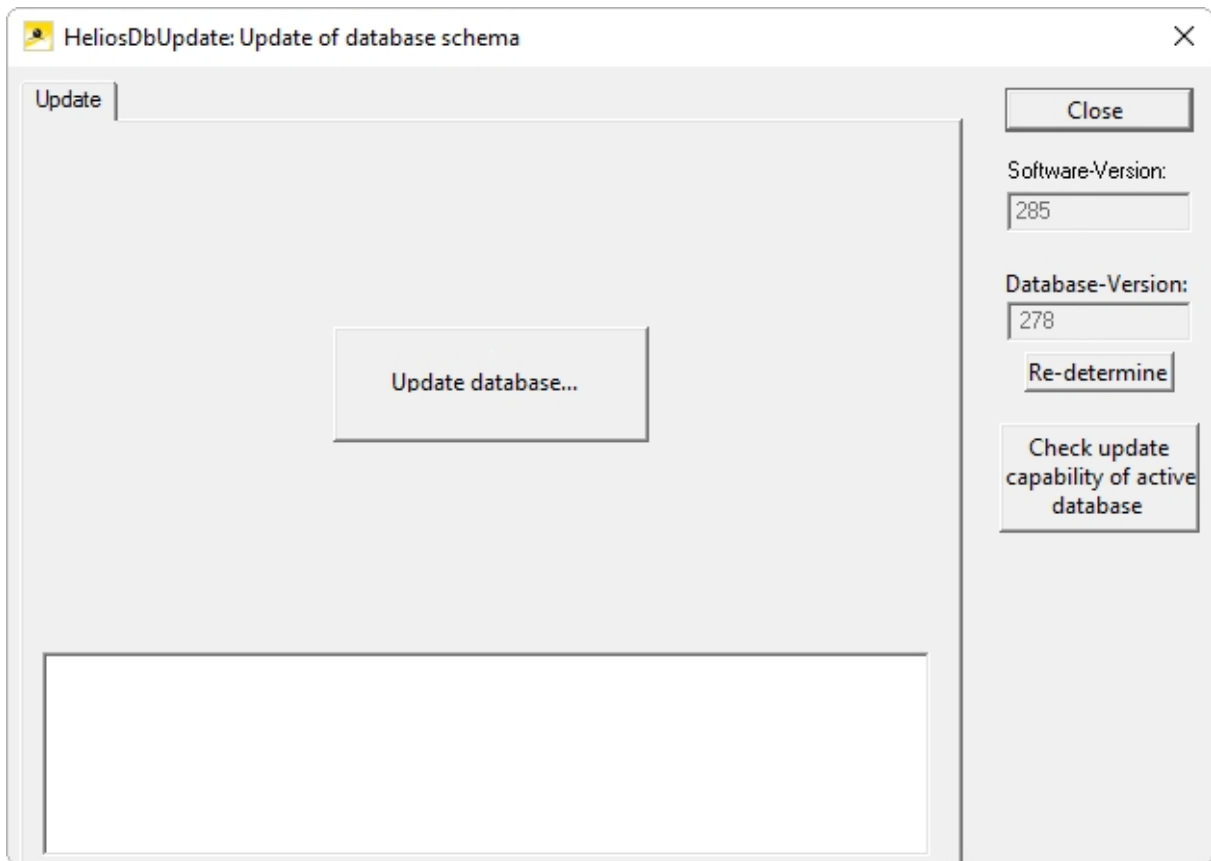


To make the uniqueness check independent of the pipe class number (RKLname), a unique index is assigned for all objects in the database. The background is that in HELiOS the path of the objects is never taken into account.

Any conflicts in the database are reported during the database version update and a database index is created for the pipe classes. You can view this index with the programme HEL_ATTREDIT.EXE and adjust your database or delete the index.

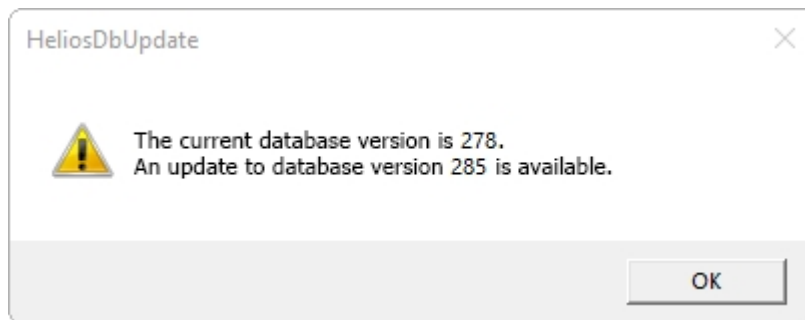
The update can be performed from any HELiOS workstation with a database connection. The **HeliosDbUpdate.exe** program is used for this purpose. It can be started via the Windows Explorer, or similar programs, from the exe directory of the HELiOS installation.

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

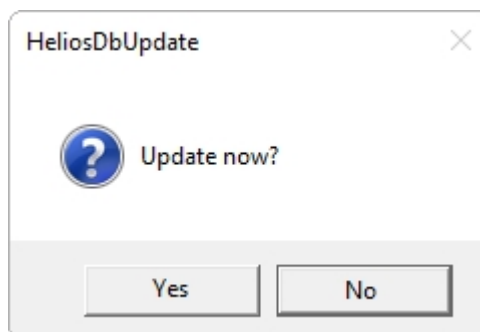


Click the **Update database...** button to start the update.

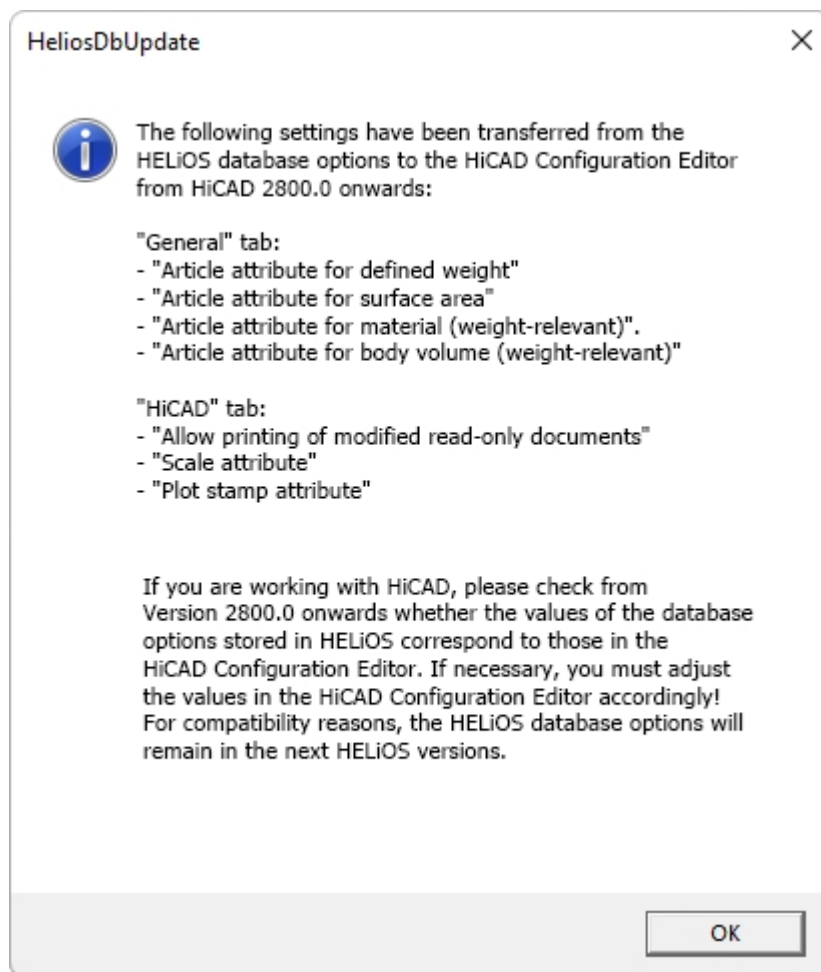
The following message (version numbers may vary) will be displayed after clicking the button.



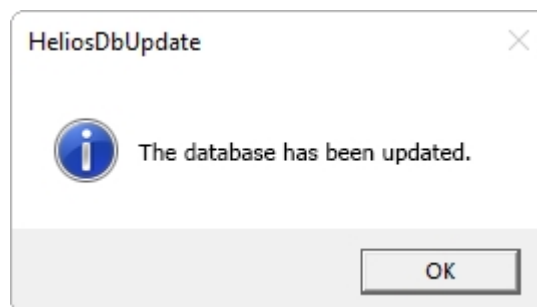
If you confirm this message with **OK**, another confirmation prompt is displayed.



The update starts after confirming the security question with Yes and leads to the following message after a successful update.



By switching from HELiOS Database Options to the HiCAD Configuration Editor, this important note will appear the first time you update to HiCAD 2800.0 or newer. Please read the note carefully.



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 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

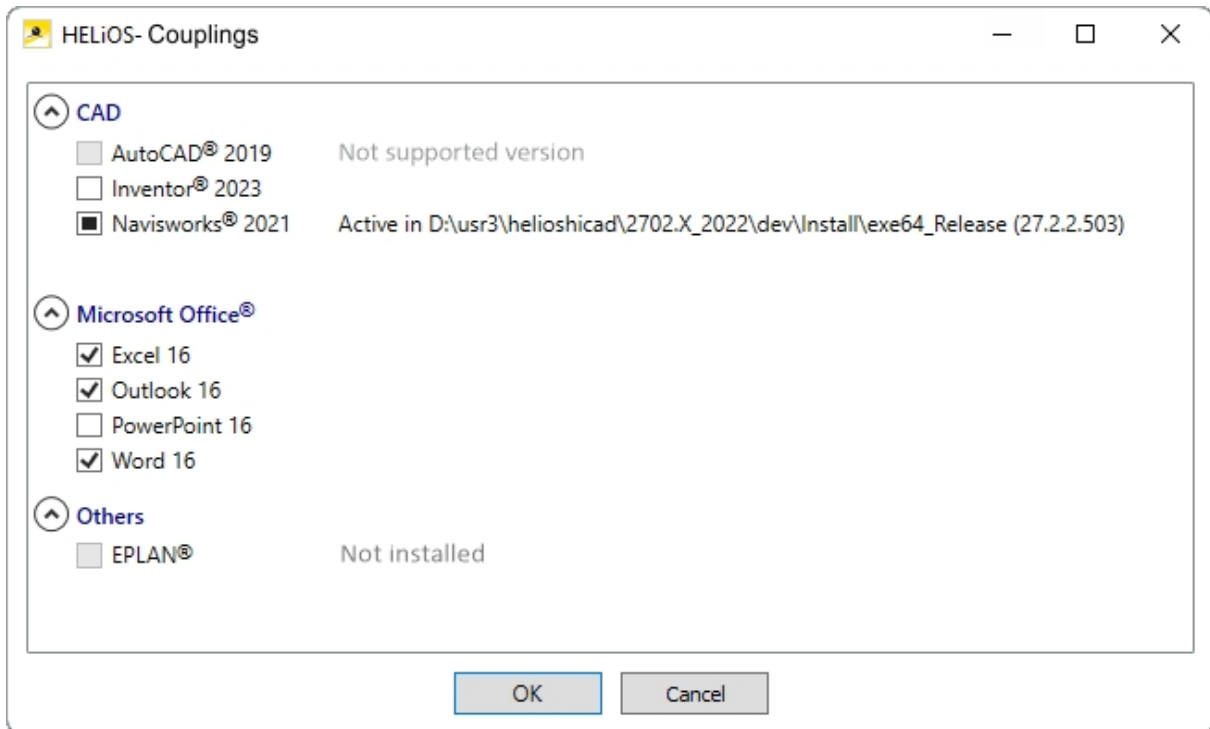
E-Mail: support@isdgroup.com

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 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.

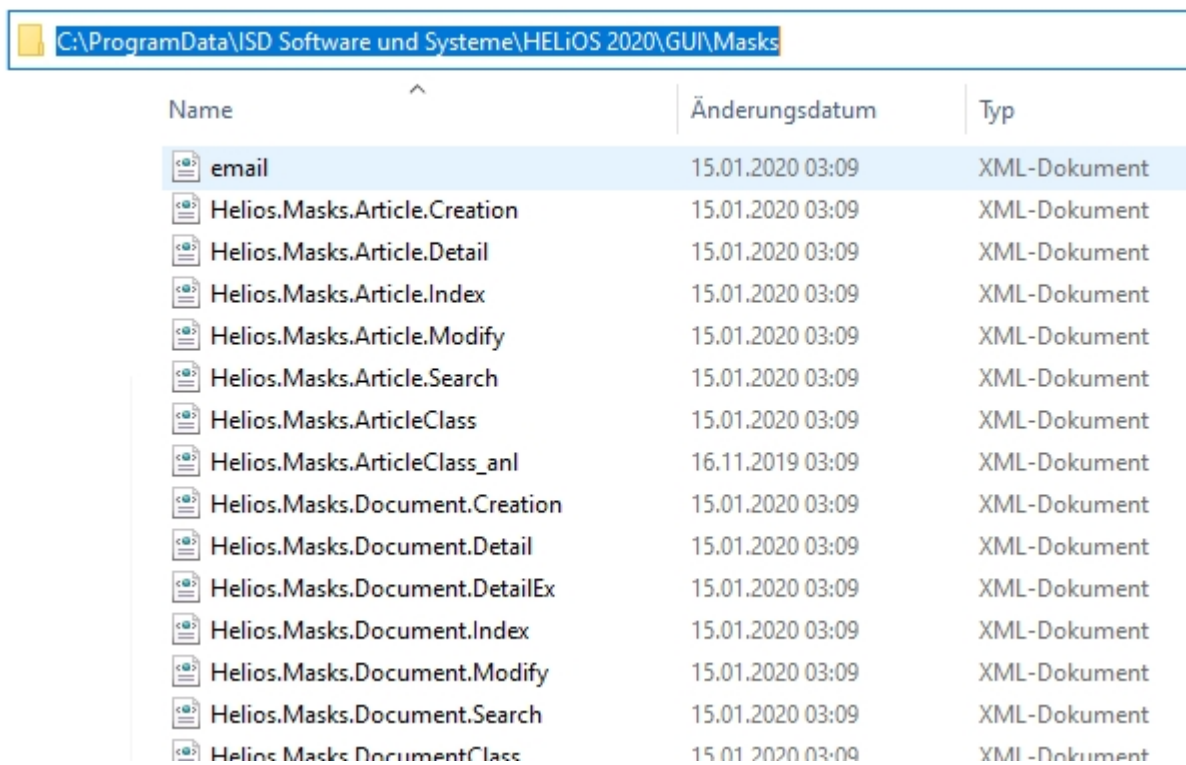
The revision of the mask editor has also led to a conversion of the mask format to XML. Mask files are now managed outside the installation directory.

