HiCAD

UNLIMITED CAD PERFORMANCE **DEVELOPED BY ISD**

Installation Notes

Version 2025

HiCAD and HELiOS

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Getting Started

Important Notes!

Hardware Exchange

If you use local HiCAD/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 HiCAD/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. 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 Microsoft SQL Server 2012

Microsoft® discontinued support for **SQL Server 2012** in July 2022 and no longer provides security updates. As a result, **SQL Server 2012** will no longer be supported from **HELiOS 2025** onwards.s.

Discontinuation of the Spooler Client

As of HELiOS 2025 (Version 30.0), the **Spooler Client** tool for limiting parallel printing processes is no longer supported.

Discontinuation of the HELiOS.Briefcase tool

As of HELiOS 2025 (Version 30.0), the HELiOS.Briefcase tool for synchronising separate HELiOS databases will no longer be supported.

In order to be able to continue working at different locations without significant latency to the database, the corresponding workstations must be provided centrally, and appropriate remote access to the environment must be set up.

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 Mircosoft 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 2025

As of HELiOS 2025 (Version 30.0), the following versions of Multi-CAD interfaces are no longer supported:

- AutoCAD 2021 or older
- AutoCAD Mechanical 2021 or older
- Inventor 2021 or older

Before installing or updating, please check if your current interfaces are supported by HELiOS.

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 omwards, 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.

Discontinuation of length measurements deviating from mm

HiCAD 2022 only supports drawings with the unit of measurement “Millimetres” (mm). The unit of measurement is saved in the corresponding SZA, FGA or KRA file when saving a drawing or a part. Attempts to open drawings with a different unit of measurement or to insert parts with a unit of measurement different from mm will be blocked.

Discontinuation of "old" OpenGL versions

From HiCAD 2021 on, only OpenGL version 4.3 is used in all HiCAD modules. Until now this was only the case with the module **HiCAD Point Cloud**. This means that HiCAD 2022 can no longer be run on computers without a separate graphics card. To avoid possible problems with onboard graphics cards, we recommend using a stand-alone graphics card.

Discontinuation of "old" HiCAD itemization

As of HiCAD 2019 the “old” itemisation, i.e. the itemisation that was used up to HiCAD 2017, will only be available for model drawings that were already itemized with these functions. From HiCAD 2021 onwards, only the “new” itemization will be supported. Please also read the information given in the Conversion of Old Itemisations topic.

Discontinuation of CADENAS PARTdataManager

As of HiCAD 2022 SP2, the CADENAS **PARTdataManager** will no longer be supported. Thus, the functions **Insert main part, PARTsolutions (CADENAS program)** and **Import PARTsolutions part** will no longer be available from SP2 onwards.

New Plugin Management starting with HELiOS 2025 SP2

- Customer-specific plugins that were integrated into HELiOS 2025 via the HELiOS.exe.config file will not be automatically transferred to the new Plugin management when updating to HELiOS 2025 SP2 or higher. They must therefore be entered manually once in the HELiOS Options on the **Plugins** tab.
- In future updates, the HELiOS Update will then automatically update the settings for the plugins stored in the HELiOS Options. Only the plugins themselves may need to be updated beyond the limits of a release cycle.
- Please also note that, starting with version 2025 SP2, managing plugins via the HELiOS options replaces the manual modification of the HELiOS.exe.config that was required in earlier versions. As a result, after installing HELiOS, there is no longer a Plugins folder under (...)\exe\.
- When installing an update for HELiOS Desktop in standalone mode, a backup of the existing plugin directory is automatically created. However, this does not happen when updating a combined HiCAD/HELiOS installation, as the installation routine cannot distinguish between HiCAD and HELiOS plugins.
- If a plugin has been accidentally copied to the HELiOS EXE directory, an error message appears instructing you to remove the relevant plugin DLL from the invalid directory and then restart HELiOS.
- The functionality for pipeline planning with HiCAD (working with pipe classes and variants) can now be enabled or disabled for the desktop via the HELiOS options in the General section. Previously, the corresponding plugin had to be enabled or disabled manually in the HELiOS.exe.config file.

License Server as of 2025 SP2

The **AdminToolsServers** for the license server are now 64-bit; they are installed by default under **Program files\ISD Software und Systeme\AdminToolsServer**. After installation, you will find the **ISD License Manager (Server)** in the Windows Start menu under **ISD Software und Systeme**. Unlike the Client, the corresponding EXE file is called **ISDLicenseManagerAdmin.exe**. The **Sentinel RMS License Manager** is still 32-bit.

HELiOS Workspaces: Conversion of the system directories

When updating from an older version to HELiOS 2025 (Version 30.0.0) or higher, please note that the directory structure will change. Since an automated migration is not possible, all users have to check out all data and empty their workspaces before installing the update to avoid data loss.

In previous versions, the workspaces were located at %localappdata%. This meant that different workspaces could be located on one system. To prevent this, the update to HELiOS 2025 will move the workspaces to the **%programdata%** directory.

Checked-out files are then stored at **%programdata%\ISD Software und Systeme\HELiOS Workspace\(...)*** (*plus Location ID and User ID). The workspace databases are stored version-dependently at **%programdata%\ISD Software und Systeme\HELiOS <Version>\Location-ID**.

Microsoft SQL Server

The SQL Server Native Client (often abbreviated to SNAC) has been removed by Microsoft from SQL Server 2022 (16.x) and SQL Server Management Studio 19 (SSMS). It is recommended to use the latest version of the Microsoft ODBC Driver for SQL Server instead.

Further information can be found on the Microsoft website or in the installation instructions for Microsoft SQL Server 2022.

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

HiCAD 2025 uses a different data format, which means that.SZA files saved with HiCAD 2025 can no longer be loaded into older HiCAD versions.

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 HiCAD and HELiOS

In the context of HiCAD/HELiOS Update Installations, the last 5 release cycles are supported. As of HiCAD/HELiOS 2025 (Version 30.0.*), you can only update installations from 2020 (Version >= 2500.0) and newer. (See also Carrying out the installation.)

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:

- heliossac_titleblock.dat,
- helacblock.xml

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

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

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 Part insertion v26 (PE)

The old **Part insertion** function in Plant Engineering has now been completely replaced by the new **Part insertion** function. Therefore, the function **Part insertion v26** in Plant Engineering is no longer available as of HiCAD 2024 SP1.

Discontinuation of 3-D projection grid

As of HiCAD 2023, the **3-D projection grid function** is no longer available.

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.

Discontinuation of the "old" Create detail drawing function

With the release of HiCAD 2012, the previously valid workshop drawing functionality in Steel Engineering had been extended to a function for general drawing derivation. The previous functions for detail drawings in Steel Engineering were still available in the Detail drawing section of the Drawing menu. As of HiCAD 2022 (Version 2700.0) these functions are no longer supported.

System Requirements

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

System Requirements for HiCAD

Here you will find the system requirements for operating HiCAD.

Minimum hardware requirements	
Computer	Generally, all hardware can be used enacting current drivers of applicable OS. Please note that for instance the graphic-card drivers support OpenGL command sequence. Internet connection and adrive for the installation medium.
Processor (CPU)	Intel or AMD processor with AVX2 and FMA support. This is the case for all processor generations from Intel Haswell (2013) or AMD Excavator (2015).
Main memory	8 GB RAM
Hard disk	approx. 20 GB free disk space
Graphics card	A fully OpenGL 4.3-capable graphics card with at least 1 GB memory should be used. You can check whether the graphics output requirements of your computer are sufficient for HiCAD with the **OpenGL Test** button (in the Installation Wizard > **Standard Edition**) To avoid possible problems with onboard graphics cards, we recommend using a stand-alone graphics card. .
Screen resolution	1920 x 1080
Operating system:	Microsoft Windows 10
Other	For the output of reports, e.g. Sheet Metal cost calculations, you require Microsoft Office.

There are no further requirements for the installation of the **HiCAD version with License Management**; the legal licensing check is performed during runtime.

Examples of suitable hardware components for HiCAD	
Computer:	HP Workstation Z2 G9
Processor (CPU):	Intel® Core™ i7-13700K 16 Core 3,4 GHz (24MB Cache) max. Turbo 5,4 GHz SingleCore Benchmarks that can be found on various websites may help you with the choice of the processor. Example: https://www.cpubenchmark.net/singleThread.html
Main memory:	64GB DDR5 nECC / 4800 MHz For optimal performance with large drawings, the system should have significantly more main memory than is apparently necessary for HiCAD. When converting point clouds, the memory requirement is often significantly greater than when using the converted point cloud in HiCAD.
Hard disk:	HP Z Turbo Drive 1TB NVME M.2 SSD
Graphics card:	NVIDIA® Quadro RTX A4000 16GB GDDR6 graphics memory Alternatives: NVIDIA® RTX 3070, AMD Radeon PRO W6600, AMD Radeon RX6600 When working with point clouds, at least 16 GB of graphics memory is recommended.
Screen resolution:	Working with a high screen resolution is only possible to a limited extent. Resizing of text ("Enlarge text") is not recommended.

Examples of suitable hardware components for HiCAD	
Operating system:	Microsoft Windows 11
Others:	For the output of reports, e.g. Sheet Metal cost calculations, you require Microsoft Office.

The interfaces available for the HiCAD can be found in the compatibility matrix.

Please note:

- For the connection to Sentinel License Server, the Firewall of the UDP Port 5093 License Server must be released for in- and outcoming connections; for the Windows Firewall, the port release is executed automatically by activating the respective option in the installation program of the License Server.
- As of HiCAD 2024 SP2, Microsoft Windows 10 N and Microsoft Windows 11 N are no longer supported.
- If you use network licenses, use the operating systems indicated in the System Requirements for the License Server.
- Internet access is necessary for the computer/server via which the licenses are managed!
- In addition, you need one of the database systems listed under Hardware Requirements for the HELiOS Database Server when using HELiOS.
- If you encounter any kind of display problems, please check if your graphics card driver is up-to-date first. If it is not, update to the current driver.

Compatibility Matrix for Interfaces Applications (HiCAD)

Listed below you find an overview of the interfaces that are available for HiCAD:

	HiCAD 2025	HiCAD 2024	HiCAD 2023
Operating system			
Microsoft Windows * * As of HiCAD 2024 SP2, Windows 10 N and Windows 11 N are no longer supported.			
Windows 11, 64 Bit	✓	✓	✓
Windows 10, 64 Bit	✓	✓	✓
Windows 8.1, 64 Bit or older	✗	✗	✗
PDM system			
HELiOS 2025	✓	✗	✗
HELiOS 2024	✗	✓	✓
HELiOS 2023	✗	✗	✓
HELiOS 2022 or older	✗	✗	✗
Interfaces			
LogiKal 12	✓	✓	✓
LogiKal 11	✓	✓	✓
LogiKal 10	✓	✓	✓
LogiKal 9	✗	✗	✗
KISSsoft 03/2017 up to 03/2025	✓	✓	✓
CADClick 3.0	✓	✓	✓
Microsoft Office * *If communication between Microsoft Office and HiCAD takes place via the COM interface, then both must have the same Bit version (64/64 Bit). Otherwise problems may occur in connection with VBA, e.g. when creating/editing Excel BOMs.			
Office 2021	✓	✓	✓
Office 2019	✓	✓	✓
Office 2016	✓	✓	✓
Office 2013	✓	✓	✓
Browsers			

	HiCAD 2025	HiCAD 2024	HiCAD 2023
Internet Explorer 9 - 11	✓	✓	✓
Edge	✓	✓	✓
Mozilla Firefox	✓	✓	✓
Google Chrome	✓	✓	✓

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 HiCAD Spooler

The system requirements for Spooler are identical to those for a normal HiCAD Client (please see System Requirements for HiCAD). The RAM should be at least as large as the RAM for the existing HiCAD Clients. The reason for this is that the Spooler must be able to perform, besides automation tasks, various other tasks such as the conversion of HiCAD drawings (to 3D-PDF or similar).The HiCAD Spooler runs on a separate Plot Server System.

In a combined operation of HiCAD and HELiOS, the HiCAD Spooler is driven by HELiOS Spooler. You can find further instructions for installing HELiOS Spooler running on the same system as the HiCAD Spooler in HELiOS Help.

Besides the Client operating system Windows 10 you can also use the Server operating systems Windows Server 2016 or newer. Whether a Server operating system needs to be used depends on the licensing conditions for the Microsoft operating system that you use. The decisive factor is the number of permitted simultaneous device connections.

Windows 10 allows 20 simultaneous connections. This will be sufficient for 20 Print Clients, if all of them are actually running at the same time. Please note however that each connection from a non-HiCAD/HELiOS workstation will reduce this number.

Please note:

- The HiCAD Spooler runs on a separate Plot Server system.
- The minimum requirement for HiCAD is OpenGL 4.3. If the minimum requirements for the HiCAD Spooler are not met, individual graphics components are replaced by customised components (Mesa implementation version 24.2.0) during installation, so that the Spooler can also run on systems that do not support OpenGL 4.3. This may result in some restrictions.

System Requirements for the HELiOS Database Server

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

	HELiOS 2025	HELiOS 2024	HELiOS 2023
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 2025	HELiOS 2024	HELiOS 2023
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 resources 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
  The productive use of SQL Server Express is also 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 2025	HELiOS 2024	HELiOS 2023
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 RAID system in order to ensure failsafe performance.

System Requirements for the HELiOS Client

The minimum requirements for the HELiOS Client are as follows:

	HELiOS 2025	HELiOS 2024	HELiOS 2023
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 Clientare 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.
- 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.
- If a HELiOS application crashes, so- called dump files will be stored in the directory %LOCALAPPDATA%\ISD Software und Systeme\CrashDumps.

Compatibility Matrix for Interfaced Applications (HELiOS)

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

	HELiOS 2025	HELiOS 2024	HELiOS 2023
Operating system			
Windows 11, 64 Bit	✓	✓	✓
Windows 10, 64 Bit	✓	✓	✓
Windows 8.1 or older	✗	✗	✗
Server Operating system			
Windows Server 2025	✓	✓	✓
Windows Server 2022	✓	✓	✓
Windows Server 2019	✓	✓	✓
Windows Server 2016	✓	✓	✓
CAD system			
HiCAD 2025	✓	✗	✗
HiCAD 2024	✗	✓	✗
HiCAD 2023	✗	✓	✓
HiCAD 2022	✗	✓	✓
HiCAD 2021	✗	✗	✓
HiCAD 2020 or older	✗	✗	✗
AutoCAD (Mechanical) 2026	✓ (as of 30.1.2)	✗	✗
AutoCAD (Mechanical) 2025	✓	✗	✗
AutoCAD (Mechanical) 2024	✓	✓	✓ (as of 28.2.1)
AutoCAD (Mechanical) 2023	✓	✓	✓
AutoCAD (Mechanical) 2022	✓	✓	✓
AutoCAD (Mechanical) 2021	✗	✓	✓
AutoCAD (Mechanical) 2020	✗	✗	✓
AutoCAD (Mechanical) 2019 or older	✗	✗	✗
Inventor 2026	✓ (as of 30.1.2)	✗	✗
Inventor 2025	✓	✗	✗

	HELiOS 2025	HELiOS 2024	HELiOS 2023
Inventor 2024	✓	✓	✓ (as of 28.2.1)
Inventor 2023	✓	✓	✓
Inventor 2022	✓	✓	✓
Inventor 2021	✗	✓	✓
Inventor 2020	✗	✗	✓
Inventor 2019 or older	✗	✗	✗
CAE-SYSTEM			
EPLAN Electric P8 2025	✓ (as of 30.0.1)	✓ (as of 29.2.3)	✗
EPLAN Electric P8 2024	✓	✓ (as of 29.2.2)	✓ (as of 28.2.6)
EPLAN Electric P8 2023	✓	✓	✓ (as of 28.0.3)
EPLAN Electric P8 2022	✓	✓	✓
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	✓	✓	✓
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 Spooler

The minimum requirements for the HELiOS Spooler are as follows:

	HELiOS 2025	HELiOS 2024	HELiOS 2023
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, unexpected behavior may occur during job processing.
- 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:

	HiCAD/HELiOS 2025	HiCAD/HELiOS 2024	HiCAD/HELiOS 2023
Processor (CPU)	64 Bit processor. 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.

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 as an ISD product (e.g. HiCAD, HELiOS, etc.), as both products share system information for licensing purposes.
- 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 HiCAD/HELiOS can be used; these packages will be installed as part of the HiCAD/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:

- HiCAD
- HiCAD Online Help
- HiCAD Viewer
- HiCAD Spooler
- 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 Spooler
- HELiOS Mail Proxy
- HELiOS Server Monitor
- HELiOS Task Starter
- Trial Edition (Demo version)
- Education Edition (for students)
- Silent Installation
- Postscript printer driver (required for the output of multiple views in a PDF file)

Important note on the scope of installed modules!

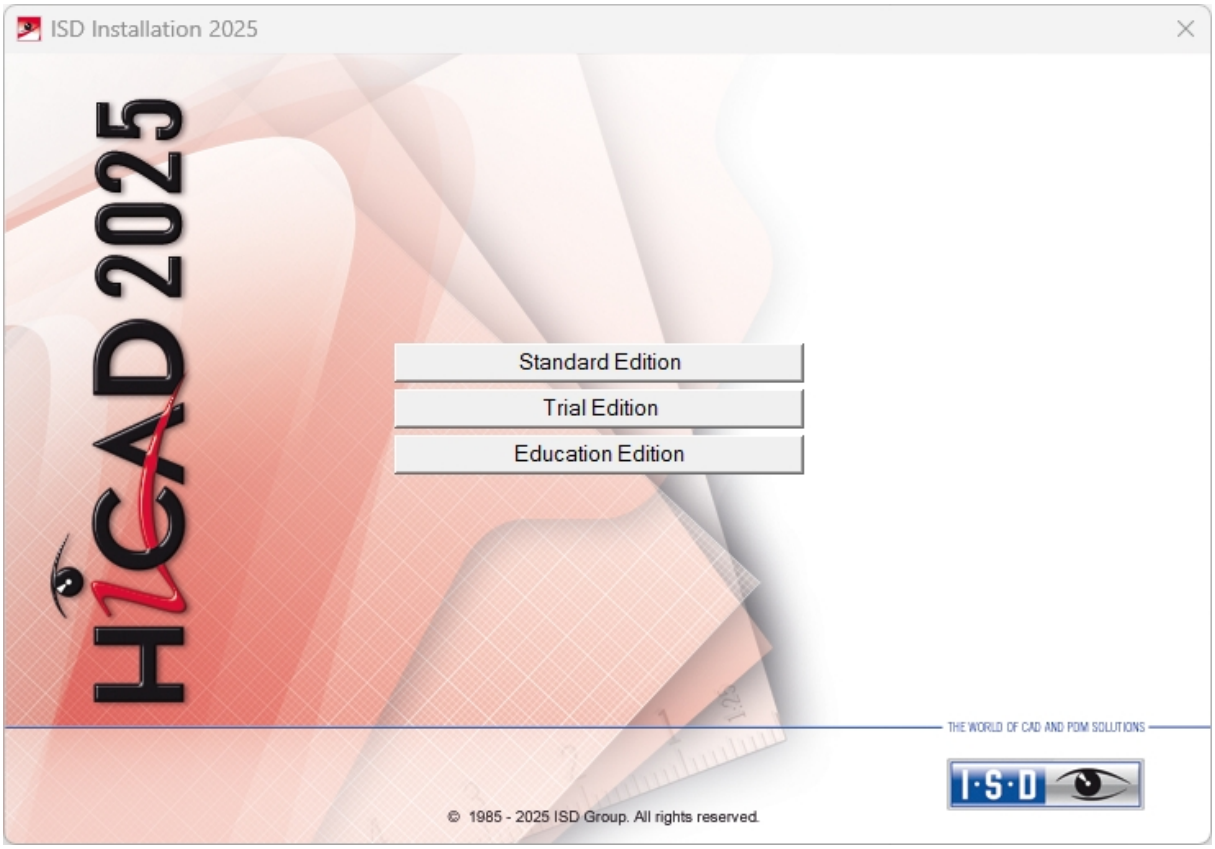
The scope of modules that will be installed depends on the product that was purchased. This means that not all modules described in the installation manual may be included in your software version.

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 HiCAD-/HELiOS version will be installed.

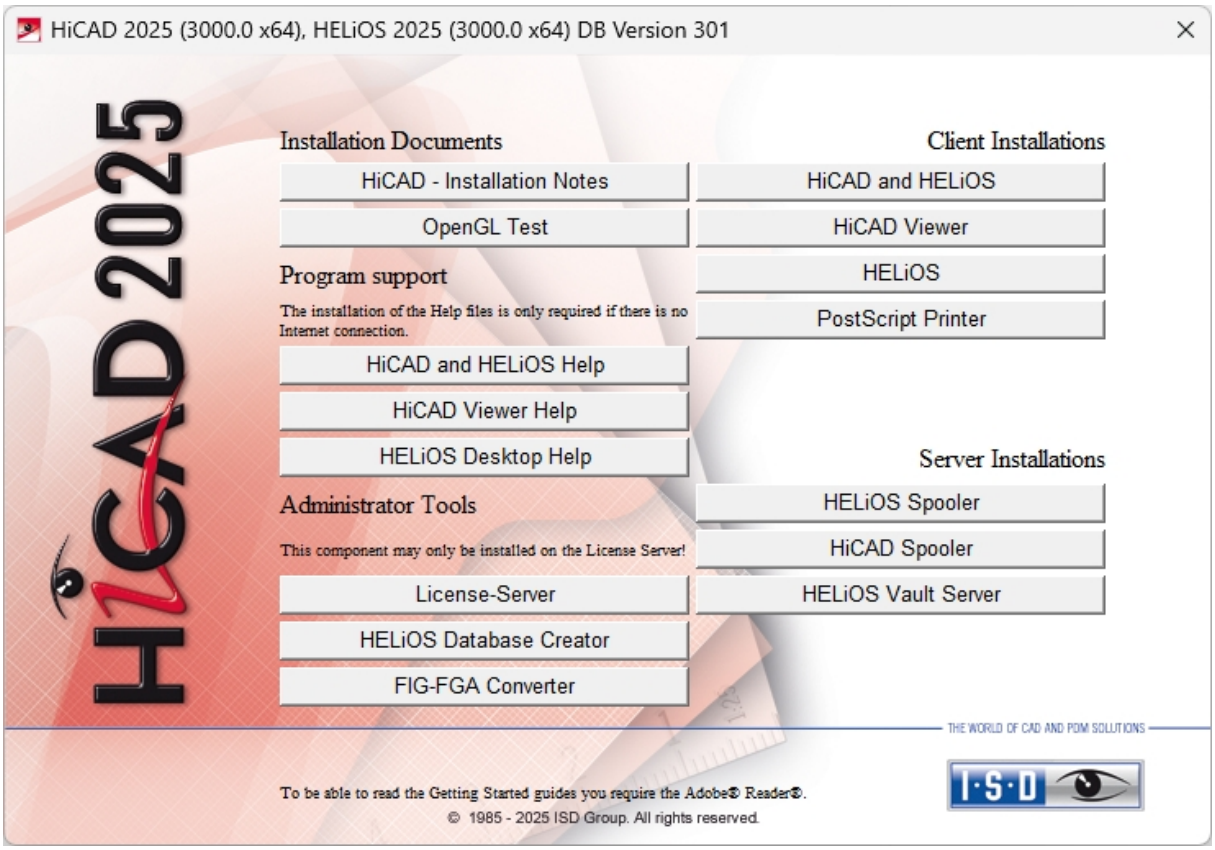
Please note:

- You can conveniently download the current HiCAD/HELiOS version in the Download Area.

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



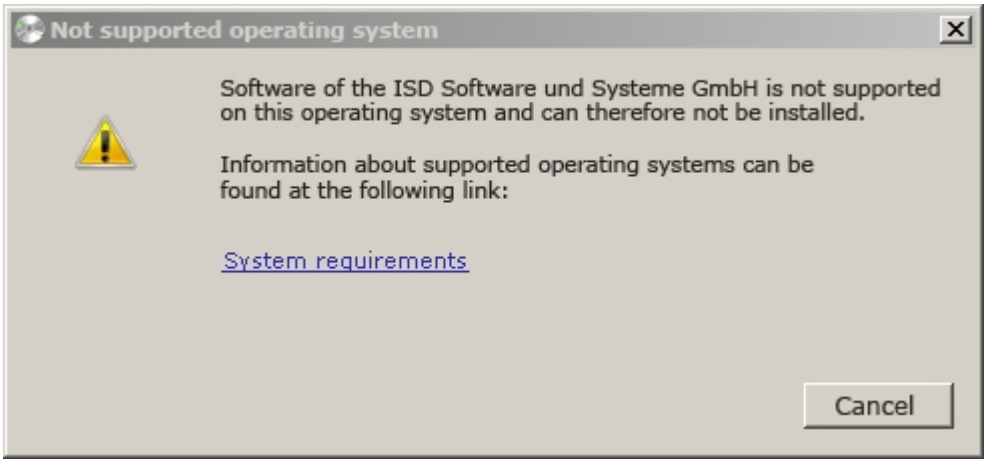
Click on the **Standard Edition** button. This will open the following selection mask:



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

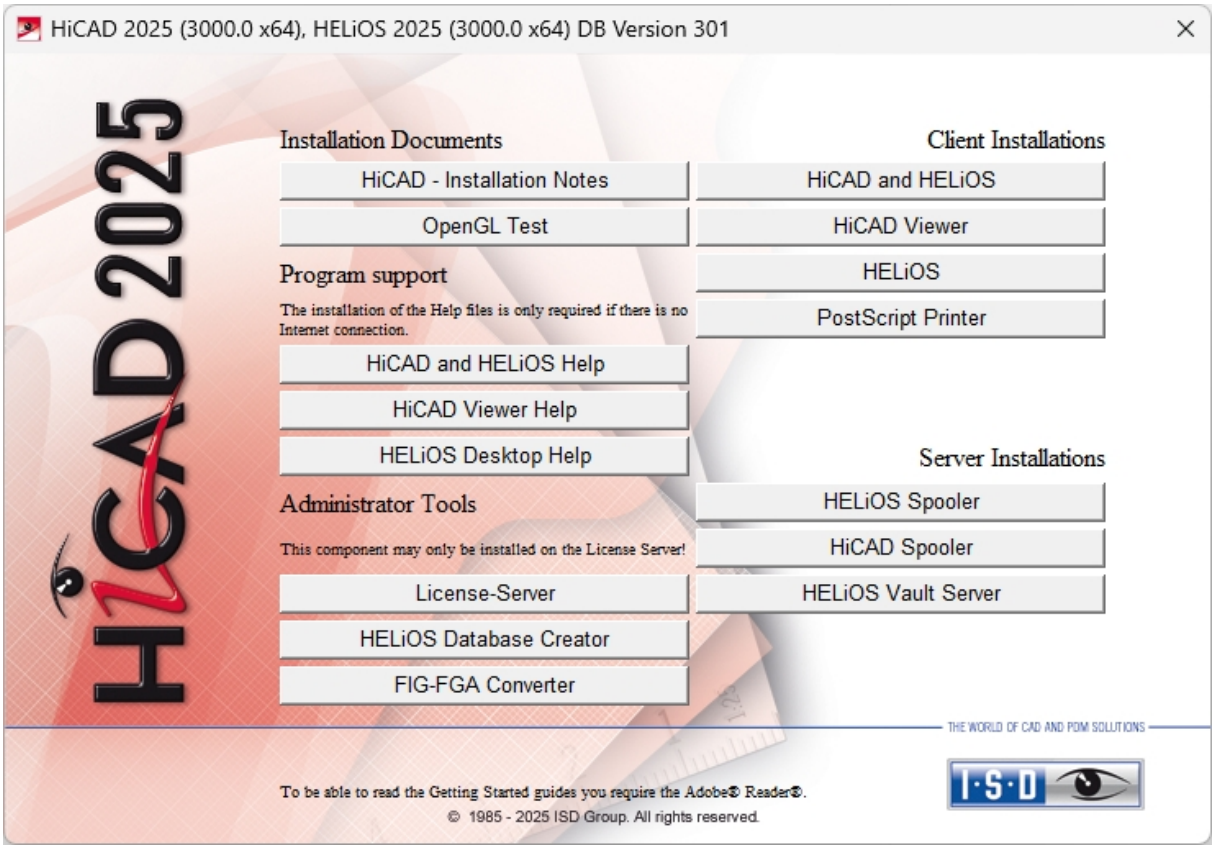
Discontinuation of Windows® 7 and Windows® 8

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.



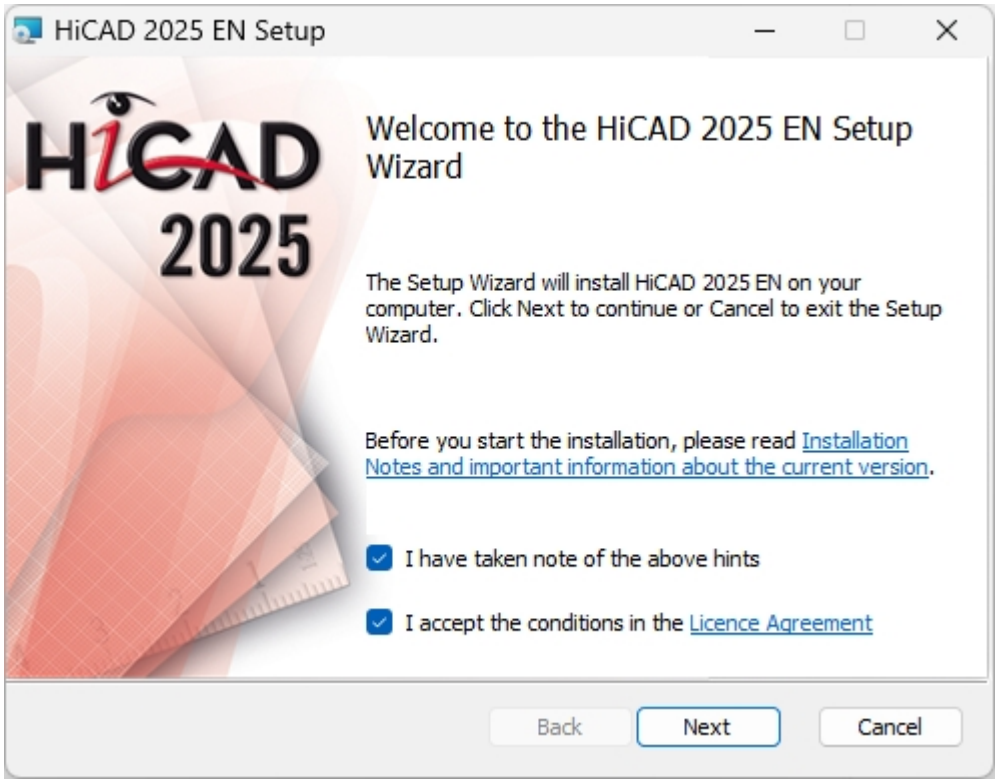
Installation von HiCAD

To install HiCAD, start Windows. If Windows has already been started, close all other applications and start the installation wizard. In the installation wizard, click on the **Standard Edition** button. This will open the following selection mask. Leave this selection mask open, so that you can select the desired components one after the other.

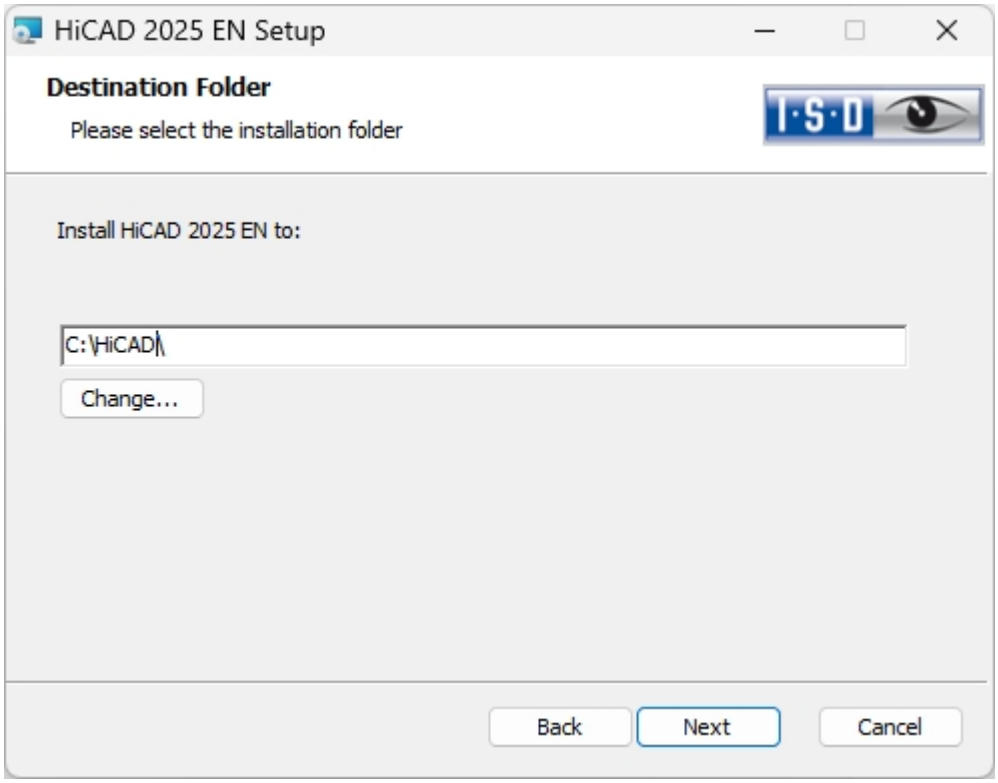


Click on the **HiCAD and HELiOS** button to start the installation.

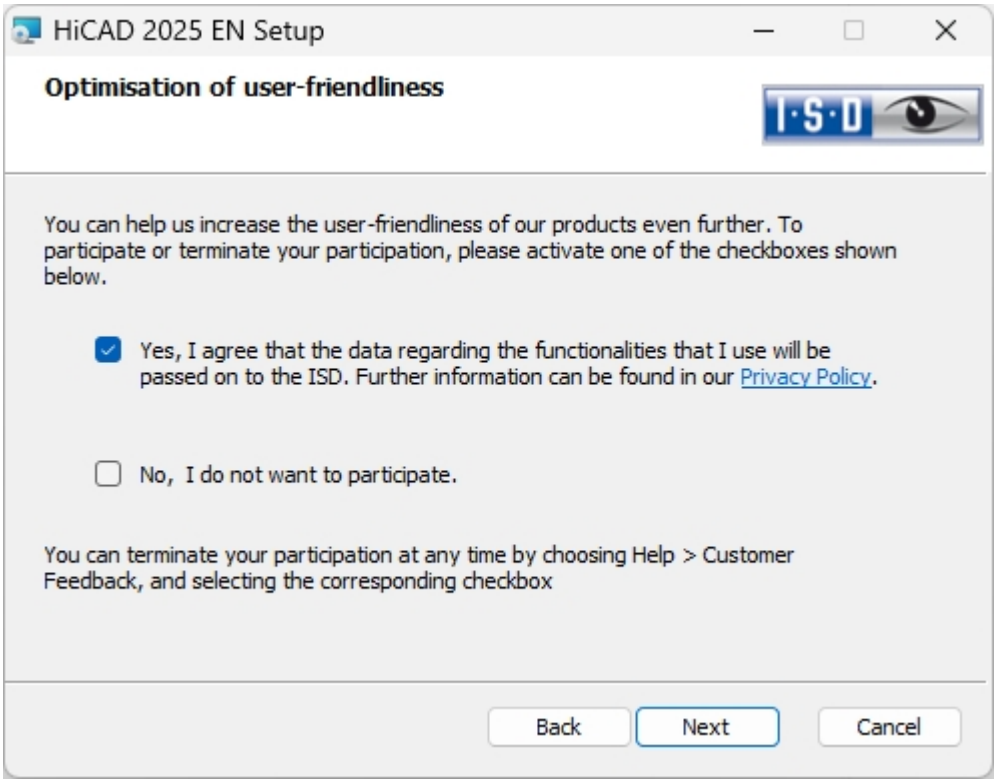
Before using HiCAD/HELiOS, **Microsoft .NET Framework** and the **Visual C++ Runtime Libraries** must have been installed on the computer; these packages will be installed as part of the installation if required.



Please read the **Installation Notes** and the Licence Agreement carefully.



Select an installation directory.



You can help us increase the user-friendliness of our products even further. To participate or terminate your participation, please activate the corresponding checkbox.

In the dialogue window, our notice on collection of data for constant GUI optimization can be opened.

You can terminate your participation at any time by choosing **Help > Customer Feedback**, and activating the corresponding checkbox.

Data Protection notice: Collection of Data for Constant GUI Optimisation

You can help us increase the user-friendliness of our products even further. If you participate, the ISD will collect information on your use of our software, in order to detect trends and use patterns. This information will then be used for a constant optimisation of our user interface, with the aim to make the operation of our software as convenient and efficient as possible for our users.

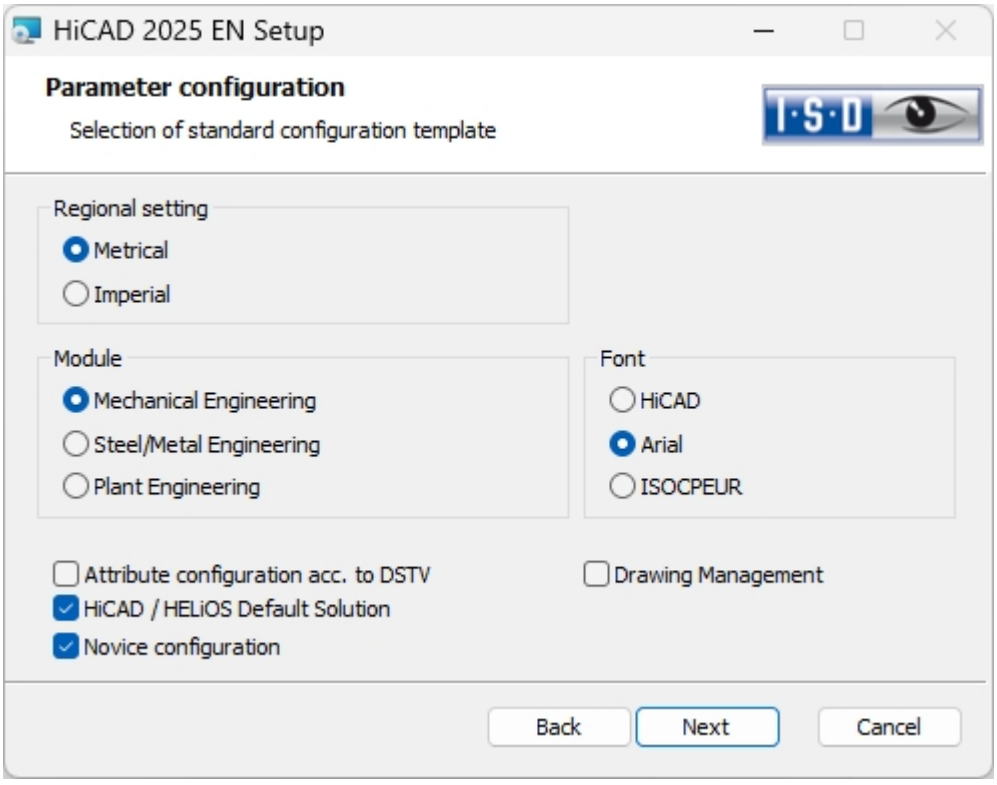
The collected information

- Contains data on the functions that you used (frequency and chronological order).
- Contains a key enabling the identification of your computer. It does not contain any personal data, and will not be used to detect your identity. The key will only be used to obtain data on the diffusion rate of customer feedback. For instance, it is important to know whether a functionality has been used 100 times by 1 customer, or whether another function has been used only once by 100 customers etc.
- Will be automatically removed after transmission to the ISD. In case of a failed transmission (e.g. because of network problems) the information will be automatically removed after 1 week at the latest when the program has been re-launched.
- Will not cause a slowing down of the program operation.

The ISD will not

- Store your name, address, or any other personal data.
- Ask any further questions besides asking for your consent to the participation.
- Use the data for any other purposes than those described above.
- Contact you in any form in connection with your participation.

You can choose to participate when installing the product for the first time. To terminate your participation at a later time, choose **Help > Customer Feedback**, and select the corresponding option.