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%**.

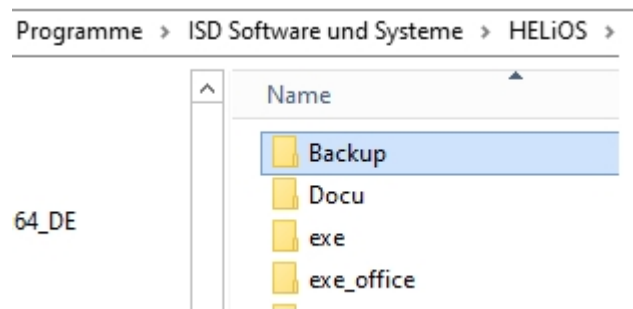
At **%Programdata%**, the masks are stored in a version-specific path, i.e. for HELiOS 2020 this path could look like this: "C:\ProgramData\ISD Software und Systeme\HELiOS 2020\GUI\Masks". In a later version, the version identifier in the path will be correspondingly higher.



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 Online Help, on the **PDF Documents on Various Topics** page, you can find the document [Checking out 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.

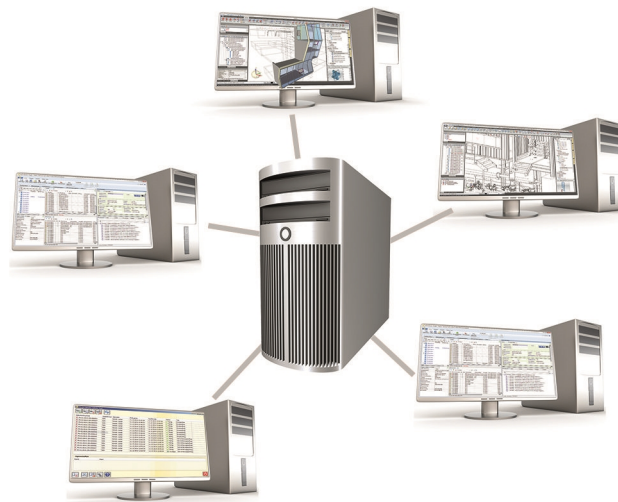
The license server must not be installed on the same computer on which an ISD software product (HELiOS) is installed, as both product share system data concerning the licensing information. Formerly, such parallel install-

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

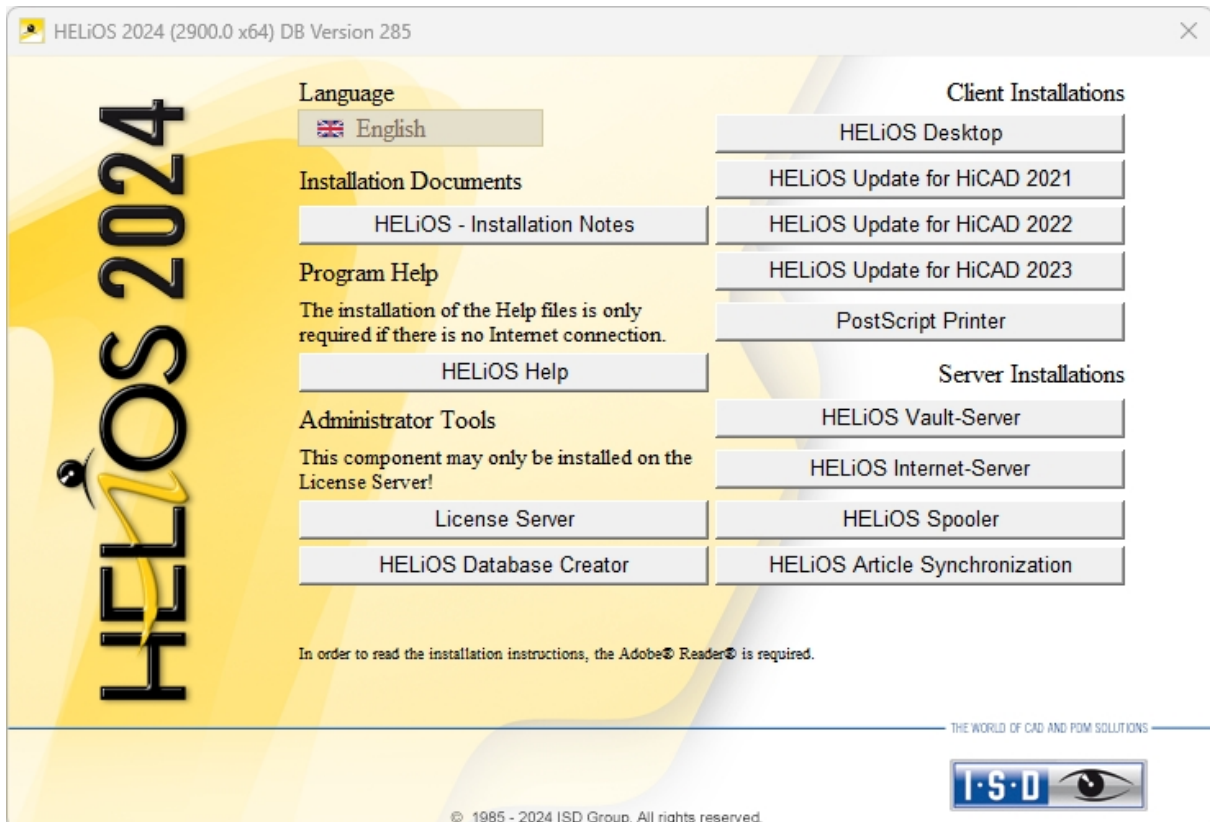
example, this license is exclusively available to you for a fixed period of time and cannot be returned to the server before expiration of this period.

Installing the License Server

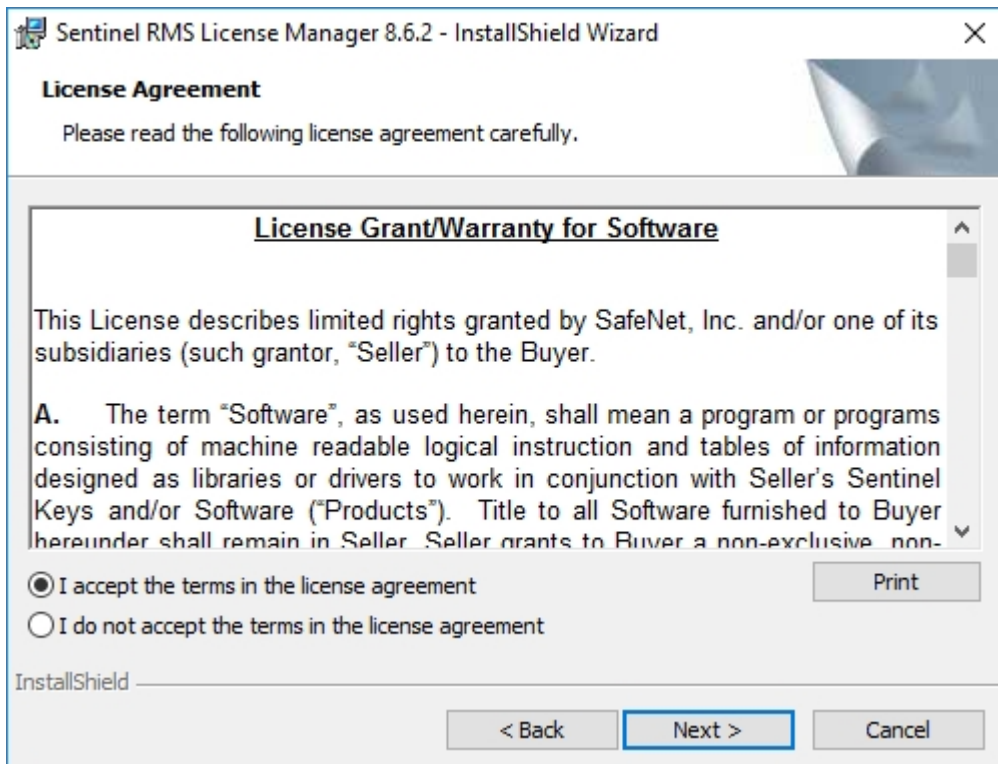
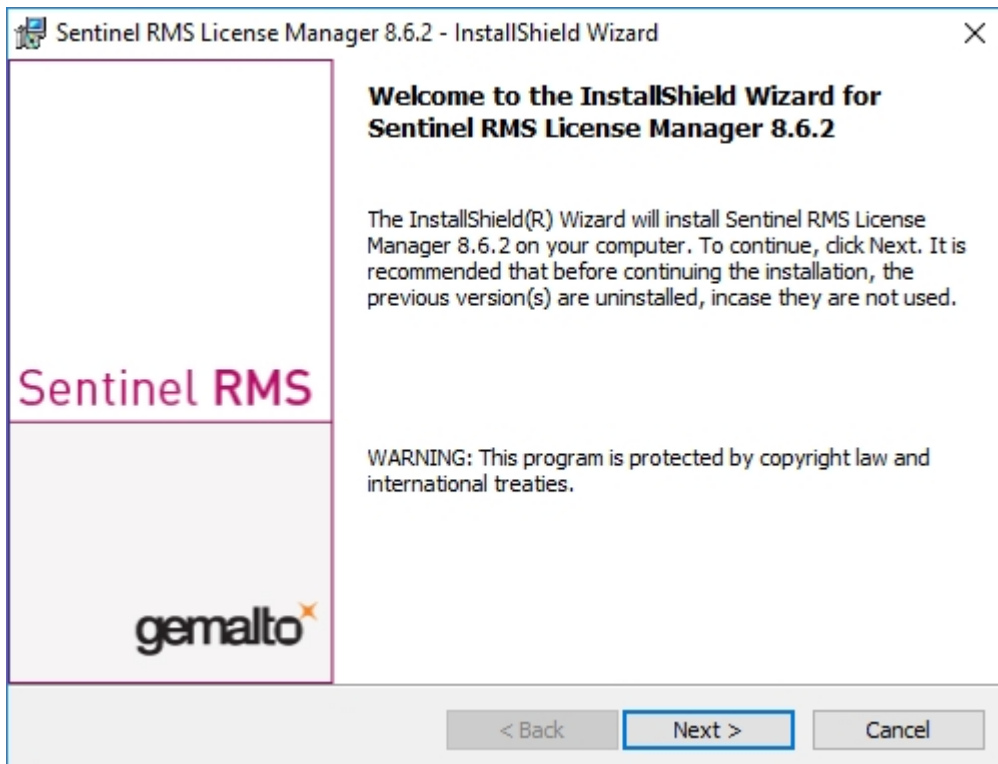
If you want to perform a HELiOS update to Version 2024 and use a license server (i.e. work with network licenses), you require Version 8.6.2 of the License Server. If you have installed an older version, you need to uninstall it before re-installing the License Server.

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:
Doku

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

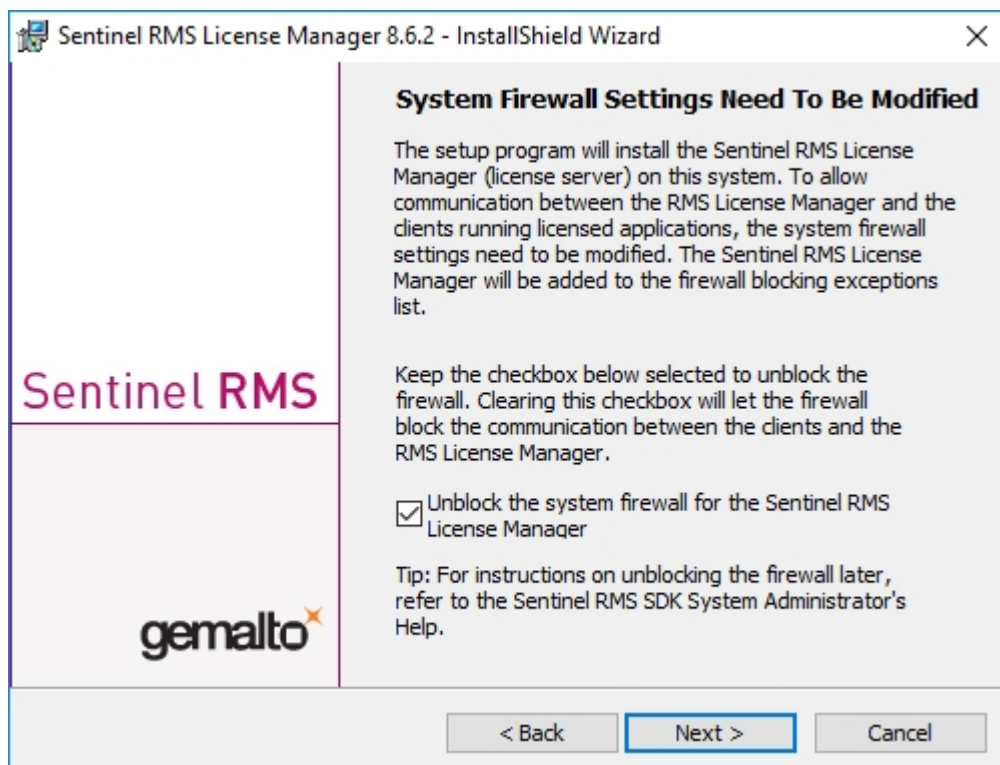
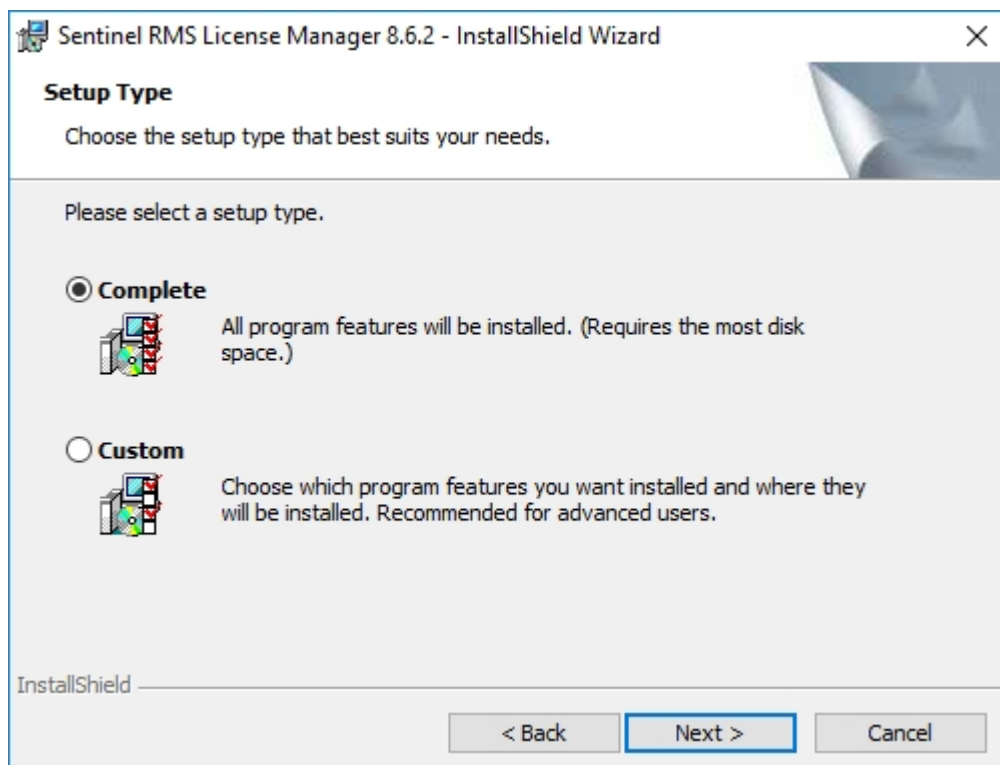
Click Next to continue installing to the following folder, or click Change to install to a different folder.

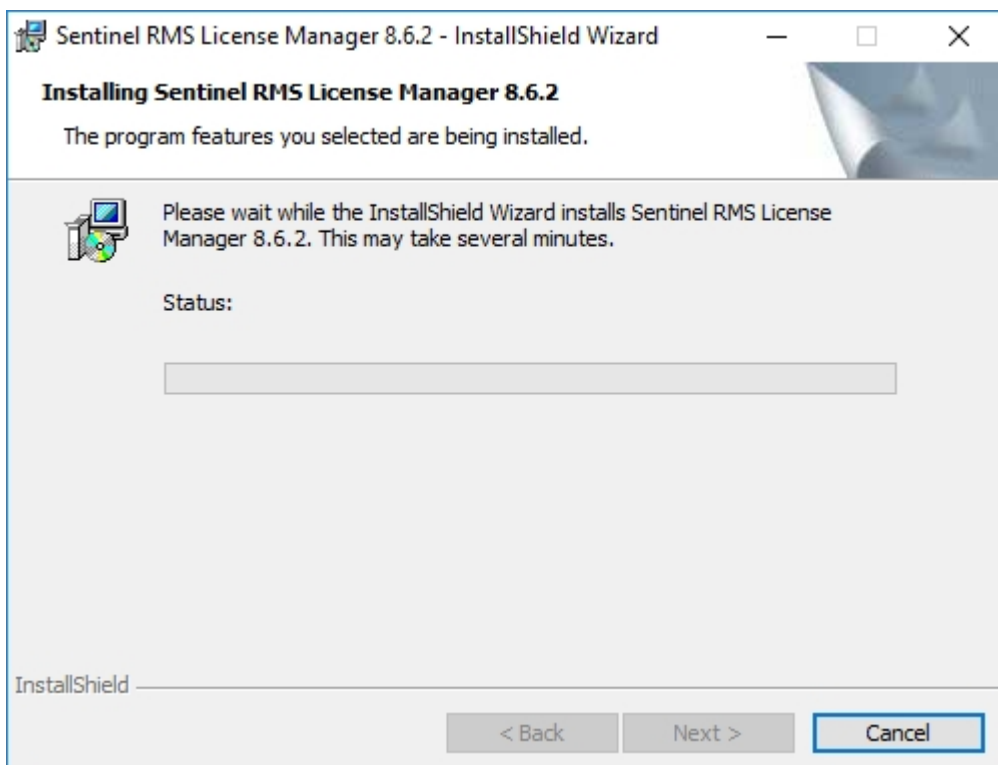
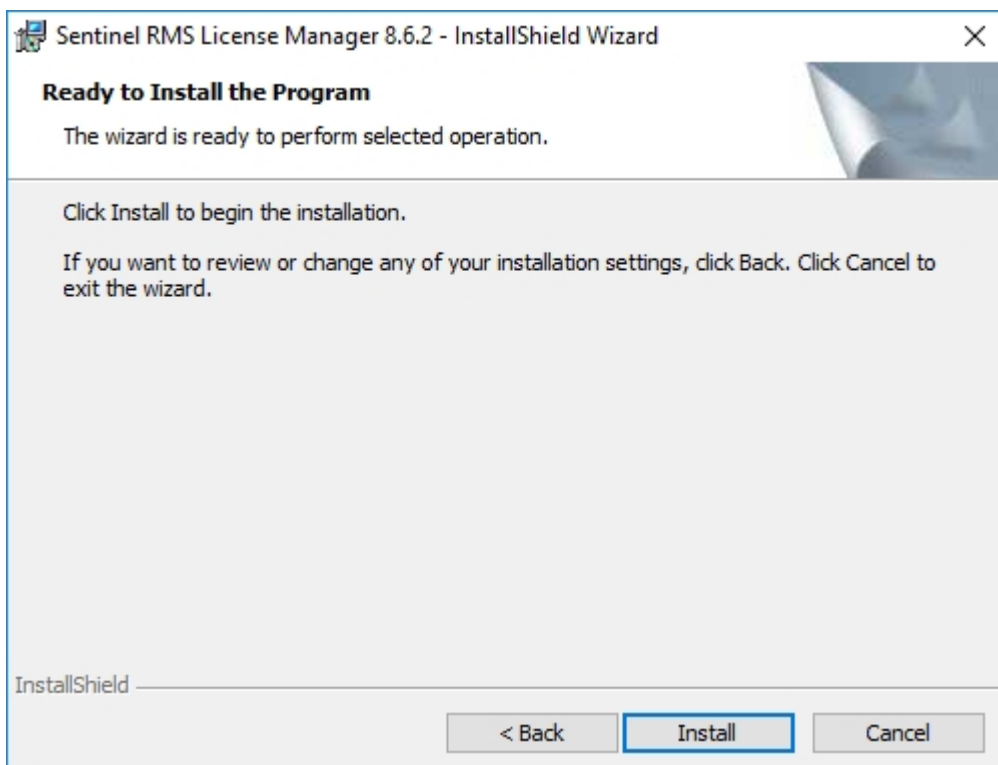
Install Sentinel RMS License Manager 8.6.2 to:
C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel RMS License Manager\

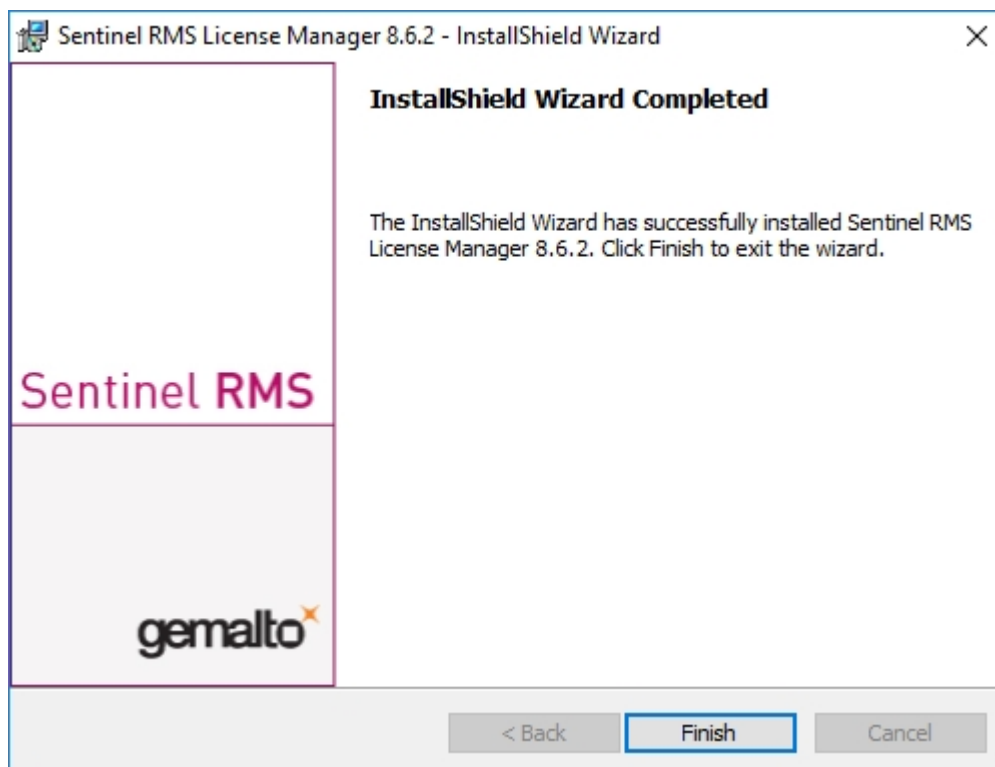
Change...

InstallShield

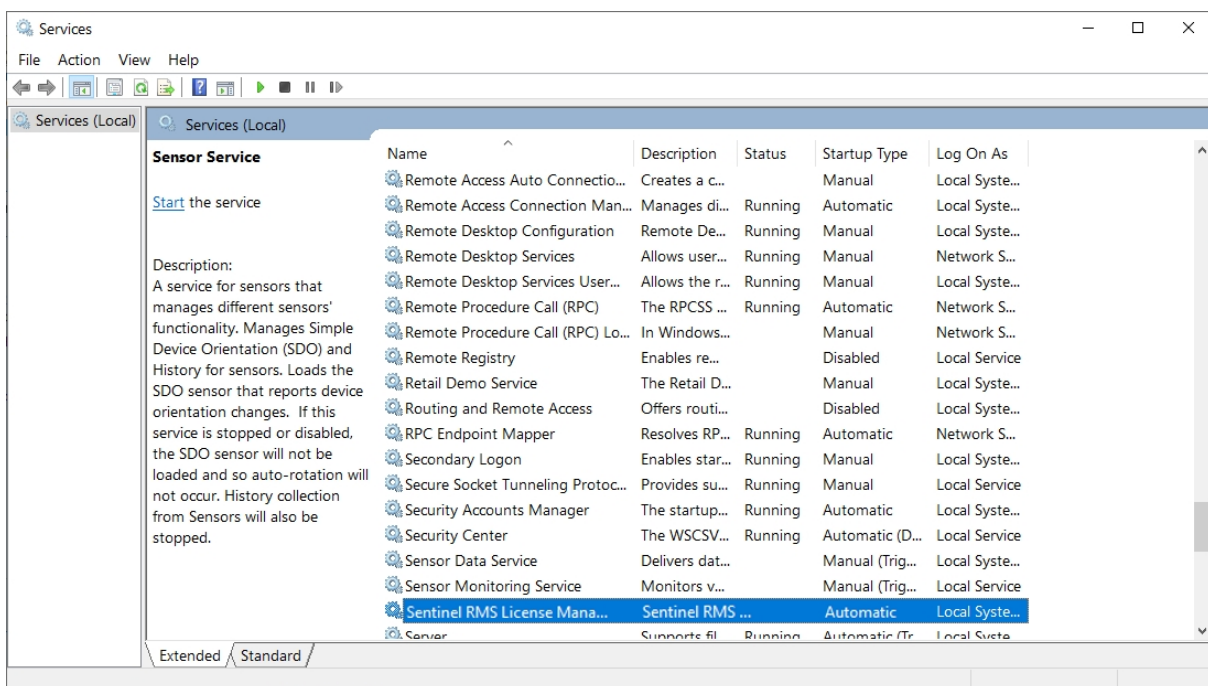
< Back Next > Cancel







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 2024 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 2023 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:	09/22/2023
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 2999.0	1	1	09/22/2023	Never expires	Enabled	Network
HiCAD steel engineering package	E103ATS2004 2999.0	1	1	09/22/2023	Never expires	Enabled	Network
HiCAD steel engineering suite premium	E103STB2010 2999.0	1	1	09/22/2023	Never expires	Enabled	Network
HiCAD Integration Module	E180CAH2001 2999.0	2	2	09/22/2023	Never expires	Enabled	Network
HELiOS engineer from	E181HEL2010 2999.0	2	2	09/22/2023	Never expires	Enabled	Network
HELiOS Spooler Client	E183PMC2005 2999.0	1	1	09/22/2023	Never expires	Enabled	Network
HELiOS Spooler	E183SPO2001 2999.0	1	1	09/22/2023	Never expires	Enabled	Network
HiCAD Point Cloud	F107PUW2001 2999.0	1	1	09/22/2023	Never expires	Enabled	Network
Master License	MasterLic 2999.0	15	15	09/22/2023	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.