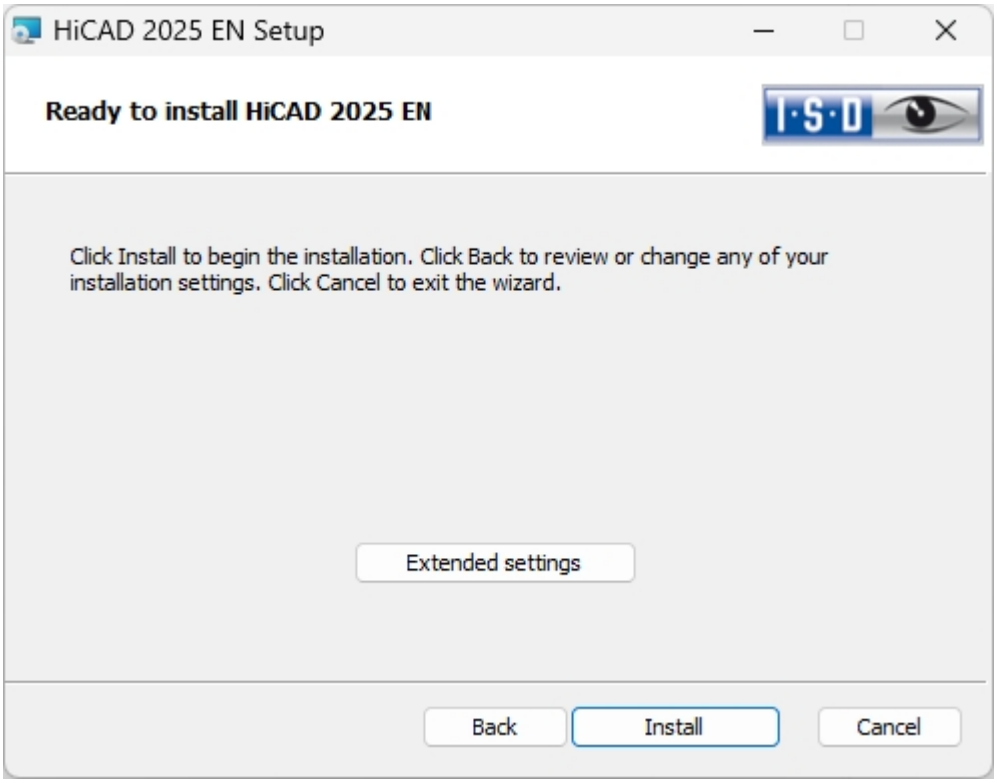


For different drawing areas HiCAD offers especially adjusted surfaces and configurations, e.g. for Mechanical Engineering, Steel Engineering and Plant Engineering. These can be selected during the installation of HiCAD. If you choose **imperial** as the **Regional setting**, then the system automatically switches to imperial, i.e. non-metric units. This applies to the units of your drawings, dimensions and scales. In addition, further drawing frames are available.

Depending on the parameter configuration the saved settings in the CSV file will be applied, too. The CSV file contains information on e.g. which files (e.g. HiCAD part masks or template files for labels) should be copied into the sys directory. In case of an update different system files in the HiCAD sys directory will be replaced – without further inquiry – by file supplied in the HiCAD templates directory, which are specifically adjusted to the chosen modules and activated checkboxes (e.g. DSTV or Drawing Management).

Via **Extended Settings** you can change the parameter configuration once more and select your own template files.

Select a module for the parameter configuration and click **Next**.



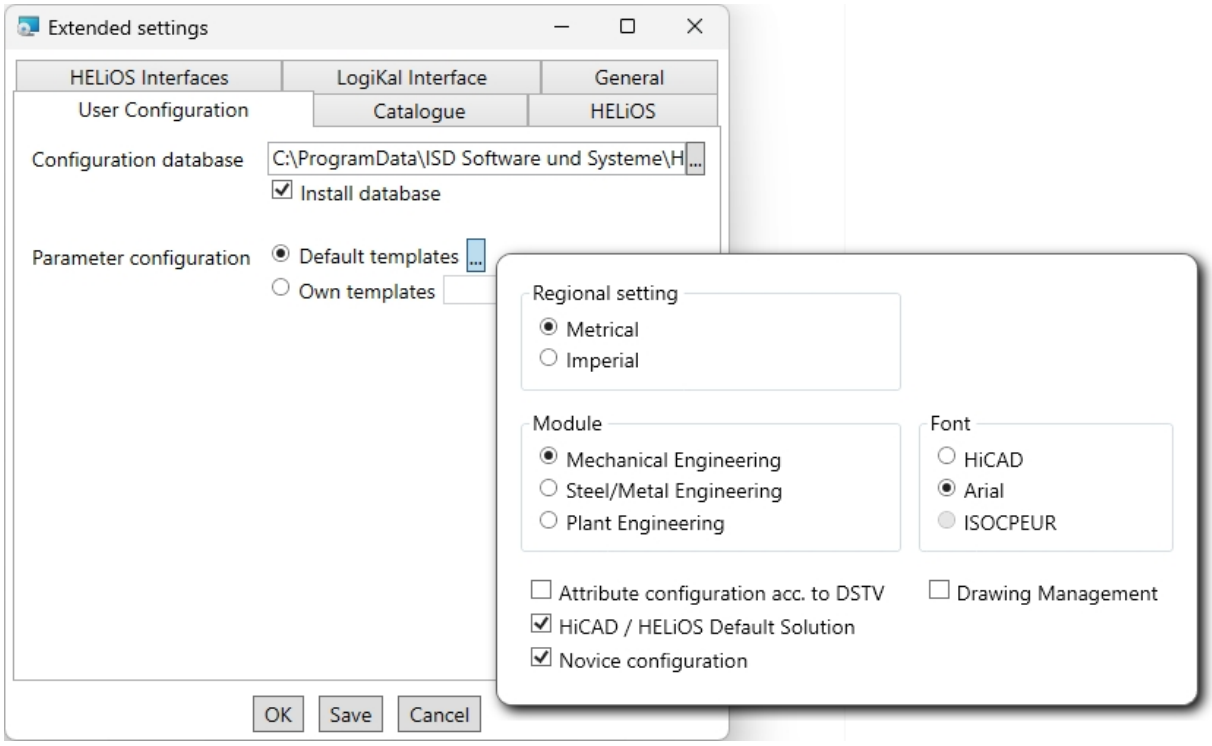
You can now start with the installation or modify the **Extended Settings**, e.g. for the user configuration, the catalogues, or HiCAD with HELiOS.

Please note the following important information:

If a network path is specified on the tabs **User Configuration**, **Catalogue** or **LogiKal interface**, please make sure that not the connected network paths (e.g. H:\Data\HiCAD_Katalog) are specified here, but the **direct UNC paths** to the respective server, e.g. \\Server01\Data\HiCAD_Katalog.

This is because the user, e.g. the system administrator performing the installation, in contrast to the user using HiCAD, may not have connected the required network drives (in the above example: H:\). In such a constellation, these paths cannot be set up correctly by the installation.

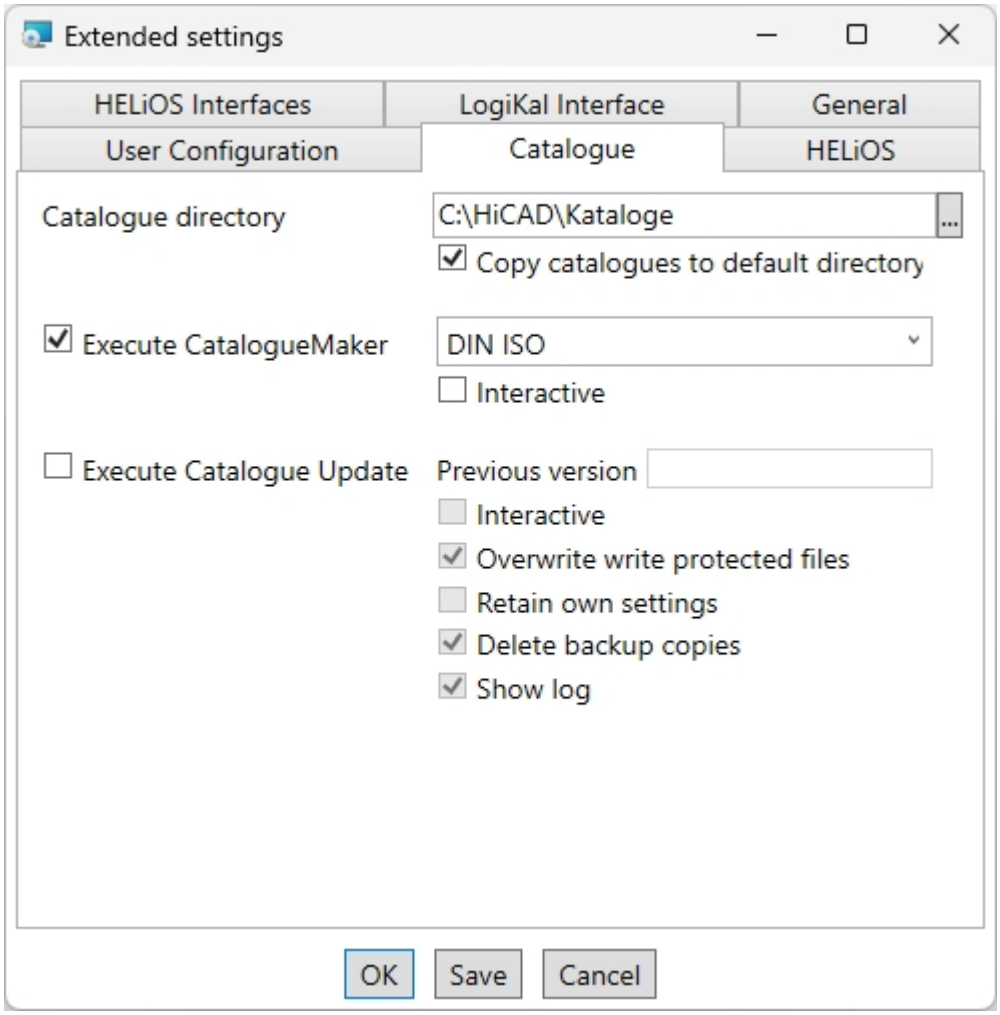
In contrast, UNC paths are available in the same form to both users - provided that both users have access.



In the **Configuration Database**, customer-specific settings for various features such as dimensioning, annotations, workshop drawing creation or fitting of vertical ladders are stored. When performing an update, **customer-specific settings** can be applied. In addition, values that have not been modified by the user will automatically obtain the updated pre-settings.

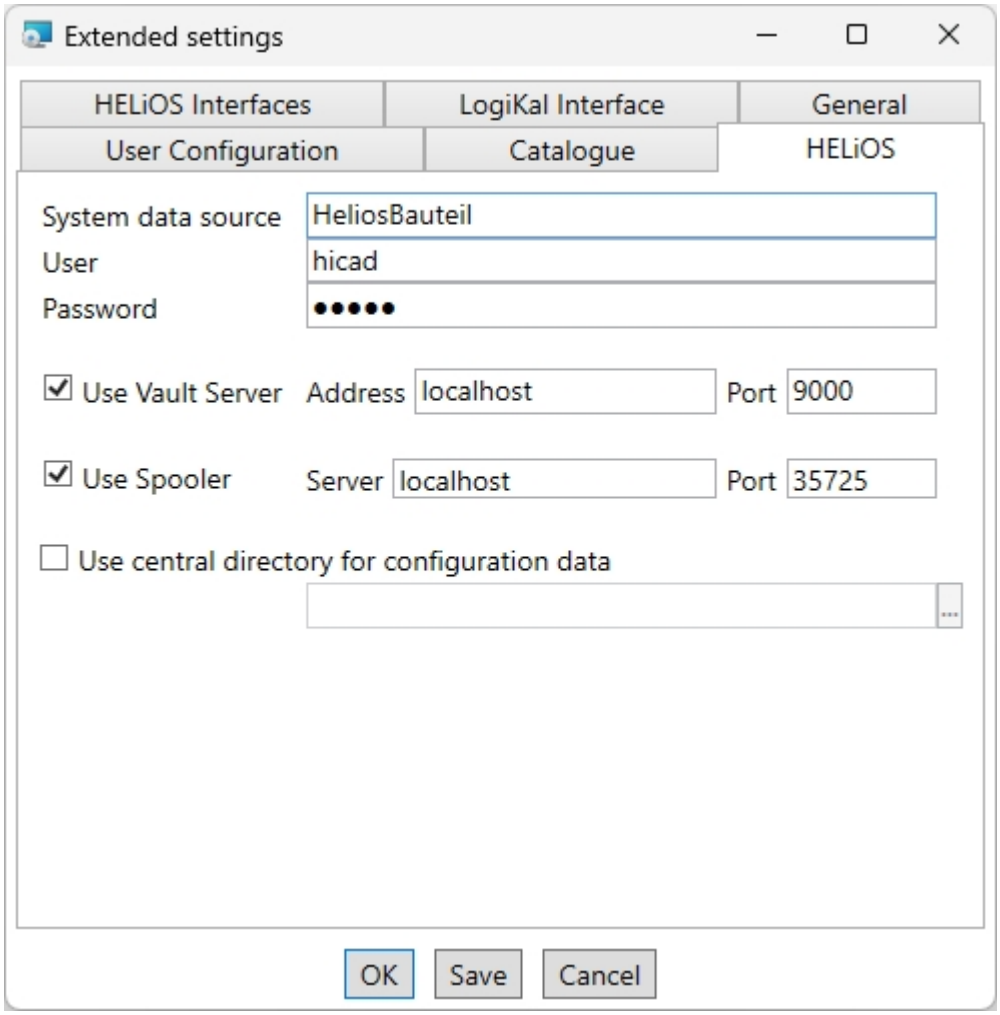
In the Parameter configuration you can modify previously activated default templates. Moreover, you can select CSV files via **Own templates**. The settings stored in the CSV file, too, will be applied. In a CSV file it is, amongst other things, specified which files (e.g. HiCAD part masks or template masks for annotations) are to be copied to the sys directory. When performing an Update, various system files in the HiCAD sys directory will be replaced with the files supplied in the HiCAD templates directory which have been designed especially for a working with the selected module and the activated checkboxes (e.g. …DSTV or Drawing Management). The standard CSV files are located in the templates directory of the HiCAD installation. CSV files are configuration templates that you can create and edit with Microsoft Excel (please see Online Help).

Parameter configuration: **No templates** is activated by default in Parameter Configuration. You can also change this setting subsequently, via the programs ..exe/ParKonfigComp.exe (for the workstation) and ..exe/ParKonfigUser.exe (for the User).



The execution of the **CatalogueMaker** serves the purpose of specifying which standard series are to appear in the standard part catalogues (currently standard series are available for DIN, ISO, EN, ANSI and JIS); the selection of standards in the **CatalogueMaker** only influences the display of standard parts, but not their availability; the availability is still controlled via license selection in the **ISD License Manager**.

The **CatalogueUpdate** tool is used to update the catalogues during an update installation. It can be started automatically during the update installation by activating the option **Execute CatalogueUpdate**. You can also start the tool later from the EXE directory of your HiCAD installation, e.g. if you want to exchange catalogues among customers.



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.

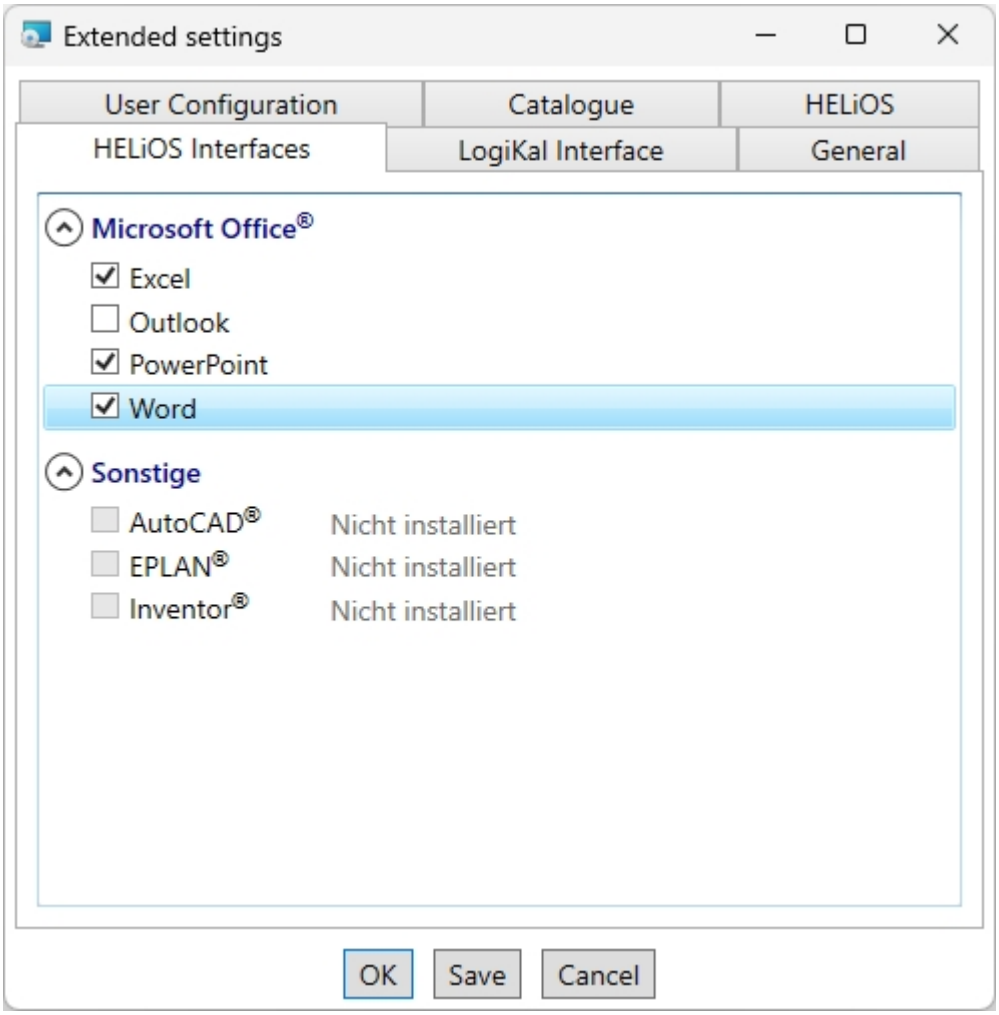
During an update installation it will be checked whether the existing HELiOS version is newer than the one on the DVD. If this is the case, the HiCAD installation will only update the non-HELiOS files. The HELiOS files are those that would be supplied by a standalone installation of the HELiOS Desktop, minus the hicadcommons contained therein.

If you want to process your print jobs via the ISD **Plot Management**, you need to install one **PrintClient** on each workstation. Activate **Use Spooler**. In the Server field, enter the network name of the computer on which the Spooler is installed. 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, taking your settings into account.

Individual settings of HELiOS can be distributed to other users or workstations. To do this, create a ZIP file in the HELiOS Client via the HELiOS icon > **HELiOS Options** > Manage... > **Export settings**. To load the settings on another workstation, select **HELiOS Options > Manage... > Import settings**. You can then select the ZIP file and confirm with **Open**.

If you want to make the settings available to multiple workstations, activate the **Use central directory for configuration data** option during installation and then select a directory after clicking on the ... icon. Via **HELiOS Options**

> Manage... > Save settings centrally, you can save the current settings of your HELiOS Desktop to the specified central directory and thus make them available to other workstations.

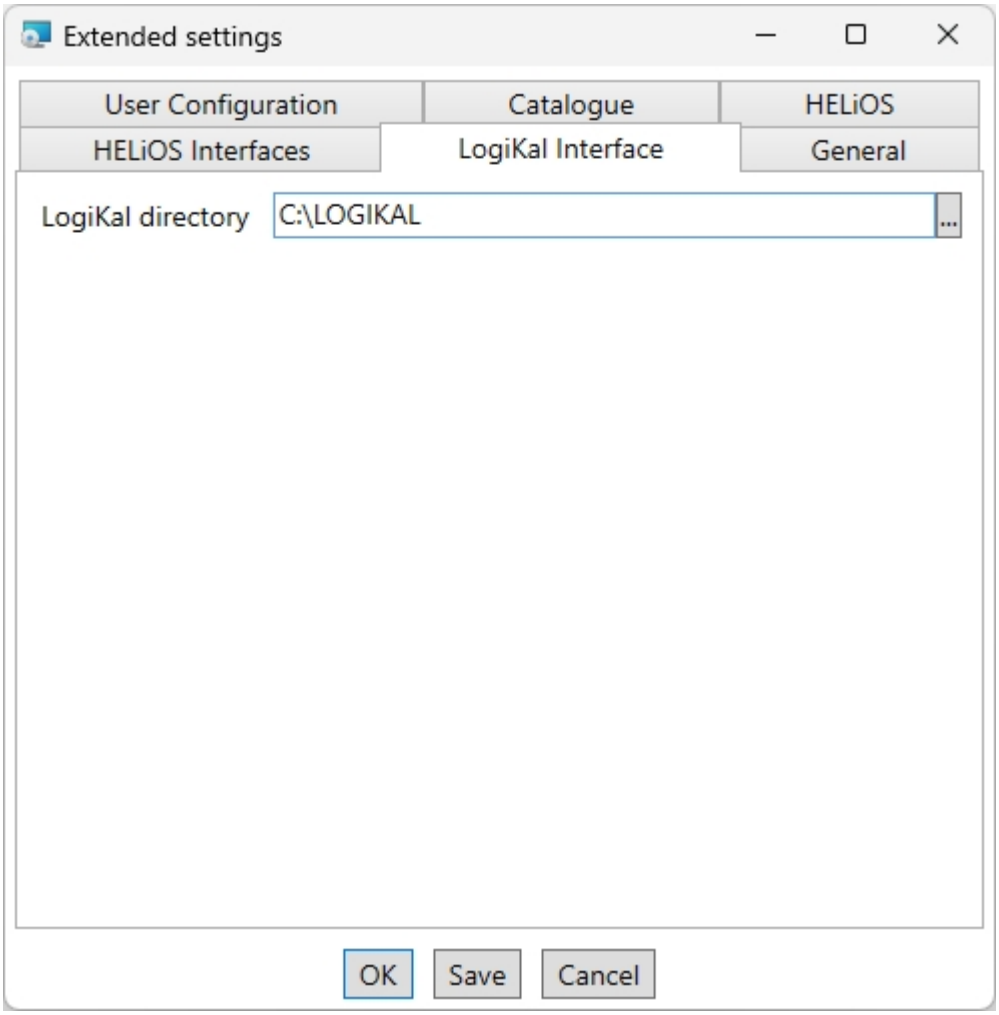


The availability of interfaces with HELiOS depends on the programs that are installed on your computer. You can only link 64-Bit versions to HELiOS 64-Bit versions. Please note however that an additional, special ODBC connection will be required for old BOMs. In such cases, please contact the ISD Consulting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

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

Please note:

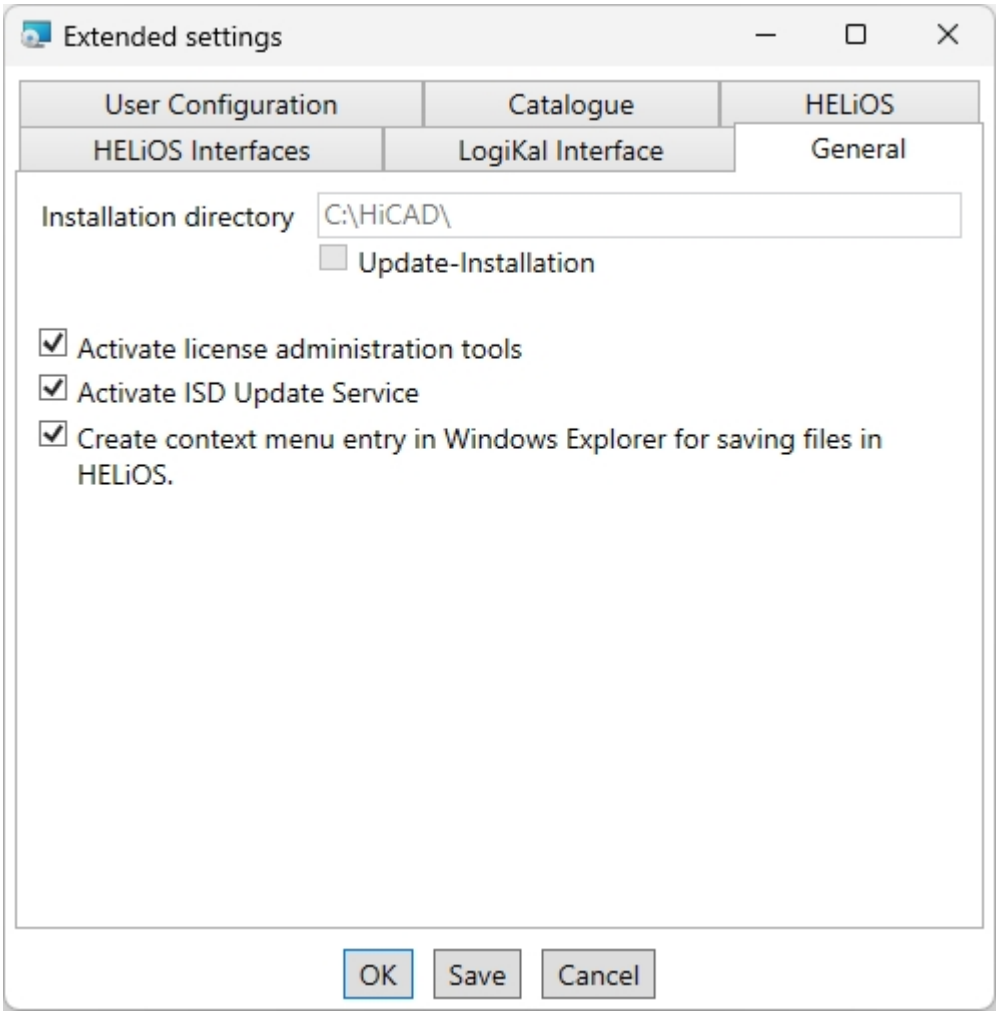
Integration of shared networks
If a directory is accessed by more than one computer, in the filegrup.dat under C: (for the Szenen directory) should not be listed a local path or the network connection letter, but the entire UNC path according to the pattern C:\\servername\ShareName\Directory.
The filegrup.dat can be found in the HiCAD/HELiOS installation in the HiCAD exe directory and in case of an EPlan interface as well under HELiOS Synchronisation Service\exe. In the HELiOS Standalone installation the filegrup.dat can be found in the HELiOS exe directory.



If you have installed **LogiKal** on your computer, you can enter the installation directory here.

Please note:

In HiCAD, at **Settings > Further directories** you can set the paths for the database of the **Configuration Editor**, the **Catalogue Editor** and **LogiKal**. These paths are located in the Windows Registry at **HKEY_LOCAL_MACHINE\SOFTWARE\ISD Software und Systeme\HiCAD\XXXX**. **XXXX** is the HiCAD version number.



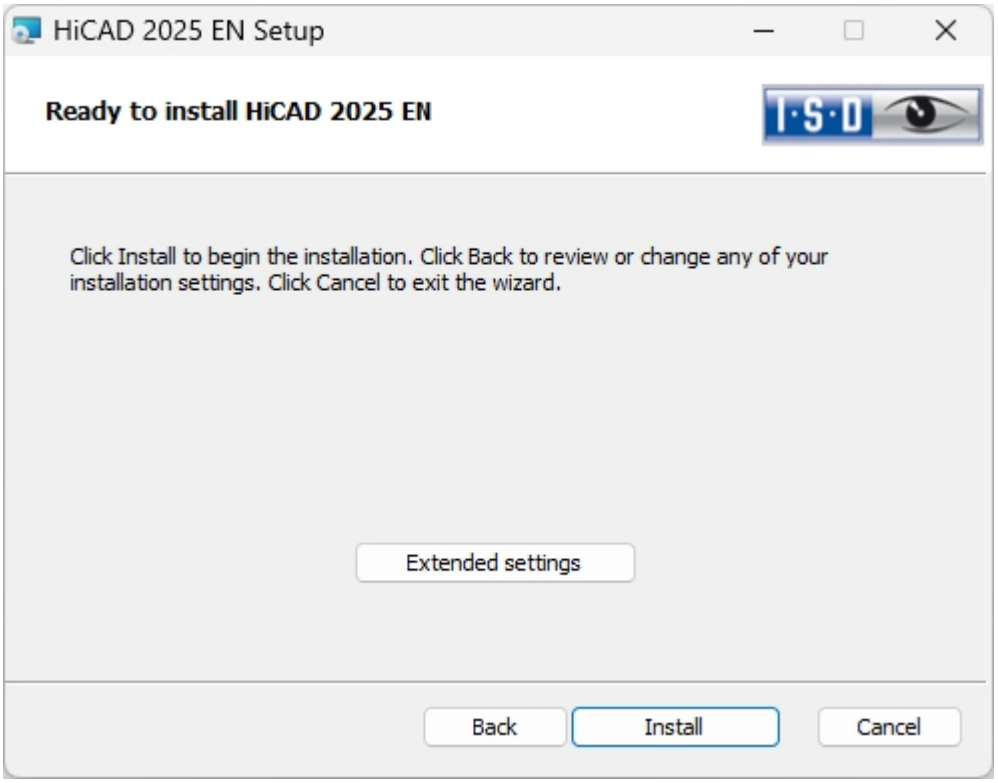
The **Activate license administration tools** checkbox must be activated for the management of server licenses.

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

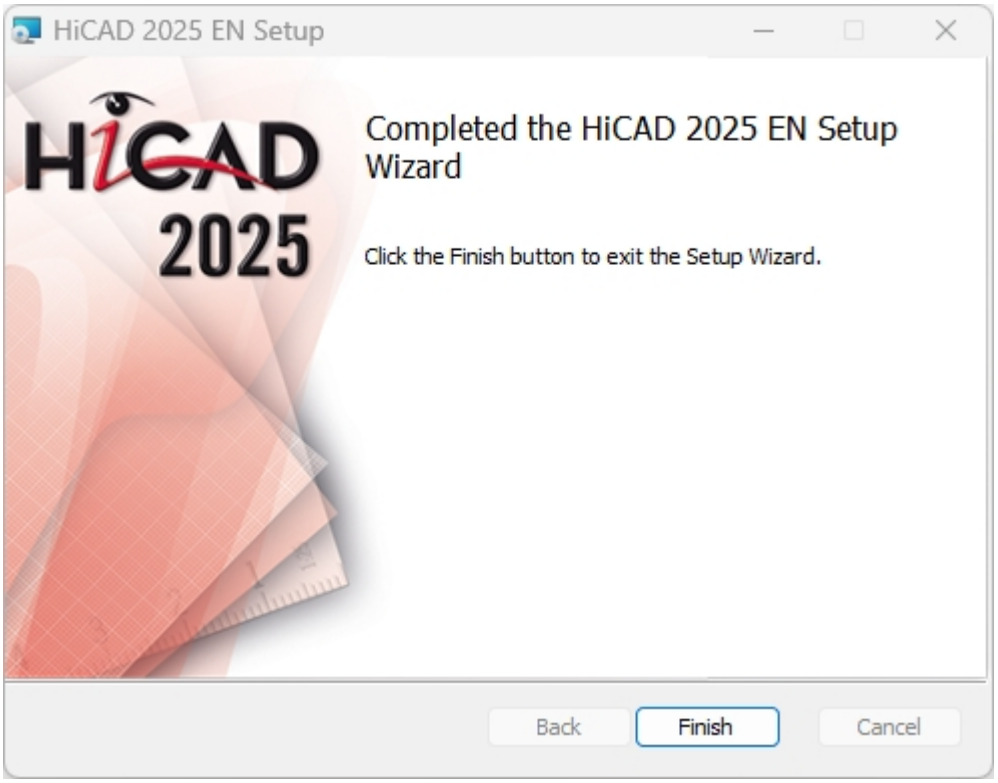
If you want the function **Save to HELiOS** to appear in the context menu of Windows Explorer, activate the checkbox **Create context menu entry in Windows Explorer for saving files in HELiOS**.

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.

As soon as you exit the **Extended settings** dialogue with **OK**, the installation will be started.



Click **Install**.



Click **Finish** to complete your HiCAD installation. After successful installation you will find the HiCAD shortcut on the Desktop of your computer for program start.

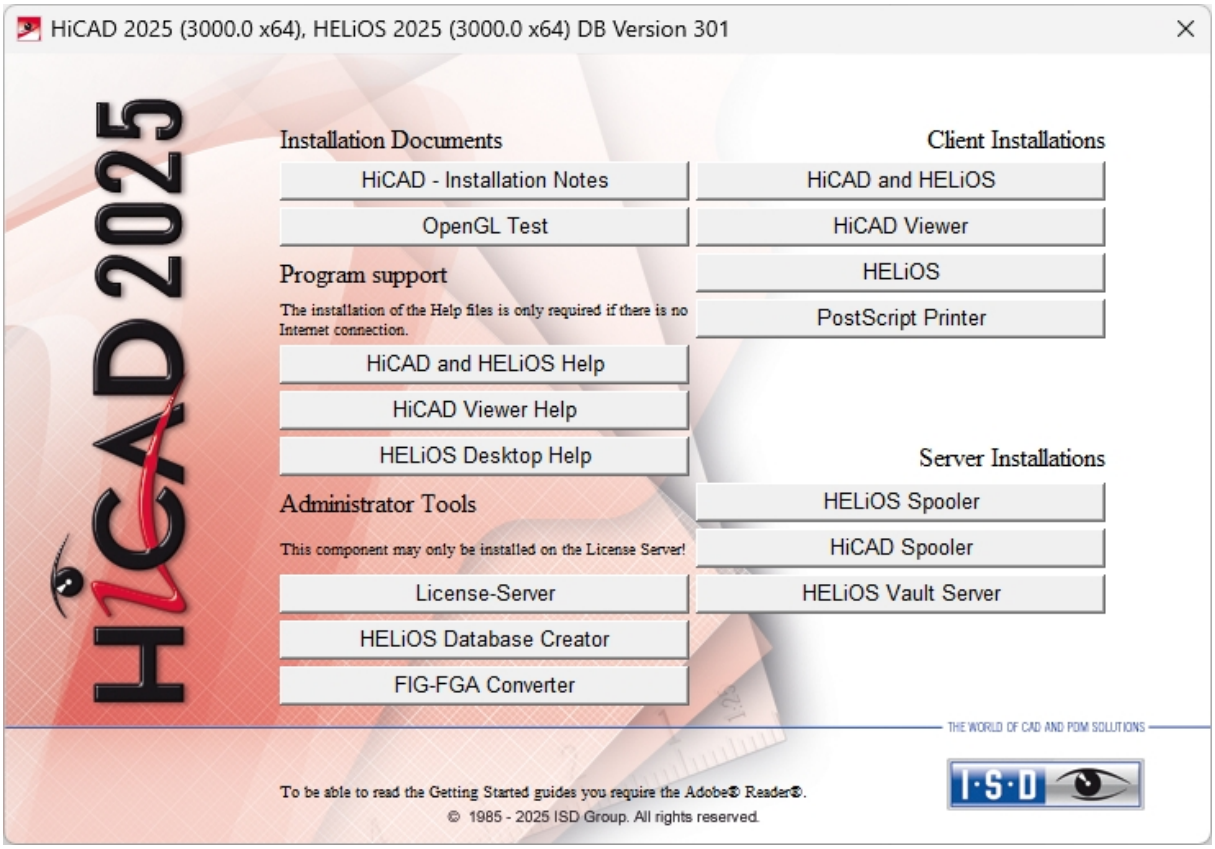
If desired, you can use the buttons of the installation mask to install further software components.

Installing the Online Help

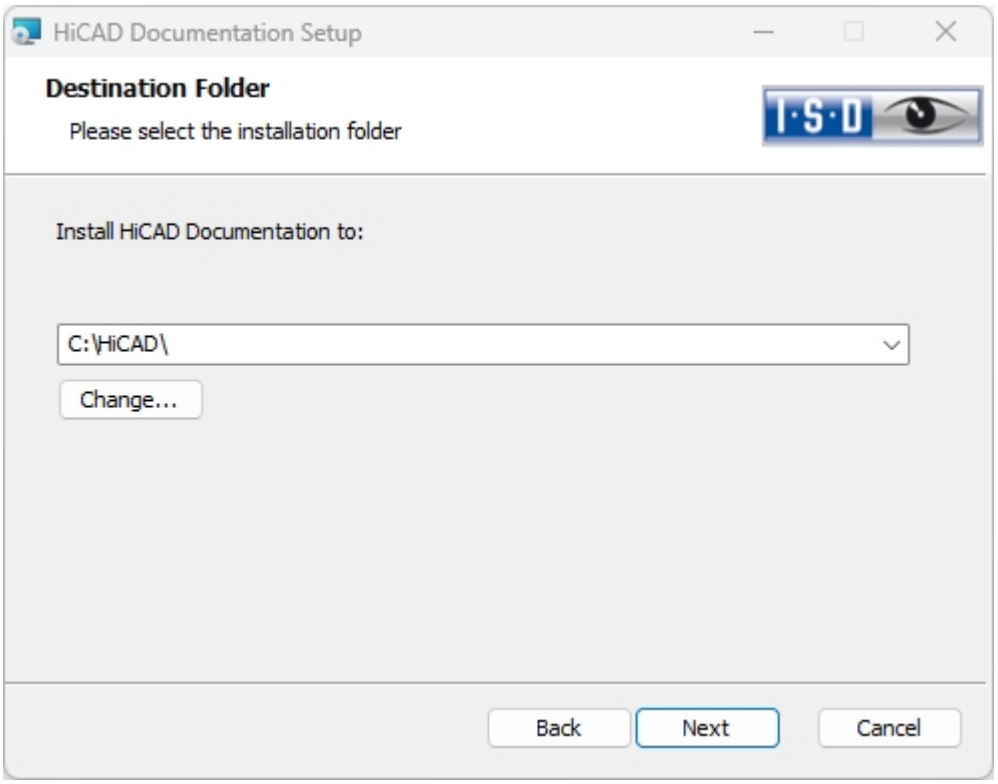
The Online Help is available locally (status of the date of installation DVD creation) and on the Internet (regularly updated) at www.help.isdgroup.com. Both versions of the Help can be directly launched from HiCAD/HELiOS. Please note that corresponding login data are required to access the Internet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

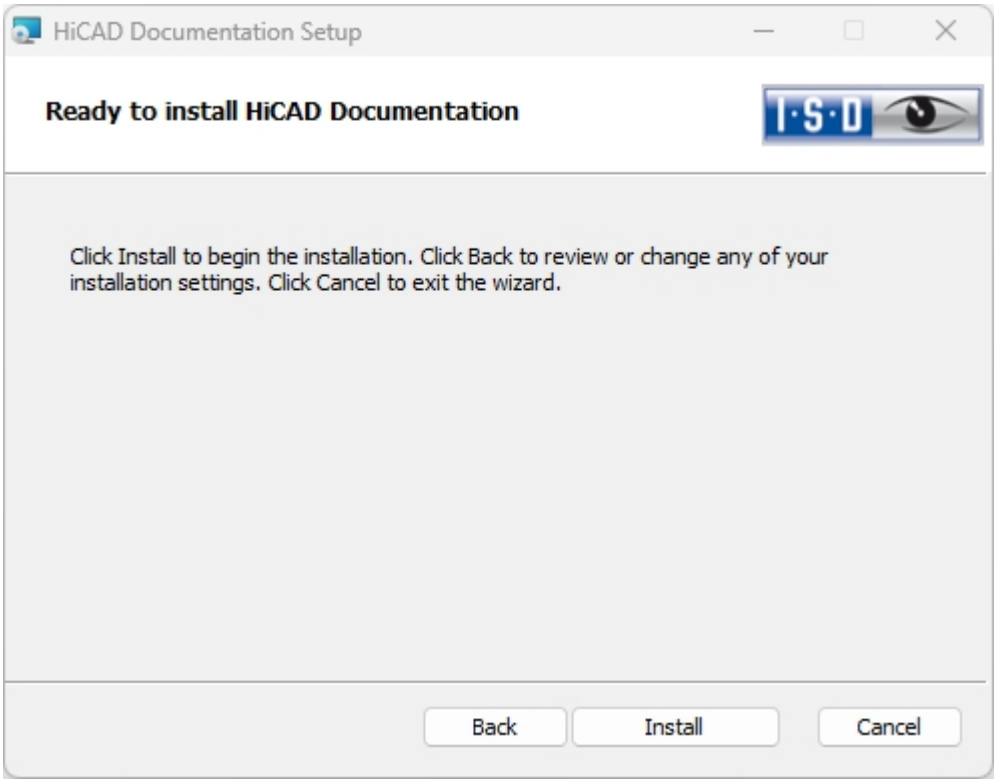
In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components. Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.



Click on the **HiCAD and HELiOS Help** button.



Enter the installation directory for HiCAD/HELiOS.



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

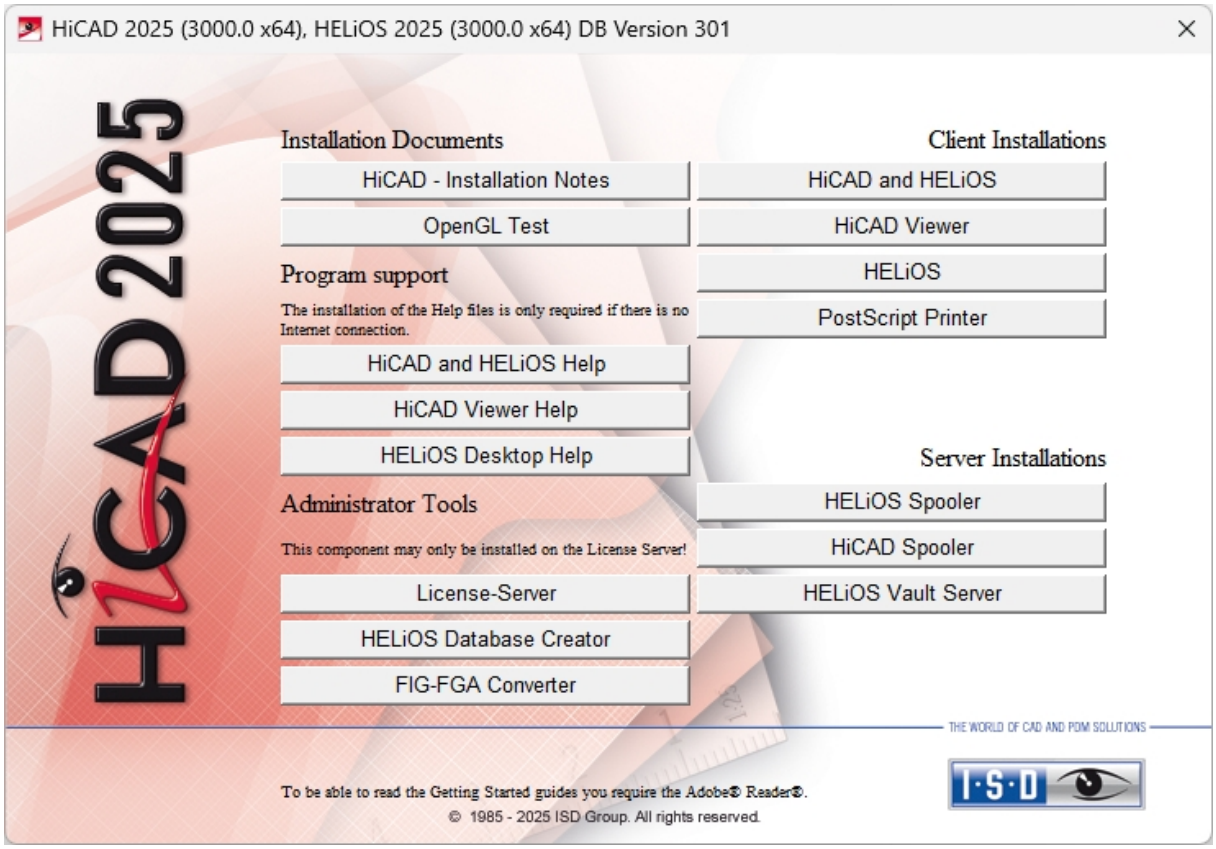
Installing the HiCAD Viewer

The HiCAD Viewer enables you to view drawings in HiCAD format (*.sza, *.szx) and output these drawings (in non-scale representation). This viewer is free of charge and may be provided free, without changing the scope of delivery.

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

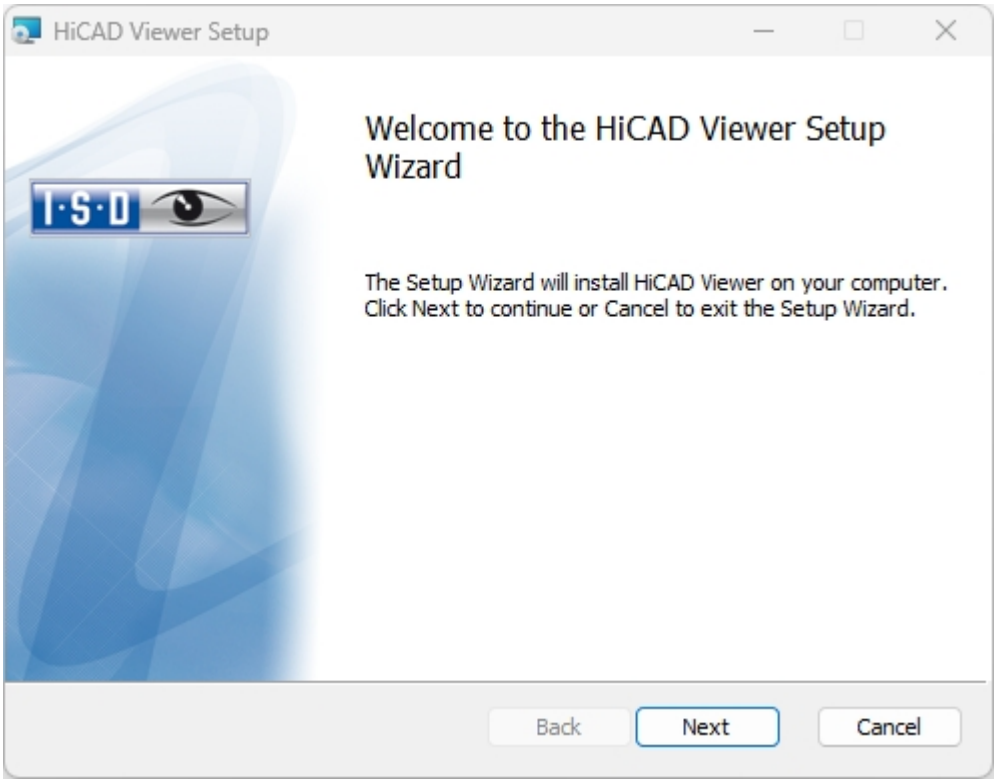
In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components.

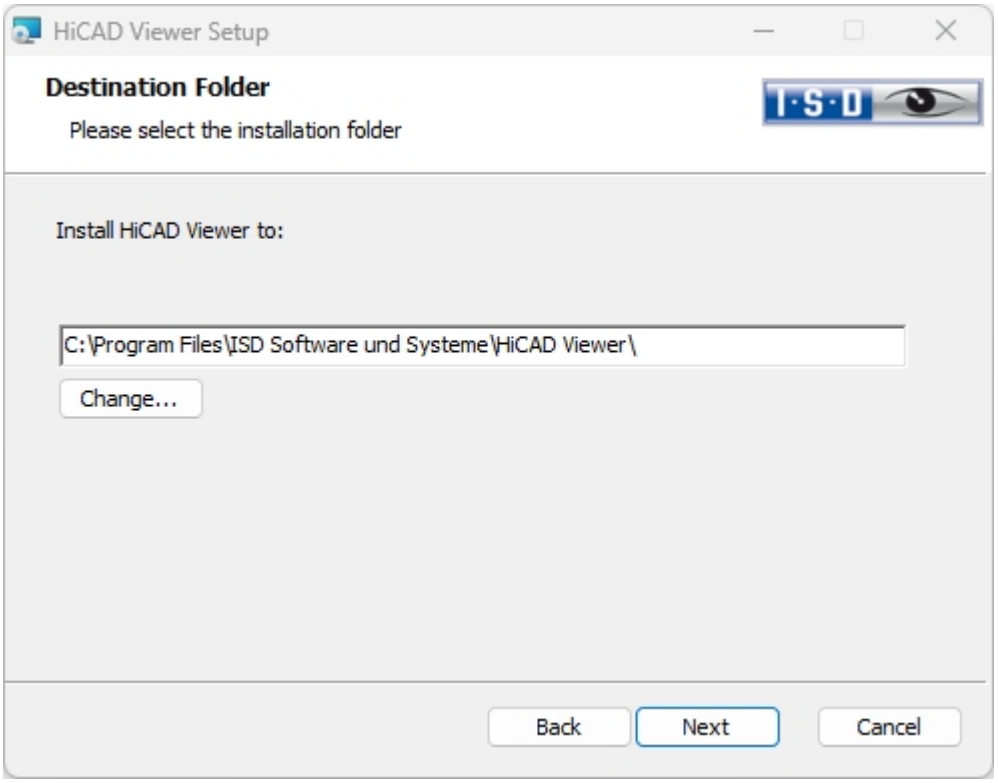
Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.



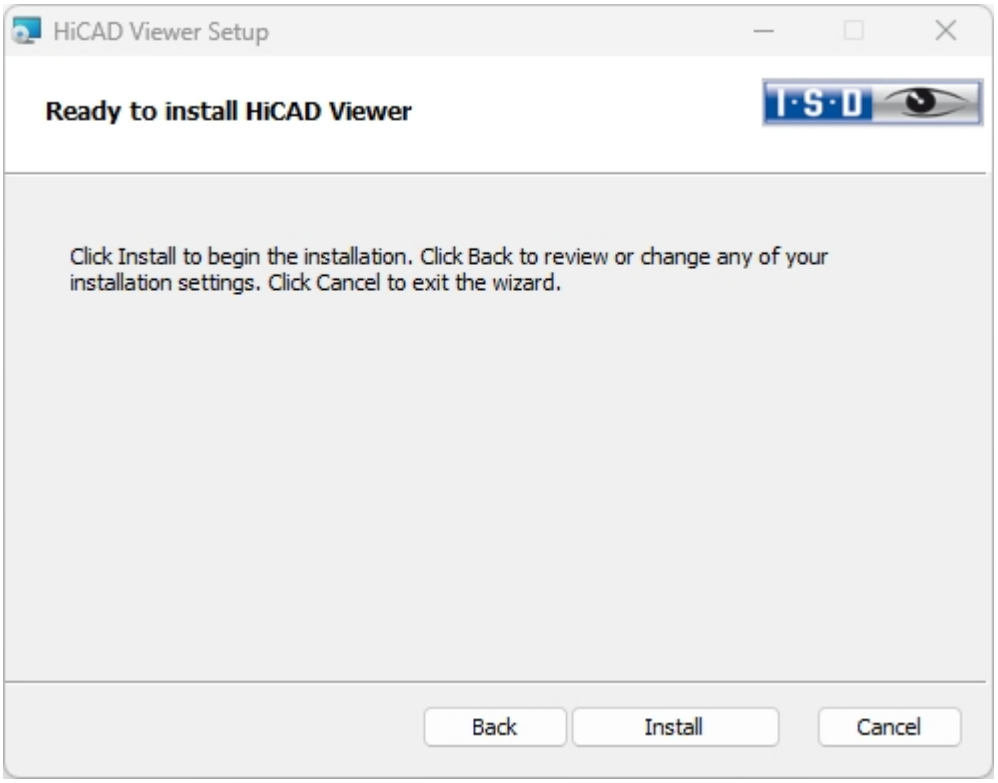
Click on the **HiCAD Viewer** button.

The minimum requirement for HiCAD is OpenGL 4.3. If the minimum requirements for the HiCAD Spooler are not met, individual graphics components are replaced by customised components (Mesa implementation version 24.2.0) during installation, so that the Spooler can also run on systems that do not support OpenGL 4.3. This may result in some restrictions.

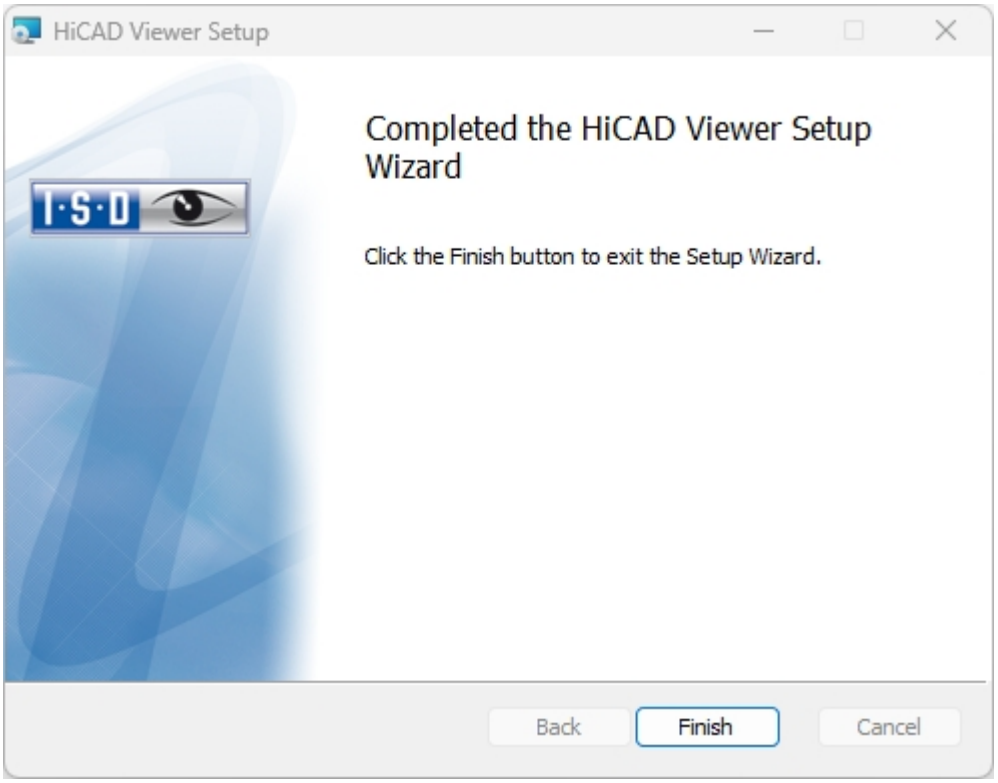




Enter the installation directory for the software.



Click **Install**.



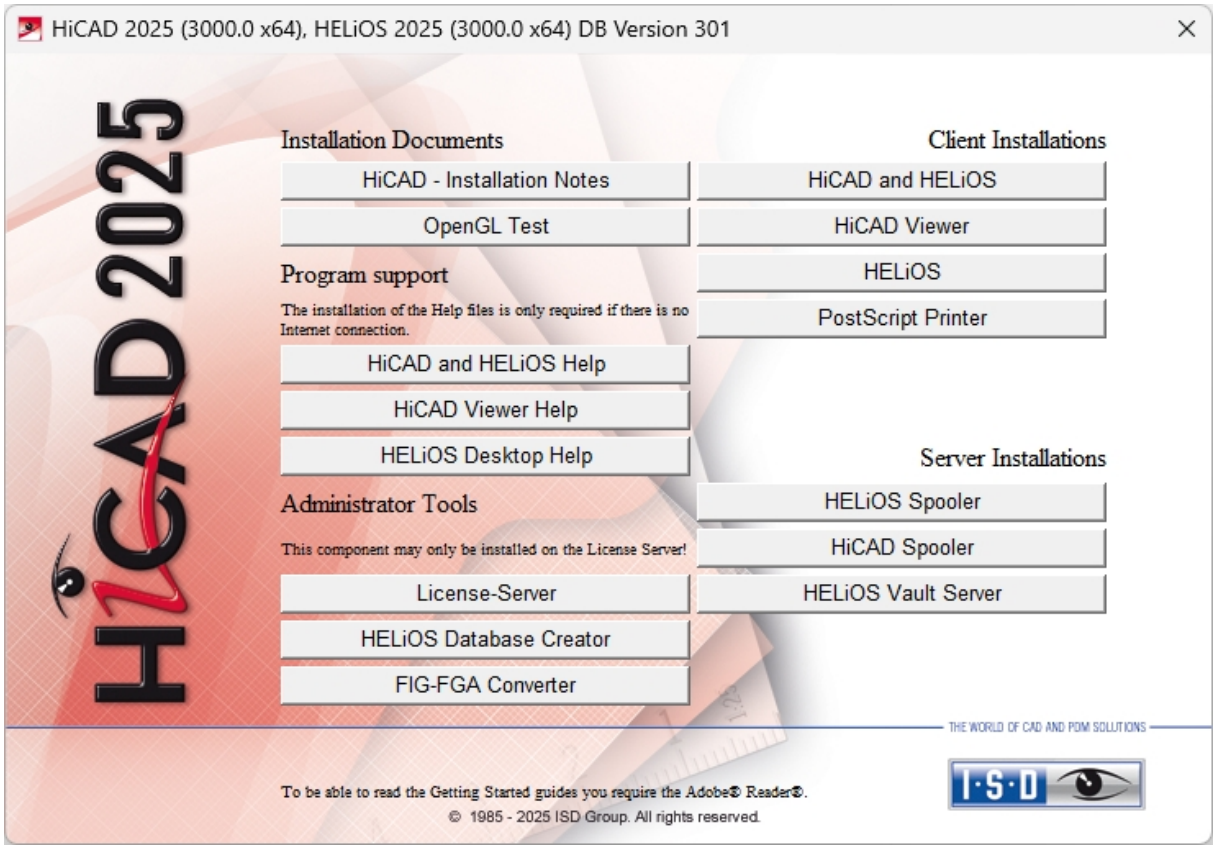
Click **Finish** to complete the installation of the HiCAD Viewer. You can now install further components from the selection mask.

Installation des HiCAD Spoolers

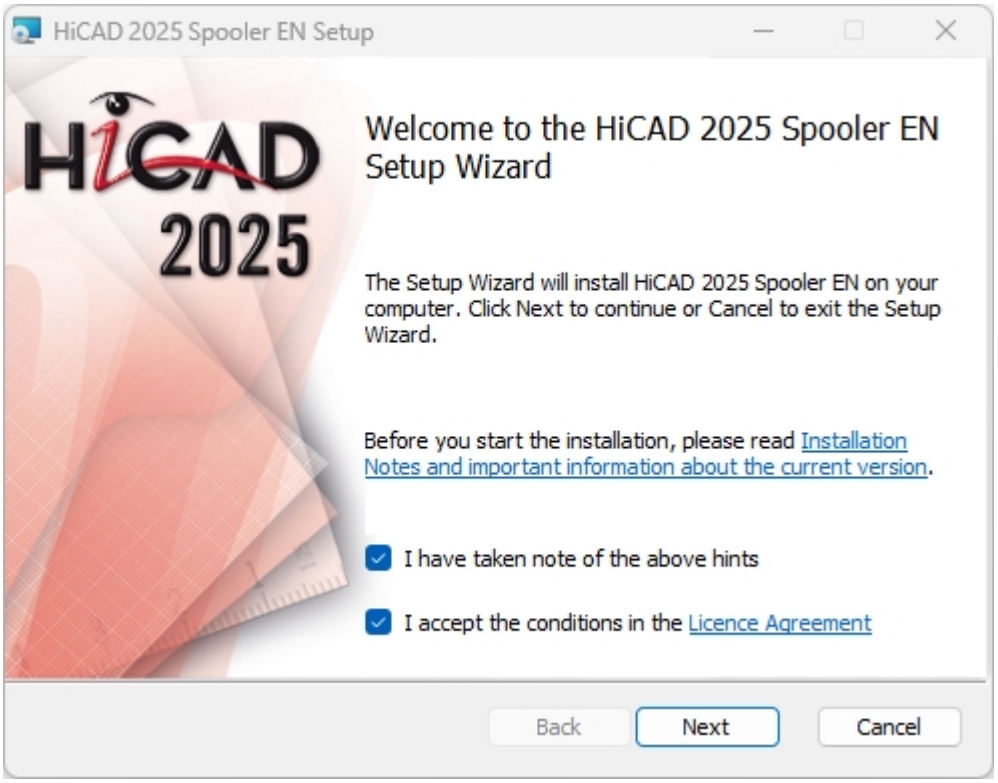
Start Windows to install the HiCAD Spooler. If Windows has already been opened, close all other applications and start the installation wizard.

In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components.

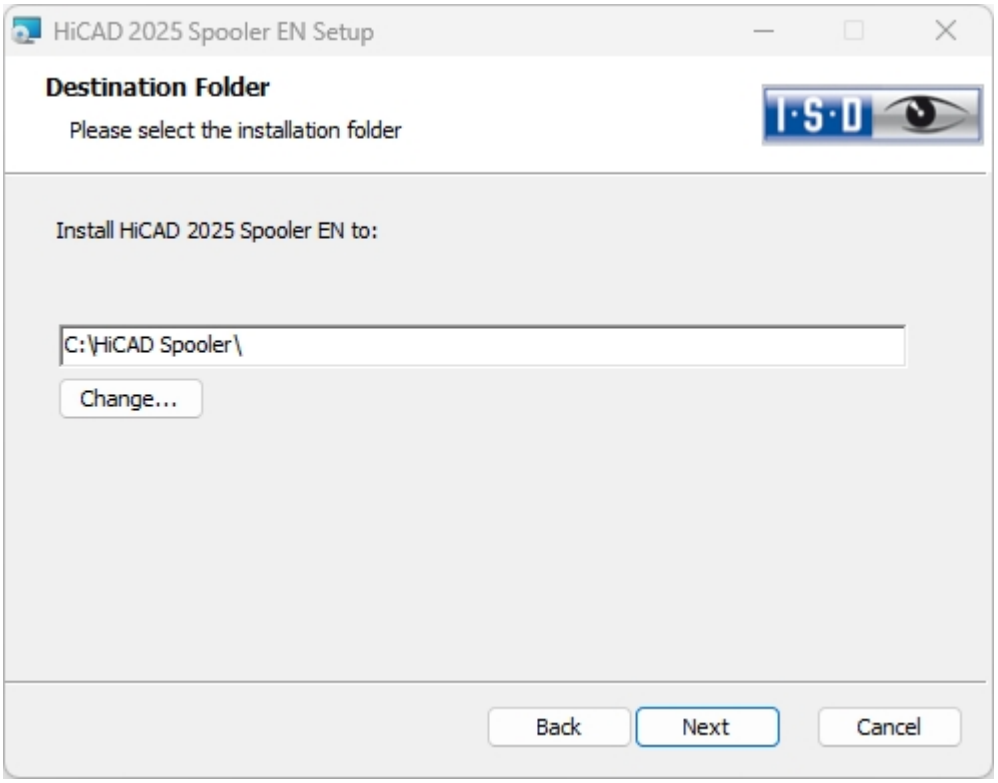
Leave the selection mask of the installation wizard open, so that you can select the desired components one after the other.



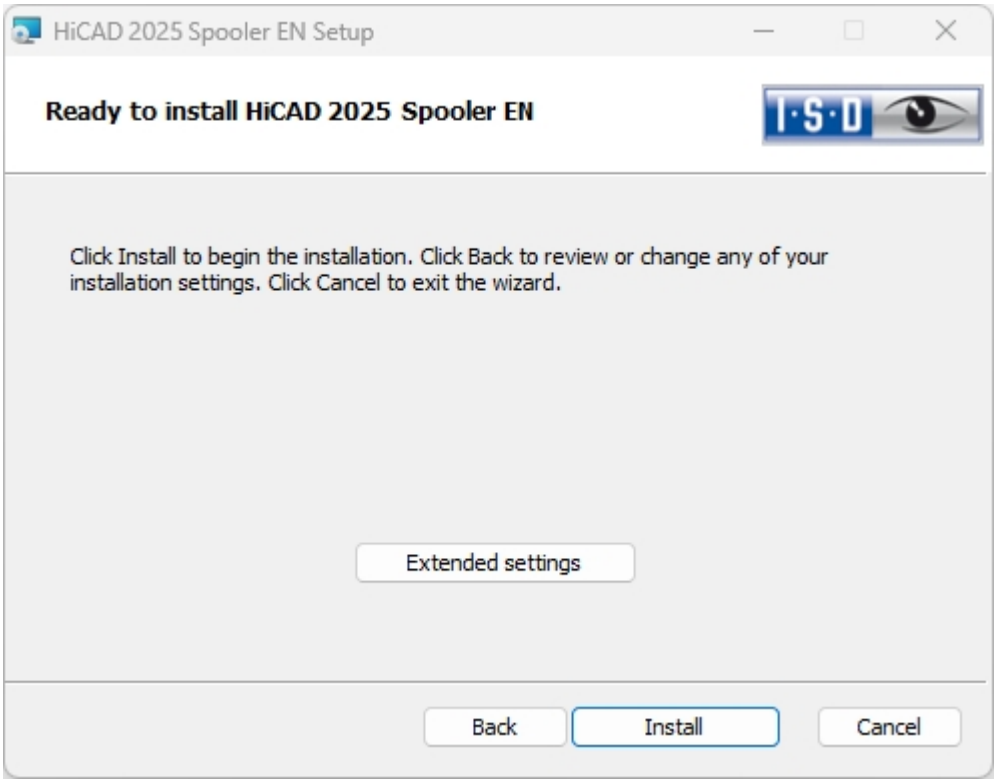
Click on the **HiCAD Spooler** button.



Please read this information carefully.



Enter the installation directory for the software.



You can now either begin with the installation or open the **Extended Settings**, for example to modify the user configuration or catalogues. You can modify the **Extended Settings** as you would do for a HiCAD installation.

Click **Install**.

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

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.

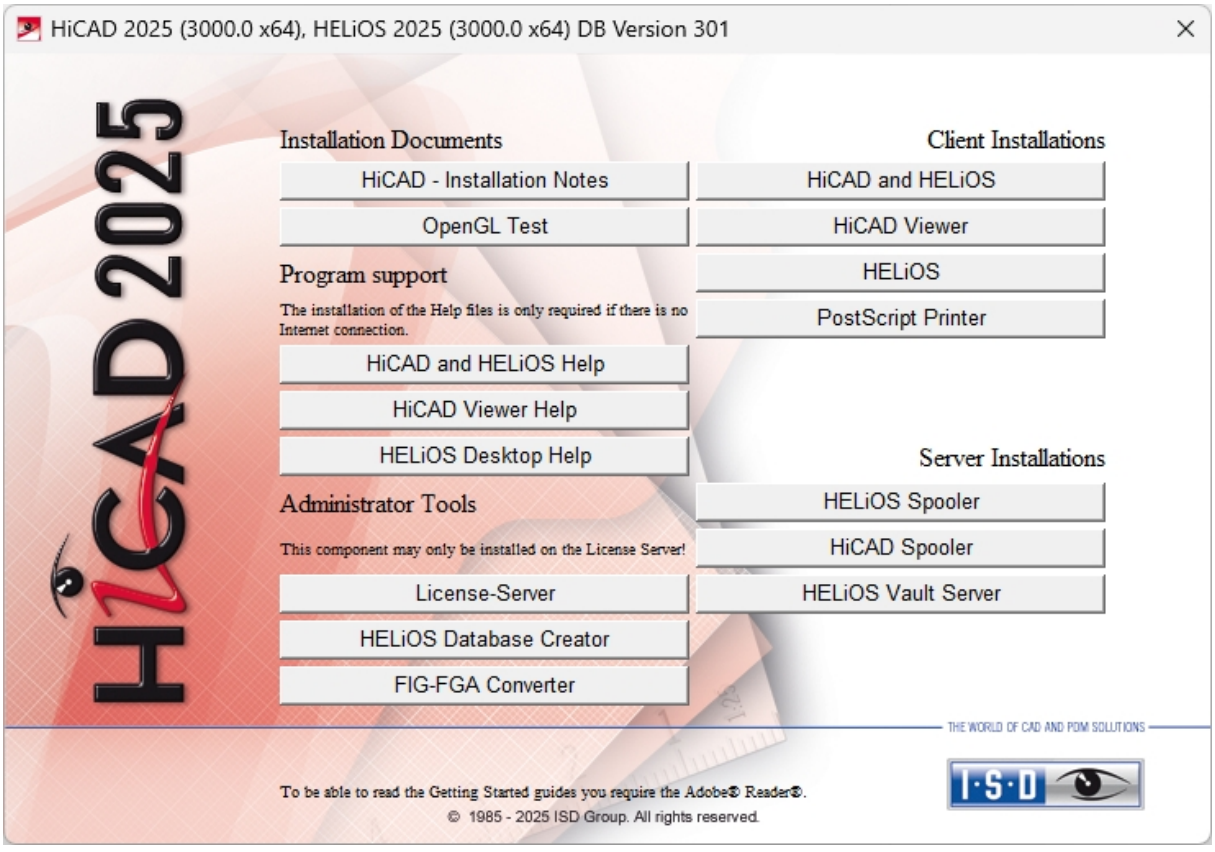
Please note:

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.

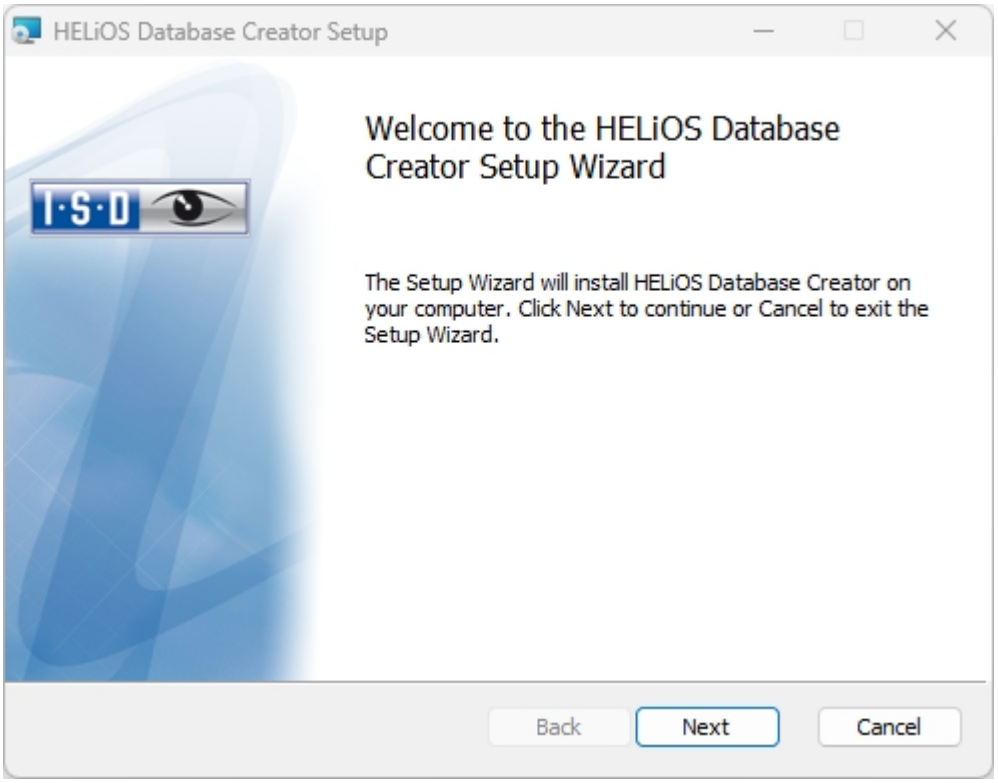
Start Windows to install the HELiOS Database Creator. If Windows has already been started, close all other applications and start the installation wizard.

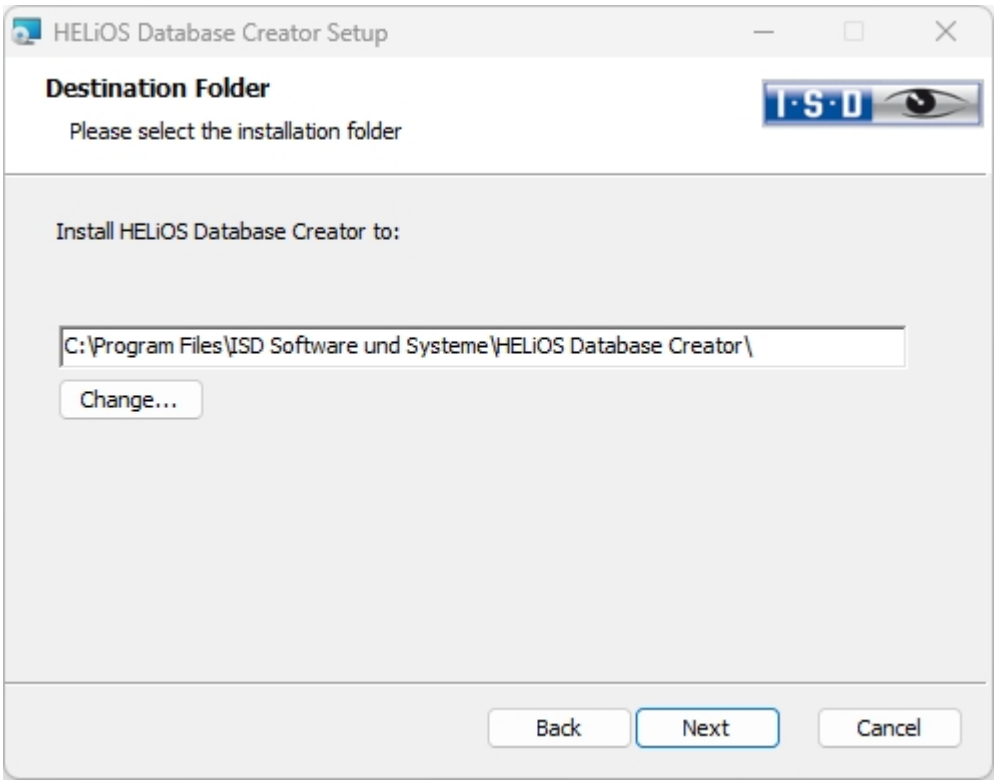
Click on the **Standard Edition** button. This will open the following selection mask.

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

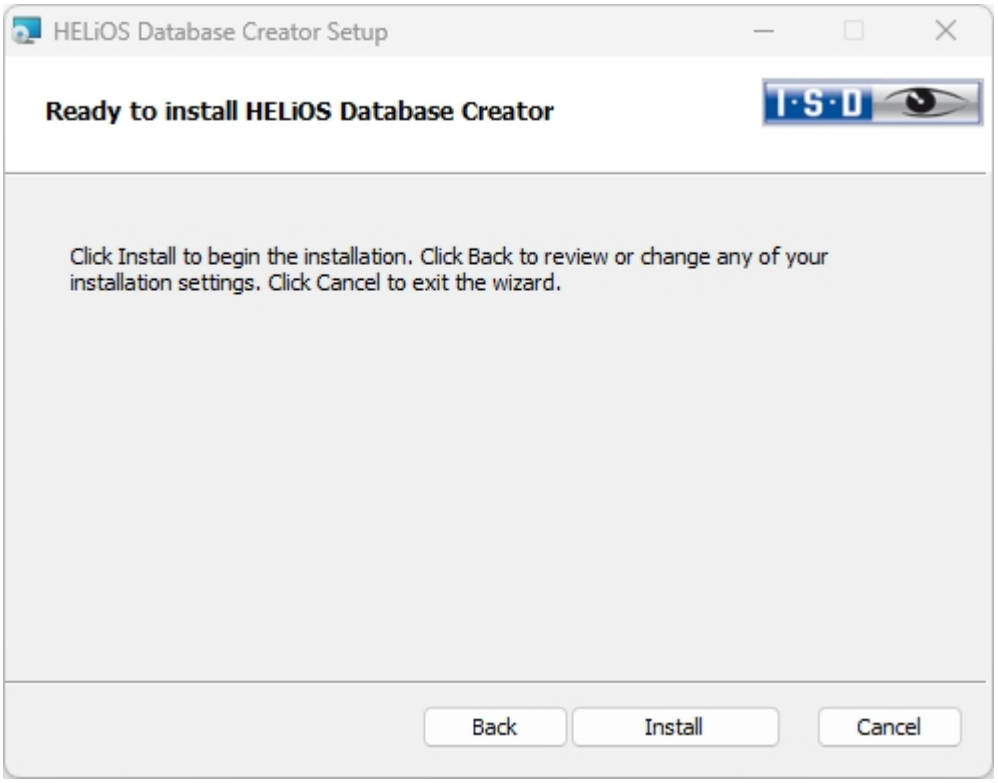


Click on the **HELiOS Database Creator** button.

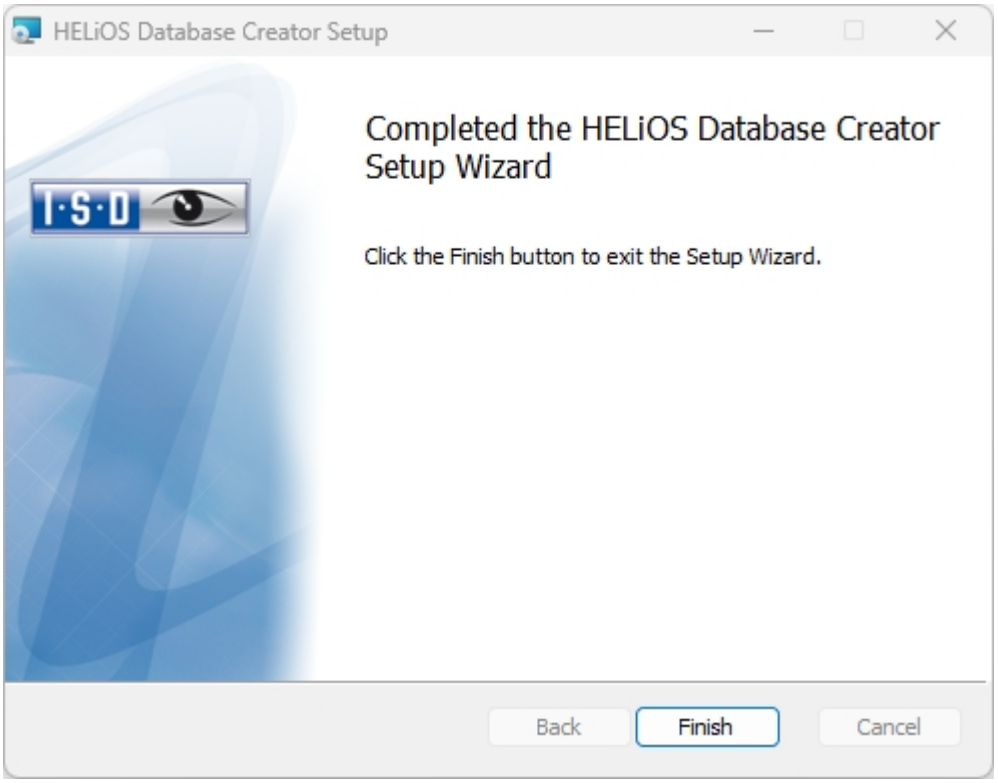




Select an installation directory for the **HELiOS Database Creator** and click **Next**.



Click **Install** to start the installation.



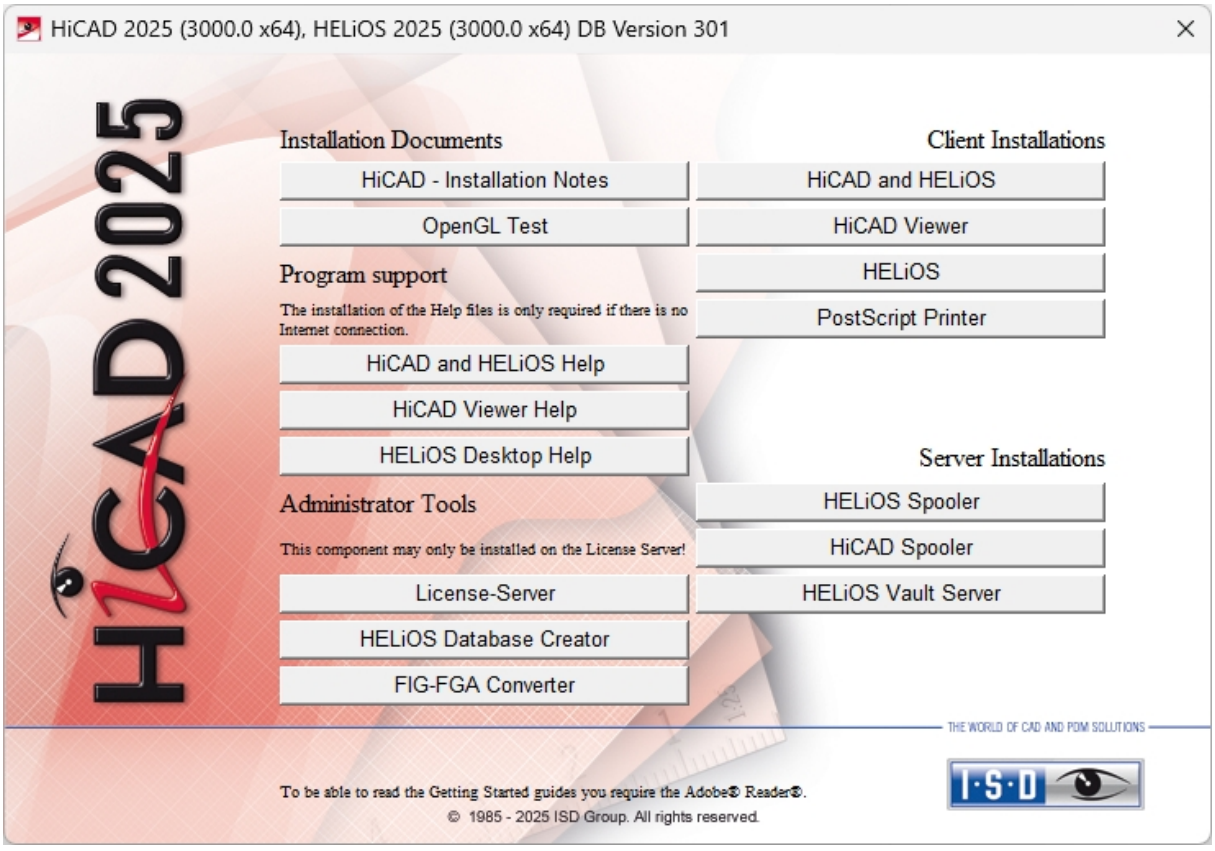
Click **Finish** to complete the installation of the **HELiOS Database Creator**. If desired, you can now install further components via the selection mask.