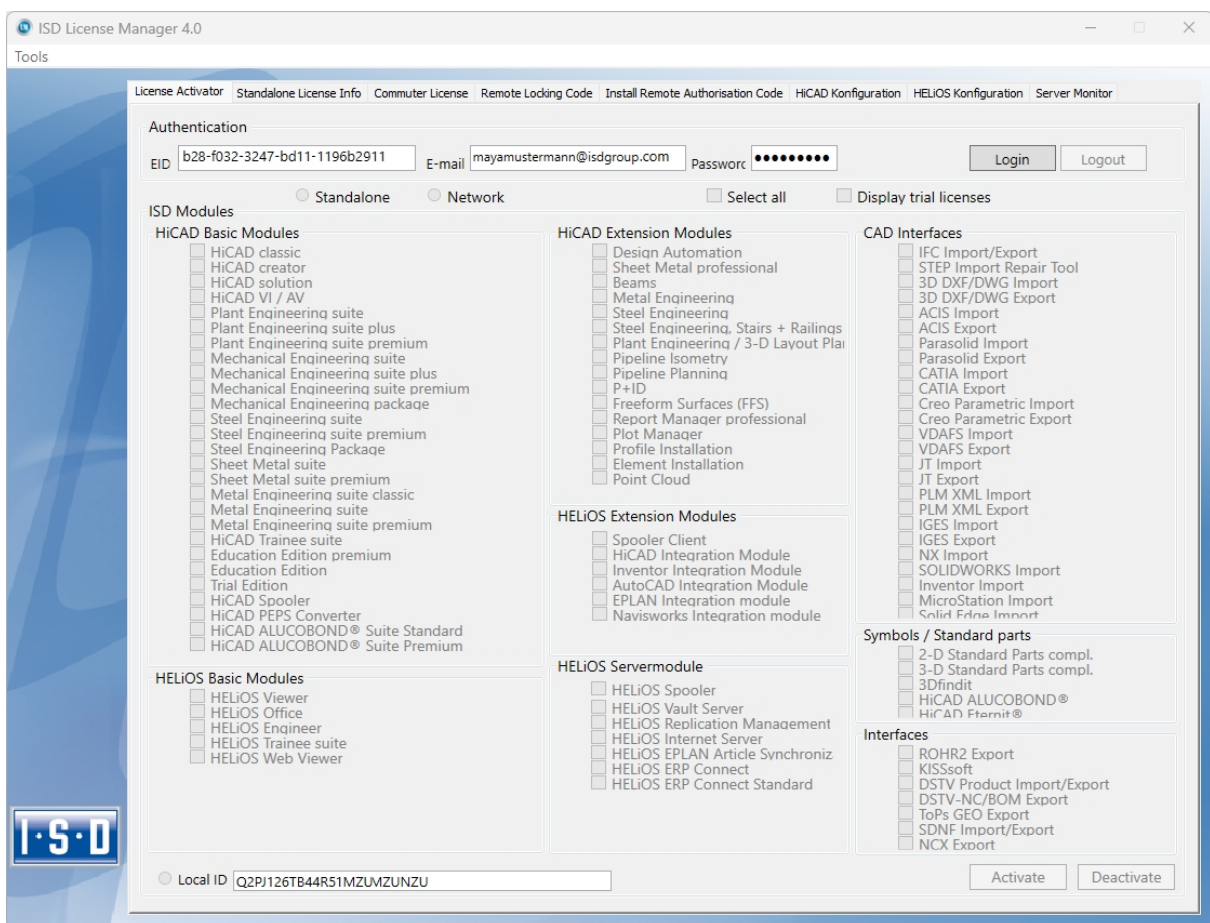
After installing HELiOS you can find the program in the Windows Start menu at **ISD Software und Systeme > Administration**. Please note that for the execution of some functions, administrator rights are required.

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.



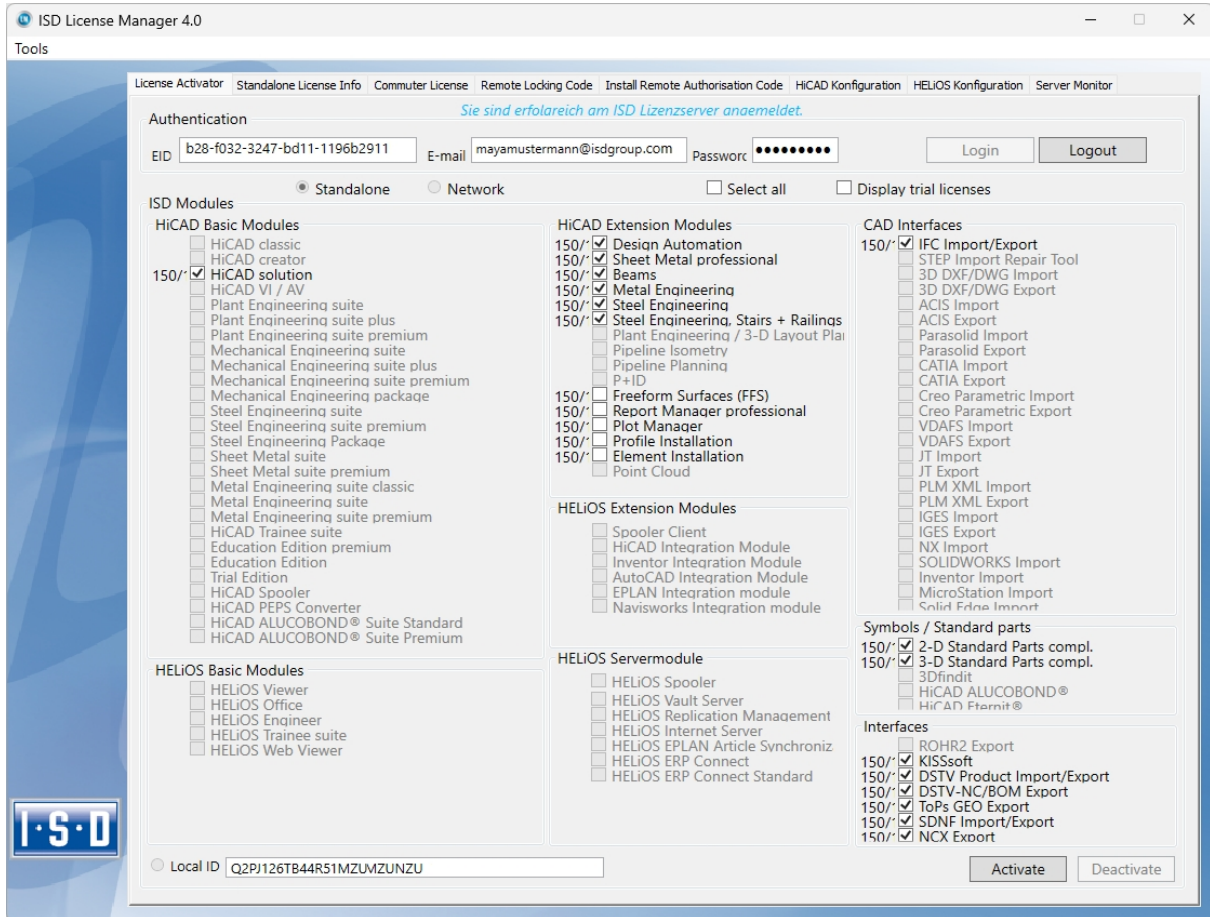
Activate the **License Activator** tab and enter the **Entitlement ID**, your **E-mail address** and your **Password**. New customers obtain their password from the ISD Hotline. With this password you can also access the Download Area.

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.

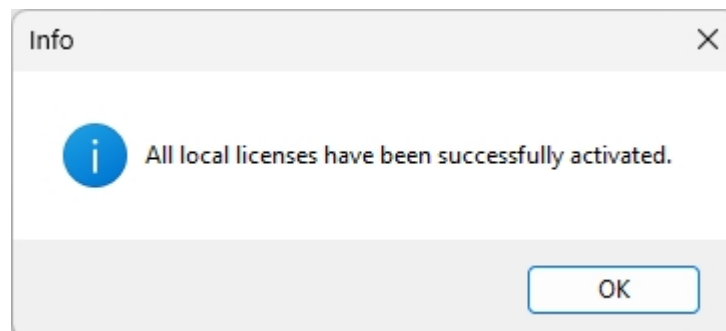
Activate Licenses

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

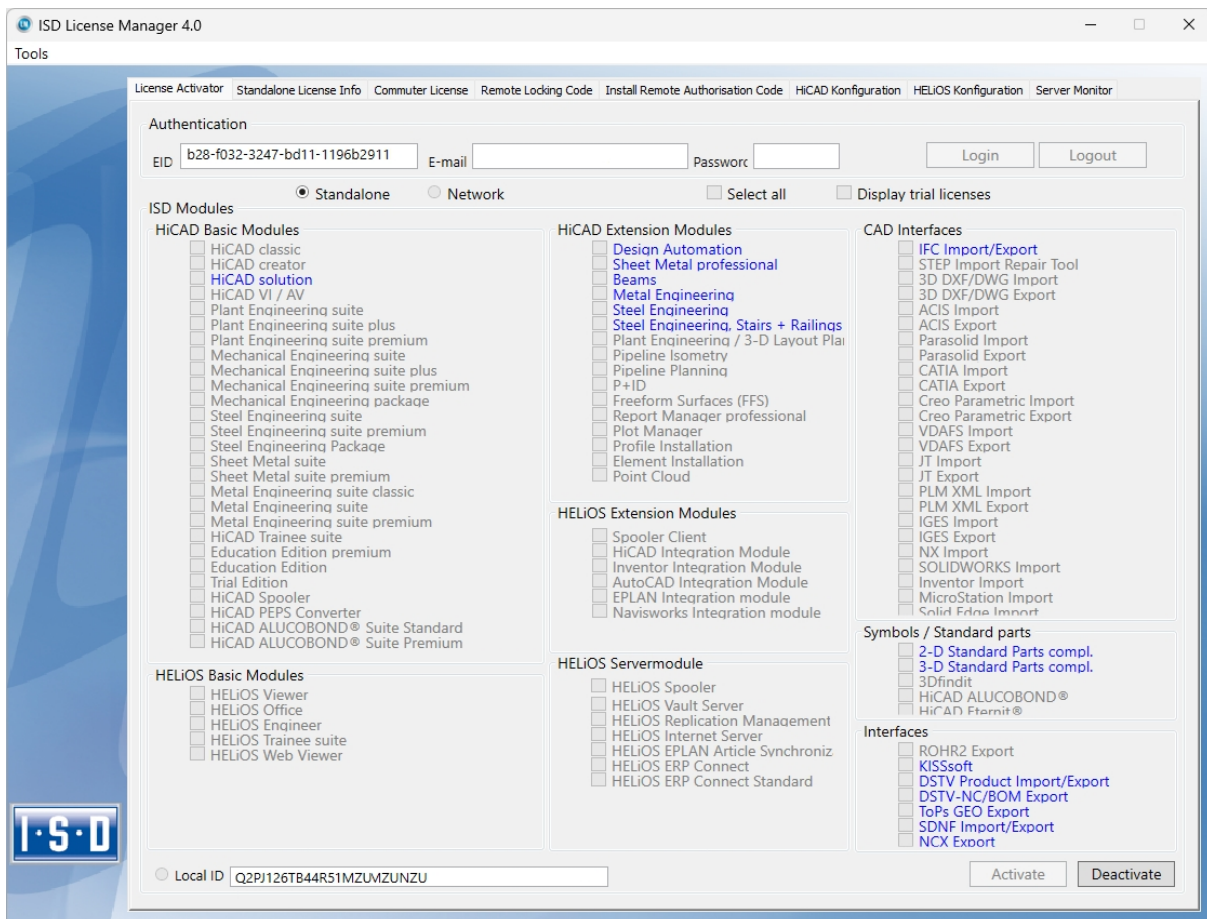
A deactivation of licenses for modules will be required in the following situations:

- Exchange of hardware or changing of hard disk partitioning
- Update of the operating system, e.g. from Windows 8 to Windows 11. (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.

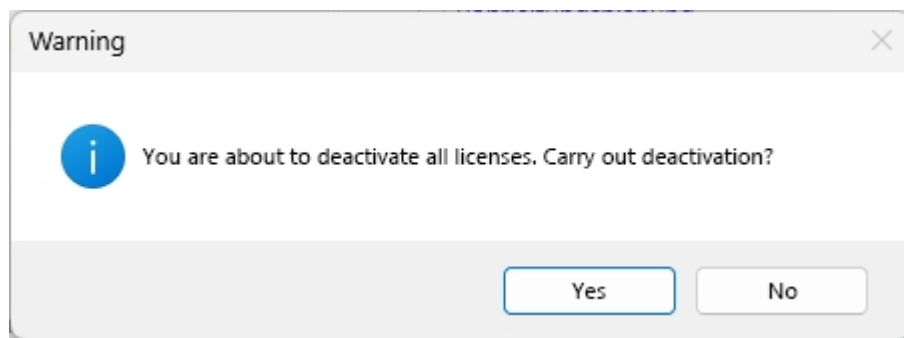
Close all HELiOS applications before deactivating local licenses or logging onto the License Manager.

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



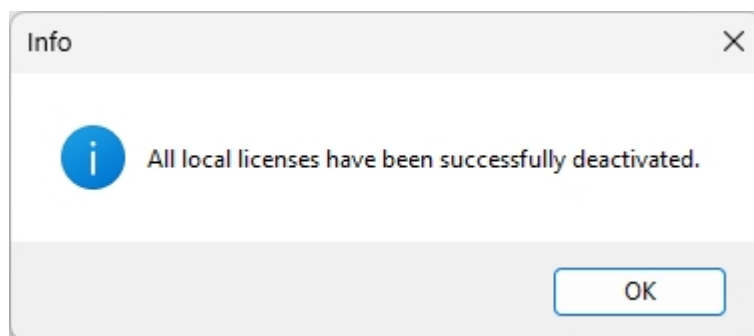
Click the **Deactivate** button to revoke the activation of the modules.

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!



Click on **Yes** when the security prompt appears.

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.

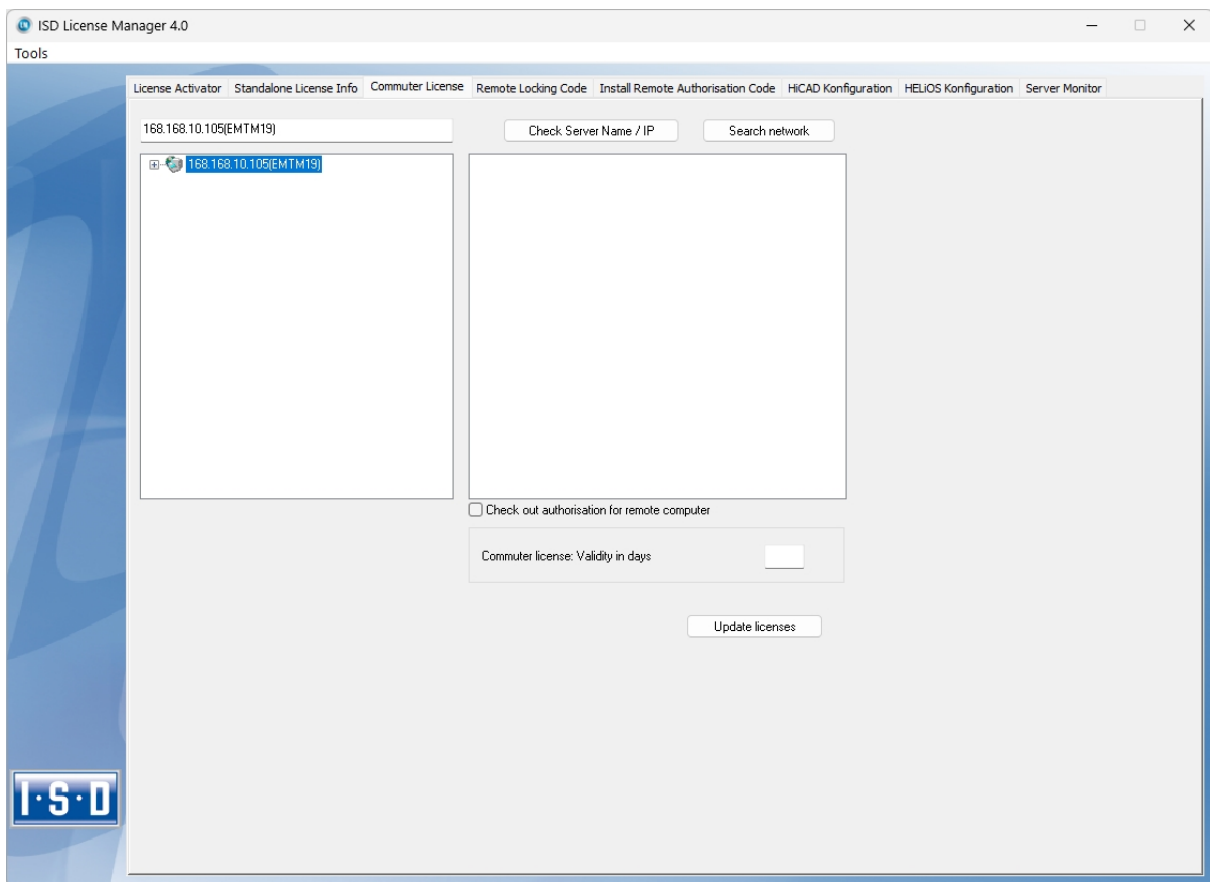
Commuter Licenses

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:

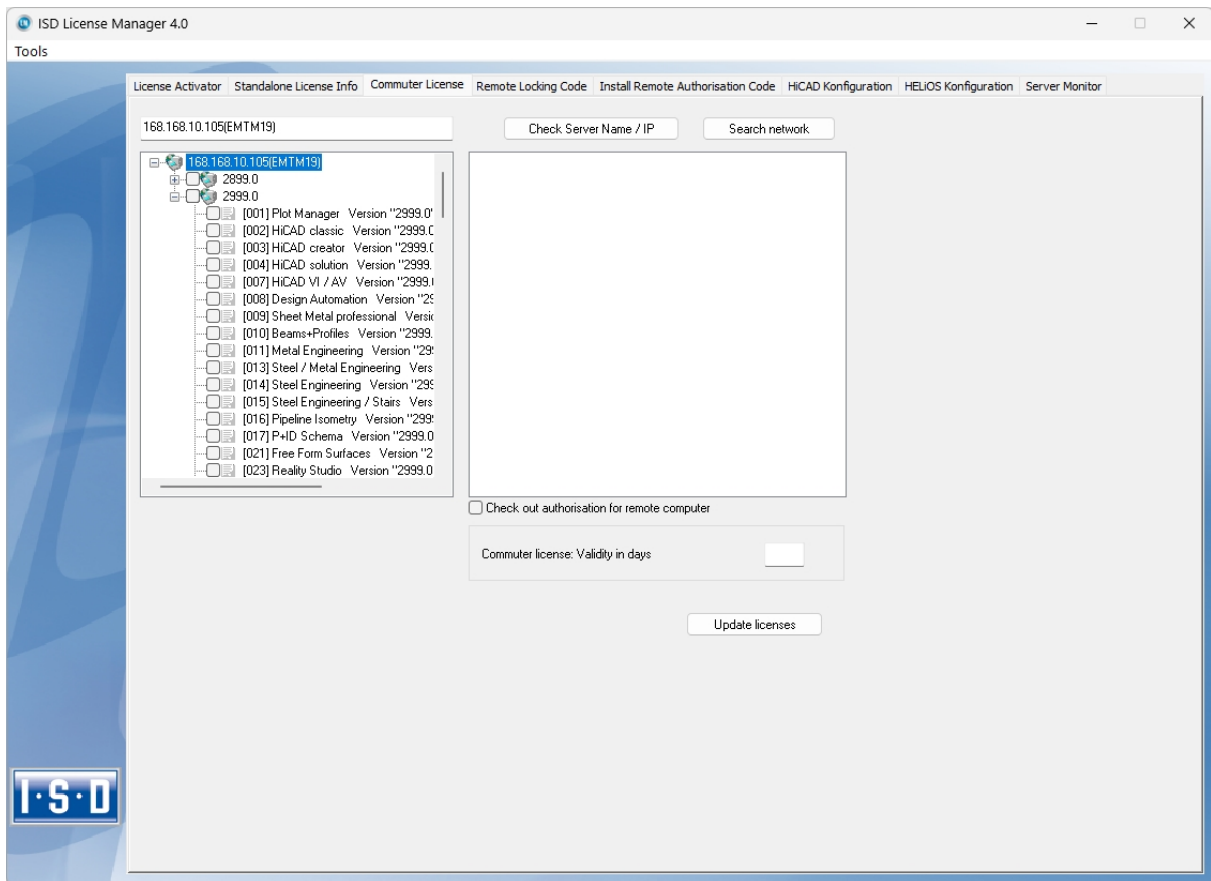
- Checking Out Commuter Licenses, with Network Connection
- Checking Out Commuter Licenses, without Network Connection

Checking Out Commuter Licenses, with Network Connection

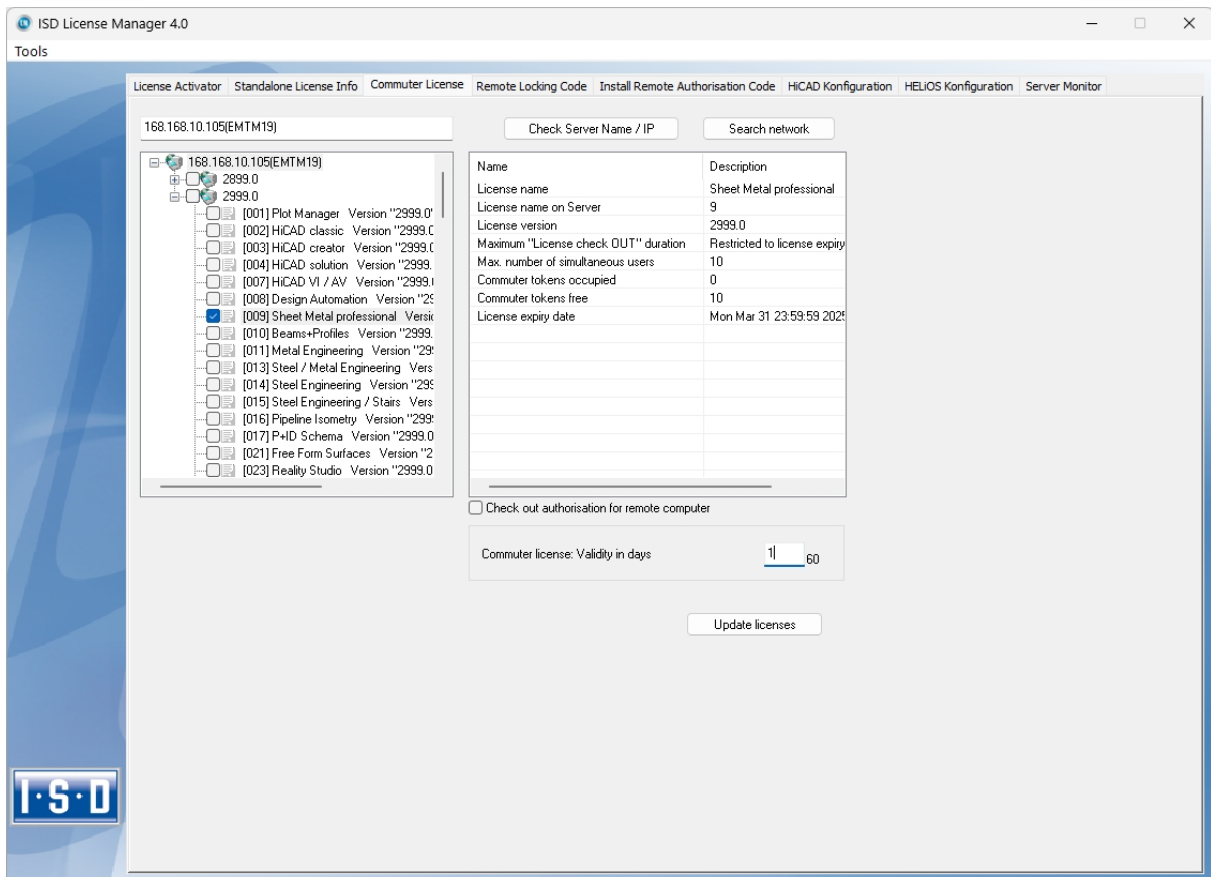
Start the **ISD License Manager** (while a connection to the Server still exists). Switch to the **Commuter License** tab.