Installing the HELiOS Vault Server

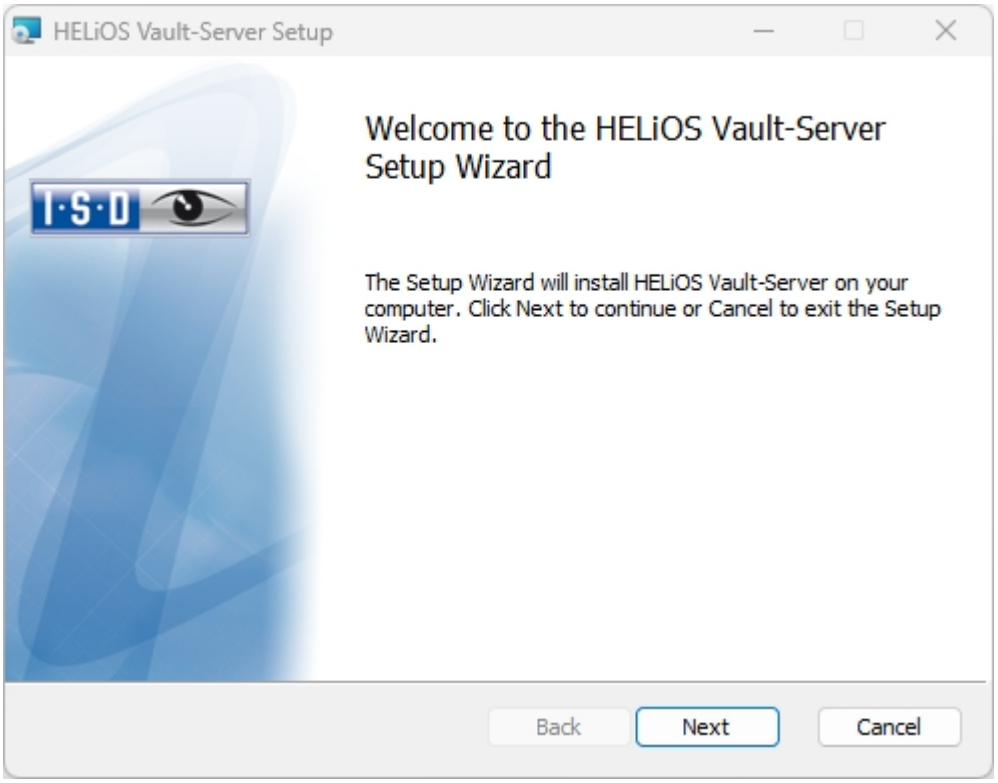
Please start Windows to install the HELiOS Vault Server. If Windows is already open, end all other applications and start the Installation Wizard.

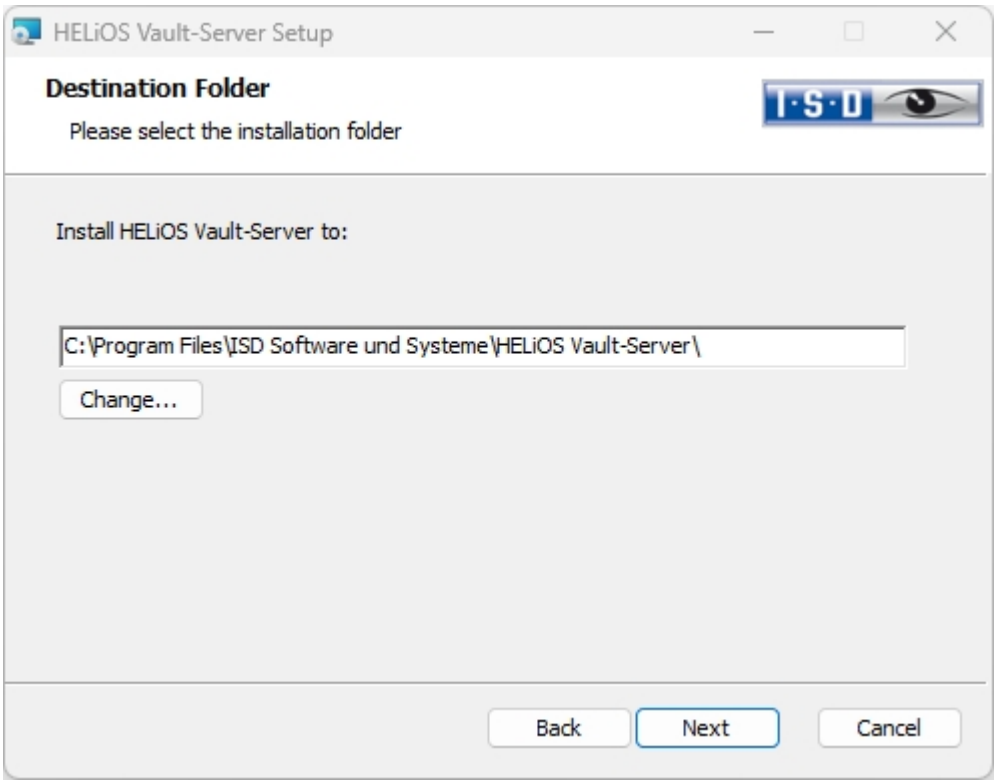
Click on **Standard Edition**. The screen with the software components then appears.

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

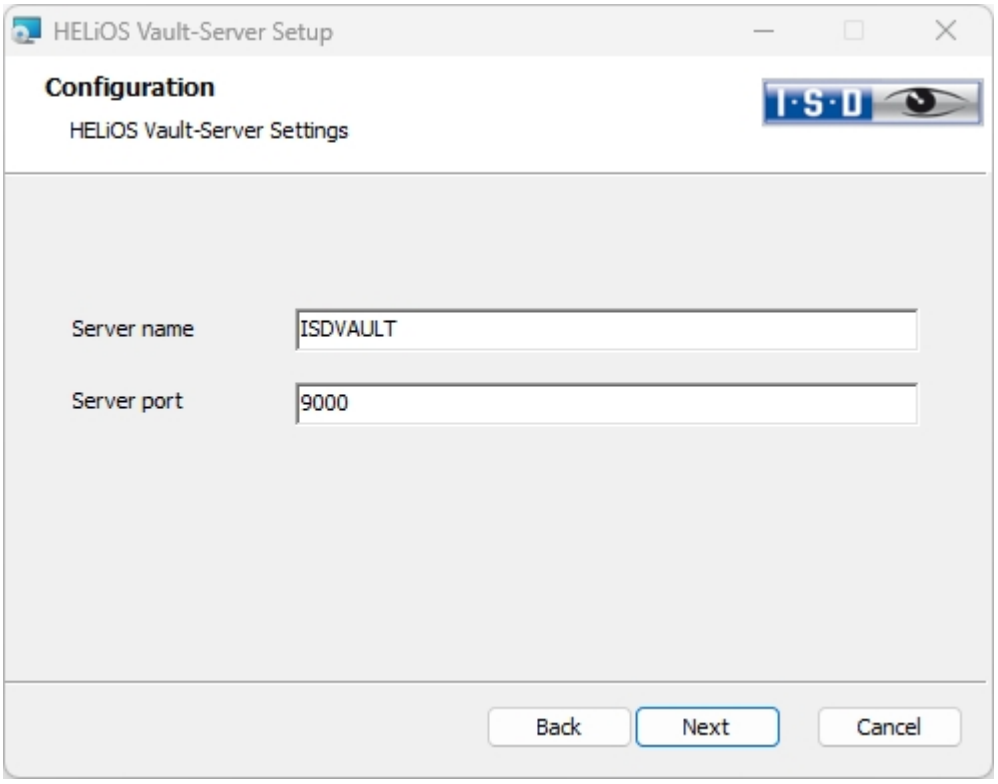


Click on the **Vault Server** button.

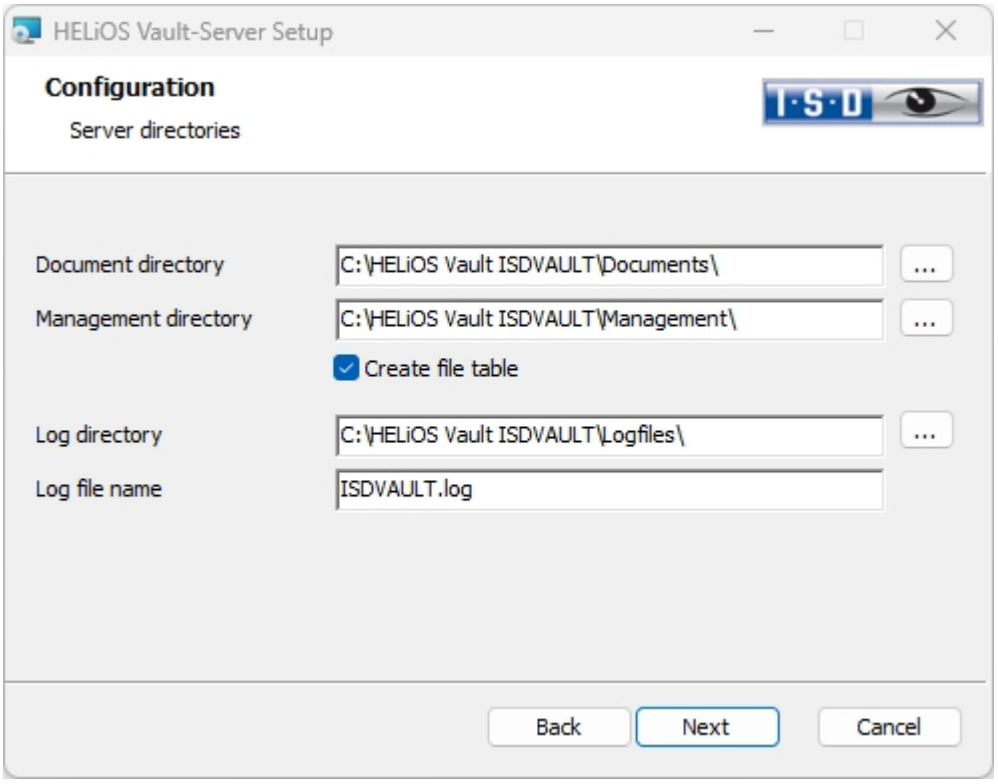




Enter the installation directory for the Vault Server. If the installation wizard finds an already installed version, it will be offered to you for updating.



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 Client.

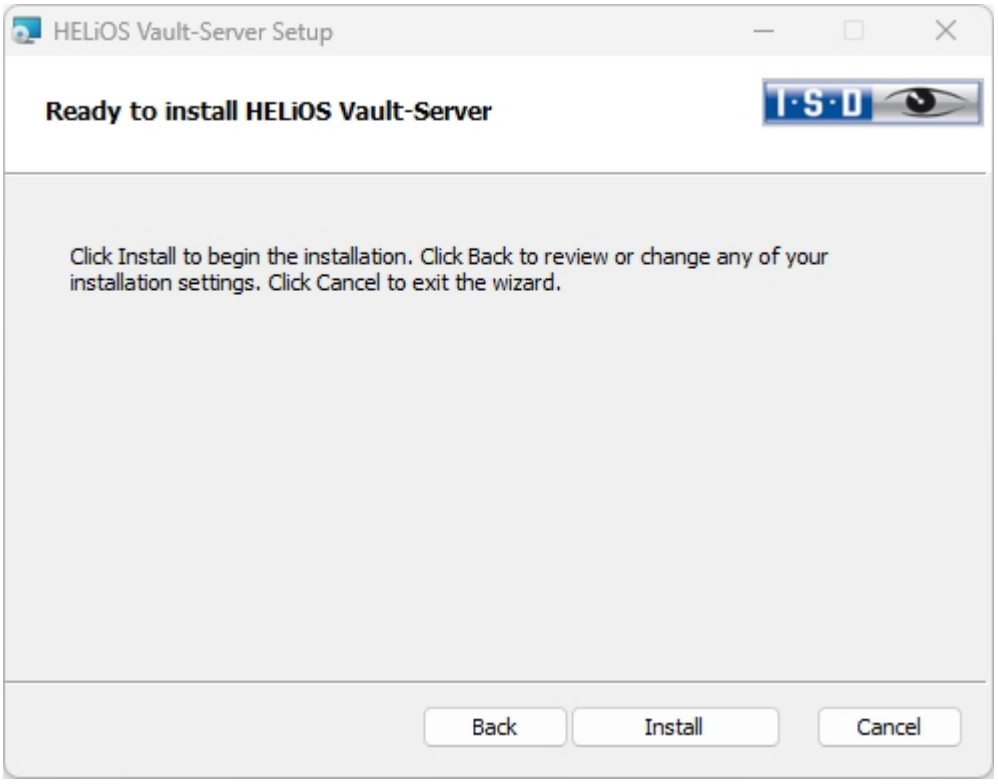


The Vault Server renames all documents that are managed in the database (e.g. SZA, DOC, XLS, …) to *.VDF. These VDF files are saved to the Document directory.

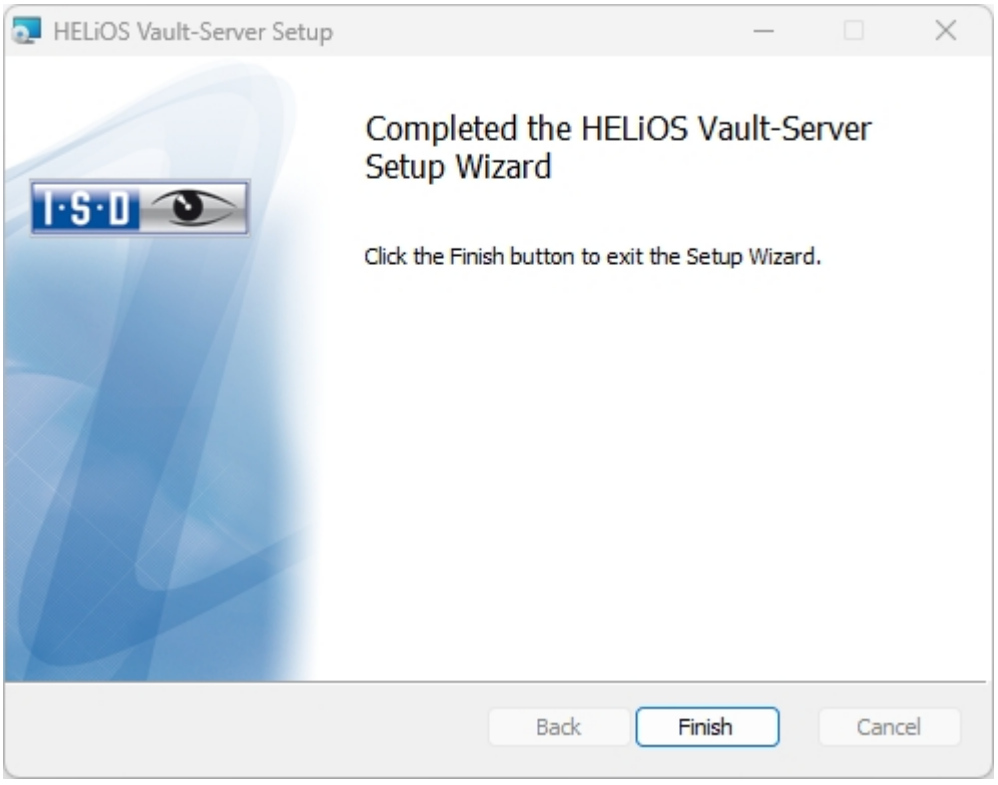
The files stored in the **Management directory** contain the assignments of the VDF file names to the “original file names”.

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**.

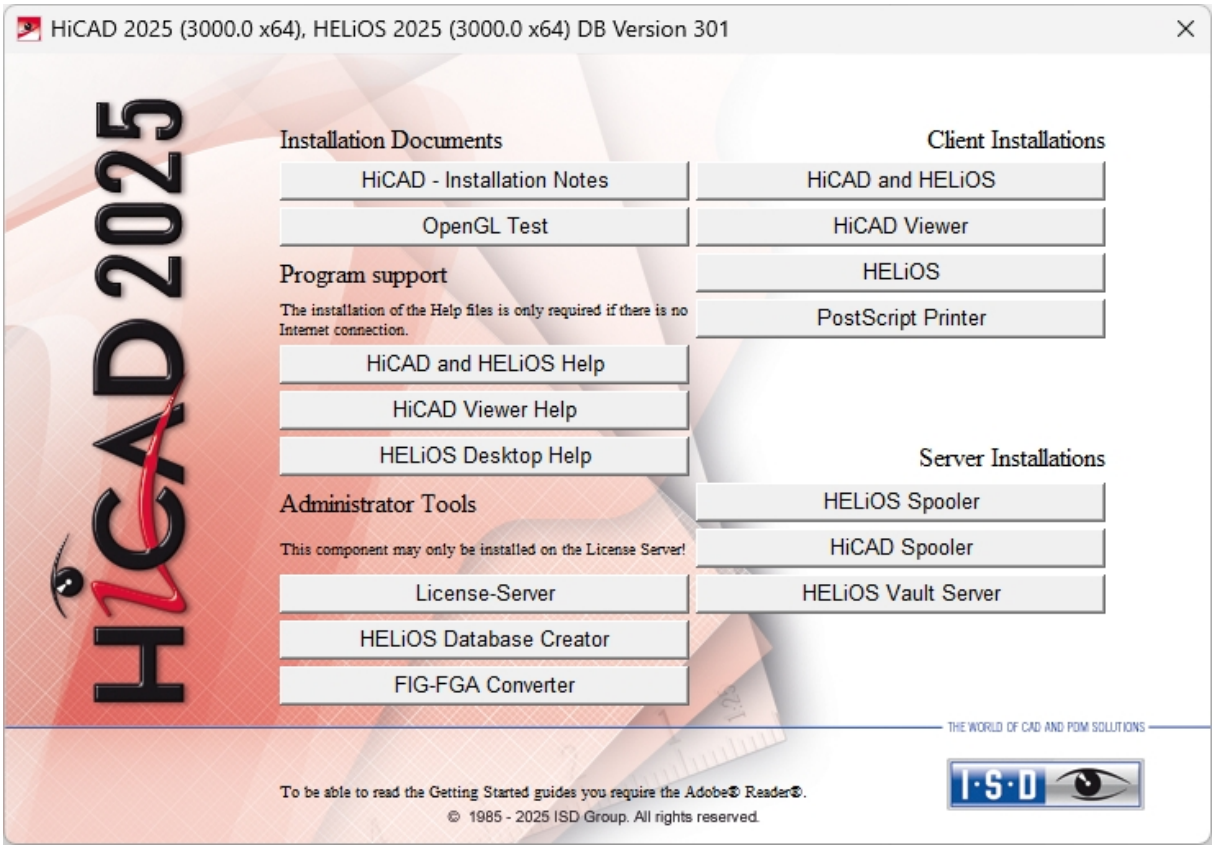


Click **Finish** to complete the installation of the Vault Server. You can now install further components from the selection mask.

Installing the HELiOS Client

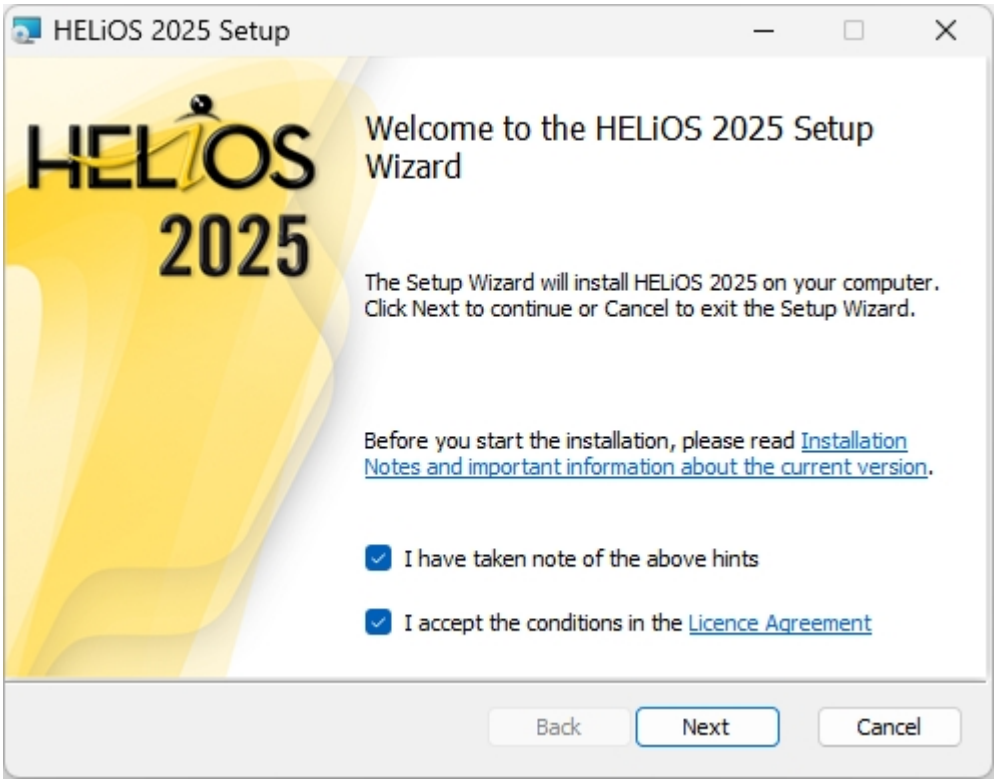
The HELiOS Client is normally automatically installed during the HiCAD installation. But of course, you can also install HELiOS separately. To install HELiOS, start Windows. If Windows has already been started, close all other applications and start the installation wizard.

In the installation wizard, click on the **Standard Edition** button. This will open the following selection mask. Leave this selection mask open, so that you can select the desired components one after the other.

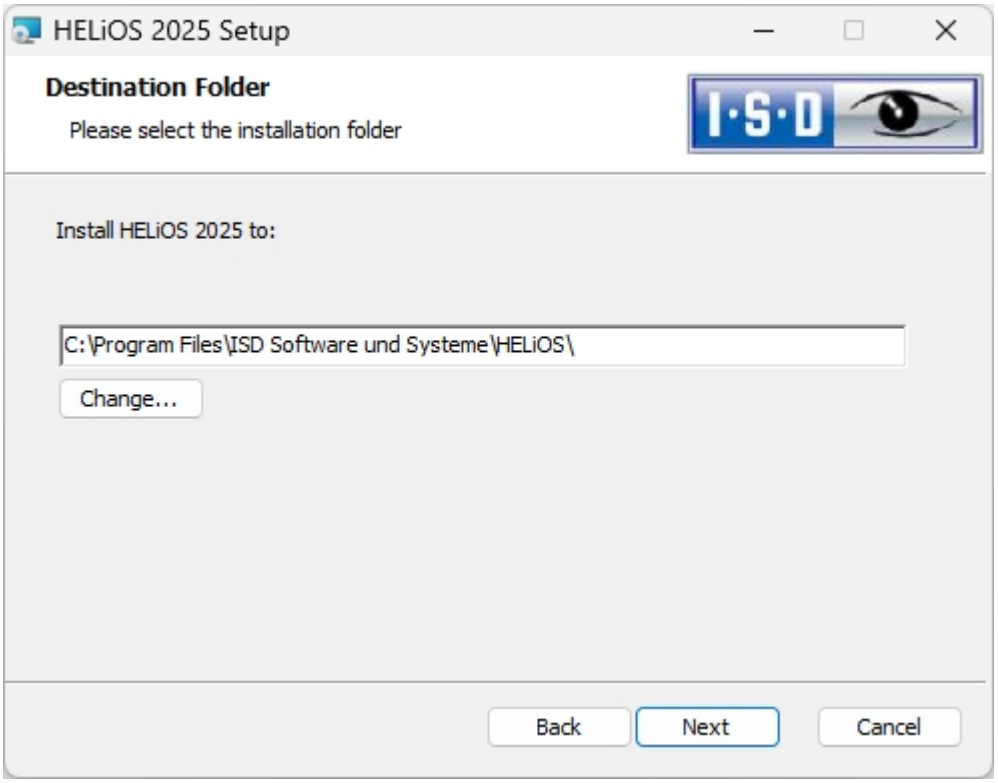


Click on the **HELiOS** button.

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.



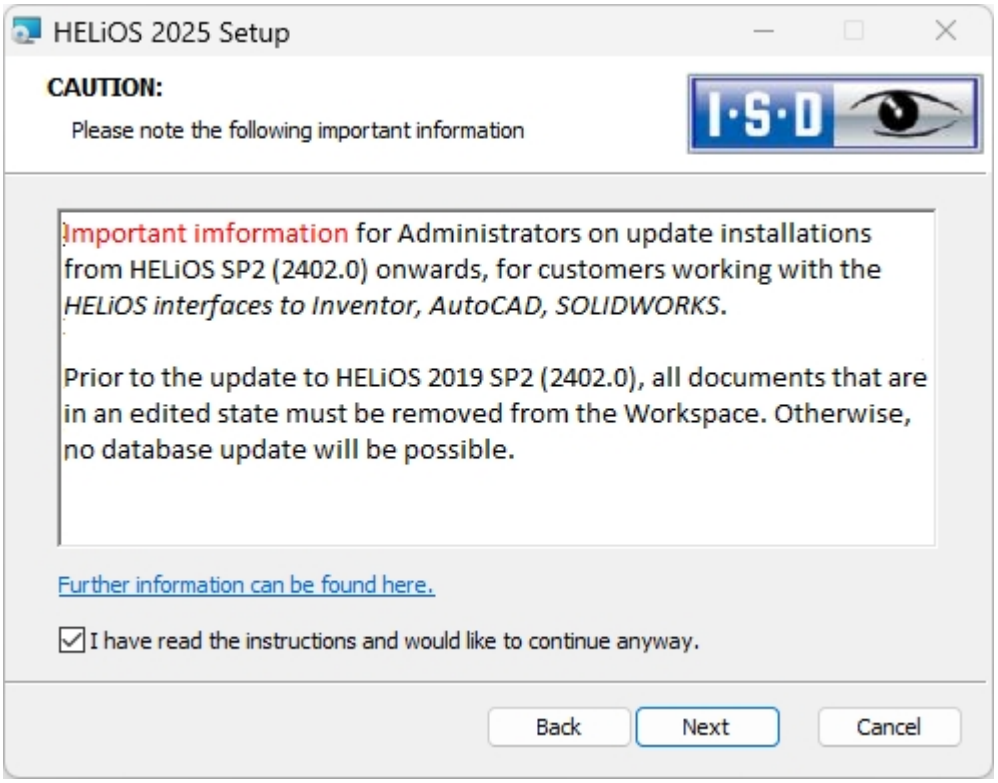
Please read the **Installation Notes** and the Licence Agreement carefully.



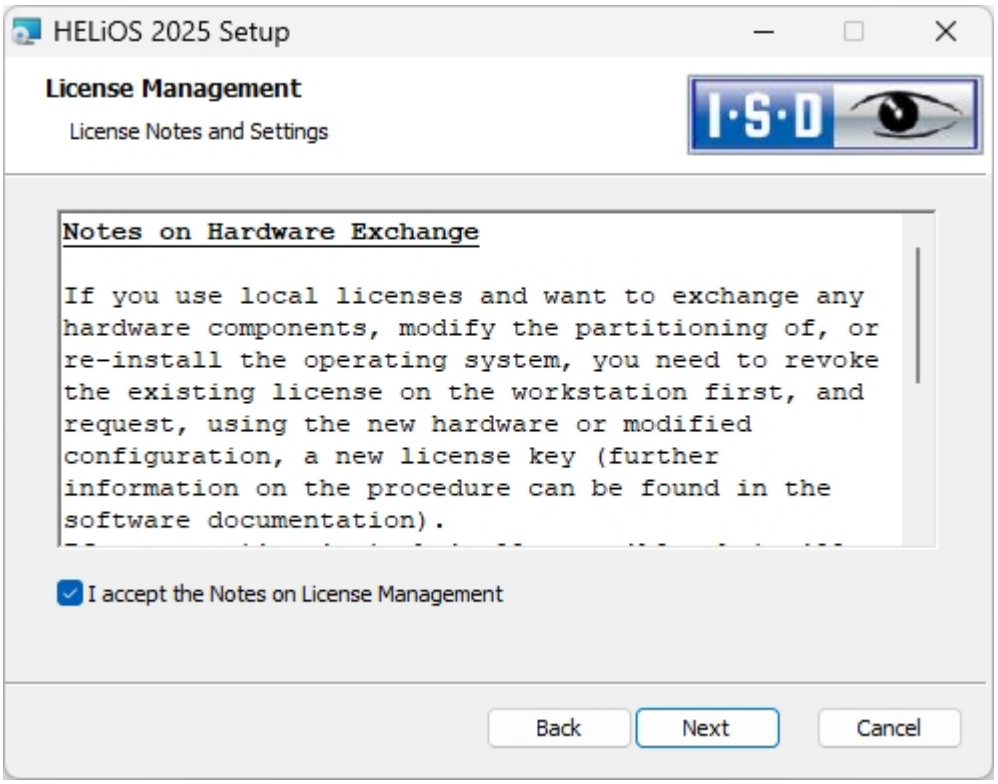
Select an installation directory. If the installation wizard finds an already installed version, it will be offered to you for updating.

In accordance with the current Microsoft guidelines, the HELiOS documents will be saved to C:\Users\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.



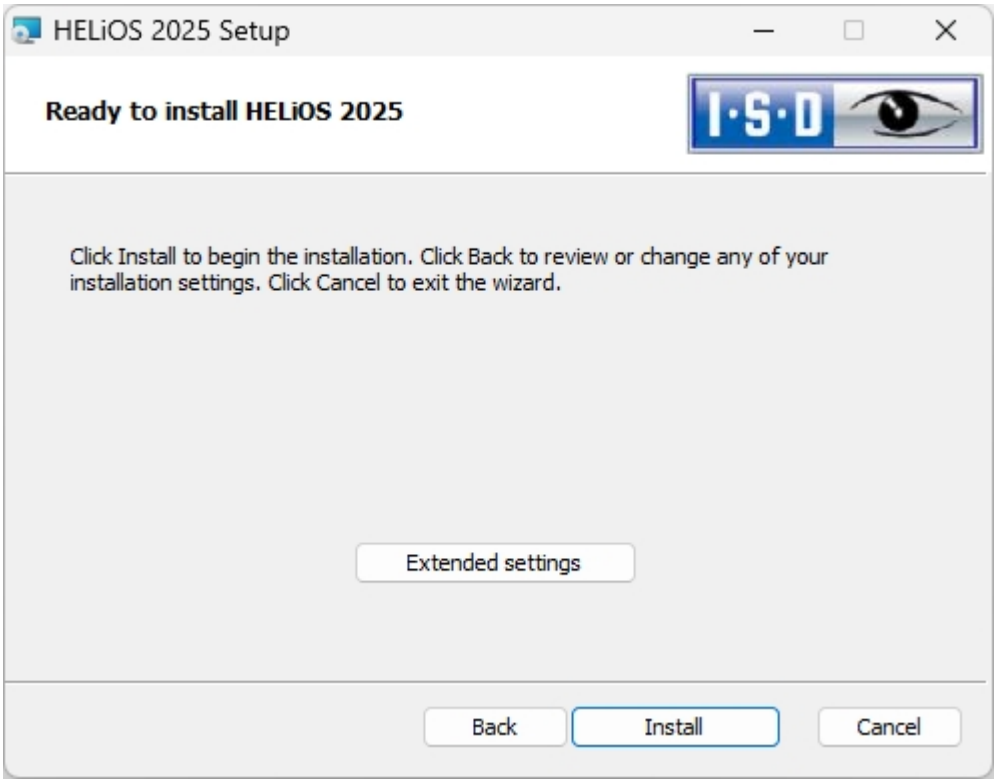
Please read the **Notes on Hardware Exchange** carefully.

Hardware Exchange

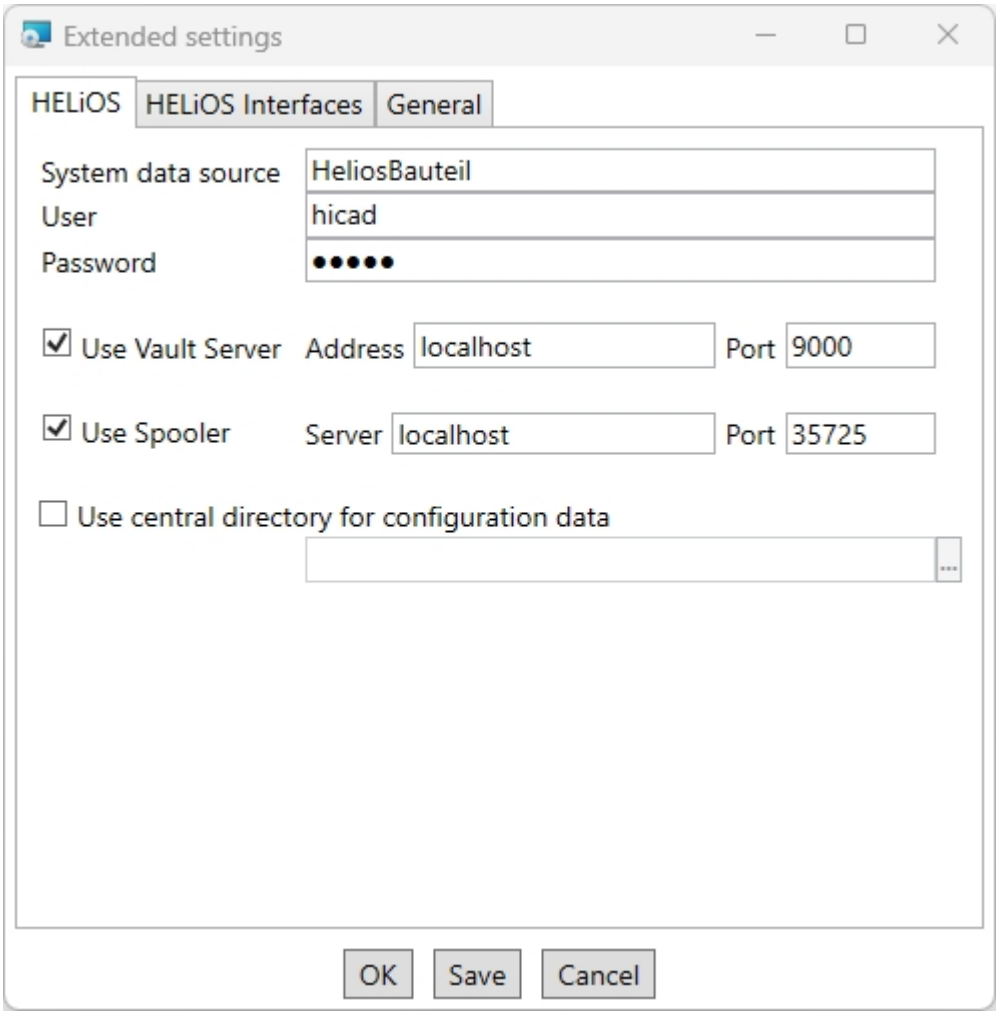
If you use local HiCAD/HELiOS licenses and want to exchange any hardware components, modify the partitioning of, or re-install the operating system, you need to revoke the existing license on the HiCAD/HELiOS workstation first, and request, using the new hardware or modified configuration, a new license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

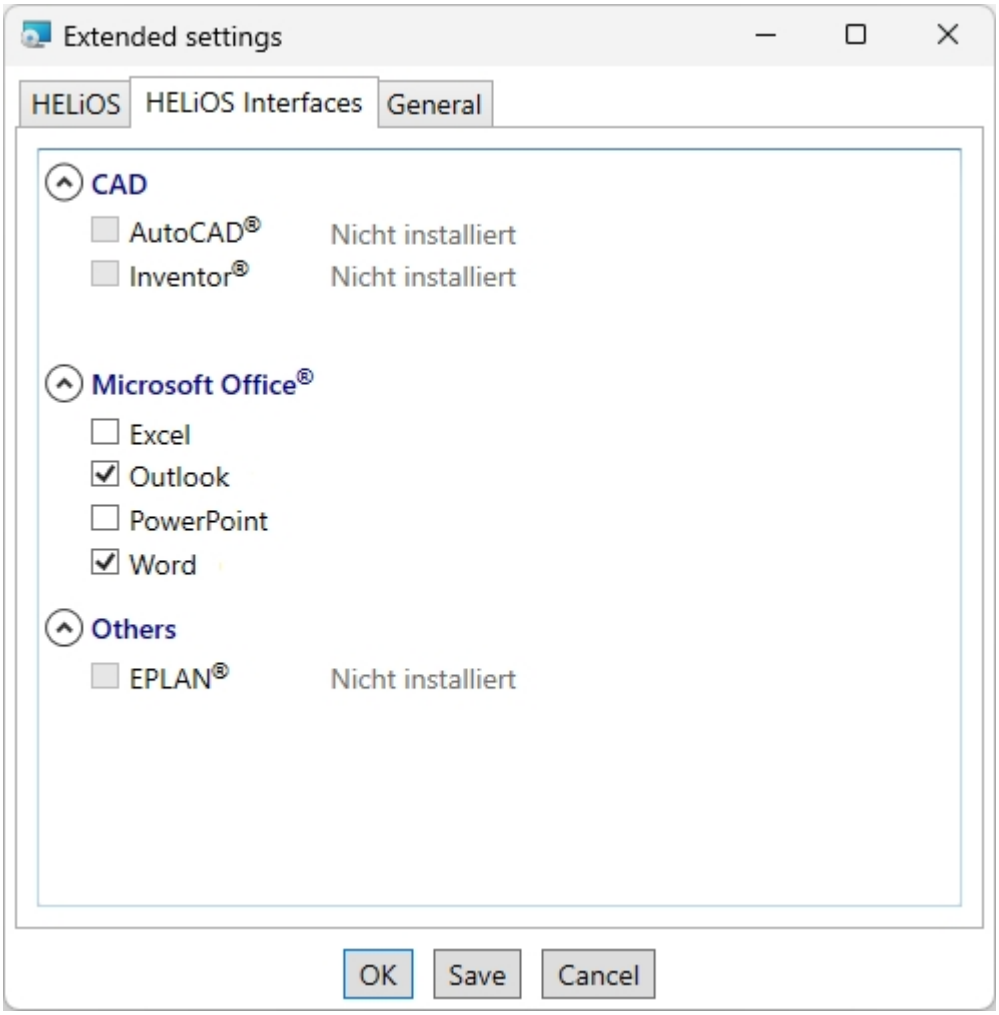
If you use a Vault Server, activate the **Vault Server** checkbox. Enter the name of the Server in the **Address** input field, and the Server Port of the Vault Server in the **Port** input field. You already entered both during the installation of the Vault Server.

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 load the settings on another workstation, select **HELiOS Options > Manage... > Import settings**. You can then select the ZIP file and confirm with **Open**.