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. All Versions will then be shown on the License Server. The result looks as follows:



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

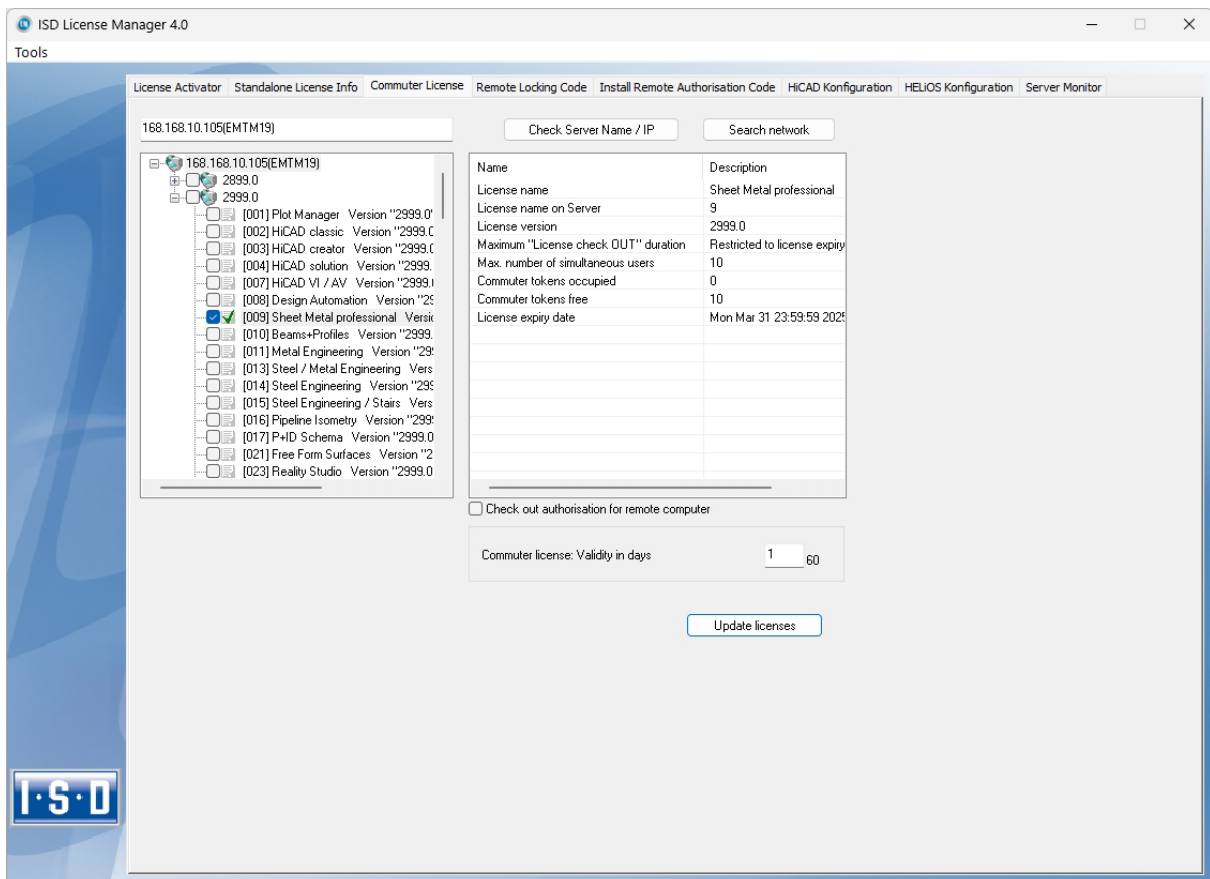


On the right hand side, information on the selected license is displayed.

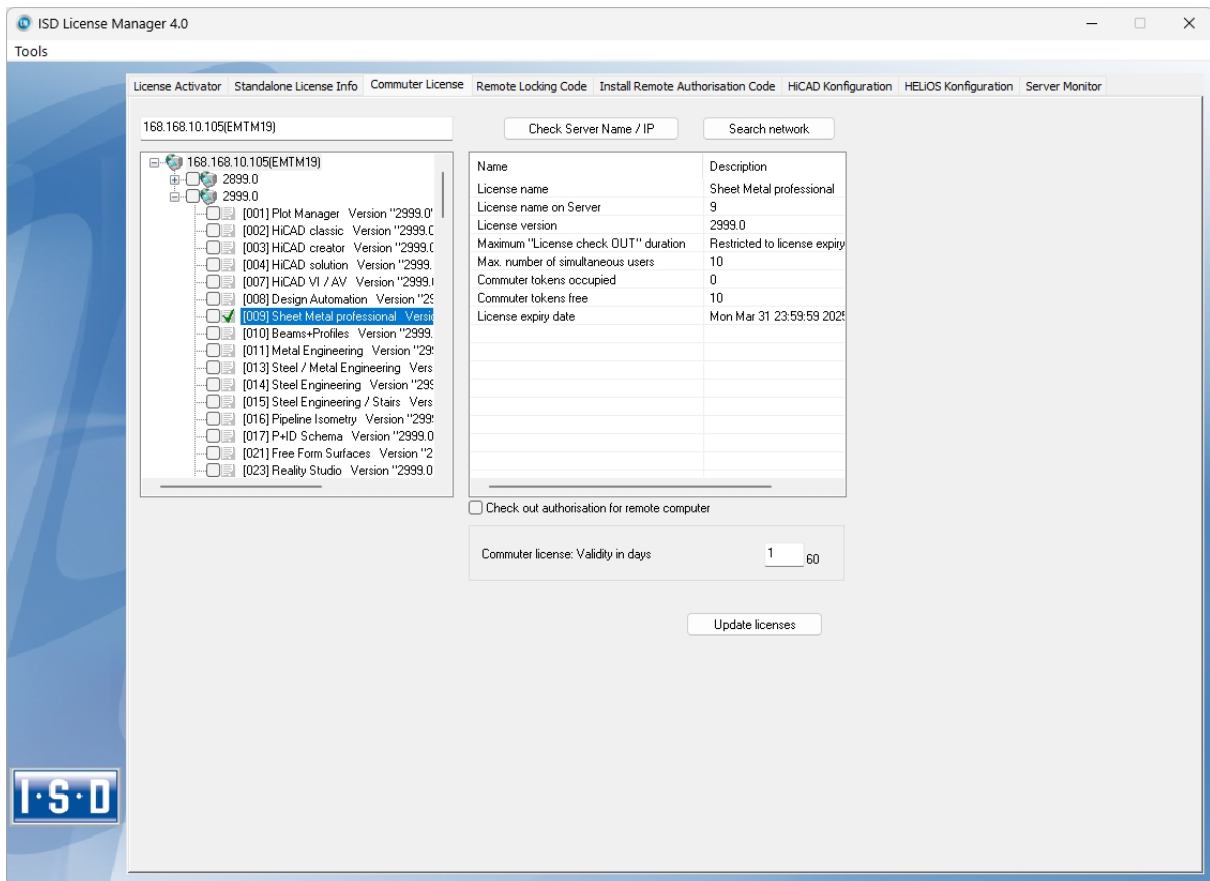
In the **Commuter license: Validity in days** field, you enter the number of days that you want the commuter licenses to remain checked out from the Server. The maximum number of days is 60. By default (or if a "0" is entered), the value is set to 1.

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

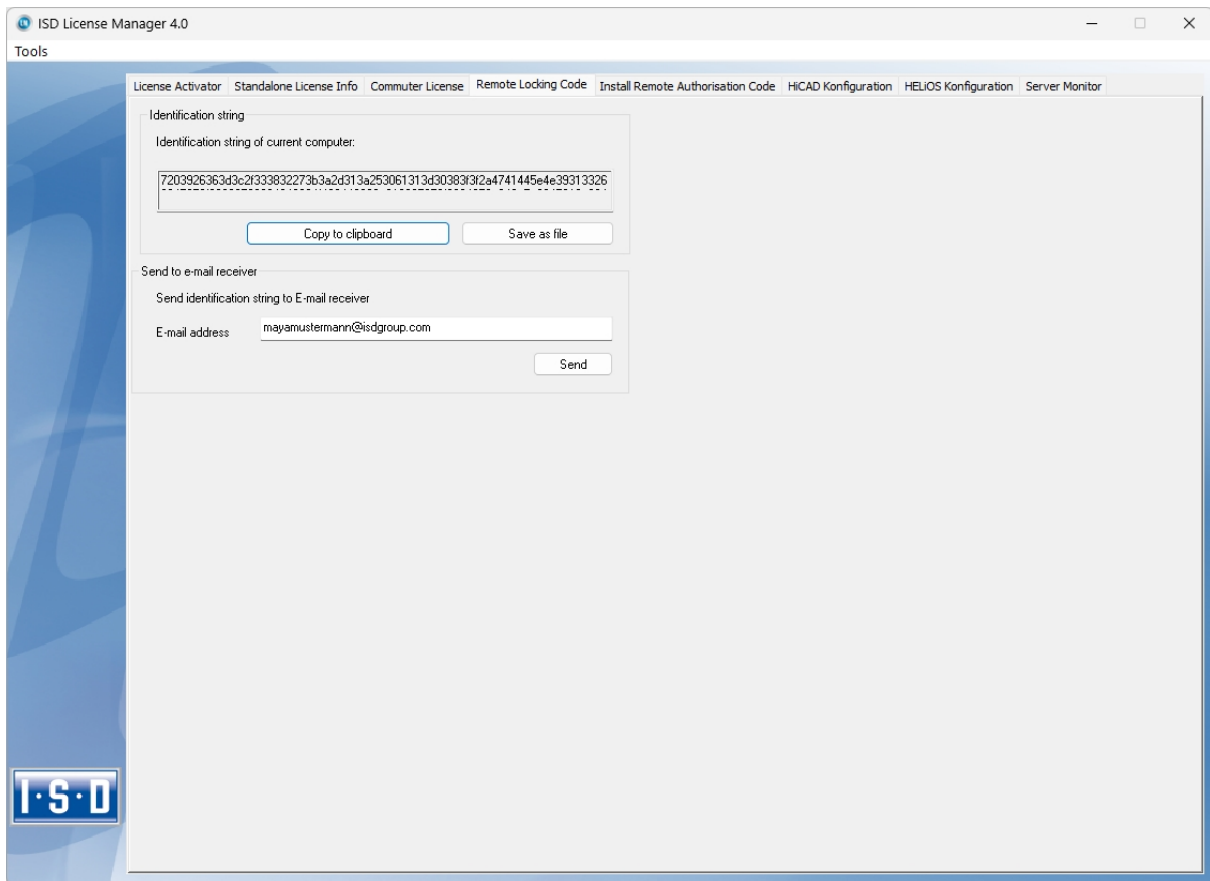
Commuter licenses can also be drawn from the License Server without an existing network connection. For this **Administrator rights** are required.

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.

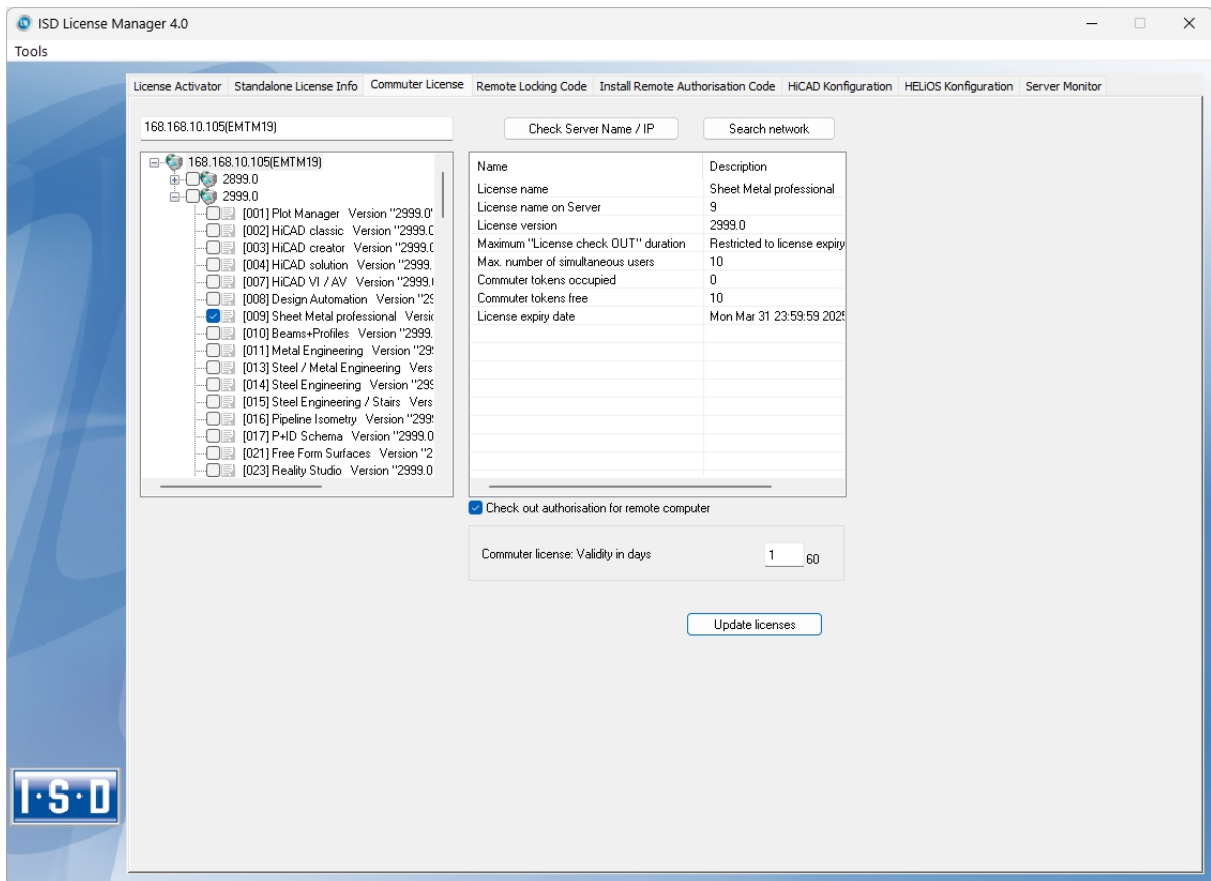
As long as commuter licenses are checked out in this way, it is not possible to update the network licenses on the server. The same applies when buying new modules/licenses and changing the configuration.

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



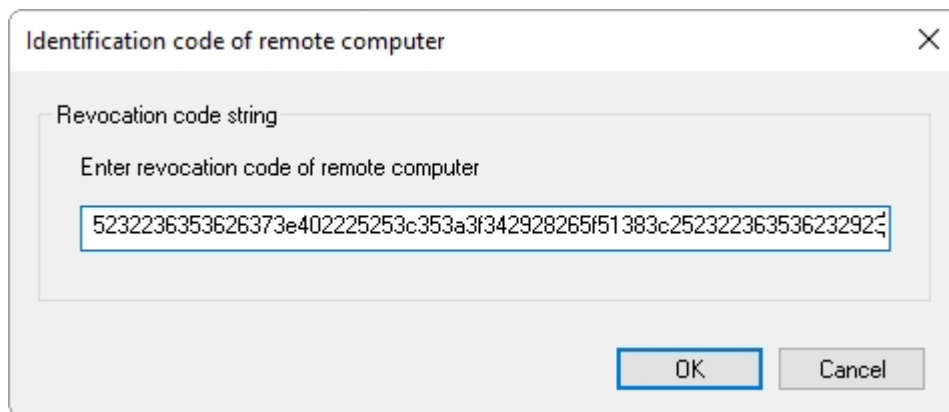
Then, the Client sends the generated character set to the Administrator (via E-mail or over the phone).

The Administrator starts the **ISD License Manager** and switches to the **Commuter License** tab.

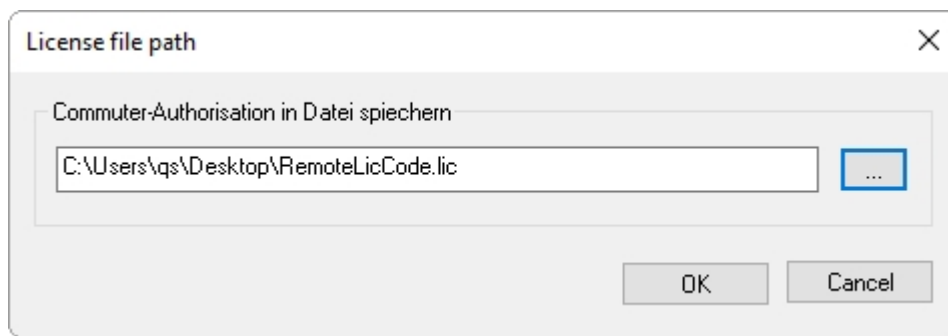


The License Server will be selected, and the required licenses (modules) are activated in the left window. In the **Commuter license: Validity in days** field, you enter the number of days that you want the commuter licenses to remain checked out from the Server. The maximum number of days is 60. By 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.

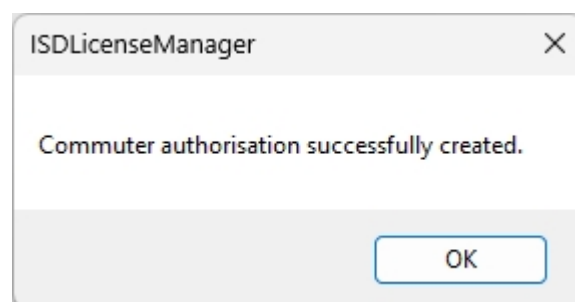
A click on the **Update licenses** button opens a new dialogue window, in which the administrator enters the character set received from the Client



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

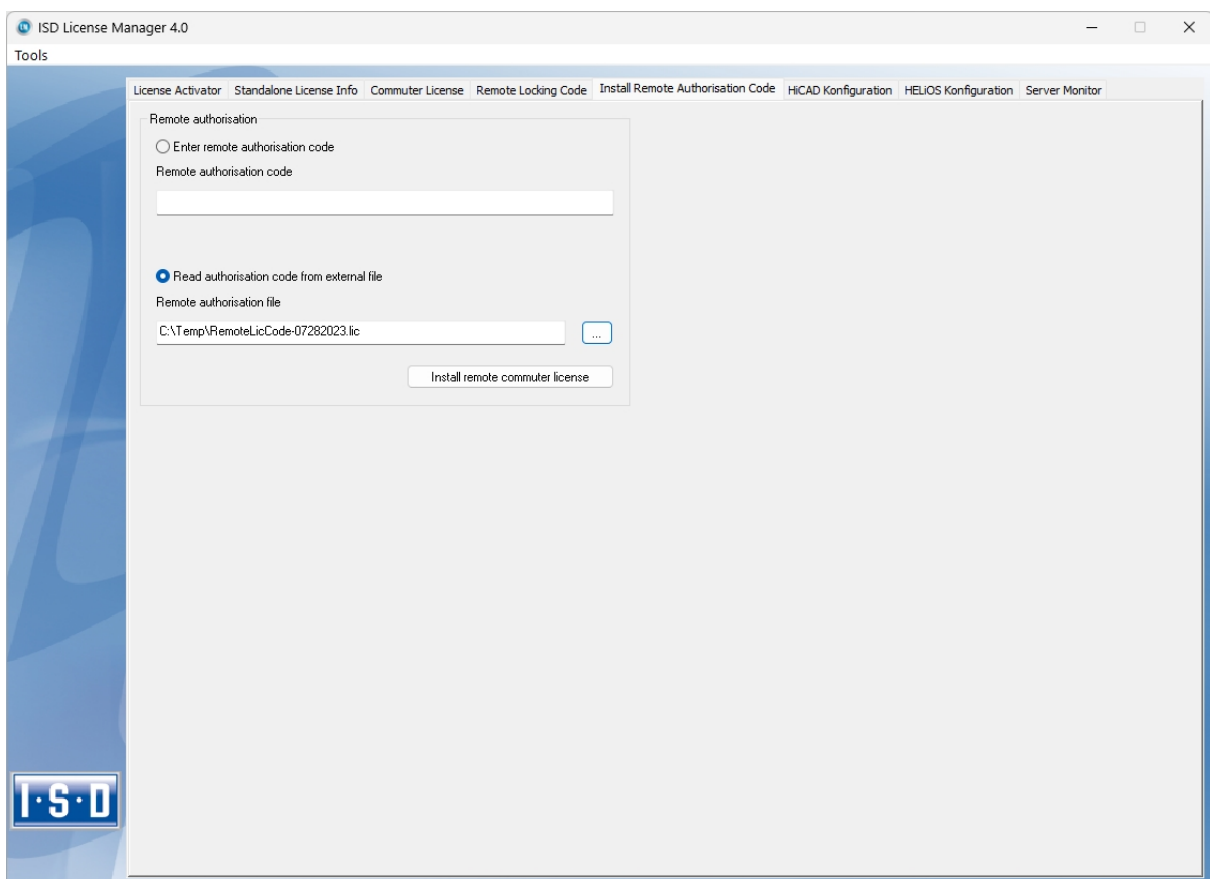


Here the Administrator enters the target path and the file name for the licenses to be swapped out. Make sure that a unique file name is used, for example, by including in the file name the host name of the remote computer and the expiry date.

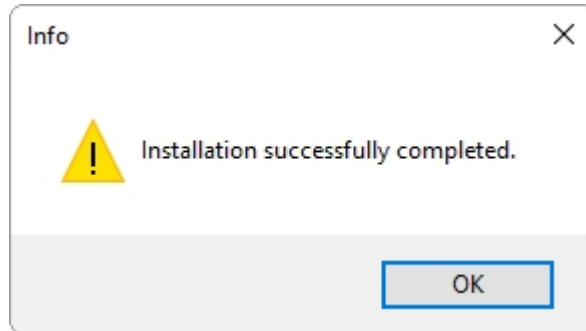


Click **OK** to check out the commuter licenses from the License Server and swap them out to a file, e.g. RemoteLicCode.lic.

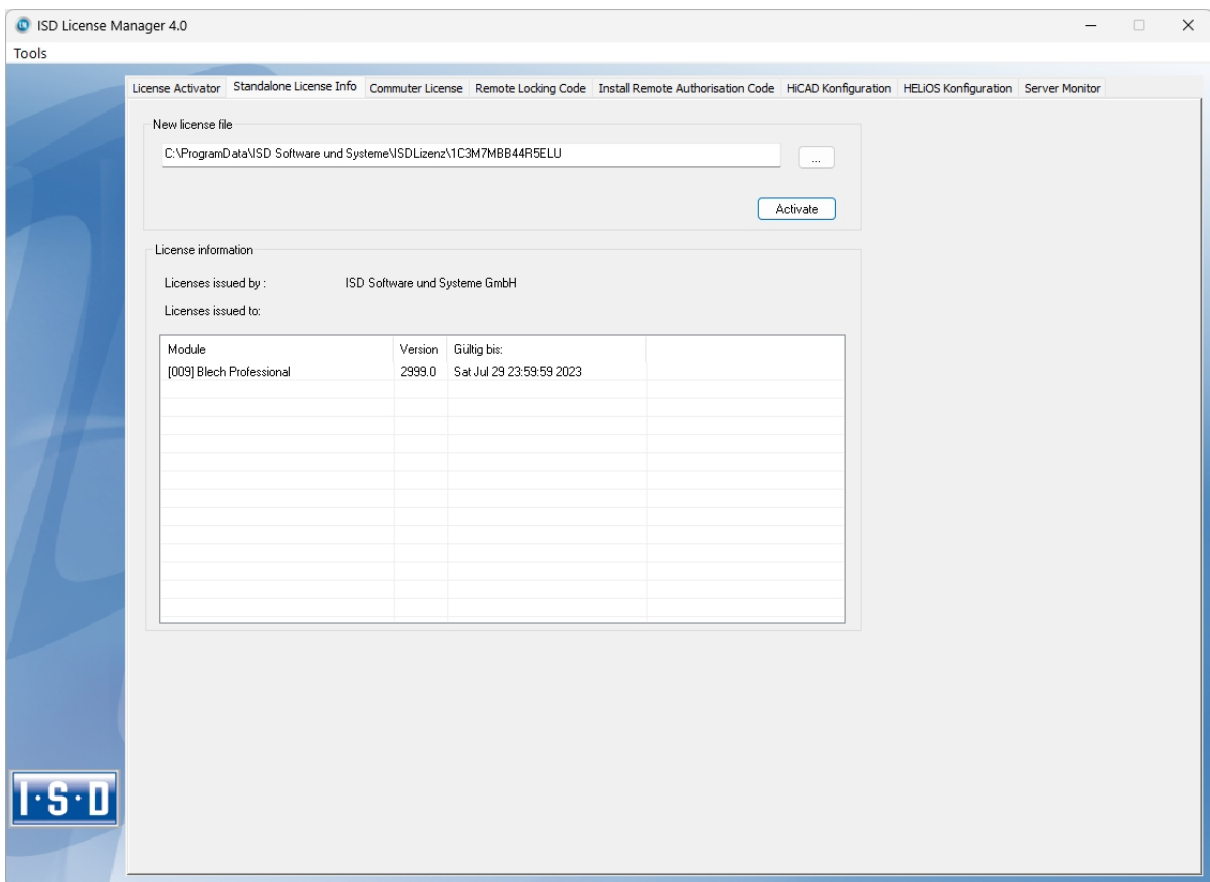
After receiving the file with the commuter licenses, the Client starts the **ISD License Manager** again and activates the **Install Remote Authorisation Code** tab.



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.

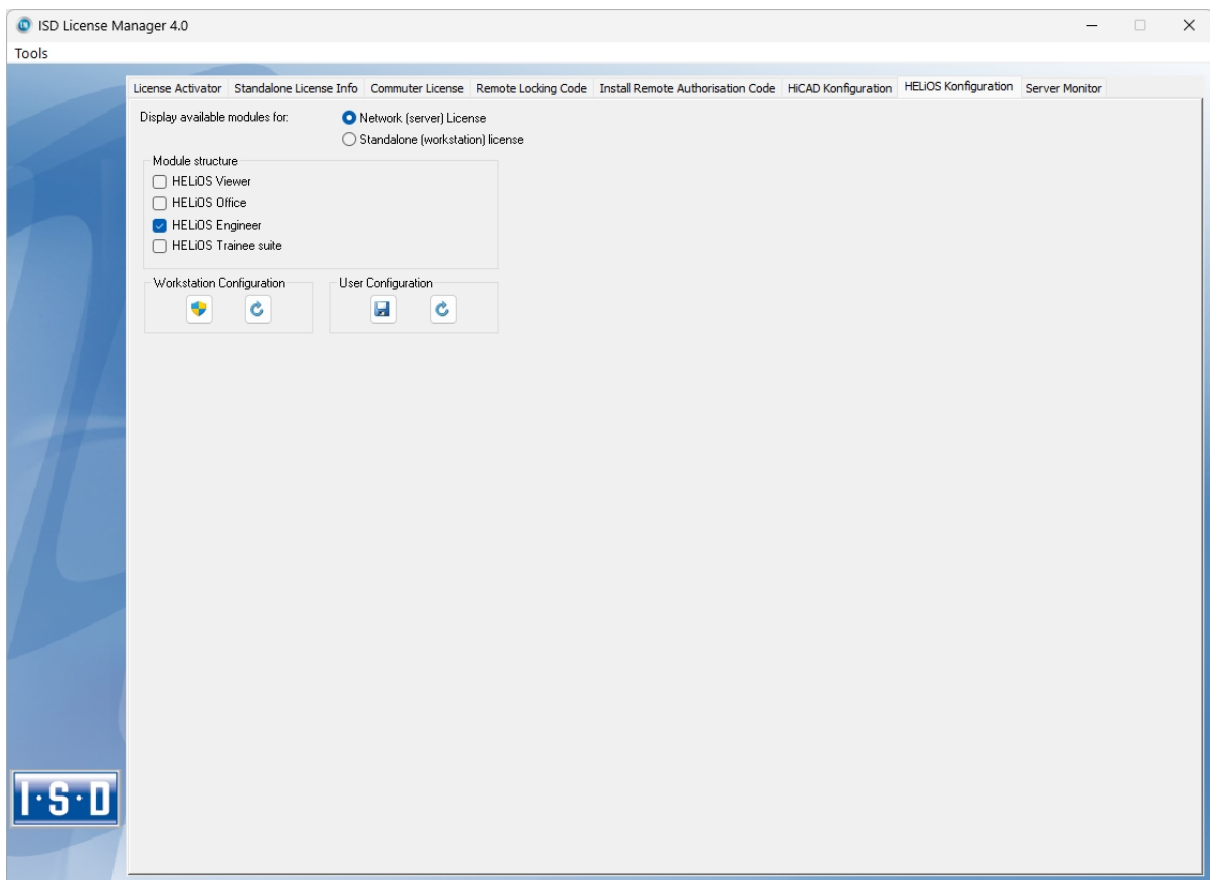


To update, the Client must click on the **Activate** button. The information which licenses are installed locally on the computer will then be provided to the Client.