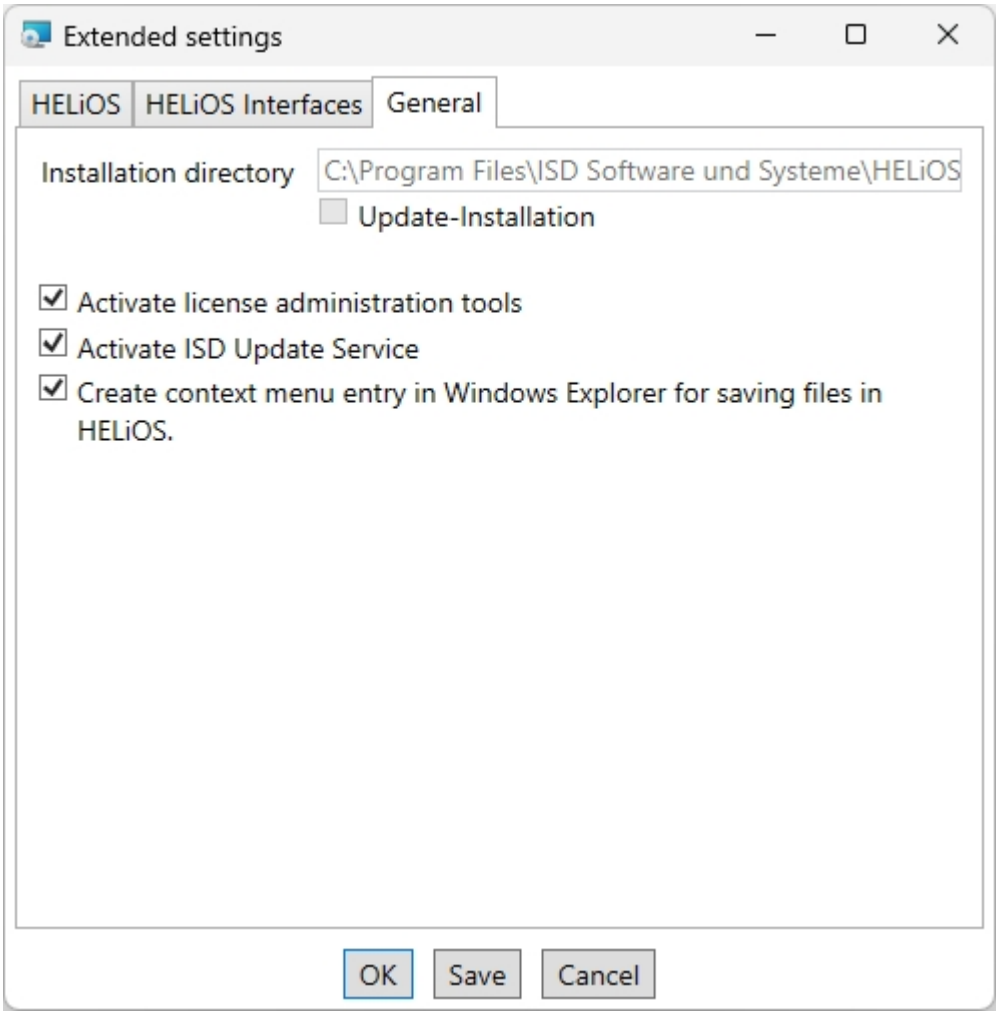
If you want to make the settings available to multiple workstations, activate the **Use central directory for configuration data** option during installation and then select a directory after clicking on the icon. Via **HELiOS Options > Manage... > Save settings centrally**, you can save the current settings of your HELiOS Desktop to the specified central directory and thus make them available to other workstations.



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 Compatiblity Matrix.to check which interfaces to external software products are supported by HELiOS.



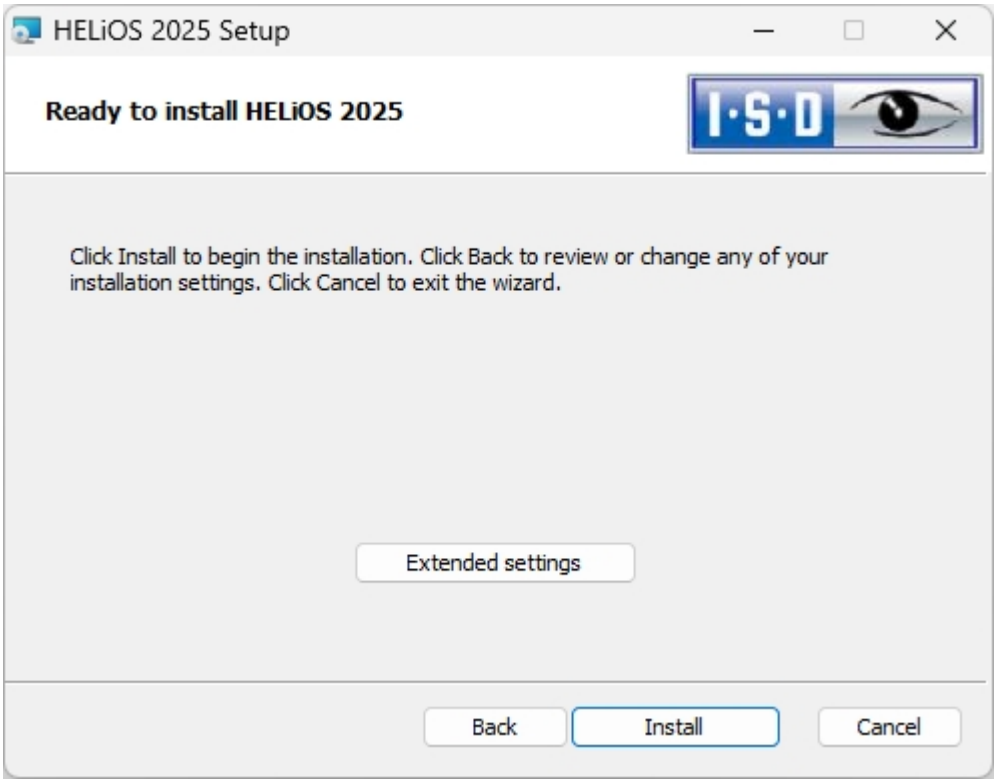
The **Activate license administration tools** checkbox must be activated for the management of server licenses.

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**.

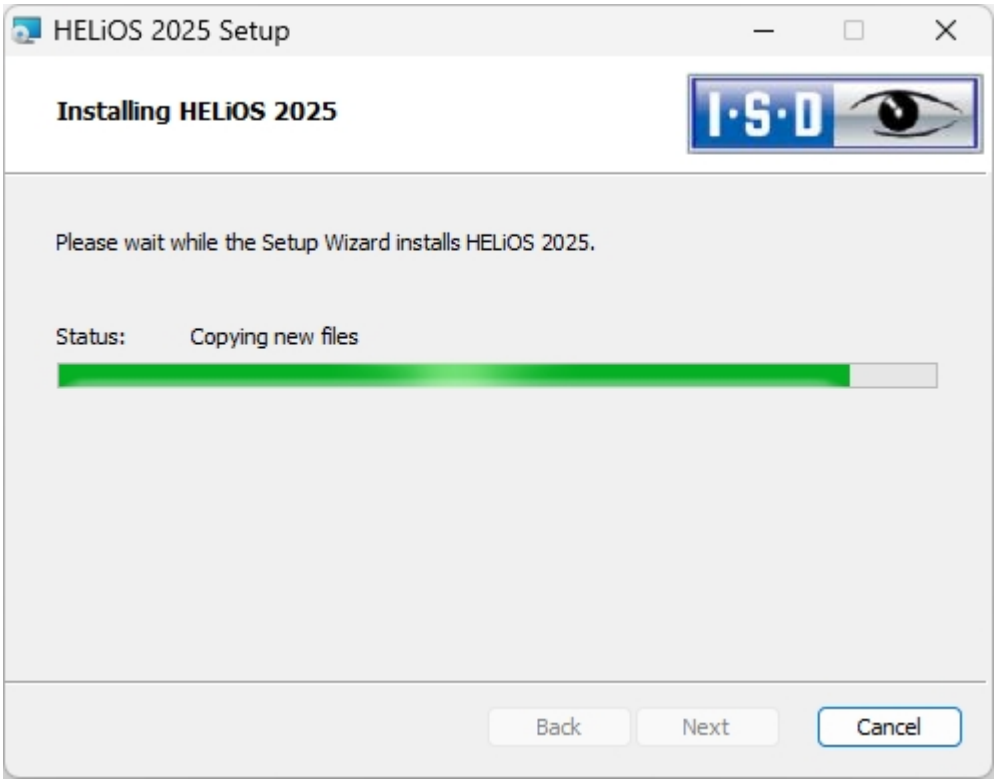
If you want the function **Save to HELiOS** to appear in the context menu of Windows Explorer, activate the checkbox **Create context menu entry in Windows Explorer for saving files in HELiOS**.

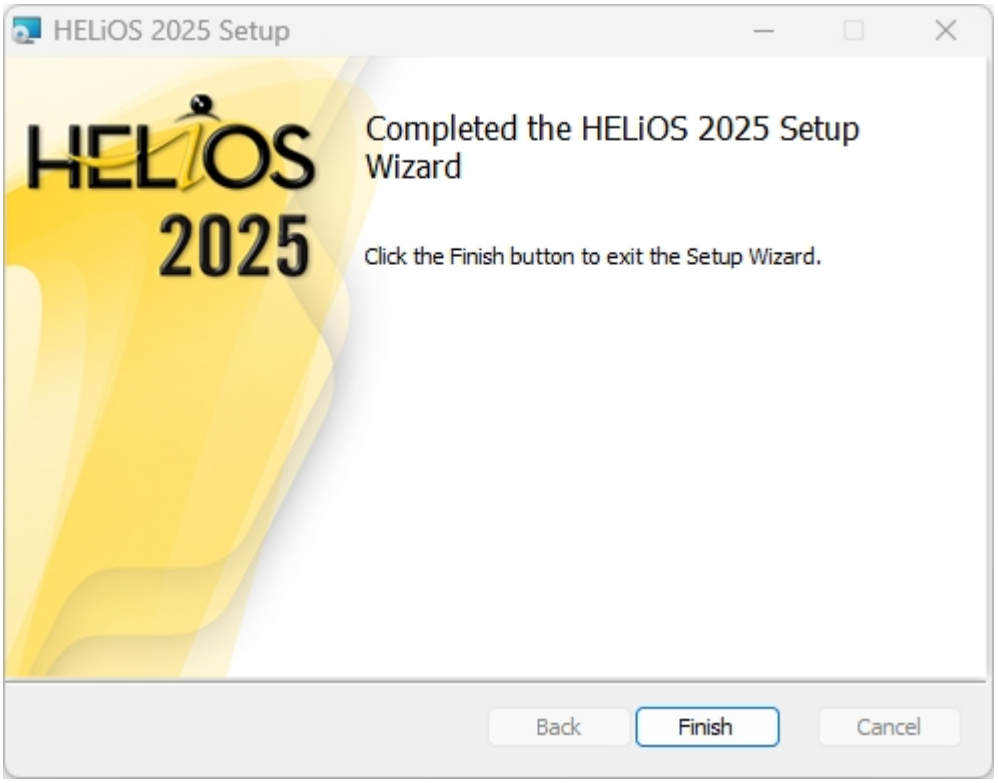
Click **Save** to save the **Extended Settings** to an **.ini file**. If you place the .ini file in the installation directory when installing server licenses, the settings will be applied.

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:

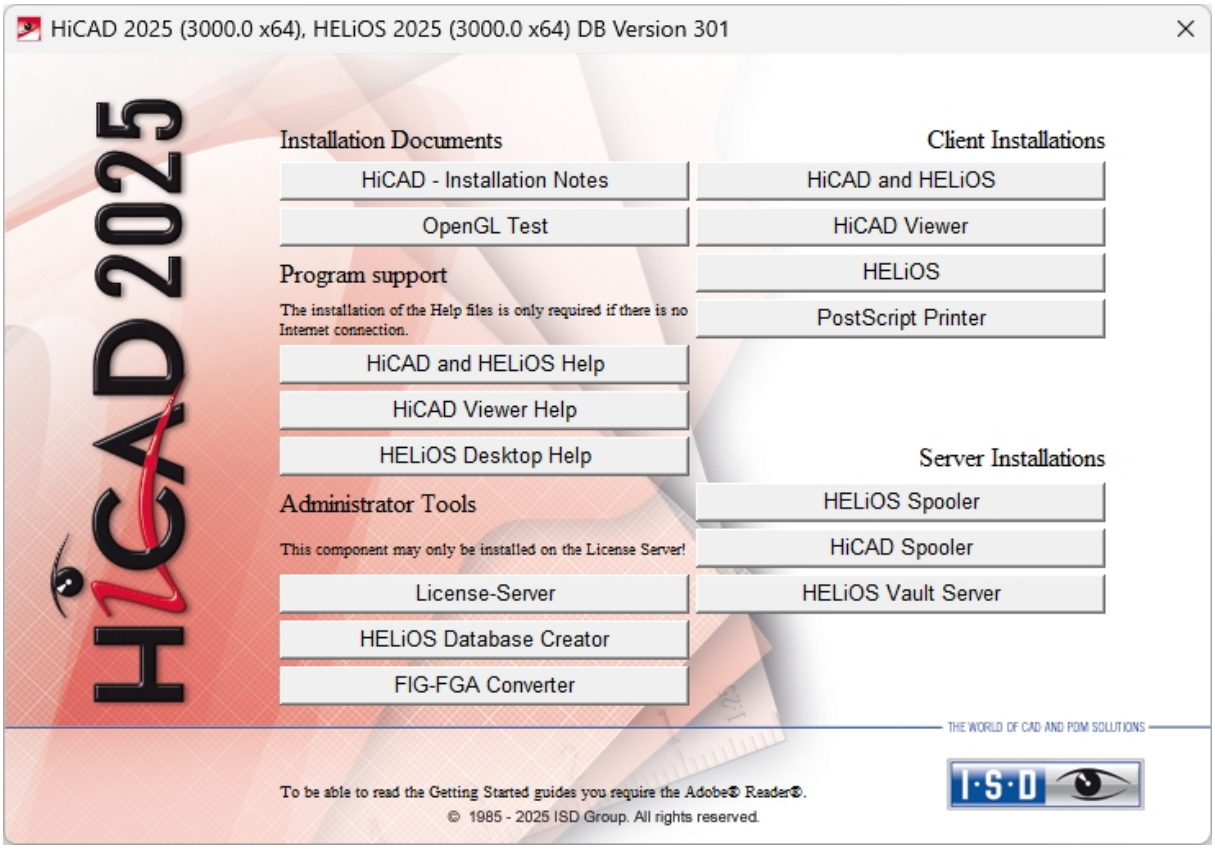
Changes to the registry should only be carried out by an administrator. In any case, the original files should be saved before making any changes!

Installing the HELiOS Spooler

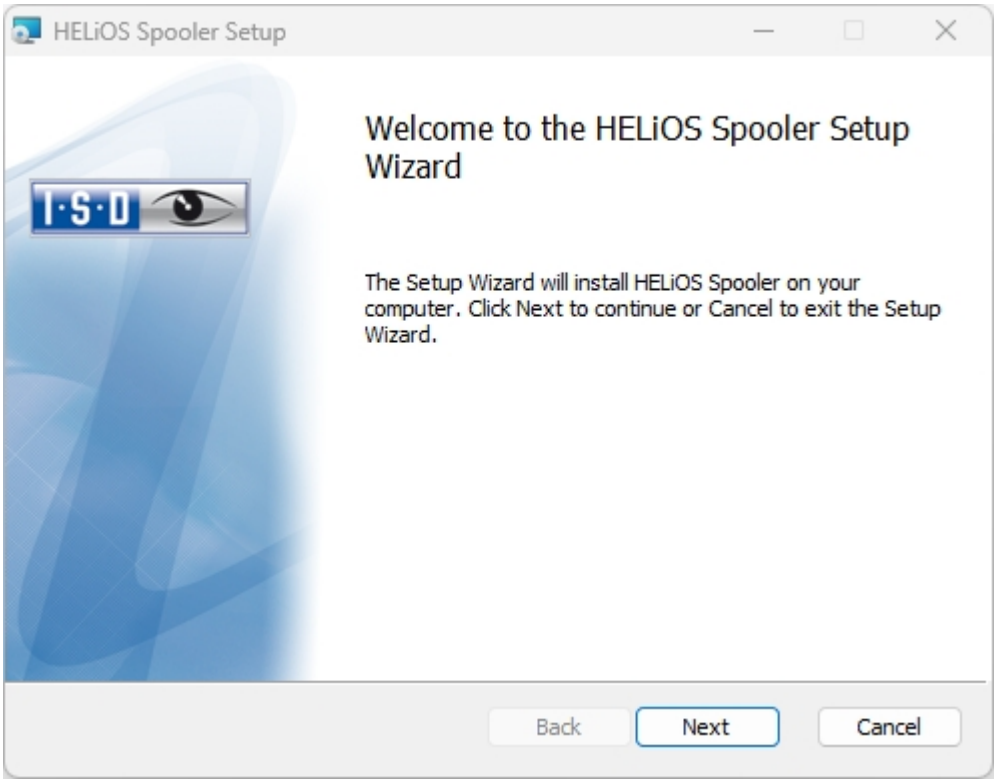
Start Windows to install the HELiOS Spooler. If Windows has already been opened, close all other applications and start the installation wizard.

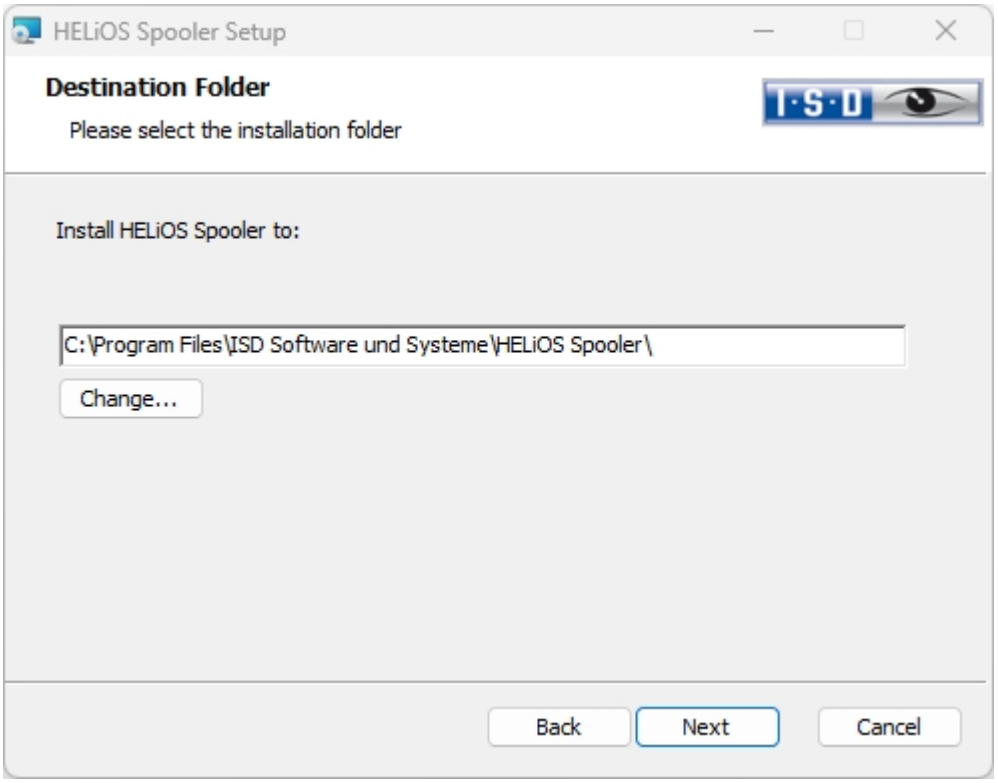
In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components.

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

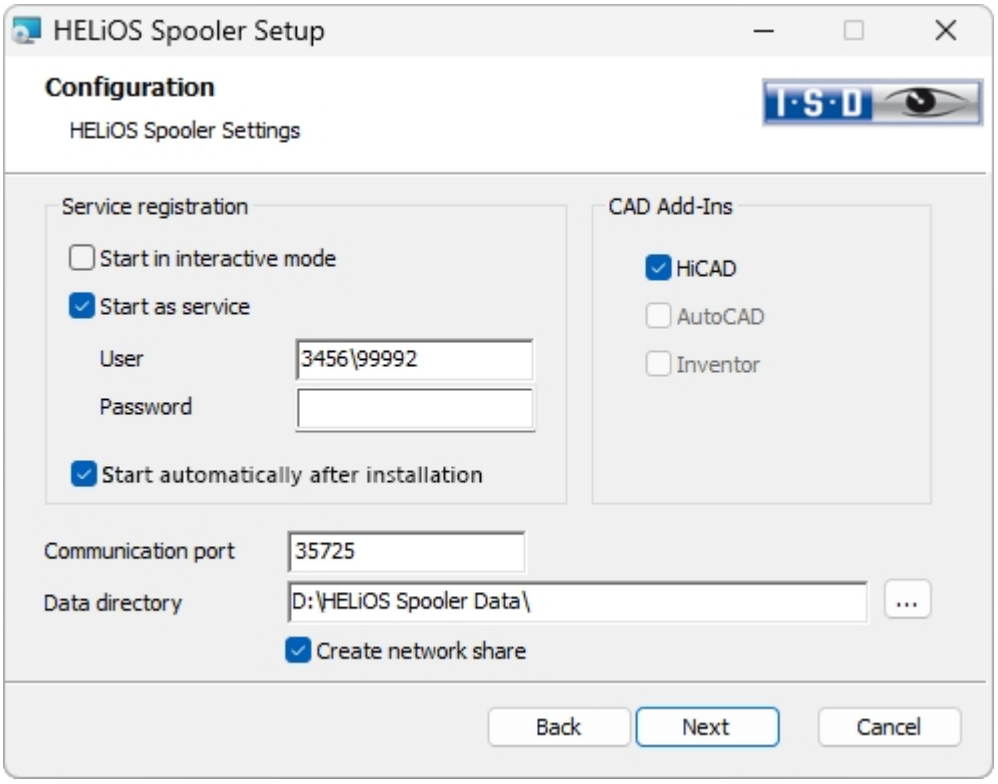


Click on the **HELiOS Spooler** button.





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 automatically after 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.

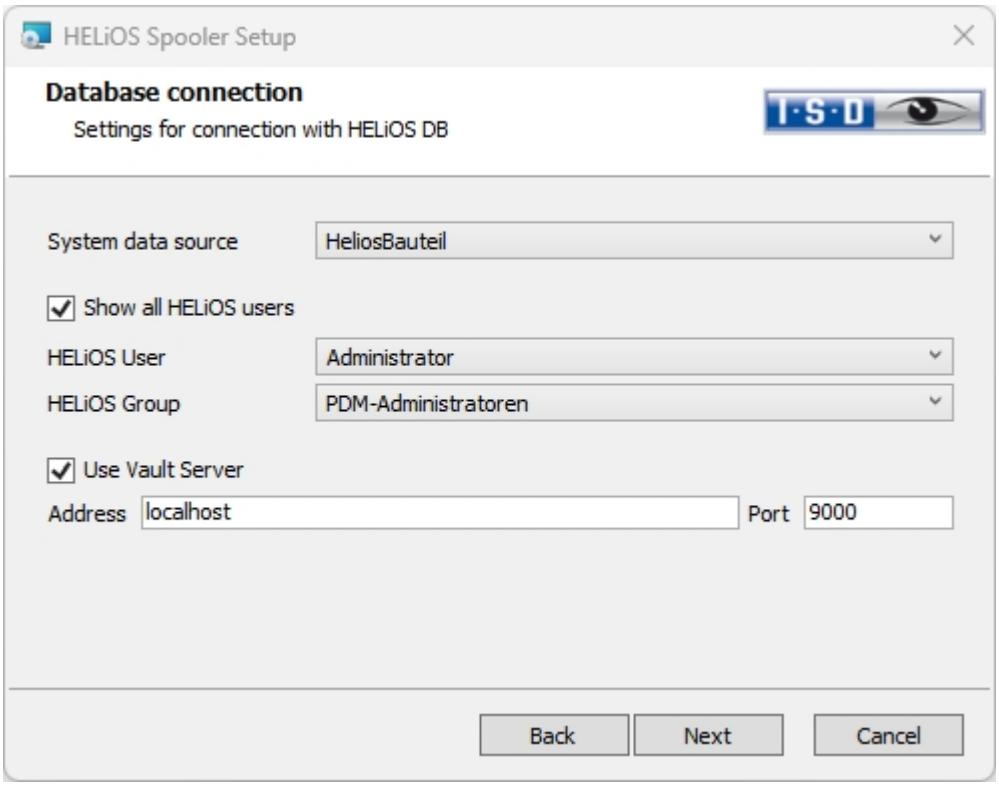
Should you encounter any problems,, we therefore recommend choosing the **Start in interactive mode** option during installation. When this option has been selected, the Spooler will no longer be set up as a service, but will be started directly in the foreground via the Administration UI. During this 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**.

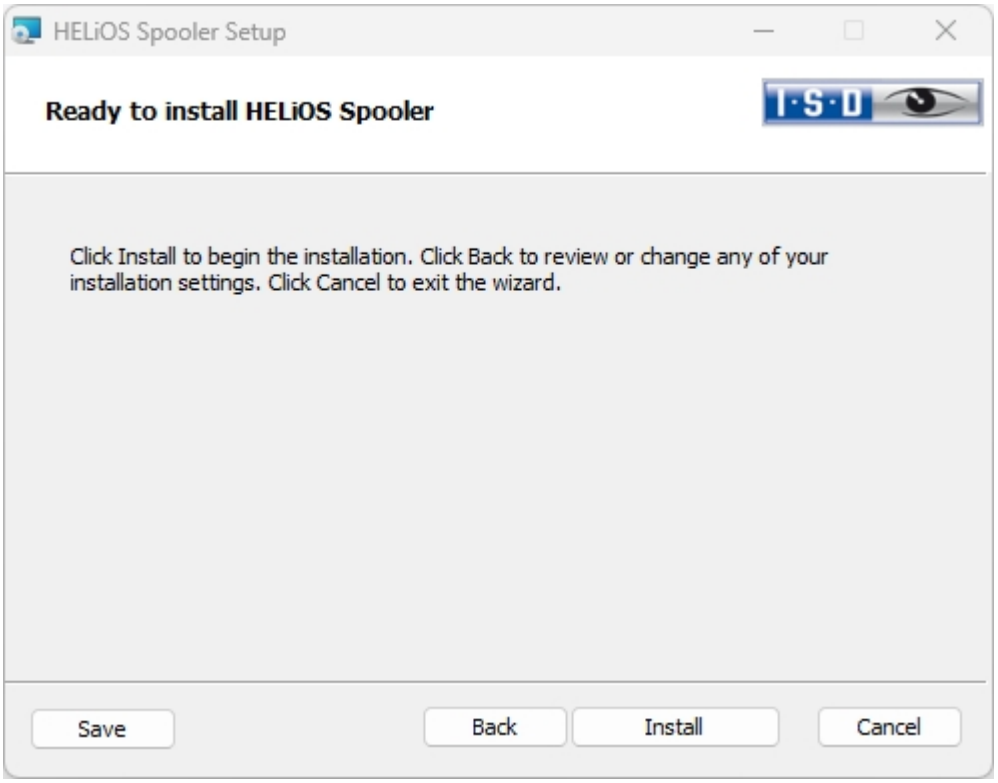


In this dialogue window you will be asked for the login of the database user, which is the login of the (SQL) database system.

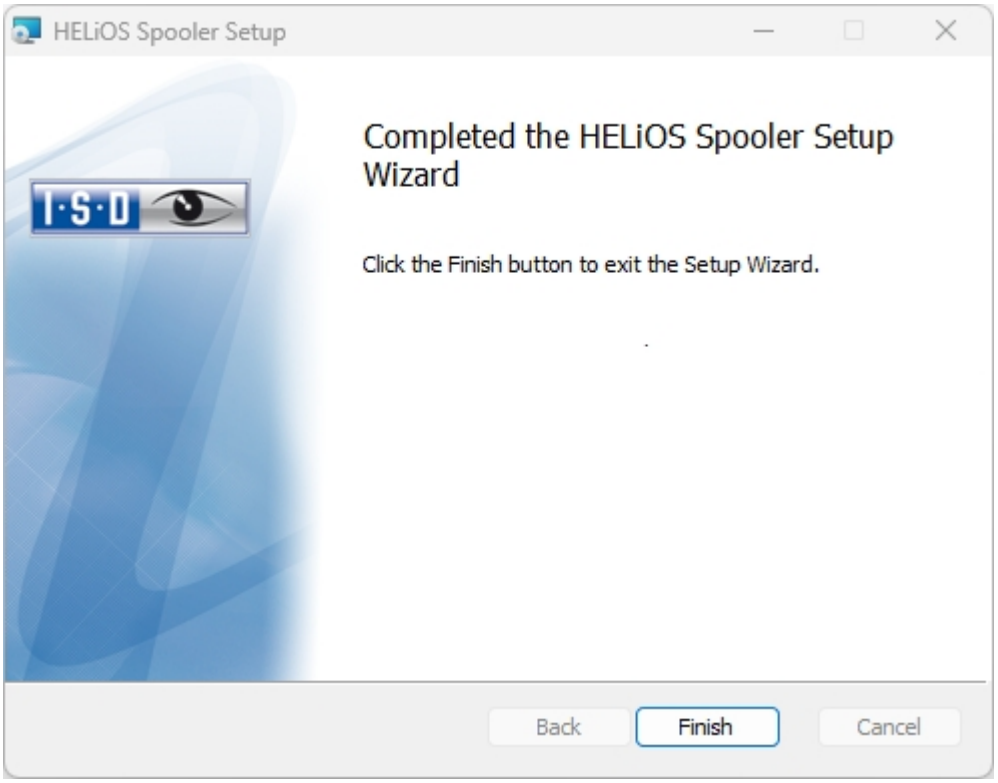
For **System data source** you have to select the corresponding ODBC database connection. Here the **HELiOS User** is selected, over which the spooler runs. It is important that this user has admin rights and is also assigned to the **HELiOS Group** of "PDM administrators" here. Otherwise you will get 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**.

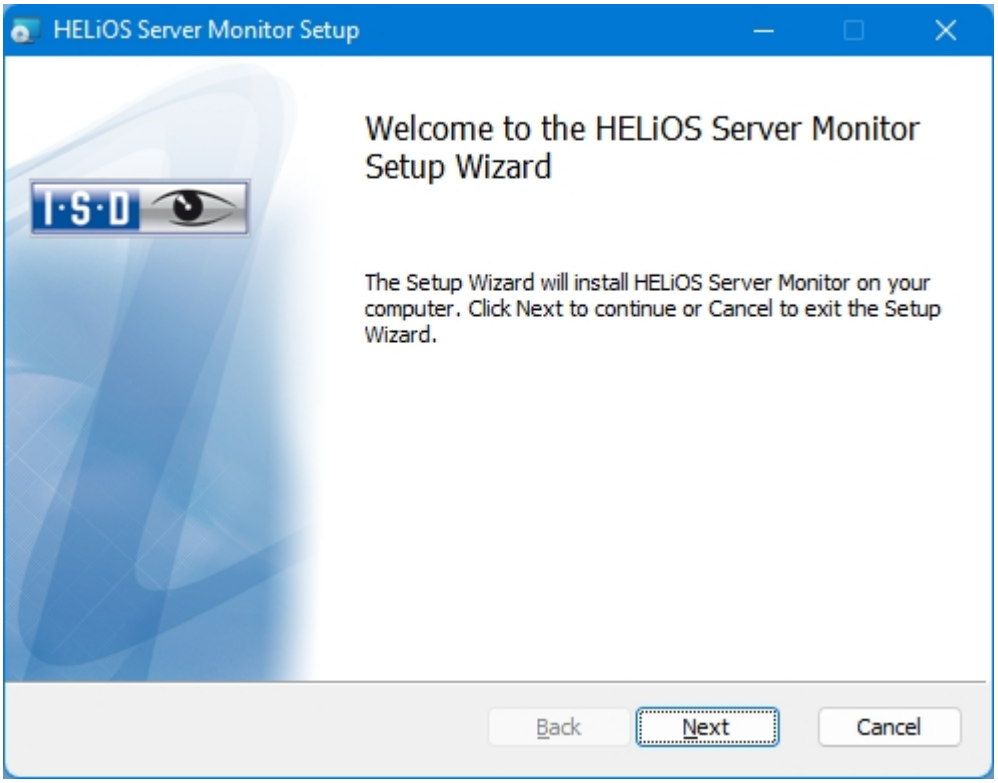


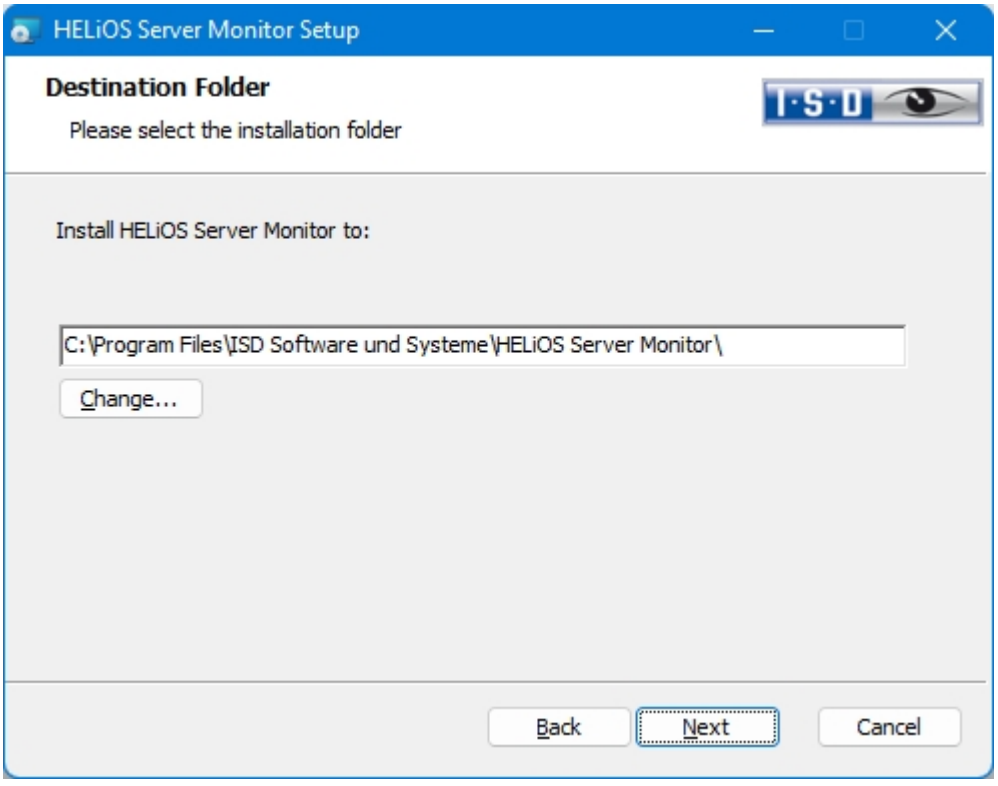
Click **Finish** to complete your installation.

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

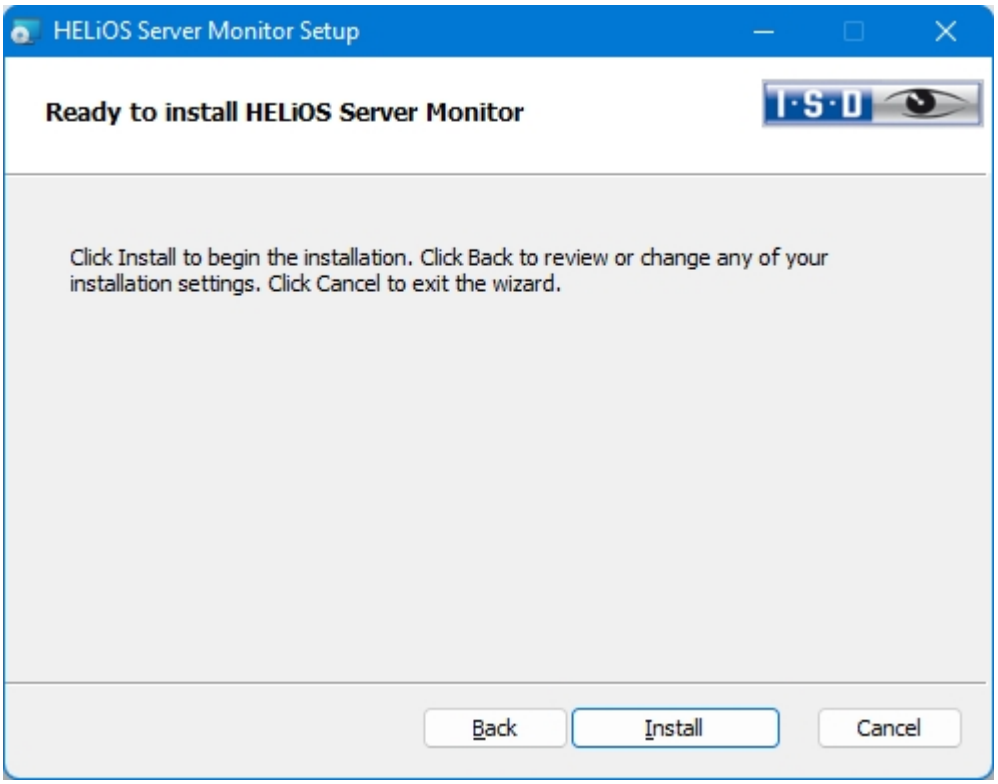
Installing the HELiOS Server Monitor

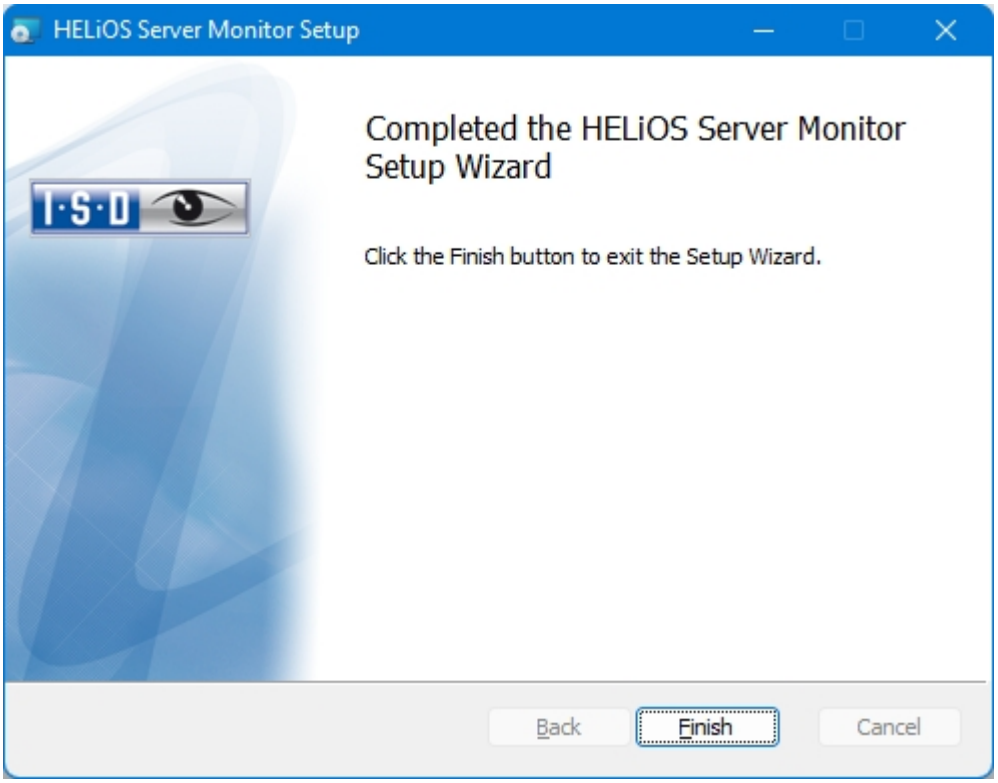
With the **Server Monitor** you have the possibility to monitor the runnability of your HELiOS server applications. You start the installation of the **Server Monitor** by double-clicking the SETUP.EXE file from the **Tools > ServerMonitor** directory of your installation medium.





Specify the installation directory.



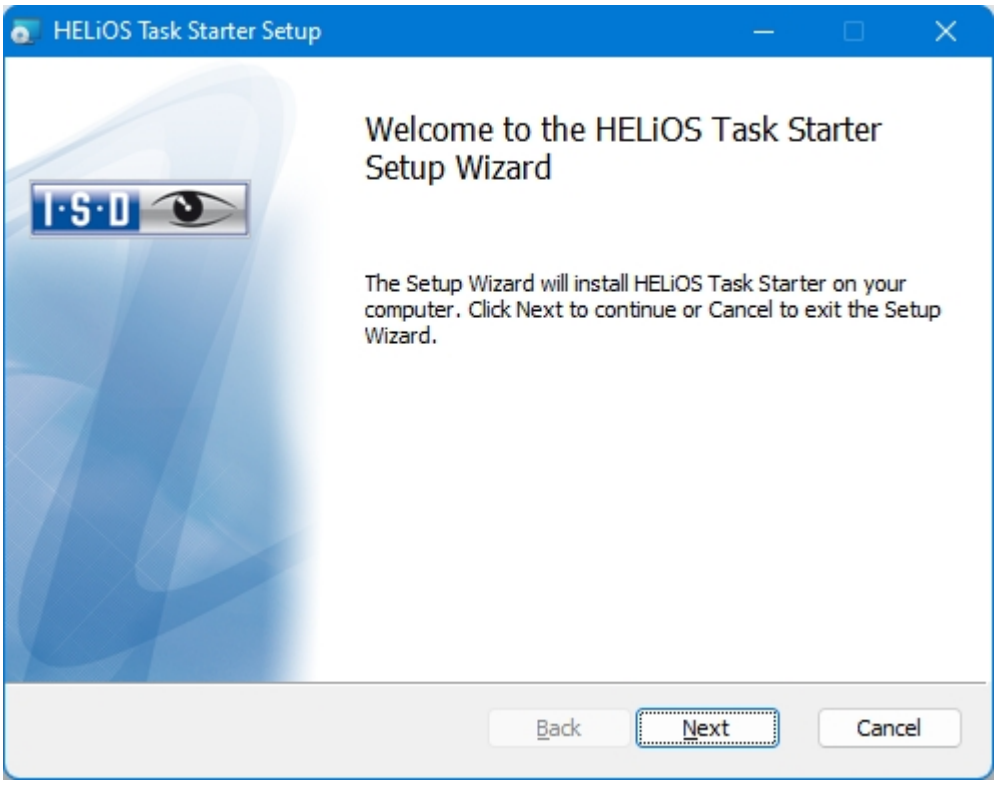


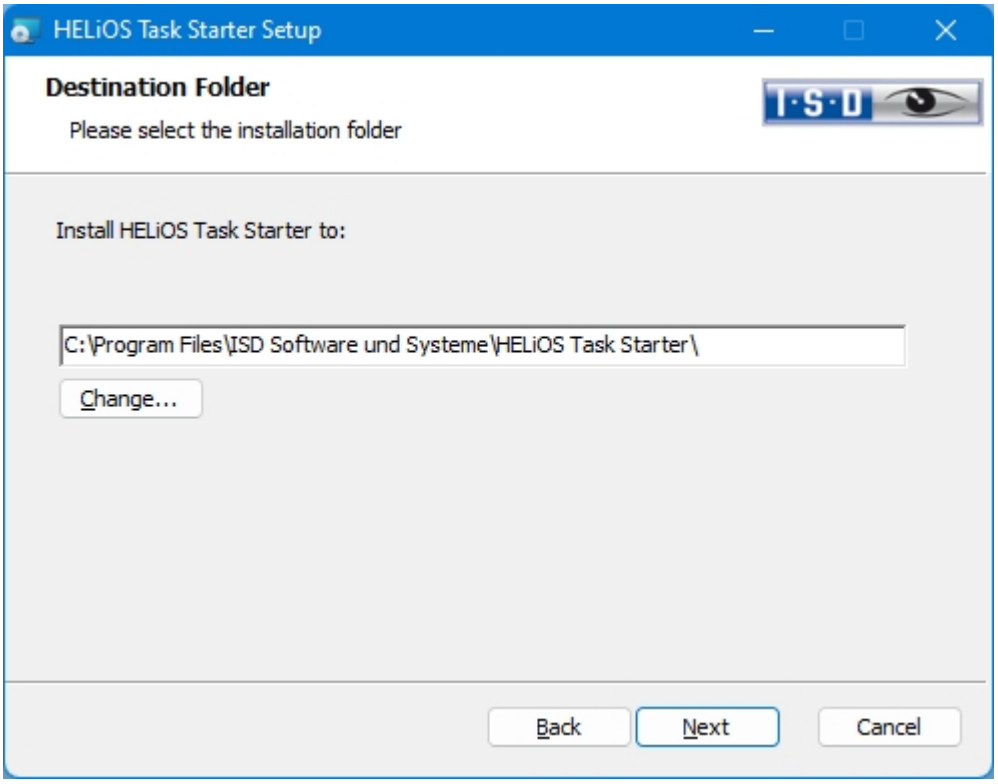
After the installation you start the monitoring with a double click on the **ServerMonitor.exe** file (EXE directory). The running monitoring by the Server Monitor is displayed in the Windows notification area.

Installing the HELiOS Task Starter

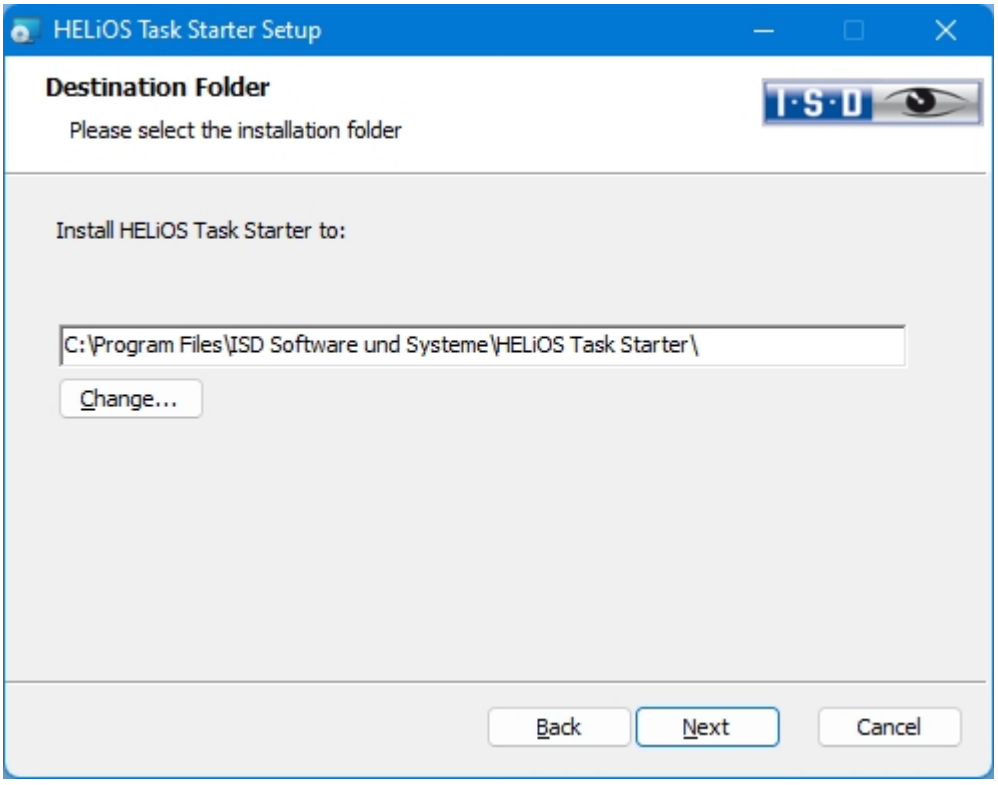
The **HELiOS Task Starter** is a tool with which HELiOS services such as the HELiOS Spooler can be automatically restarted after termination or after a crash (e.g. due to interruption of the database connection or network access).

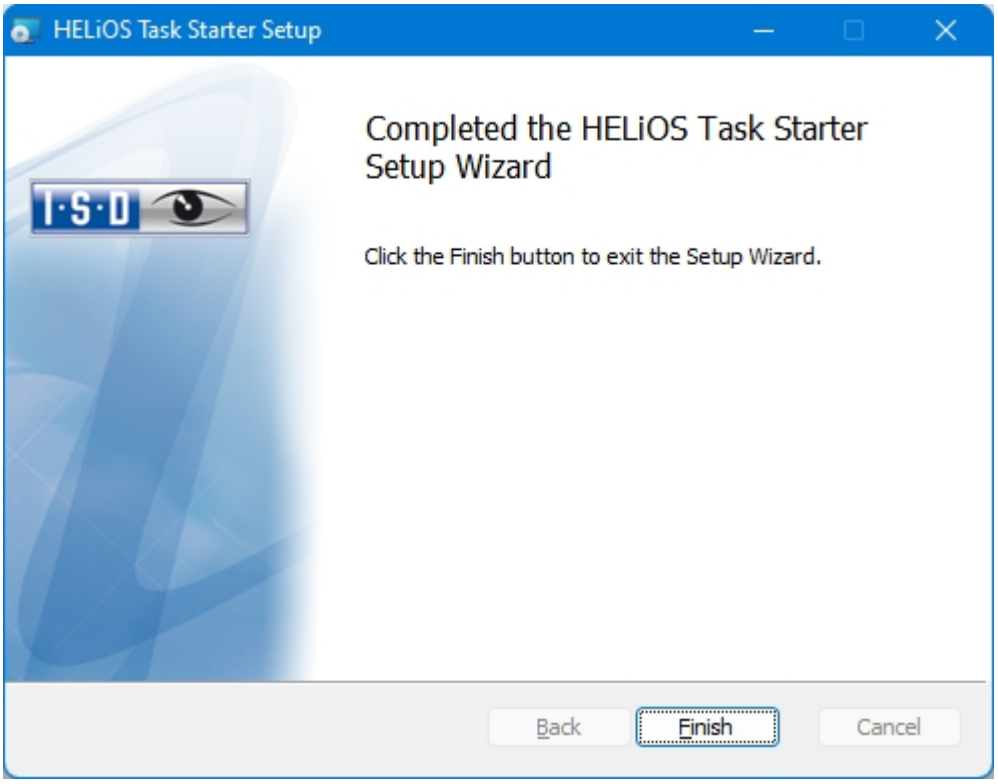
You start the installation of the **HELiOS Task Starter** with a double click on the file SETUP.EXE from the directory **Tools > TaskStarter** of your installation medium.





Specify the installation directory.





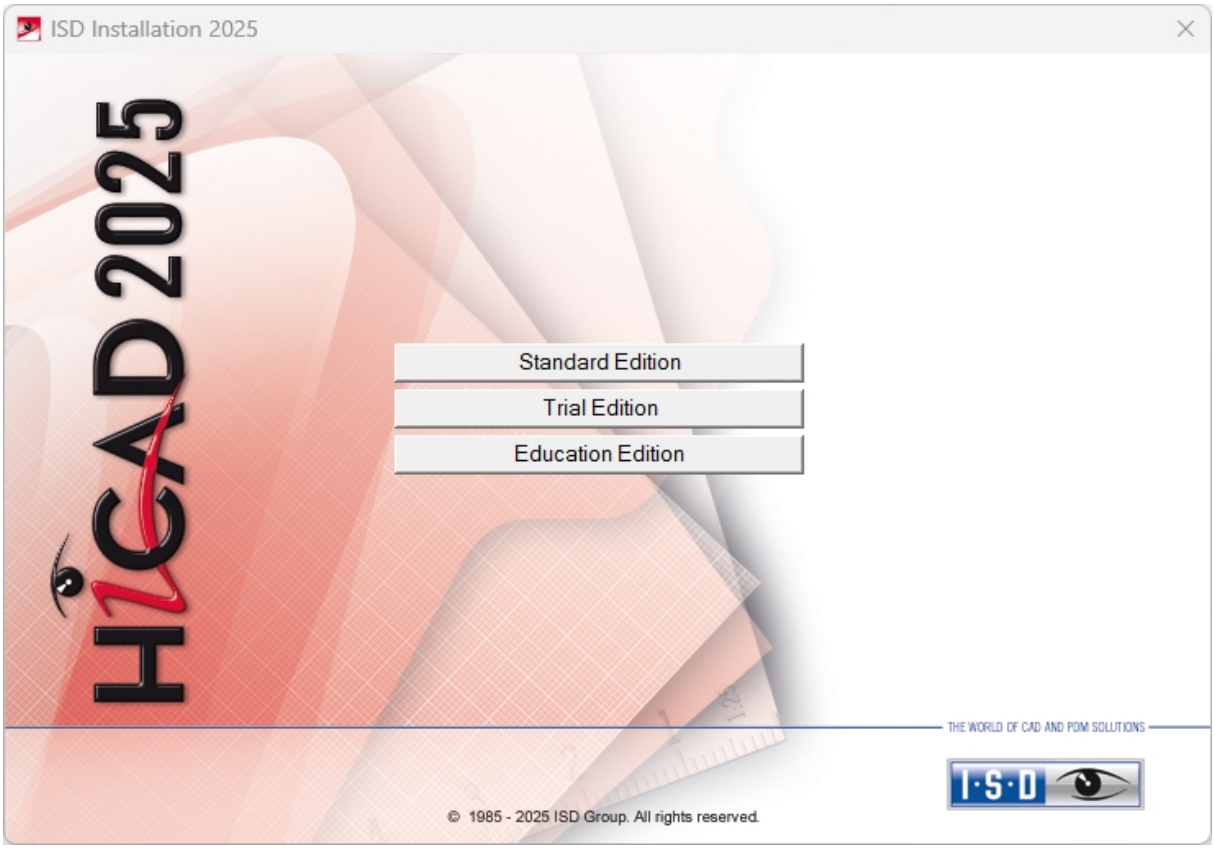
After the installation, the **HELiOS Task Starter** must be configured (see HELiOS online help). To do this, edit the file **TaskStarter.config** (%programdata%\ISD Software und Systeme\HELiOS Task Starter <Version>\). Then enter the service in the Windows task scheduler. If you have any questions, please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

Installing the Trial Edition (Demo Version)

The Trial Edition (Demo version) has a changed data format, which allows a reading of data out of the Standard Edition, but not a writing of data back to it (i.e. in a Standard Edition the data format of special versions is not readable!). For printouts, plot stamps will always be output.

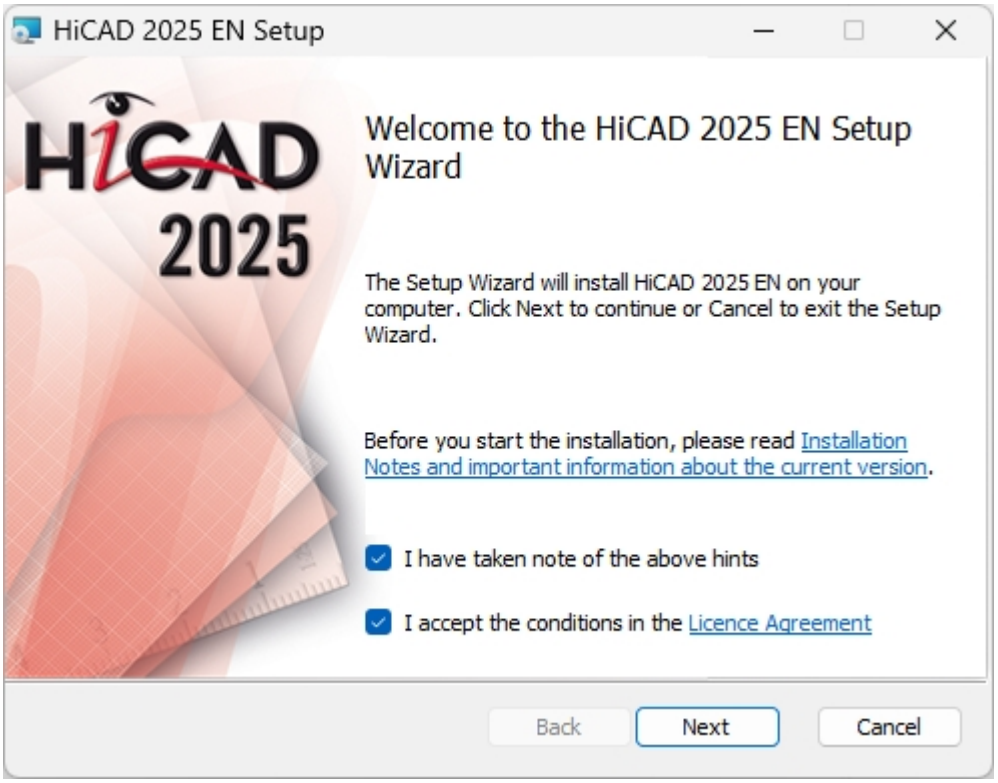
Please note:
The license is free and valid for 30 days from the date of installation. Its transfer to other computers after its activation is not possible.

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

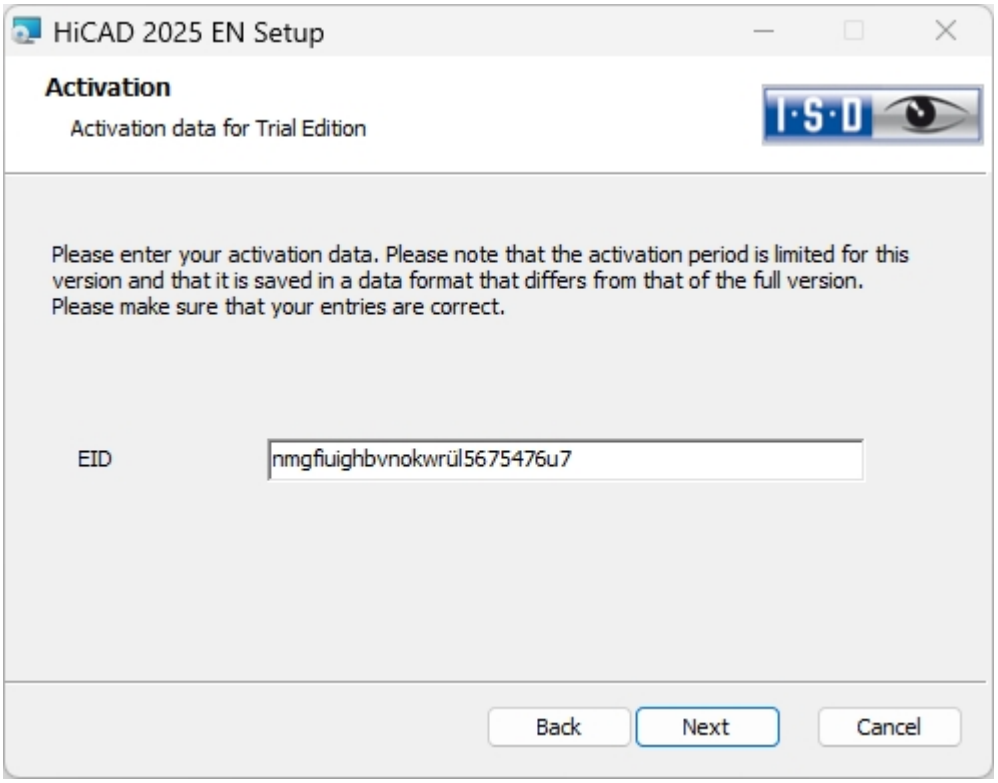


In the start mask of the Installation Wizard, click **Trial Edition**.

Before using HiCAD/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 HiCAD installation if required.

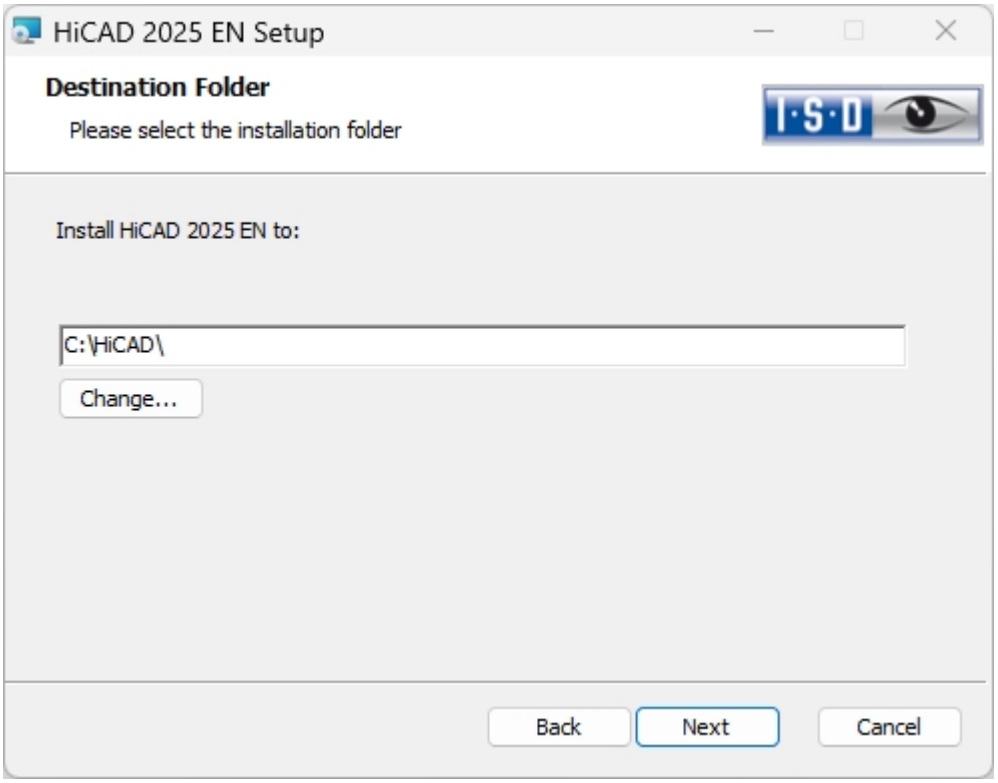


In the **Welcome...** window, click **Next**.

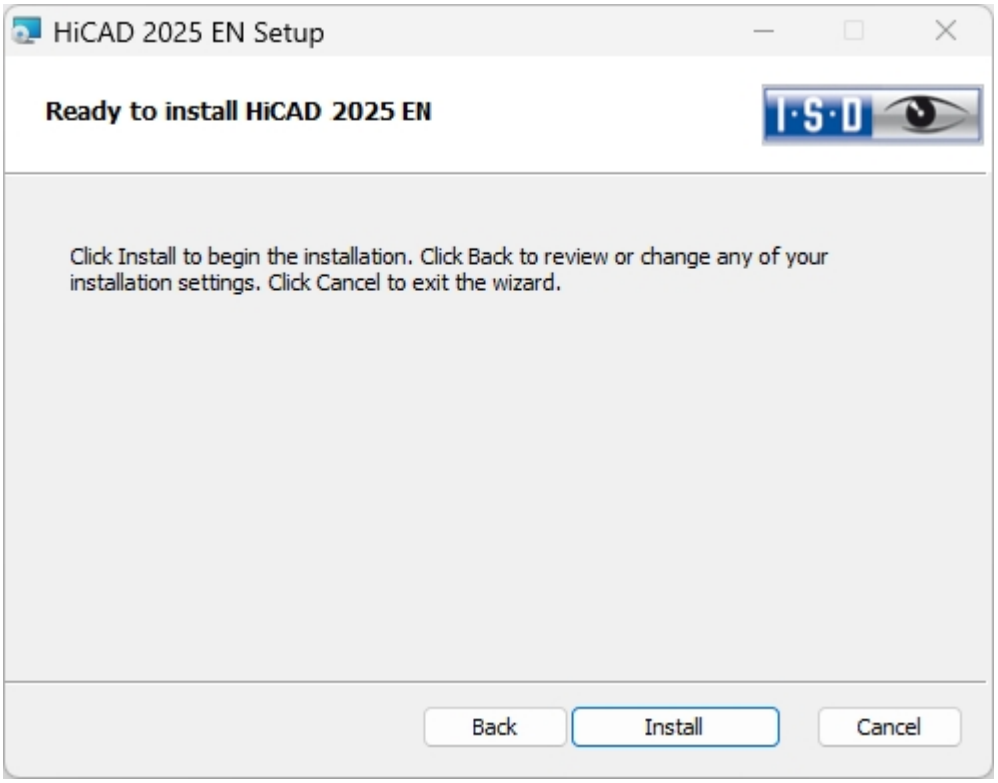


Enter the activation data for product activation and click **Next**.

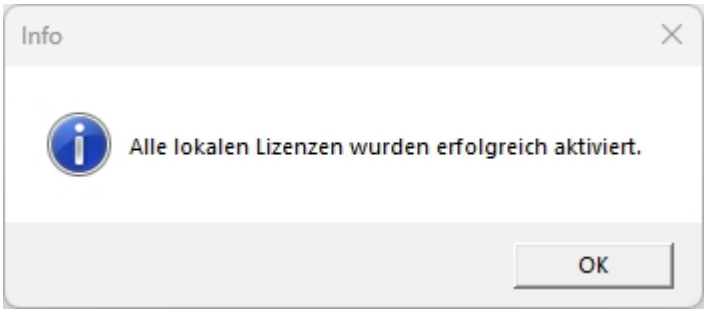
To obtain the activation data, please fill in the form on our website at isdgroup.com.



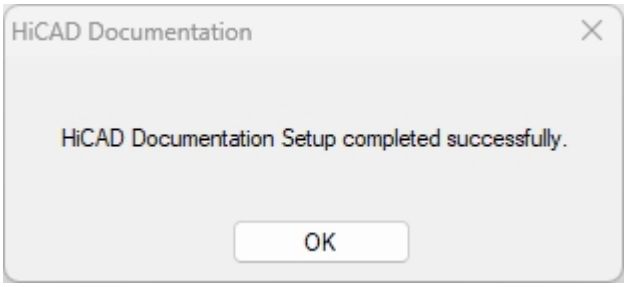
Install the program to the ...\Trial Edition folder.



Click **Install**.



Click **OK** to start the installation of the local Help.



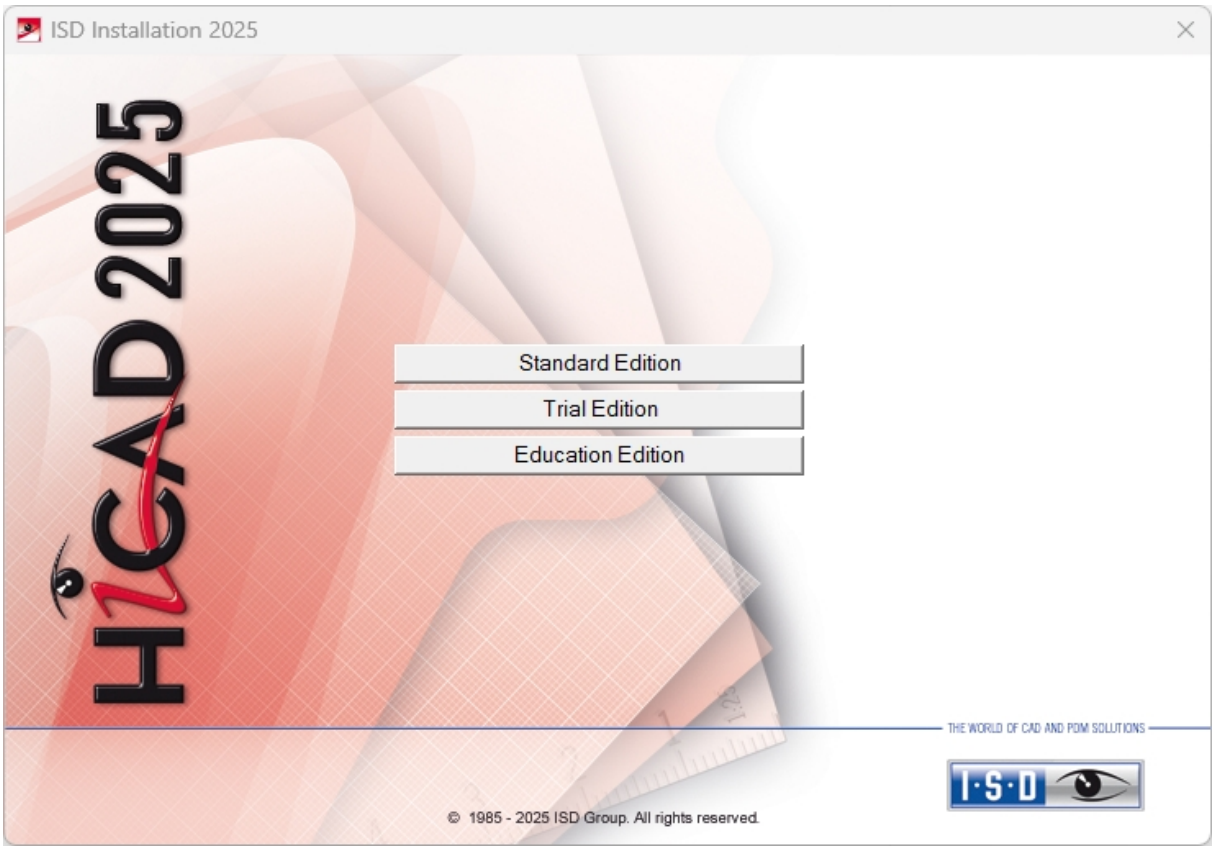
Click **OK** to complete the installation.

Installation Education Edition (for Students)

The Education Edition (Student Version) is a fully functional standard version. The license is free and valid for 1 year (365 days). It can be activated and deactivated with the ISD License Manager, which will be available after installation (see Chapter 7.3).

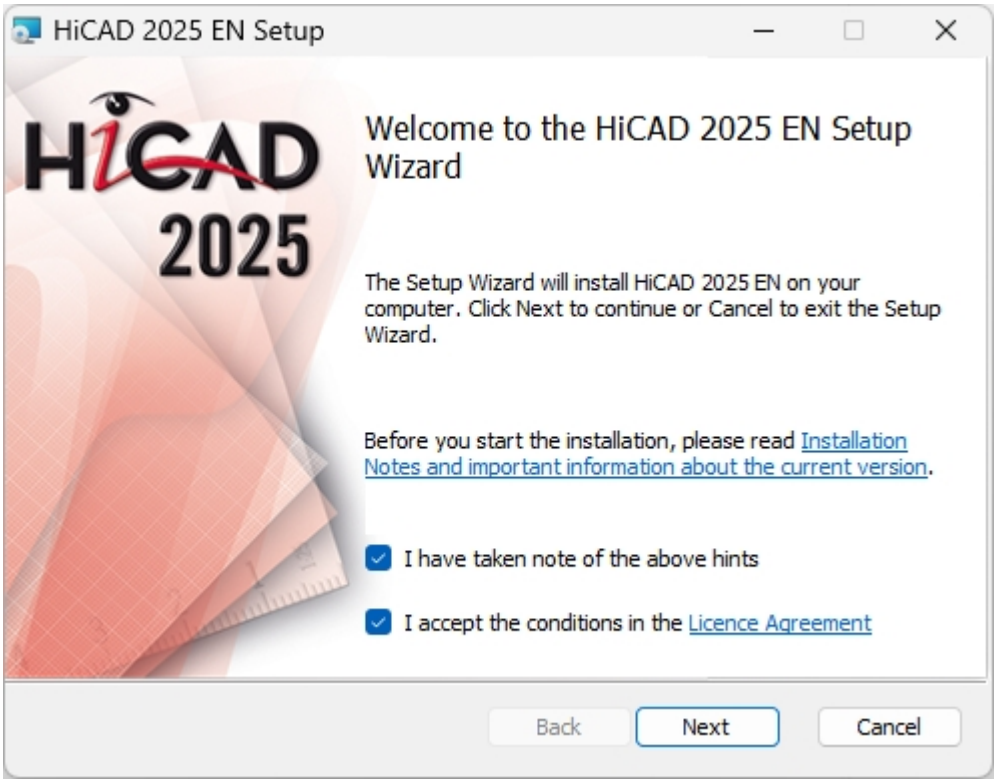
The drawings (.-SZA) and parts (.KRA) created with Education Edition can not be loaded with the Standard Edition. In case if a file (.SZA or .KRA) created with the Education edition is opened with a Standard Edition, an appropriate message will be sent. The title bar of the HiCAD interface will show the text HiCAD Education Edition: Not for commercial purposes.

If the Autostart function has been switched off in the operating system, you must run the setup.exe file in the root directory of the DVD for installation. Only in this way will be ensured that the version of the operating system will be correctly recognized and that the correct HiCAD version will be installed.

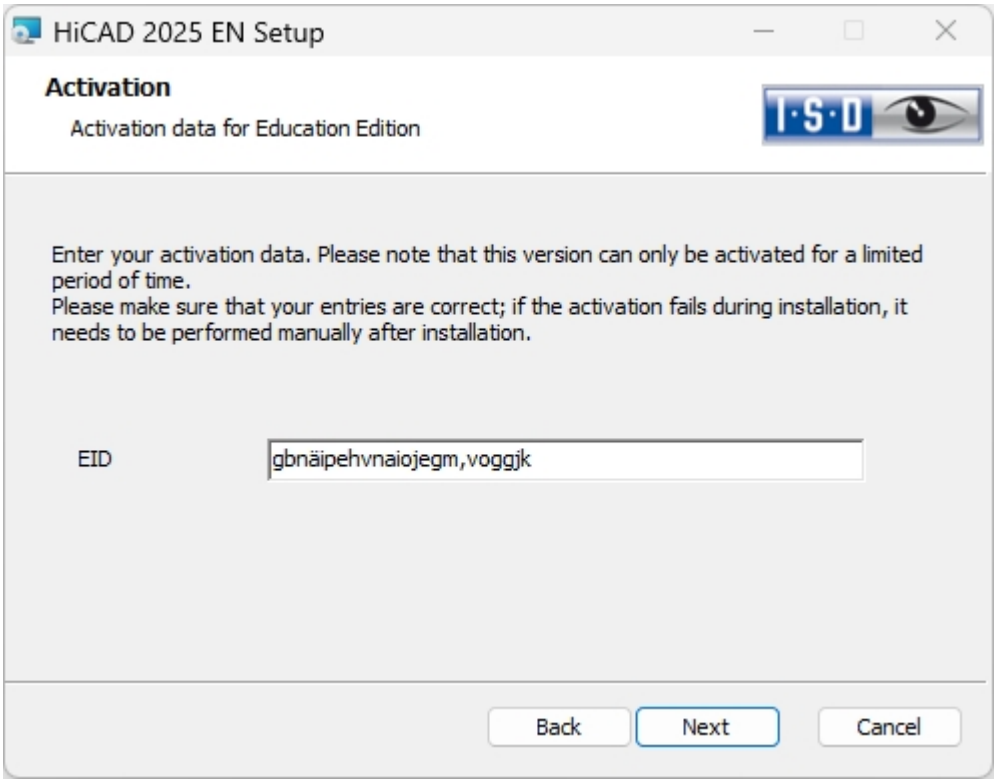


Click on the **Education Edition** button.

Before using HiCAD/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 HiCAD installation if required.

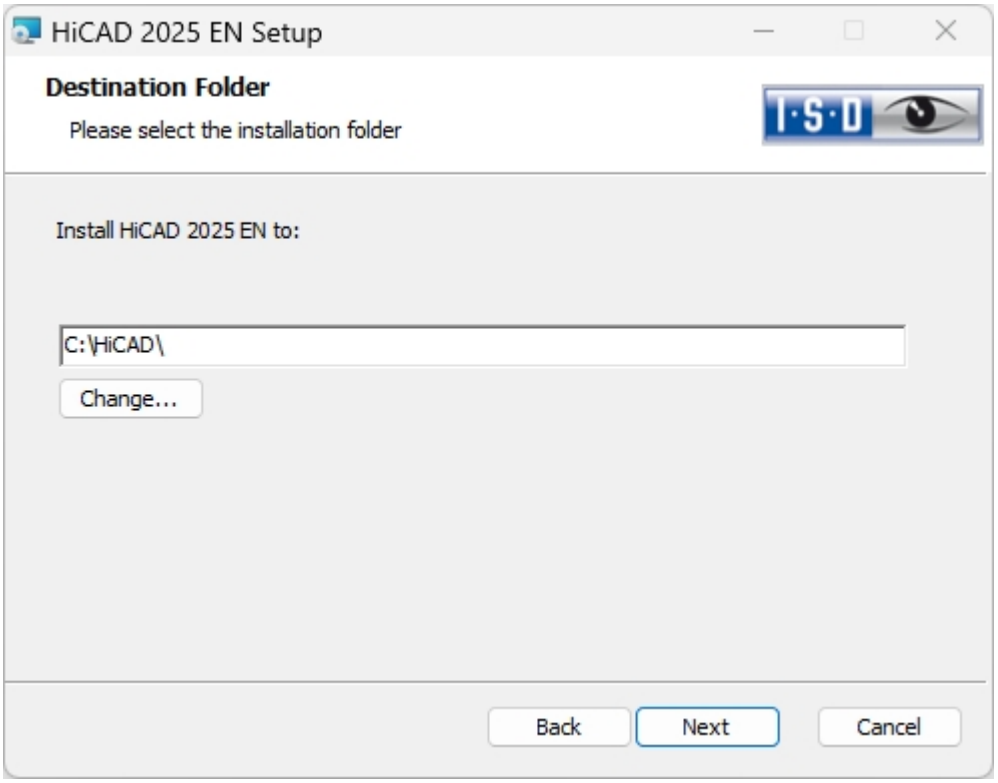


Click **Next** to start the installation.

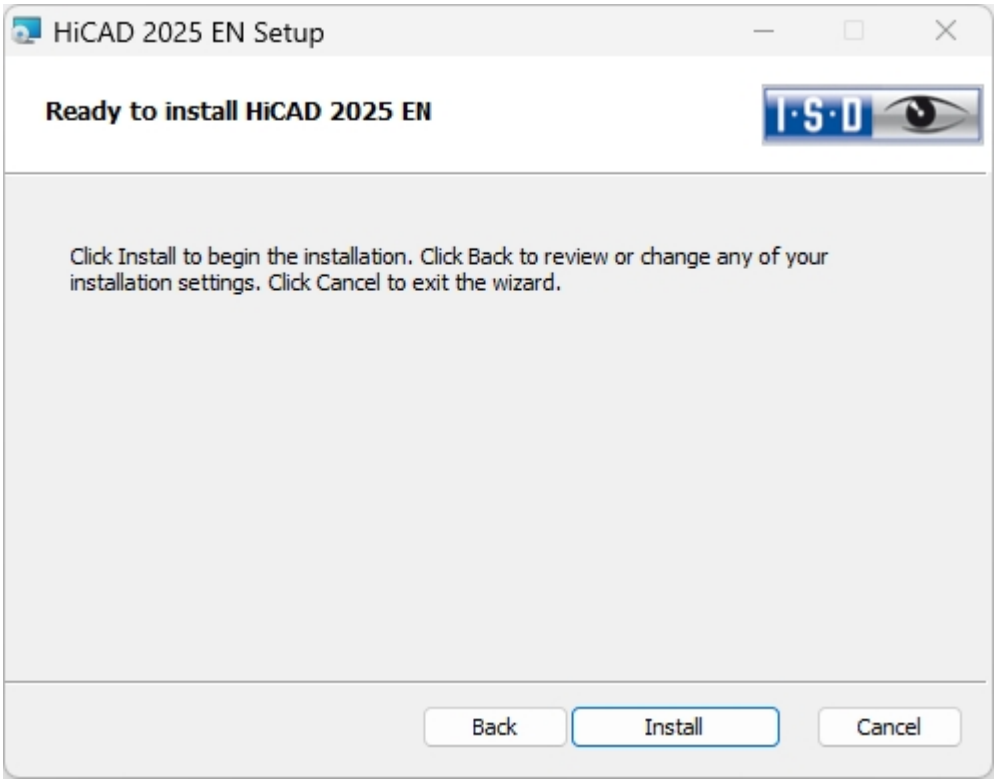


Enter the activation data for product activation and click **Next**.

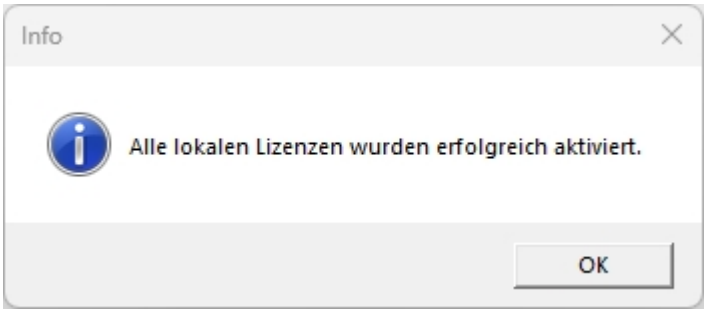
To obtain the activation data, please fill in the form on our website at isdgroup.com and upload your student identity card or your matriculation certificate.



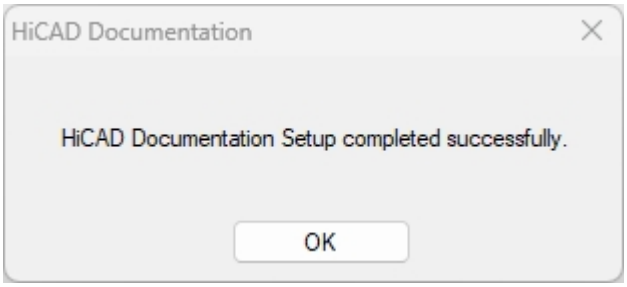
Select an installation directory.



Click **Install**.



Click **OK** to start the installation of the local Help.