License Configuration

Some cases may require the use of only certain specific licences on a computer. Example: On the 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.

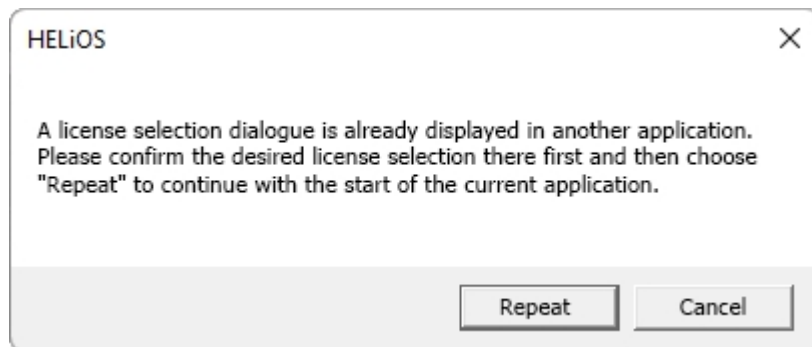
- **Save as workstation configuration:** This configuration will be saved for all users of this computer. When HELiOS is started, the selection window is no longer displayed (administrator rights are required for this).
- **Save as user configuration:** This configuration is only saved for the current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

Licence selection with parallel product start

If you start several applications without licence selection (e.g. without workstation configuration) one after the other, the system checks whether a licence selection dialogue is already displayed in another application. If this is not the case, the dialogue is displayed.

If another licence selection dialogue is already displayed, then you will receive the following message:



The **Repeat** button checks whether another licence selection dialogue is started at the same time. If yes, the same information dialogue appears again. If not, the start (and possibly the display of the licence selection dialogue) is continued.

Use the **Cancel** button to end the start of the application.



Please note:

If no licence could be reserved for the HiCAD integration module, only viewing functionalities are available in the HELiOS, regardless of the selected basic module.

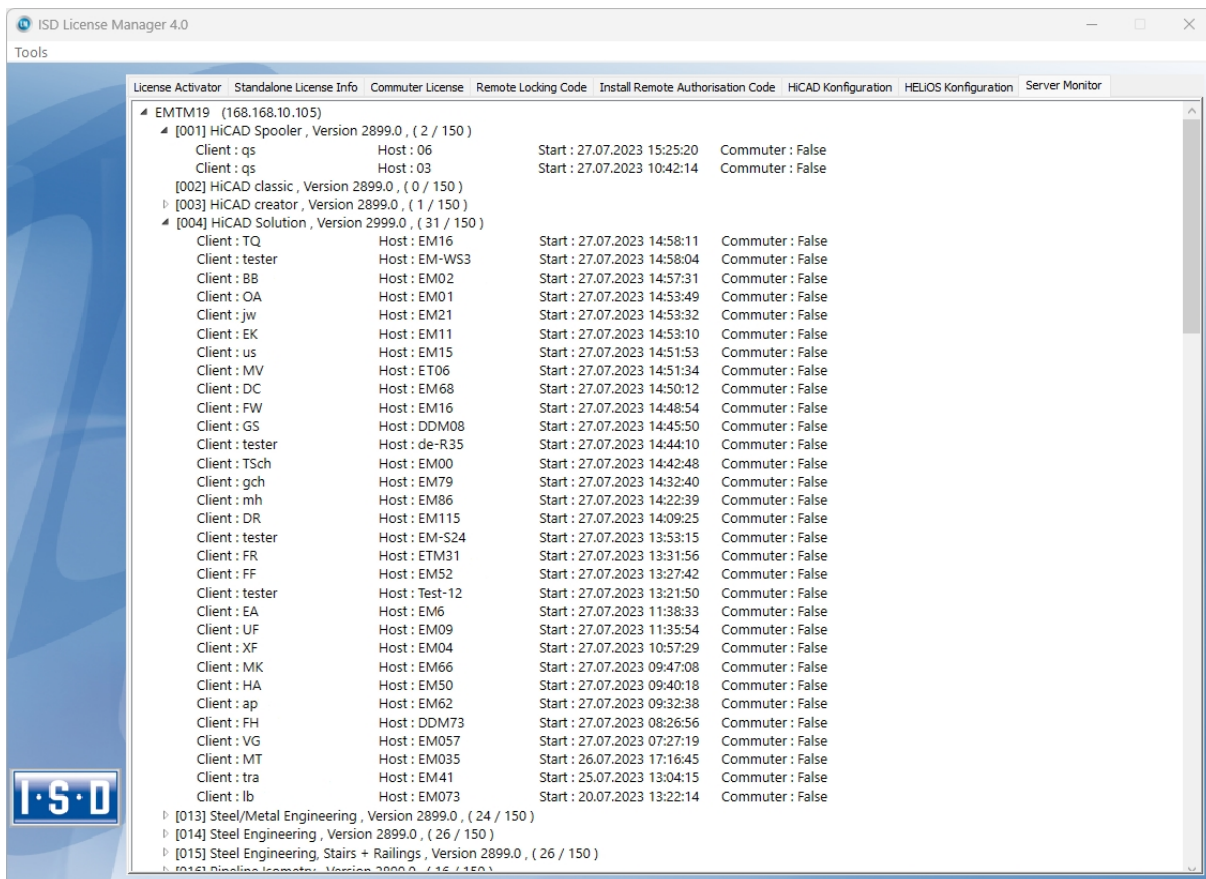
Server Monitor

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**.



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 2024?

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 or via the HELiOS icon  on the Desktop of your computer.

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

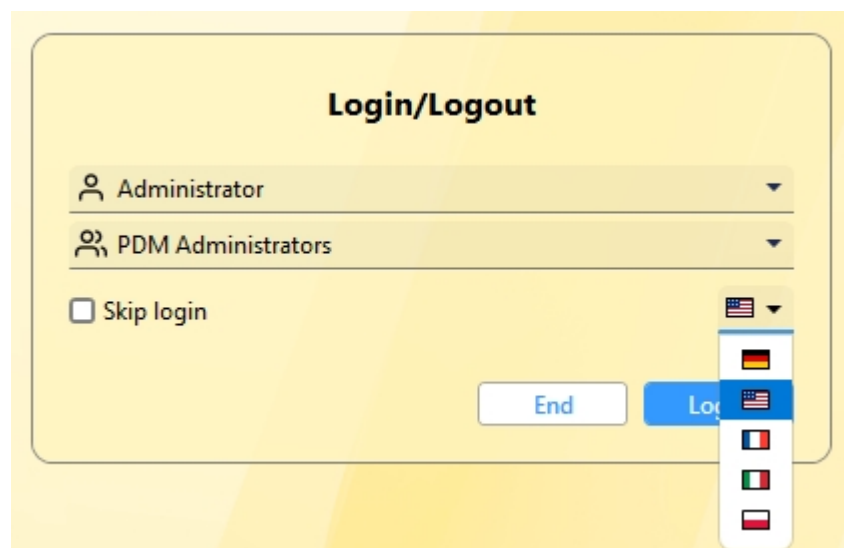
To make the best possible use of the numerous new features and enhancements offered by HELiOS, check out the videos explaining the new and changed HELiOS functionalities. From now on we will provide you with such videos with each Major Release and Service Pack to keep you constantly informed in the best 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. Punctuation marks such as commas, apostrophes, square brackets etc. and special characters such as @ cannot be used in user names. If several users are registered with the same Windows User Name in EDBSETUP, a login mask will appear when starting HELiOS Desktop.




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 is always opened after starting HELiOS, click on the  icon at the top left of the Desktop and then select the **HELiOS Options**. You can select a start project on the **General** tab.


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 2024?

An extensive overview of all changes and enhancements of HiCAD 2024 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.


How to Use the Help

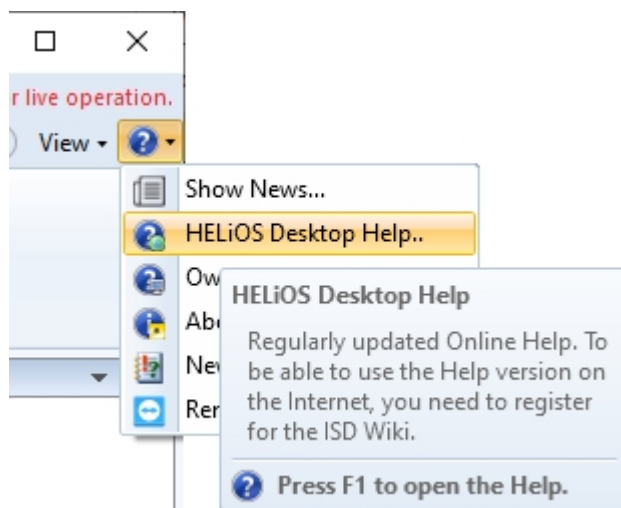
The Online Help provides you with information, descriptions and examples on all functions and techniques which are available in HELiOS.

 **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 customer portal 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 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 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. In addition, you will have access to all important information.

If you could not be identified as an ISD customer, an account will be created, but not all information available for customers will be unlocked. If you are a customer, please perform the steps described in the message so that we will be able to unlock your account for all available content.



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 E-mail (support@isdgroup.com) 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.

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.

Copyright

© 2011-2024 ISD ® Software und Systeme GmbH. All rights reserved.

This User Guide and the software described herein are provided in conjunction with a license and may only be used or copied in accordance with the terms of the license. The contents of this User Guide solely serve the purpose of information; it may be modified without prior notice and may not be regarded as binding for the ISD Software und Systeme GmbH. The ISD Software und Systeme GmbH does not assume any responsibility for the correctness or accuracy of the information provided in this document. No part of this document may be reproduced, saved to databases or transferred in any other form without prior written permission by the ISD Software und Systeme GmbH, unless expressly allowed by virtue of the license agreement.

All mentioned products are trademarks or registered trademarks of their respective manufacturers and producers.

Sentinel® RMS and EMS

The license management portion of this Licensee Application is based upon one or more of the following copyrights:

- **Sentinel®RMS**, © 2009-2024 Thales Group. All rights reserved.
- **Sentinel®EMS**, © 2009-2024 Thales Group. All rights reserved.

Sentinel® is a registered trademark of the Thales Group.

PDF3D®

PDF3D®, © 2003-2024 Visual Technology Services Ltd. All rights reserved.

PDF3D® is a registered trademark of Visual Technology Services Ltd.

Protocol Buffer

Copyright 2008, Google Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license.

FreeType

Portions of this software are copyright 2018 The FreeType Project (www.freetype.org). All rights reserved.

Autofac, Copyright © 2024 Autofac Project

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Castle.Core, Copyright © 2004-2024 Castle Project

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0> Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

ngx-extended-pdf-viewer, Copyright © 2008-2024 by James Boyle. All Rights Reserved.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0> Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Apache log4net, Copyright © 2004-2024 The Apache Software Foundation

This product includes software developed at The Apache Software Foundation (<http://www.apache.org/>). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0> Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

NHibernate, Copyright © The NHibernate Project

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation (version 2.1). This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Fluent NHibernate, Copyright © 2008-2024, James Gregory and contributors

All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of James Gregory nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Mesa Gallium, Copyright (C) 1999-2007 Brian Paul. All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

ZLib, Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly, jloup@gzip.org

Mark Adler, madler@alumni.caltech.edu

ZStandard, Copyright (c) 2016-present, Facebook, Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name Facebook nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

3Dconnexion, Copyright (c) 1992 - 2020. All rights reserved.

3D input device development tools and related technology are provided under license from 3Dconnexion.

Angular, Copyright © 2010-2024 Google LLC.

Licensed under the MIT License.

See <http://angular.io/license> for details.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

PrimeNG, Copyright © 2016-2024 PrimeTek

Licensed under the MIT License.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to

use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

IdentityServer

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0> Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Legal notes

© 2024 ISD @ Software und Systeme GmbH. All rights reserved.

This User Guide and the software described herein are provided in conjunction with a license and may only be used or copied in accordance with the terms of the license. The contents of this User Guide solely serve the purpose of information; it may be modified without prior notice and may not be regarded as binding for the ISD Software und Systeme GmbH. The ISD Software und Systeme GmbH does not assume any responsibility for the correctness or accuracy of the information provided in this document. No part of this document may be reproduced, saved to databases or transferred in any other form without prior written permission by the ISD Software und Systeme GmbH, unless expressly allowed by virtue of the license agreement.

All mentioned products are trademarks or registered trademarks of their respective manufacturers and producers.



Your local contact

We attach great importance to the direct contact with our customers and partners, because only a lively dialogue and constant exchange with practice ensure application-oriented software development.

Feel free to contact us! Whether at our headquarter in Dortmund or at one of our branches and subsidiaries in your vicinity - we will be happy to answer all your questions about our products and services. We are looking forward to hearing from you!

Headquarter Dortmund

ISD Software und Systeme GmbH

Hauert 4

D-44227 Dortmund

Phone +49 231 9793-0

info@isdgroup.de

ISD locations worldwide at www.isdgroup.com