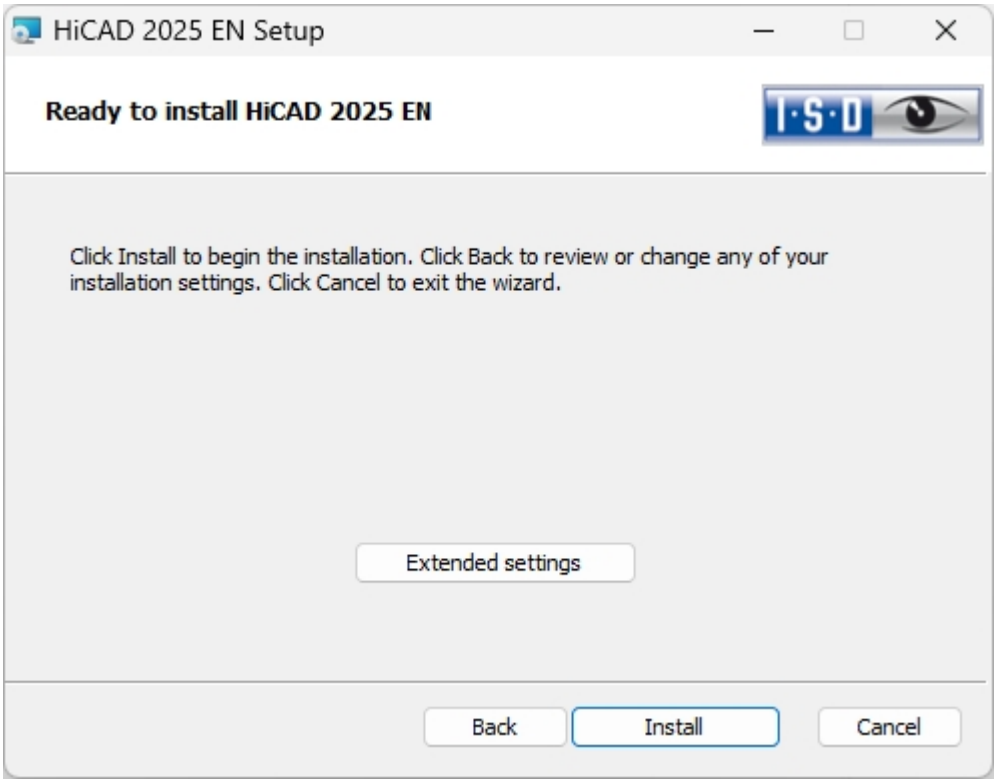
Click **OK** to complete the installation.

Silent Installation

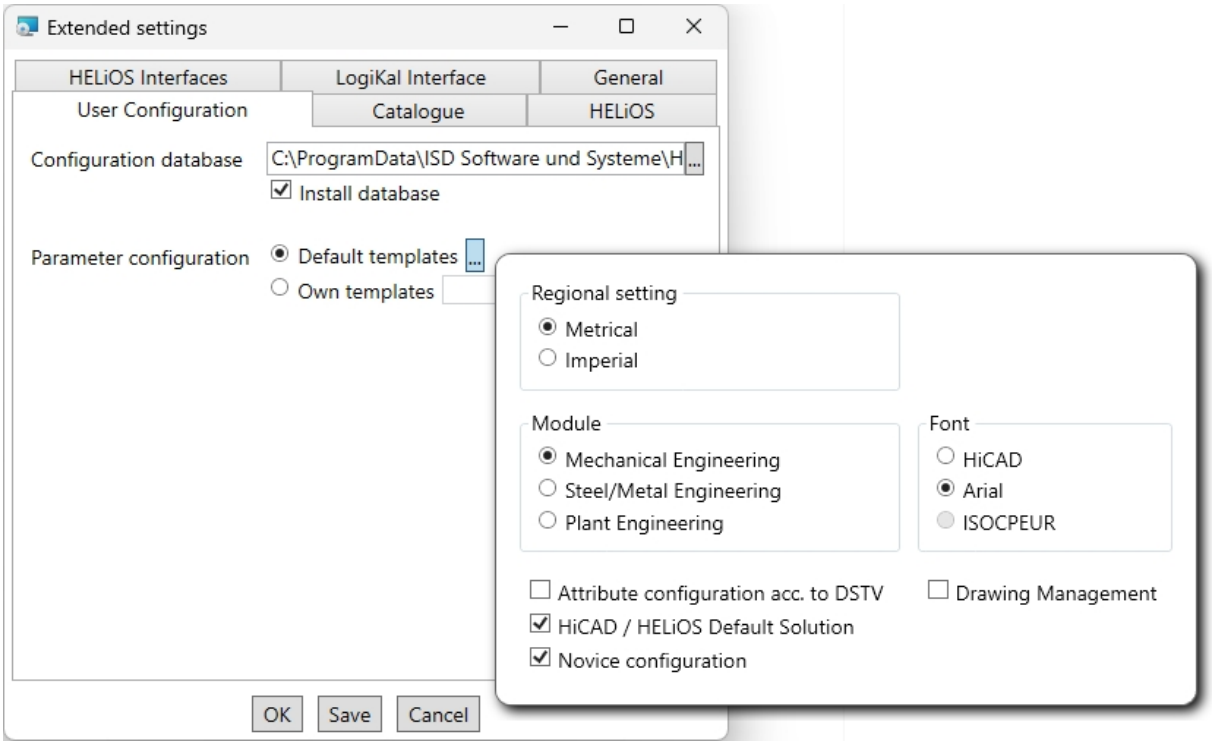
The silent installation can, for example, be configured for HiCAD, HELiOS or the HELiOS Spooler. The procedure is always the same.

To configure the installation options, start the installation **setup.exe** as usual and make the required settings.

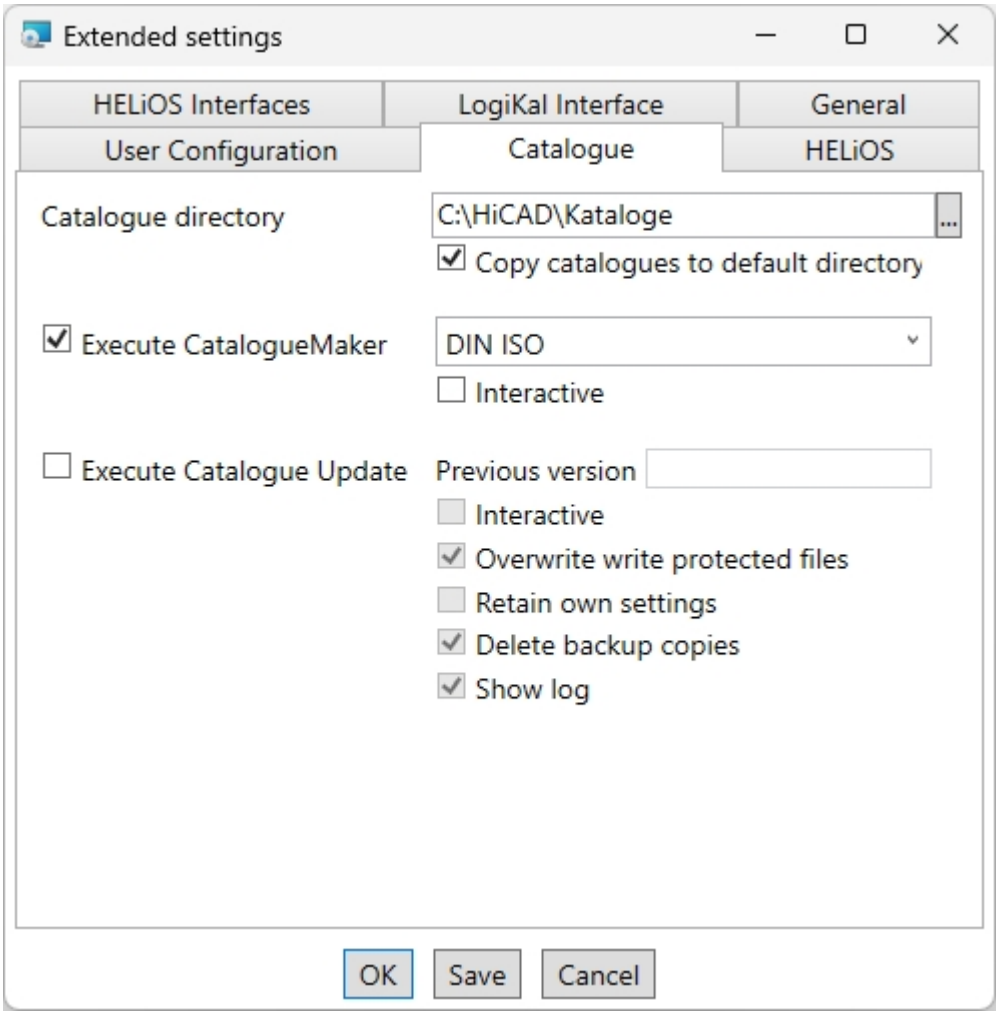
In the last dialogue of the installation, click on **Extended Settings**.



Here you can configure in particular the settings for the and the Catalogues in such a way that user interactions will no longer be required.



The parameter configuration takes place via selection of the .CSV file.



For **Execute CatalogueMaker**, the **Interactive** checkbox must been deactivated.

Clicking **Save** creates a setup.ini file containing the desired settings. This file will be loaded automatically if it is located in the same directory as the Windows Installer package **HiCAD.msi**. Alternatively you can specify a file via the command line:

setup.exe SETTINGS="<Ini-Datei>" /l*v "<Log-Datei>"

or

msiexec /i HiCAD.msi SETTINGS="<Ini-Datei>" /l*v "<Log-Datei>"

In this case the starting will not be “silent”, i.e. the installation dialogues will appear, but with the default values of the .ini file.

The option /l*v "<Log-Datei>" creates a log file of the installation which can be used for the diagnosis of installation problems.

Redistributables

Before distributing the installation you need to install the required redistributables on the target systems in order to circumvent the Microsoft-EULAs.

Examples:

vcredist.exe /passive

dotNetFx40_Full_x86_x64.exe /passive

The respective command line options of the individual Redistributable Installer can be called via the command line option **/?**.

If required, the .msu files of the Windows Installer 4.5 can be installed with the Windows Package Manager **pkgmgr.exe** (http://support.microsoft.com/kb/934307/en).

The packages can be installed with /passive /norestart. Otherwise, a reboot would be initiated automatically. If a package requires a reboot, the return value is 3010; otherwise it is 0 or an error code.

Please note:

- You need to install the redistributables that are located on the DVD at Program32 or Program64 (except for the setup.exe and the language-specific folders such as de-de).
- The utilisation of the msi package or the setup.exe, respectively, differs insofar as the setup.exe will issue an interactive message if a requirement (redistributable) is missing, while the msi package will cancel the process with an error code. The latter might be more suitable for a deployment within the scope of a software distribution program.

Starting the installation in the silent mode

The installation can only be set to the silent mode via the command line:

setup.exe SETTINGS="<Ini-Datei>" /passive /l*v "<Log-Datei>"

or

msiexec.exe /i HiCAD.msi /qb!- /SETTINGS="<Ini-Datei>" /l*v "<Log-Datei>"

As neither dialogues nor error messages are displayed, /l*v "<Log-Datei>" creates a log file of the installation which can be used for the diagnosis of installation problems.

Information on further command line options can be obtained via the command line, by means of the command msiexec /? , and via the Internet at

http://technet.microsoft.com/en-us/library/cc759262%28WS.10%29.aspx#BKMK_SetUI

http://msdn.microsoft.com/en-us/library/windows/desktop/aa372024%28v=vs.85%29.aspx

Starting a hotfix installation in the silent mode

Example: **msiexec.exe /i "\\entw042\Setups\Hotfix_HiC26022x64-3.msi" INSTLOC="C:\HiCAD" /passive**

Example: Batch installation incl. Redistributables and Log

```
@REM UAC auto elevate -->
@net file 1>nul 2>nul && goto :run || powershell -ex unrestricted -Command "Start-Process -Verb RunAs -FilePath '%comspec%' -ArgumentList '/c cd /d %CD% && %~fnx0 %*'"
@goto :eof
:run
@REM UAC auto elevate <--

@setlocal
@setlocal EnableDelayedExpansion

@set SOURCE=d:\Programm64
@set LANGUAGE=en-us

@for /r "%SOURCE%" %%f in (vc*redist*) do @(
echo "%%f" /passive /norestart
"%%f" /passive /norestart
if not "!errorlevel!" == "0" if not "!errorlevel!" == "1638" if not "!errorlevel!" == "3010" echo Visual C++ Runtime Installation Error && goto error
)

"%SOURCE%\DotNetFX48\NDP48-x86-x64-AllOS-ENU.exe" /q /norestart
@if not "%errorlevel%" == "0" if not "%errorlevel%" == "1638" if not "%errorlevel%" == "3010" echo .NET Runtime Installation Error && goto error

"%SOURCE%\VSTOR40\vstor_redist.exe" /passive /norestart
```

```
@if not "%errorlevel%" == "0" if not "%errorlevel%" == "1638" if not "%errorlevel%" == "3010" echo VSTOR Runtime Installation Error && goto error

@setlocal DisableDelayedExpansion

msiexec.exe /qb+! /i "%SOURCE%\%LANGUAGE%\HiCAD.msi" /l*v "HiCADInstall_%COMPUTERNAME%.log" SETTINGS="%setup.ini"

goto :eof

:error
@echo Error %errorlevel%
@net helpmsg %errorlevel%
@pause
```

Important:

The INI file must always be specified in the batch file with the complete path, as no assumptions can be made about the current directory of the Windows installer process.

If the INI is in the same directory as the batch file, this could be done via **SETTINGS="%~dp0setup.ini"**.

Configuration

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

- Configuration Management HiCAD
  - Configuration Management for Updates
  - Configuration Management for New Installations
- Parameter Configuration for HiCAD

Configuration Management

HiCAD offers a central configuration management with the Configuration Editor. This tool allows the creation of customer-specific configurations for a wide range of tasks, such as dimensioning, annotation, workshop drawing creation, fitting of vertical ladders etc. Once adjusted to company-specific requirements, these configurations can directly be used in HiCAD, without having to specify any further settings. The aim of our further developments is a gradual transfer of the previously used system files with their adjustable parameter settings into the Configuration Editor, thus enabling a central and safe configuration management.

This transfer has already been realised for the following files:

- ALGPAR.DAT (as of 1800)
- BEMPAR.DAT (as of 1800)
- DIMENSIONING_SETTINGS.XML (as of 1800)
- KRPGEN.DAT (as of 1801)
- MASPAR.DAT (as of 1801)
- FITTABLE_SETTINGS.XML (as of 1801)
- STBEMPAR.DAT (as of 1801)
- TXTANSI.DAT (as of 1801)
- STABMPAR.DAT (as of 1802)
- AUBM3PAR.DAT (as of 1802)
- ALG3DPAR.DAT (as of 1901)
- FEATURE.DAT (as of 1901)
- SCHRIF.DAT (as of 1901)
- TXTFONT.DAT (as of 1901)
- LINPAR.DAT (as of 1901)
- SSWRITESTEP.DAT (as of 1901)
- PASSTAB.DAT (as of 2000)
- ANSGEN.DAT (as of 2100)
- PARAMASS.DAT (as of 2101)
- SSTINI3D.DAT (as of 2102)
- SSTINI.DAT (as of 2102)
- STB_PARAMETER.DAT (as of 2102)
- GRAPAR.DAT (as of 2201)
- KNTPAR.DAT (as of 2202)
- REF3D_ATTR_AKT.DAT (as of 2300)
- TXTPAR.DAT (as of 2300)
- TPAR.DAT (as of 2400)
- ABWPAR.DAT (as of 2402)
- ABWCOL.DAT (as of 2402)
- ABWPOL.DAT (as of 2500)

- KRPMOD.DAT (as 2700)
- SKIZZTEC.DAT (as 2701)

The settings from these files have been integrated into the Configuration Management. In the Online Help for the Configuration Management you will find the document schluesselnamen.pdf, which shows you where you can retrieve the entries from the DAT files in the Configuration Editor.

In addition, the Online Help provides a description of various scenarios for the utilisation of the tool. An extensive description of the Configuration Management (Performance – Functions – Scenarios) is provided in the document ISD-Configuration.pdf.

Configuration Management for Updates

When performing an update, your settings from the existing configuration file **HICAD.CFGDB** of your previous HiCAD version will be transferred to the Configuration Management of HiCAD 2025, namely into the Administrator profile.

When the update is performed, only the values predefined by the ISD, i.e. the “factory settings”, will be changed. All other (administrator or user) settings will be preserved.

If you use a central configuration database on a server, it will be automatically detected by the update program by means of the aforementioned Registry entry, and will be updated. For an update of several workstations, one single update will be sufficient; a multiple update will, however, not do any harm either (as an already updated setting will not be updated again).

When HiCAD is started, the configuration database will be checked.

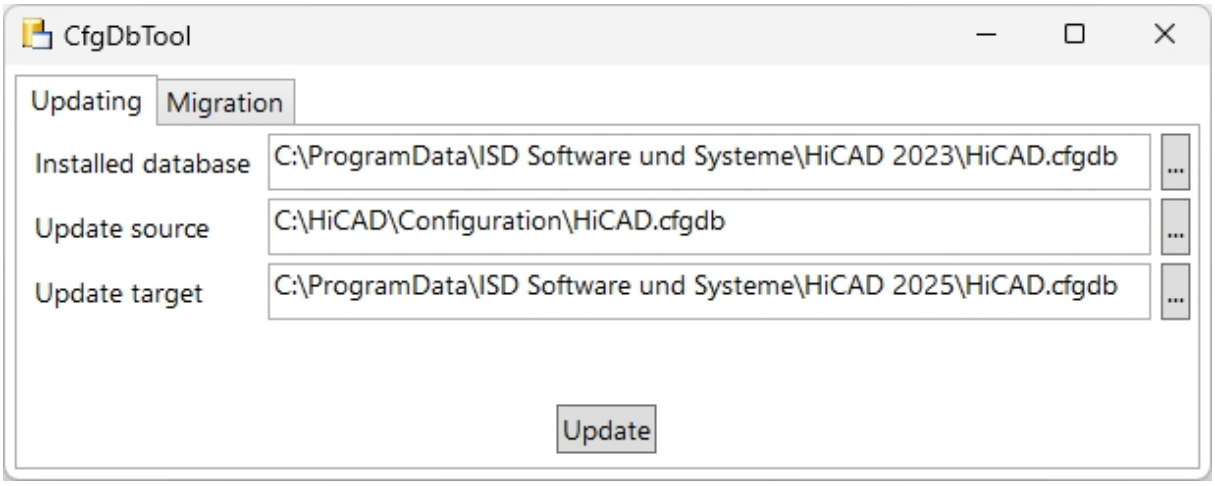
- If HiCAD is started with an outdated configuration base, a corresponding message will be displayed. In this case, please perform an update of the configuration database in order to avoid error messages or unexpected behaviour.
- If HiCAD is started with the database of a newer Major Release, a corresponding message will be displayed. In this case, please use a compatible database to avoid error messages or unexpected behaviour.

Configuration Management for New Installations

If you perform a (new) installation of HiCAD 2025, the settings predefined by the ISD will be initially used in the Administrator profile of the Configuration Management. If you want to transfer your individual settings in the file **HICAD.CFGDB** to the Configuration Management of HiCAD 2025, use the program **CfgDbTool.exe** in the HiCAD EXE sub-directory for this.

Furthermore, you are enabled to transfer settings from old **DAT** and **XML** files which are now managed in the Configuration Editor, to the configuration database of the current version.

Start the **CfgDbTool.exe** from the HiCAD / exe sub-directory



Use the **Update** tab of the CfgDBTool you tab to transfer the settings of your previous configuration file (.CFDB) to the configuration file.

Installed database	The configuration database to be updated, i.e. (the configuration database of your previous HiCAD.
Update source	The configuration database of the new version; the configuration database with the current ISD settings can be found in the folder: [HiCAD installation directory]\Configuration.
Update target	The result of the update. If you enter the same file here as in the Installed database, a backup of the previous configuration database will be created. You cannot enter the same database here that you entered in the Update source field.

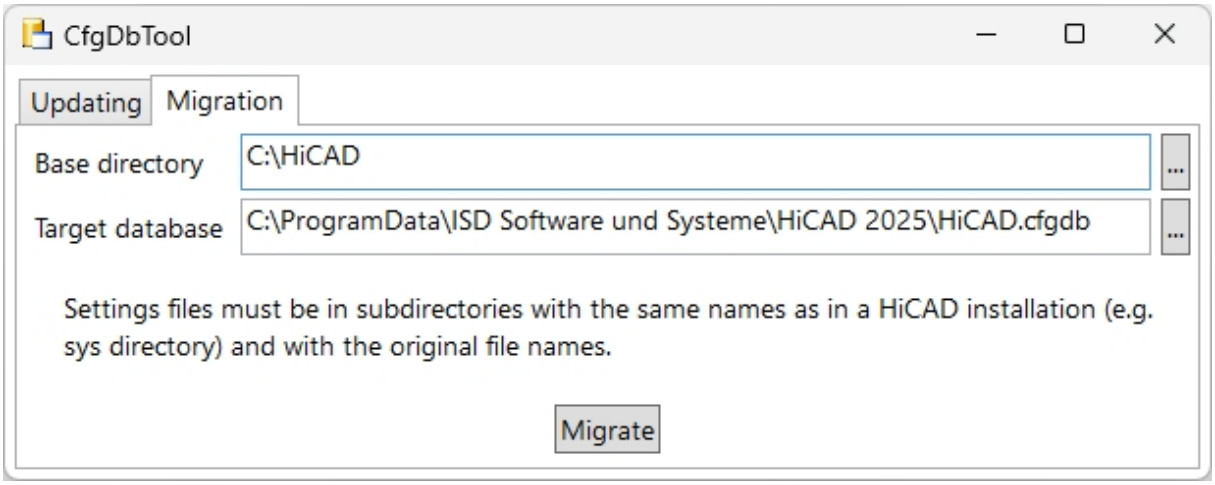
Select the directories.

Click the Update button to start the process.

Use the **Migrate** tab to transfer your individual settings from old **DAT** and **XML** files which are now managed in the Configuration Editor, to the configuration database of HiCAD 2019.

The setting files with their adjustments need to be copied to the HiCAD SYS subdirectory of the new HiCAD version for this purpose.

Start the **CfgDbTool.exe** from the HiCAD / exe sub-directory and activate the **Migrate** tab.



HiCAD base folder	Here you enter the directory where your old DAT and XML files etc. are located. Please make sure that the old files have the same name and are located in the same directory structure as in a HiCAD standard installation.
Target database	Here you specify the database to which the data are to be transferred.

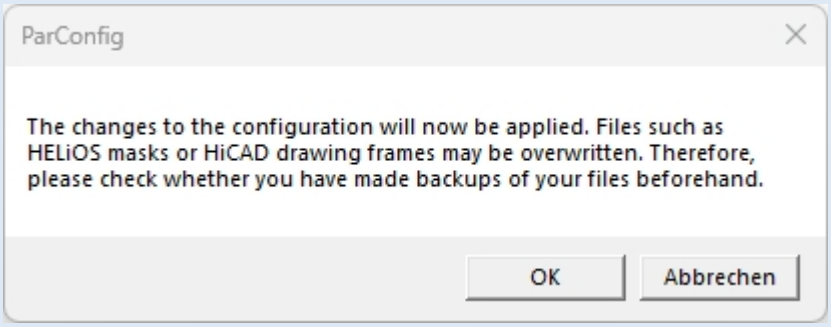
Select the directories.

Click the **Migrate** button to start the process.

Parameter Configuration for HiCAD

Important update notes - please read carefully!

When you run the **Computer Parameter Configurator** (HiCAD exe\ParKonfigComp.exe) tool – either during the installation/update (Extended Settings > User Configuration tab) or later – the following message will be displayed.



After confirming with **OK**, various system files in the HiCAD sys and szenen directory will be replaced with the files supplied in the HiCAD templates directory which have been designed especially for a working with the selected module and the activated checkboxes (e.g. …DSTV or Drawing Management). These files include, for example

- HiCAD masks for the part attributes (*.HDX),
- HELiOS masks for projects, documents and articles (*.XML, *.MSK),
- Various configuration files (*.HDB) and
- Template files for annotations (*.FTD).

You should therefore always make backups of all files that you have customized before using the ParKonfigComp.exe tool! If you have any questions, please contact your nearest ISD branch office.

Cancel aborts the operation without any changes to the configuration.

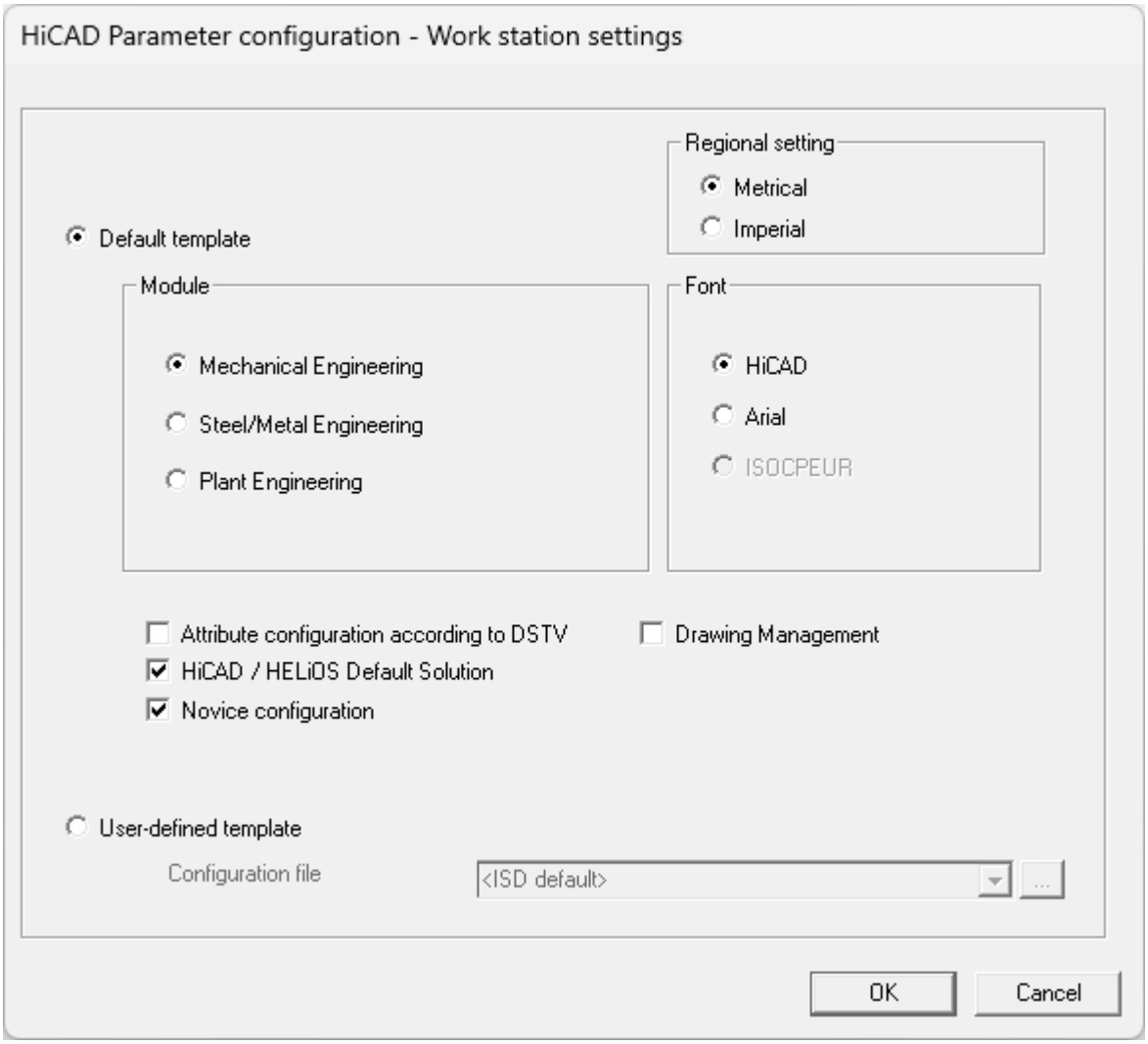
HiCAD provides suitably customised interfaces and configurations for various fields of engineering, e.g. for Mechanical Engineering, Steel Engineering, Metal Engineering or Plant Engineering. You can select these options during the installation of HiCAD.

To change the parameter configuration subsequently, start the programs

- ..exe/**ParKonfigComp.exe** for the workstation configuration, and
- ..exe/**ParKonfigUser.exe** for the user configuration.

Depending on the selection in the Parameter configuration, the settings stored in the **CSV file**, too, will be applied. In a CSV file it is, amongst other things, specified which files (e.g. HiCAD part masks or template masks for annotations) are to be copied to the sys directory.

When performing an Update, various system files in the HiCAD sys directory will be replaced with the files supplied in the HiCAD templates directory which have been designed especially for a working with the selected module and the activated checkboxes (e.g. …DSTV or Drawing Management). The standard CSV files are located in the templates directory of the HiCAD installation. CSV files are configuration templates that you can create and edit with Microsoft Excel.



In the dialogue window you have the following setting options:

- Region
  If you choose **North America** as the **Region**, then the system automatically switches to imperial, i.e. non-metric units. This applies to:
  - units of your drawings,
  - dimensions and
  - scales.

  This means that settings made in the Configuration Editor will be replaced if necessary! The same applies if you choose **Europe** as the **Region**. Here, the conversion is to metric units, dimensions and scales. In addition, further drawing frames are available.
- Module
  Here you choose the required filed of engineering. The common HiCAD parameters are then configured for this area.
- Font
  Specifies the text font default setting, e.g. for dimensioning, title blocks, view labelling, annotation etc.
- Attribute configuration according to DSTV
  If you want the HiCAD attribute masks for parts and drawings to obtain the DSTV-relevant attributes, please activate the appropriate checkbox. The files BRW_3DTEIL.HDX and BRW_SZENE.HDX in the HiCAD SYS directory will be preset for DSTV BOM configuration.

- HiCAD/HELiOS Default Solution
  Provides you with a preconfigured database solution for a safe and convenient management of product data. If you want to use it, activate the checkbox.
- Novice Configuration
  If you want HiCAD to be preset so that the automatic procedures of the novice configuration apply, activate this checkbox.
- Drawing Management
  Provides the PDM configuration with typical civil engineering attributes, masks and title blocks.
- User-defined template
  Activate this option if you want to use your own configurations. Then select the relevant configuration file.

Please note:

When performing an update, only activate the copying of default templates if no user-specific, customized masks and Bills of Materials are used.

Update

- Licensing in Case of Updates
  - Updating the Server License
  - Updating Local Licenses
- Carrying Out the Installation
- Data Compatibility of HiCAD/HELiOS
- Update of HiCAD
  - Backups Before Performing the HiCAD Update-Installation
  - Update Installation of HiCAD
- ISD Update Service
  - Installing the ISD Update Service
  - Using the ISD Update Service
  - ISD Update Service: Settings
- Update - Procedure for the modules Plant Engineering and Pipeline Planning
- Updating the HELiOS Database (Database Schema)
- Mask Converter for HELiOS
- Manual Registration of Multi-CAD Add-ins
- New File Format for 2-D Files in HiCAD
  - Installing the FIG-FGA Converter
  - Conversion of 2-D Files into FGA Format
- CatalogueMaker

Important notes on updates!

Hardware Exchange

If you use local HiCAD/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 HiCAD/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 HiCAD/HELiOS, you must deactivate all licenses (Server Licenses or Local Licenses). The procedures for Server Licenses and Local Licenses are different.

Data compatibility

HiCAD 2025 uses a different data format, which means that.SZA files saved with HiCAD 2025 can no longer be loaded into older HiCAD versions.

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.

HELiOS Workspaces: Conversion of the system directories

When updating from an older version to HELiOS 2025 (Version 30.0.0) or higher, please note that the directory structure will change. Since an automated migration is not possible, all users have to check out all data and empty their workspaces before installing the update to avoid data loss.

In previous versions, the workspaces were located at %localappdata%. This meant that different workspaces could be located on one system. To prevent this, the update to HELiOS 2025 will move the workspaces to the **%programdata%** directory.

Checked-out files are then stored at **%programdata%\ISD Software und Systeme\HELiOS Workspace\(...)*** (*plus Location ID and User ID). The workspace databases are stored version-dependently at **%programdata%\ISD Software und Systeme\HELiOS <Version>\Location-ID**.

Update HiCAD and HELiOS

In the context of HiCAD/HELiOS Update Installations, the last 5 release cycles are supported. As of HiCAD/HELiOS 2025 (Version 30.0.*), you can only update installations from 2020 (Version >= 2500.0) and newer. (See also Carrying out the installation.)

Backup HiCAD/HELiOS

Backups of the following files must be made, for cases in which an unexpected interruption of the update occurs: Catalogues, HiCAD.cfgdb (Configuration Database) and HELiOS Database (only required if you actually use a HELiOS Database).

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:

- heliossac_titleblock.dat,
- helacblock.xml

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

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

HELiOS List attributes

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

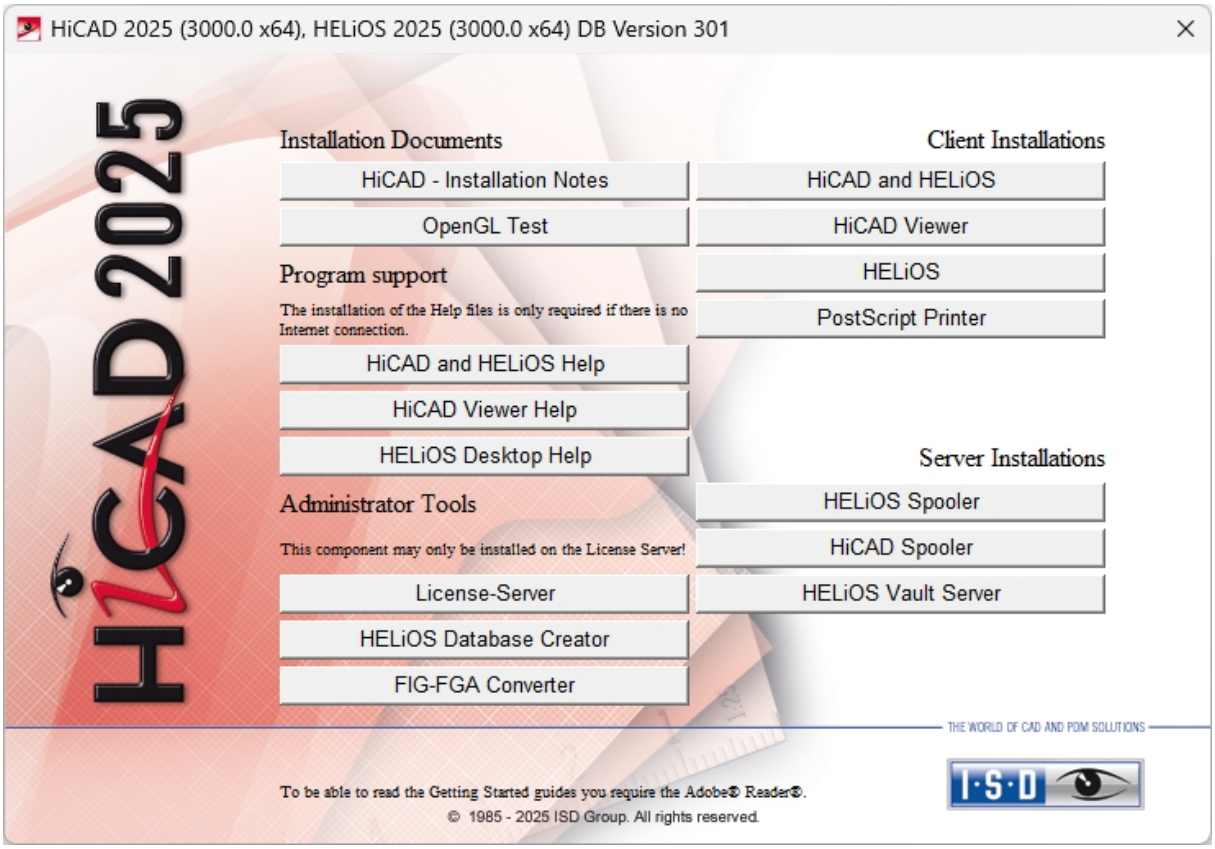
Updating the Server License

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 2025.

You can start with the installation of HiCAD/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, can be found on the installation medium of HiCAD/HELiOS 2025. 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 and click on the **Standard Edition** button. In the selection mask of the installation wizard, click on the **License Server** button.



Before you can use the new licenses of HiCAD/HELiOS 2025, you need to deactivate the old licenses with the help of the ISD License Manager. This tool is can be found via the in the Windows Start menu under **Program files** > **ISD Software und Systeme**.

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 (Server)**. After installing 2025 this tool is available in the Windows **Start** menu via **Programs > ISD Software und Systeme GmbH > Administration**.

Another prerequisite for the activation of the new licenses is their requesting via the via the Update form and the subsequent provision of the licenses by the ISD.

Start the current **ISD License Manager (Server)**, which you can find in the Windows Start menu via**Programs > ISD Software und Systeme GmbH > Administration** (the ISD License Manager (Server) required for server licenses is installed in the folder C:\Program Files\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 HiCAD/HELiOS.

Updating Local Licenses

Before installing HiCAD/HELiOS 2025, you need to deactivate the local licenses of the old version on **all** workstations. After installing HiCAD/HELiOS 2025, 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** or in the exe directory of your HiCAD version.

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 most recent **ISD License Manager**. After installing HiCAD/HELiOS 2025 this tool will be available to you in the **Start** menu of Windows under **ISD Software und Systeme** or in the exe directory of the new HiCAD version.

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 HiCAD/HELiOS, start the most recent **ISD License Manager** (Folder [HiCAD/HELiOS installation directory]\exe\ISDLicenseManager).

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 Manager**, 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 HiCAD/HELiOS.

Carrying Out the Installation

The installation of HiCAD/HELiOS and 3rd Party CAD 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 HiCAD/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 themself with the Update Installation topics and ensures that nothing will be forgotten.

Data Compatibility of HiCAD/HELiOS

No changes are made to the HiCAD data format and the HELiOS standard database within major releases. This means that all patches and service packs of a version (e.g. 30.0.x, 30.X.x) will be using the same data format, and no HELiOS update will be required.

When updating from older HiCAD versions to HiCAD 2025(Version 30.X), please note the information given below.

Update from Version	HELiOS Update	HiCAD data format changed
HiCAD 2024 Version 29.X	✓	✓
HiCAD 2023 Version 28.X	✓	✓

Please note:

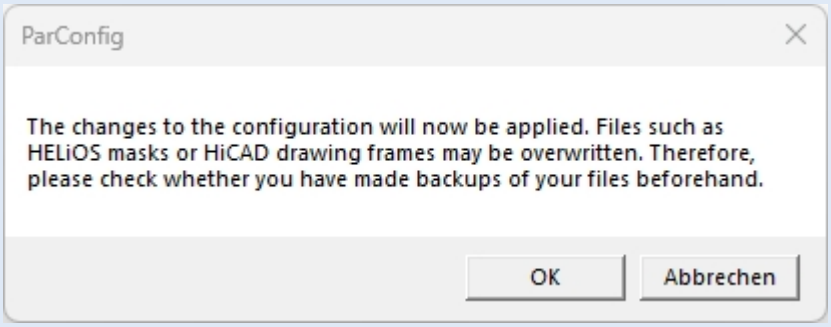
- If a HELiOS update is necessary, older HiCAD, respectively HELiOS versions have no access to the database any more. All workplaces need to be converted at the same time.
- If the HiCAD data format has been changed, drawings and parts cannot be loaded with the older version if they were saved with the new version.

Update of HiCAD

The ISD recommends performing an Update Installation when switching from an old version to HiCAD 2025 or for the installing of Service Packs and Patches. Before the update, create a backup of the Catalogues, the HiCAD.cfgdb (Configuration Database) and the HELiOS Database (only required if you actually work with a HELiOS Database).

Important update notes - please read carefully!

When you run the **Computer Parameter Configurator** (HiCAD exe\ParKonfigComp.exe) tool – either during the installation/update (Extended Settings > User Configuration tab) or later – the following message will be displayed.



After confirming with **OK**, various system files in the HiCAD sys and szenen directory will be replaced with the files supplied in the HiCAD templates directory which have been designed especially for a working with the selected module and the activated checkboxes (e.g. …DSTV or Drawing Management). These files include, for example

- HiCAD masks for the part attributes (*.HDX),
- HELiOS masks for projects, documents and articles (*.XML, *.MSK),
- Various configuration files (*.HDB) and
- Template files for annotations (*.FTD).

You should therefore always make backups of all files that you have customized before using the ParKonfigComp.exe tool! If you have any questions, please contact your nearest ISD branch office.

Cancel aborts the operation without any changes to the configuration.

Backups Before Performing the HiCAD Update Installation

Before starting the Update Installation of HiCAD, you should create a backup of the following files:

- Catalogues
- HiCAD.cfgdb (Configuration Database)
- HELiOS Database (only required when you actually work with a HELiOS Database)

These components will be automatically updated during the installation. Nevertheless is a backup of these components recommended, e.g. for cases in which an unexpected interruption of the update occurs.

Please create an archive folder for the storage of these backups.

Backup of catalogues

Find the folder where the catalogues of the old version are located.

- In case of a local installation this is usually the KATALOGE folder in the directory of your HiCAD installation.
- In case of a network installation the catalogues are normally located in a shared network folder, which is indicated in the Windows Registry at HKEY_LOCAL_MACHINE\SOFTWARE\ISD Software und Systeme\HiCAD\XXXX (version) in the CatDir key.

In the Windows Explorer, right-click the folder that contains the catalogues. Select **Send to > Compressed (zipped) folder**. Important: Please choose a descriptive name for the zipped folder enabling an easy recognition of the catalogues, e.g. HiCAD_2024_CATALOGUES.ZIP

After its creation, move the file to the archive folder.

Backup of Configuration Database HiCAD.cfgdb

Before installing the new HiCAD version, copy the old file HiCAD.cfgdb to the archive folder.

In the Windows Registry at HKEY_LOCAL_MACHINE\ SOFTWARE\ISD Software und Systeme\HiCAD\XXXX (version) in the CfgdbPath key you can see where the file HiCAD.cfgdb is located.

Backup of HELiOS Database

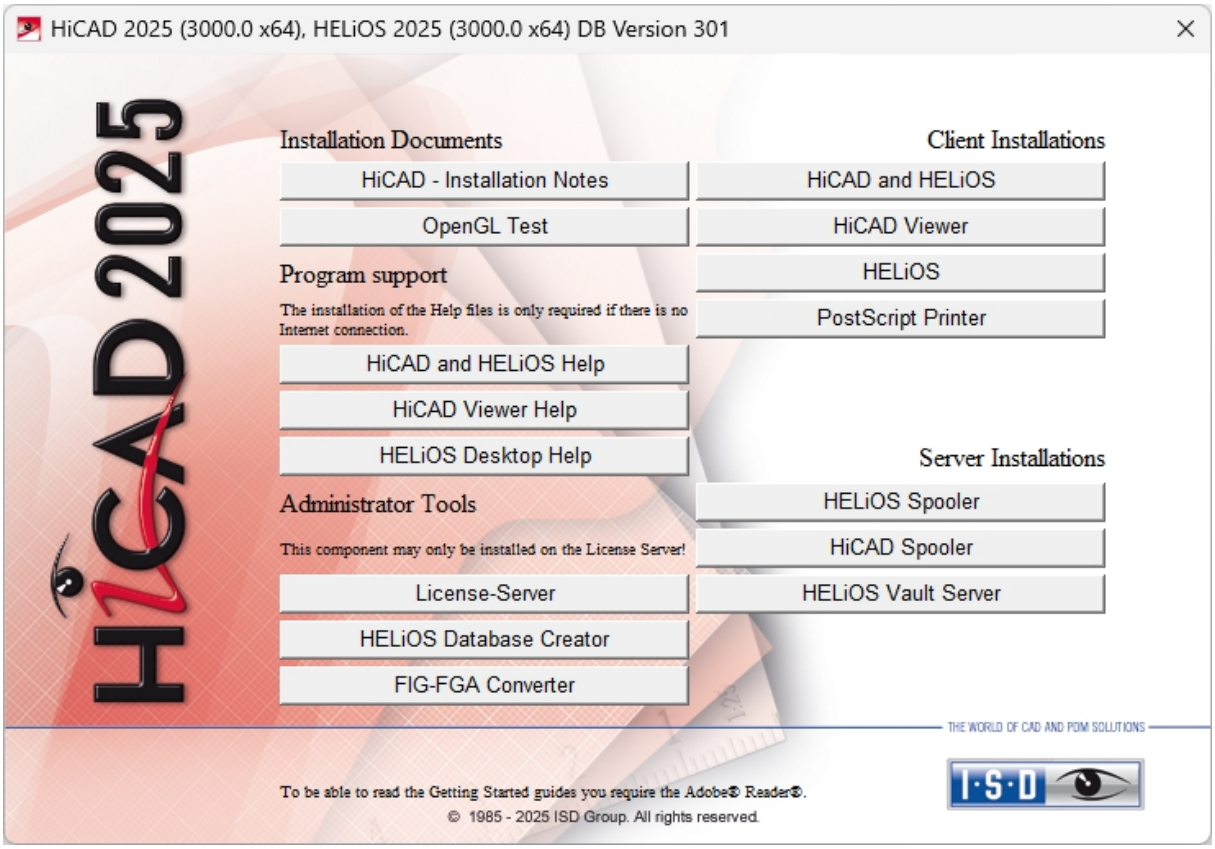
Open the **SQL Server Management Studio**. .On the left side, right-click **bauteil...** in the list. Then, select Tasks > Back Up. Make sure that the backup will be stored in the archive folder. You can then compress the backup file (.bak) to a ZIP file.

Update Installation of HiCAD

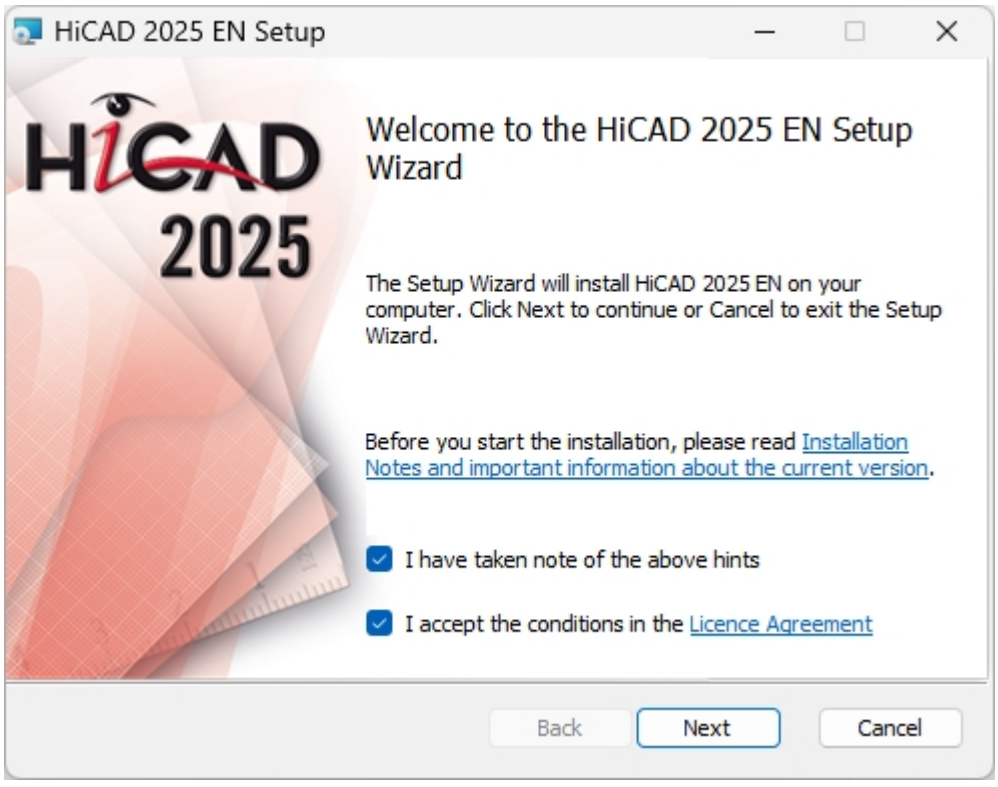
You can conveniently download the current HiCAD version in the Download Area. On the corresponding installation medium you will find, besides the HiCAD installation, further utilities and the HELiOS installation. Please note that the HELiOS installation is the last available HELiOS patch containing the same database version as the HELiOS version that was originally released with the corresponding Major Release. The advantage of this is that you will not need to update the database as well thanks to the simultaneous installation of HELiOS.

Start Windows to begin with the Update Installation. If Windows has already been opened, close all other applications and start the installation wizard.

In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components.

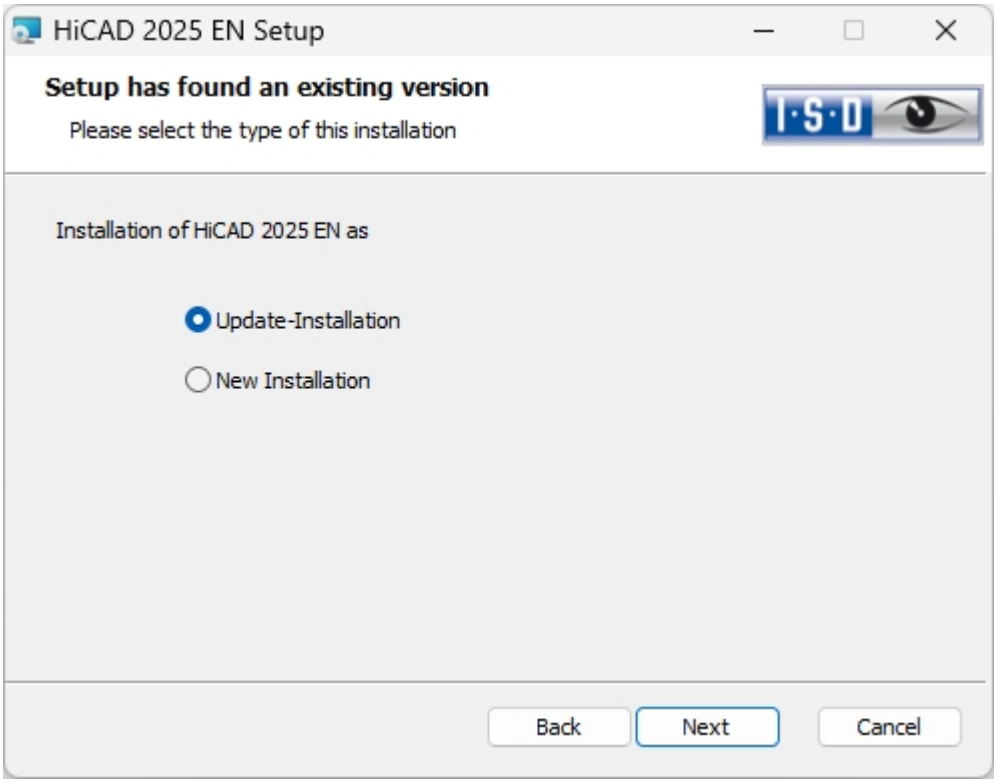


Click on the **HiCAD and HELiOS** button.

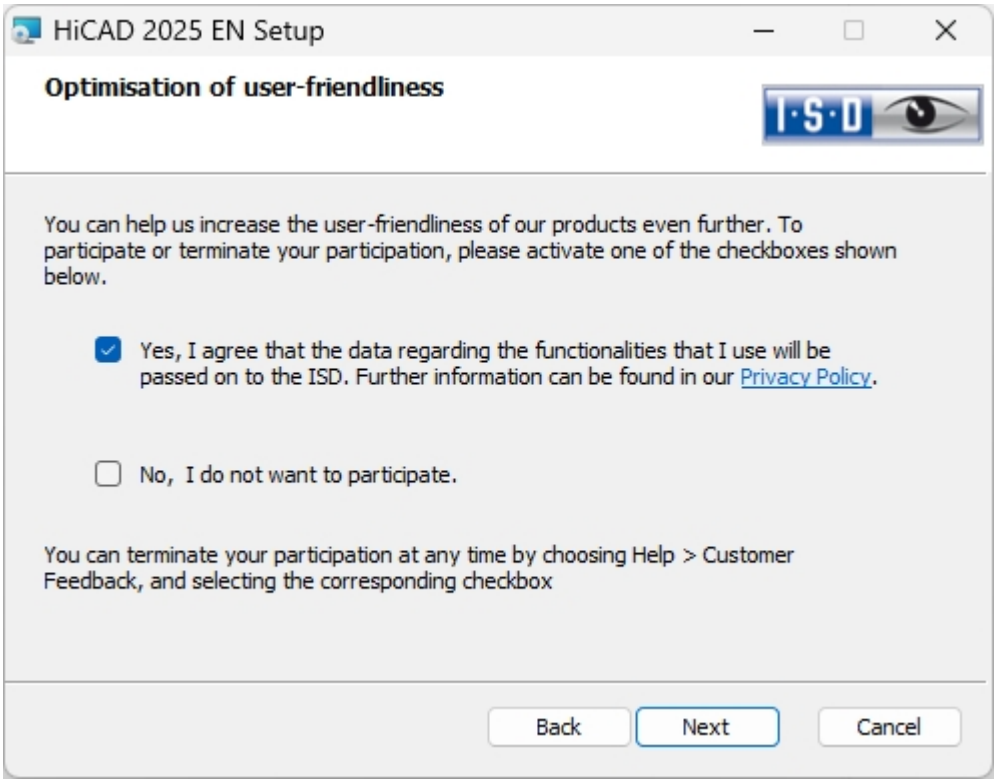


Please read the **Installation Notes** and the Licence Agreement carefully.

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

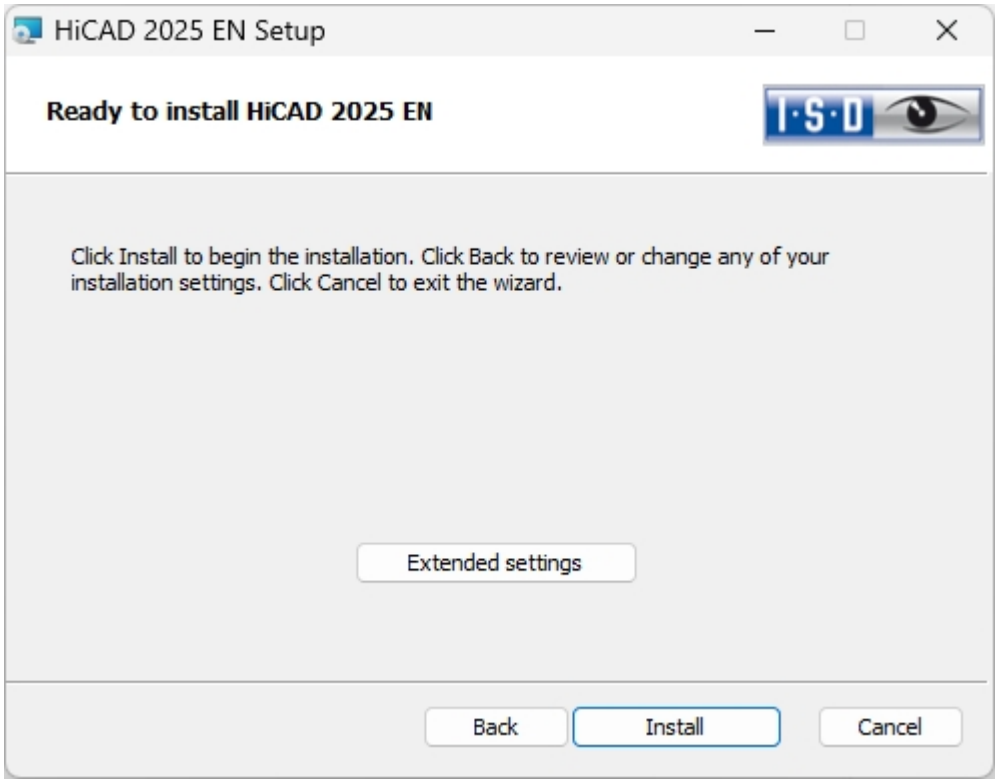


Activate the **Update Installation** option and click **Next**.

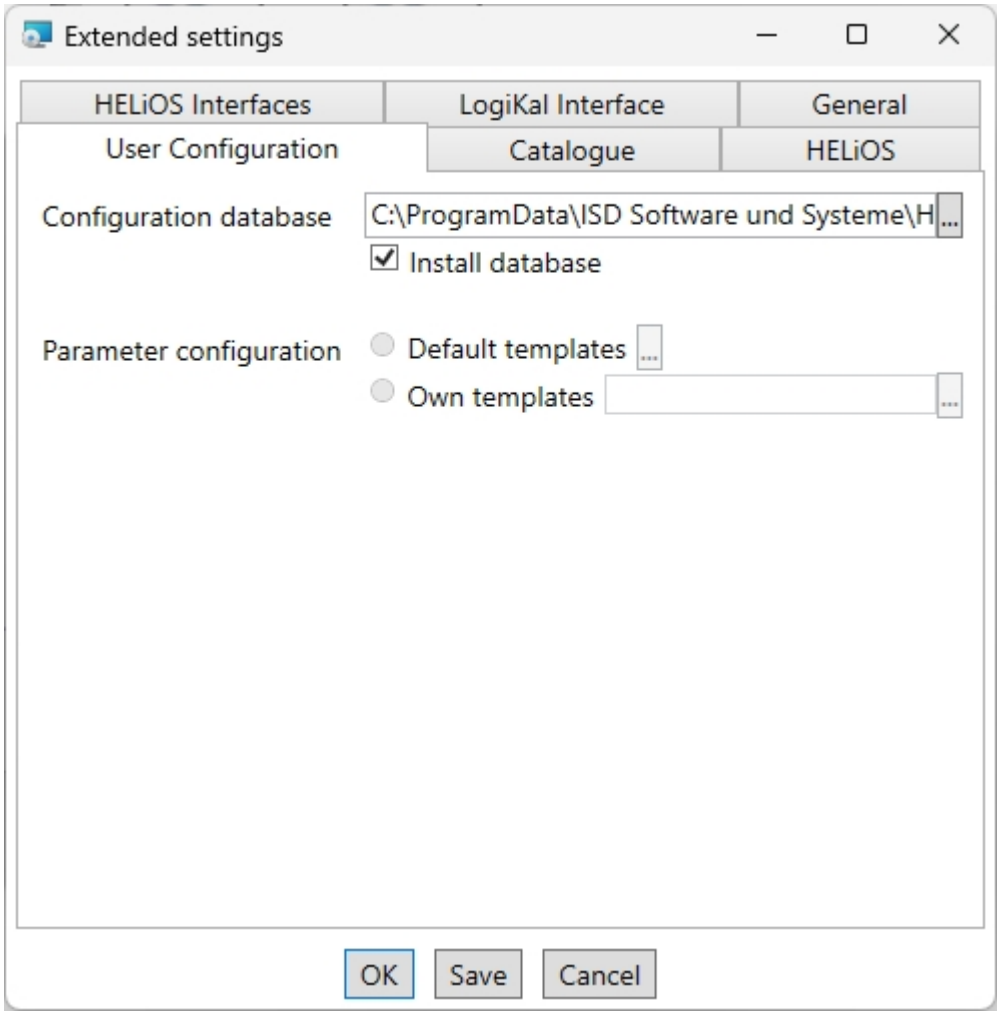


You can help us increase the user-friendliness of our products even further. To participate or terminate your participation, please activate the corresponding checkbox.

You can terminate your participation at any time by choosing **Help > Customer Feedback**, and selecting the corresponding checkbox.

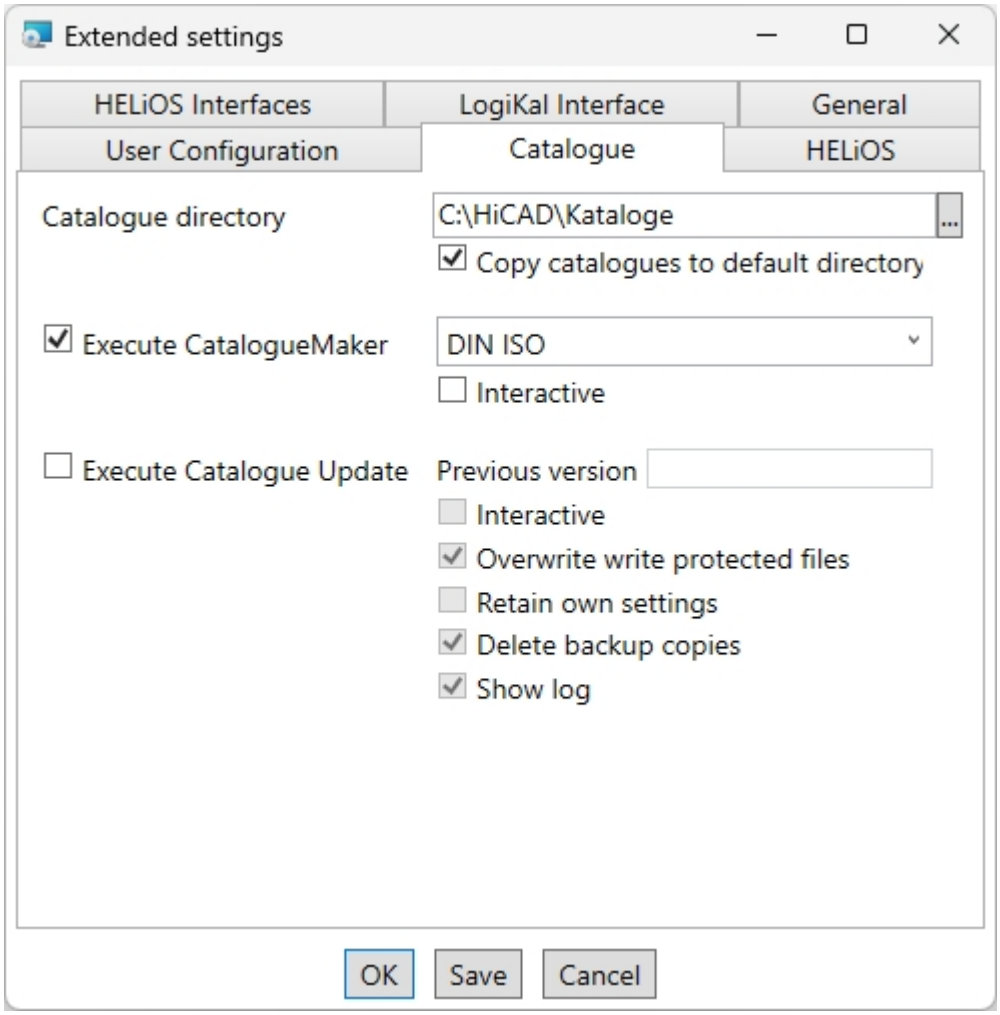


You can now start with the installation or modify the **Extended Settings**, e.g. for the user configuration, the catalogues, or HiCAD with HELiOS



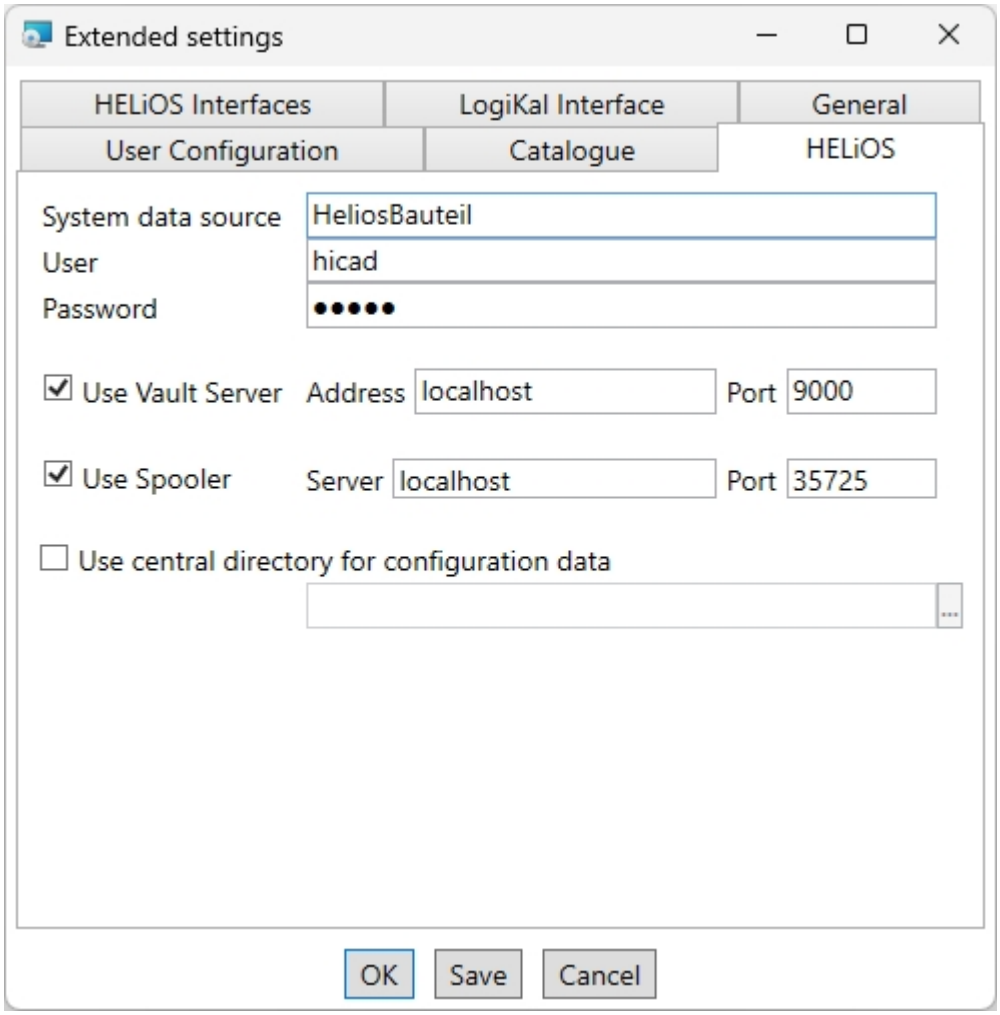
Under the path specified in the **Configuration Database** field, customer-specific settings for various features such as dimensioning, annotations, workshop drawing creation or fitting of vertical ladders are stored. When making an update, **customer-specific settings** can be applied. In addition, values that have not been modified by the user will automatically obtain the updated pre-settings.

You can change the parameter configuration after the update installation with the programs ../exe/ParKonfigComp.exe (for the workstation) and ../exe/ParKonfigUser.exe (for the user).



The running of the **CatalogueMaker** serves the purpose of specifying which standard series are to appear in the standard part catalogues (currently standard series are available for DIN, ISO, EN, ANSI and JIS); the selection of standards in the **CatalogueMaker** only influences the display of standard parts, but not their availability; the availability is still controlled via license selection in the **ISD License Manager**.

The **CatalogueUpdate** tool is used to update the catalogues during an update installation. It can be started automatically during the update installation by activating the option **Execute CatalogueUpdate**. You can also start the tool later from the EXE directory of your HiCAD installation, e.g. if you want to exchange catalogues among customers.



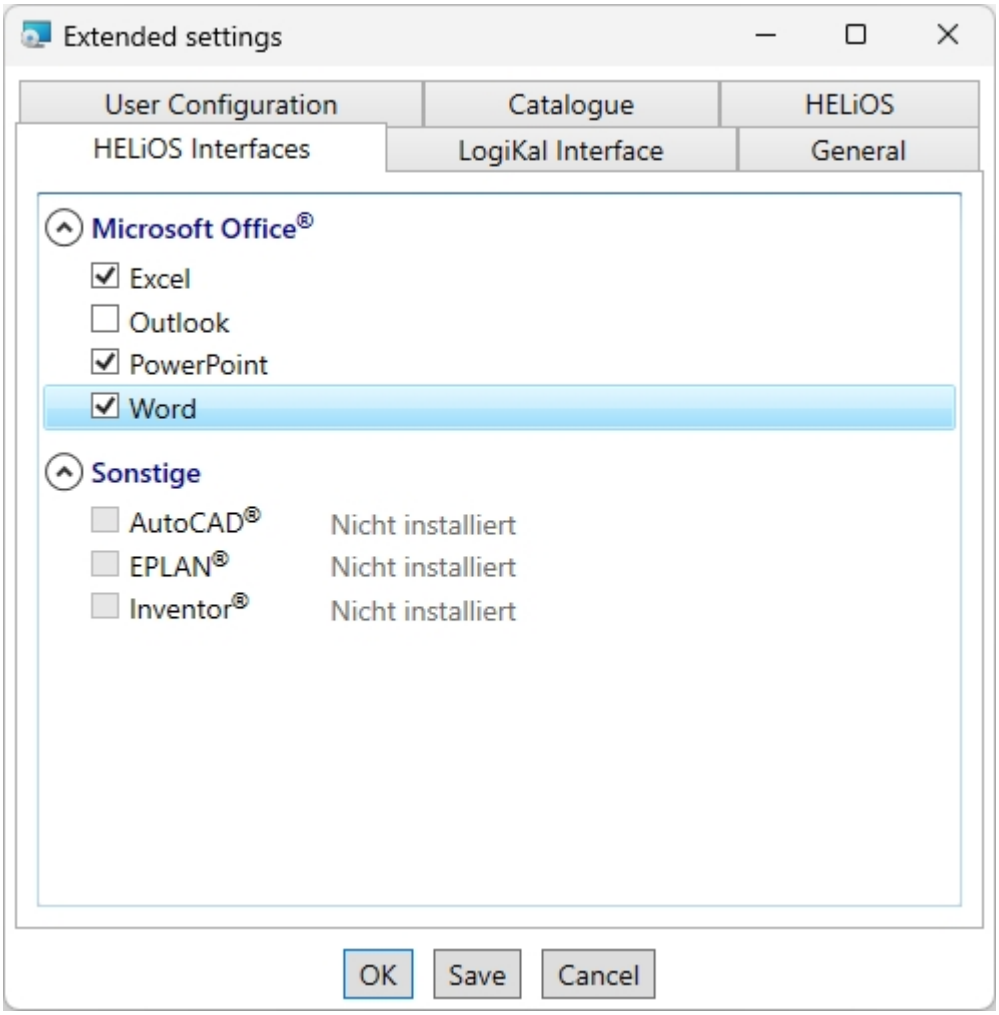
For a new installation, you can enter any name for the system data source. In the case of an update, you are offered the existing data source. **User** and **Password** are identical to the ODBC login.

If you are working with a HELiOS Vault Server, **Use Vault Server** is activated and the **Address** and **Port** are entered. The data of the spooler are also taken over.

Individual settings in HELiOS can be distributed to other users or workstations. To do this, create a ZIP file in the HELiOS client via **> HELiOS Options >** Manage... **> Export settings** to create a ZIP file. To load the settings on another workstation, select **HELiOS Options > Manage... > Import settings**. You can then select the ZIP file and confirm with **Open**.

If you want to make the settings available to multiple workstations, activate the **Use central directory for configuration data** option during installation and then select a directory after clicking on the icon. Via **HELiOS Options > Manage... > Save settings centrally**, you can save the current settings of your HELiOS Desktop to the specified central directory and thus make them available to other workstations.

During the update installation, the system checks whether the existing HELiOS version is more recent than the one on the installation medium. If this is the case, the HiCAD installation will only update those files that do not originate from HELiOS. The files that belong to HELiOS are those that a standalone installation would bring from the HELiOS desktop minus the hicadcommons contained there.

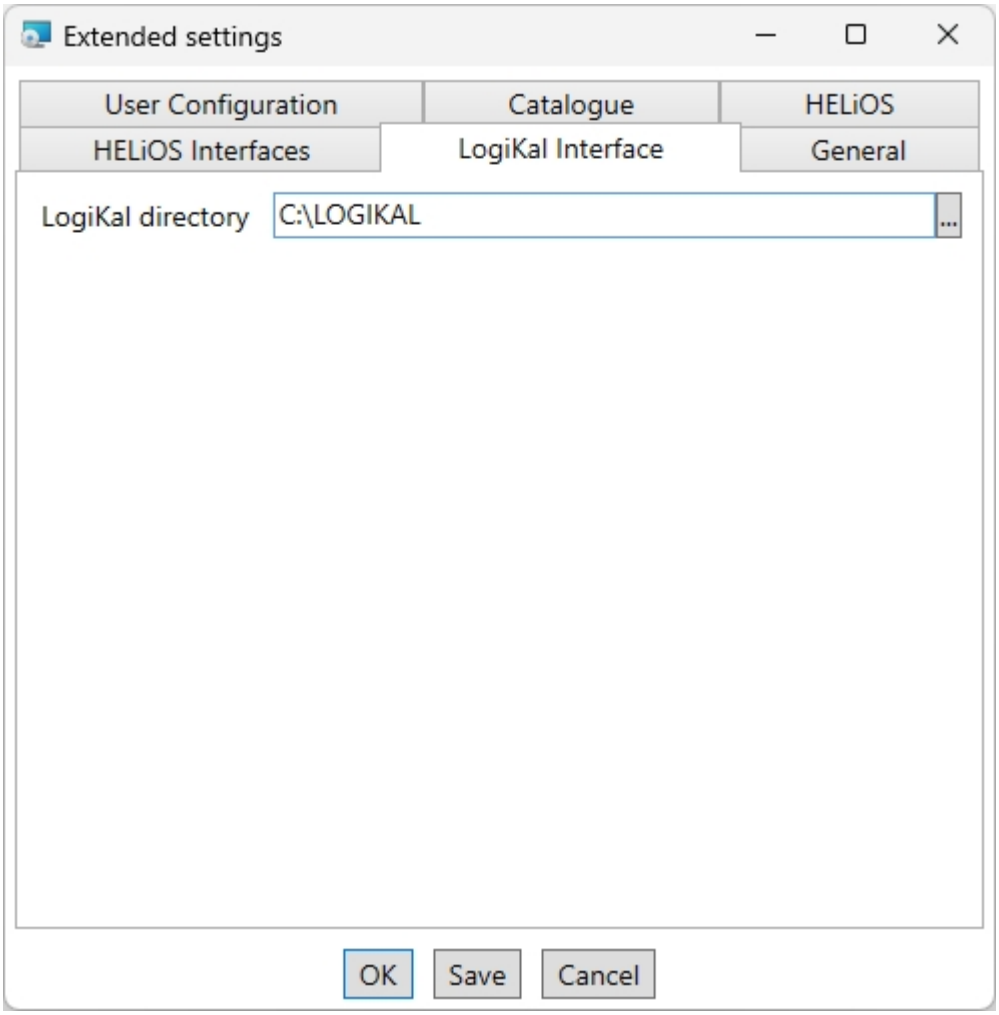


The availability of interfaces with HELiOS depends on the programs that are installed on your computer. You can only link 64-Bit versions to HELiOS 64-Bit versions.

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

Please note:

Integration of shared networks
If a directory is accessed by more than one computer, in the filegrup.dat under C: (for the Scenes directory) should not be listed a local path or the network connection letter, but the entire UNC path according to the pattern C:\\servername\ShareName\Directory. The filegrup.dat can be found in the HiCAD/HELiOS installation in the HiCAD exe directory and in case of an EPLAN interface as well under HELiOS Synchronisation Service\exe. In the HELiOS Standalone installation the filegrup.dat can be found in the HELiOS exe directory.

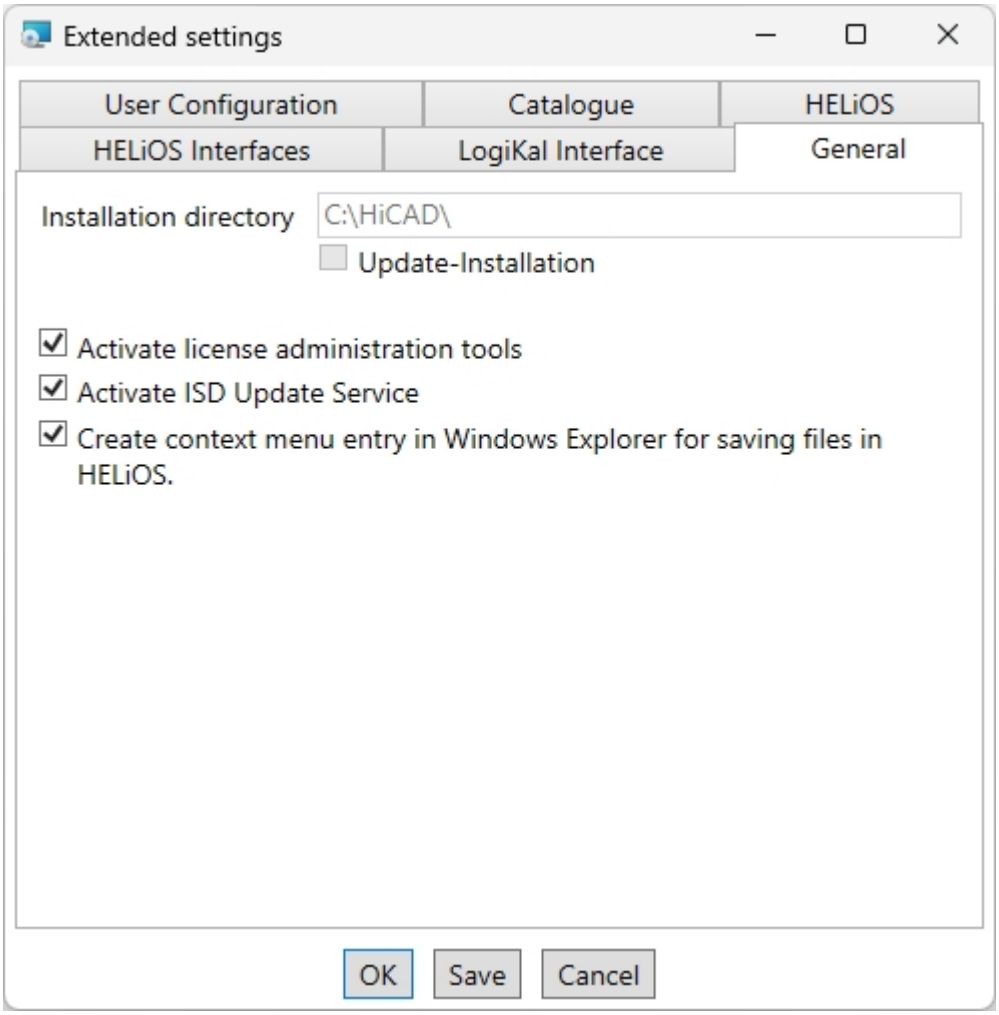


If you have installed **LogiKal** on your computer, you can enter the installation directory here.

Please note:

In HiCAD, at **Settings > Further directories** you can set the paths for the database of the **Configuration Editor**, the **Catalogue Editor** and **LogiKal**. These paths are located in the Windows Registry at **HKEY_LOCAL_MACHINE\SOFTWARE\ISD Software und Systeme\HiCAD\XXXX**.

XXXX is the HiCAD version number.



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

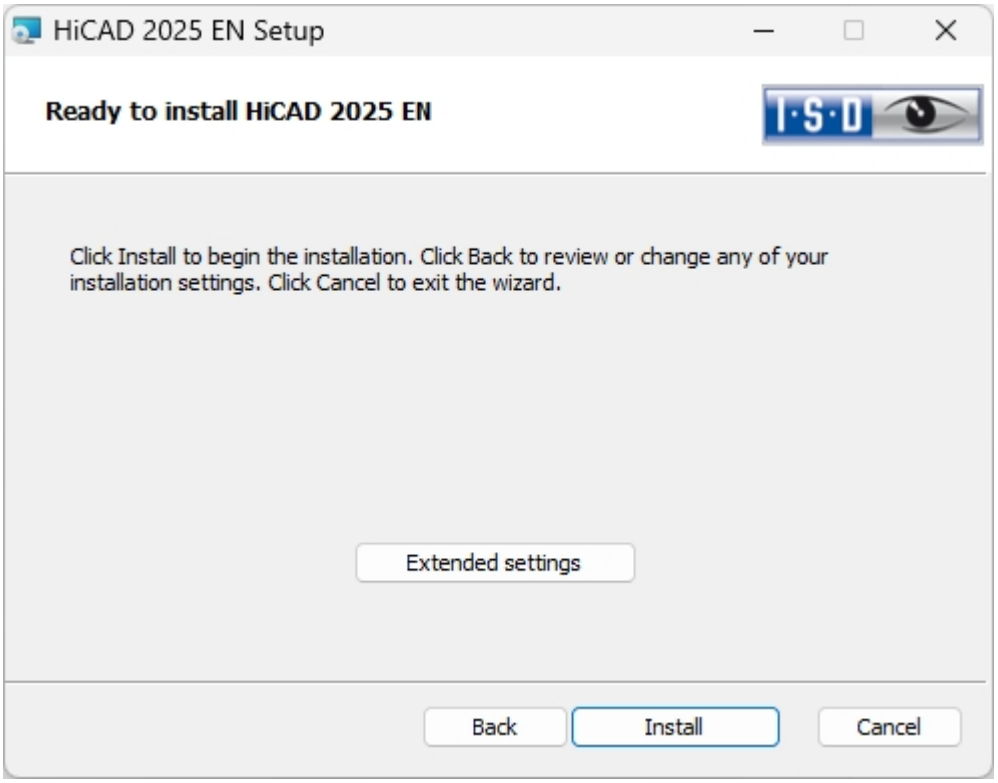
Please note:
During installing of HiCAD, a ISD License Manager that may exist will be uninstalled. By checkmarking the **Activate license administration tools** option you can reinstall the current standard ISD License Manager during the installation.

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

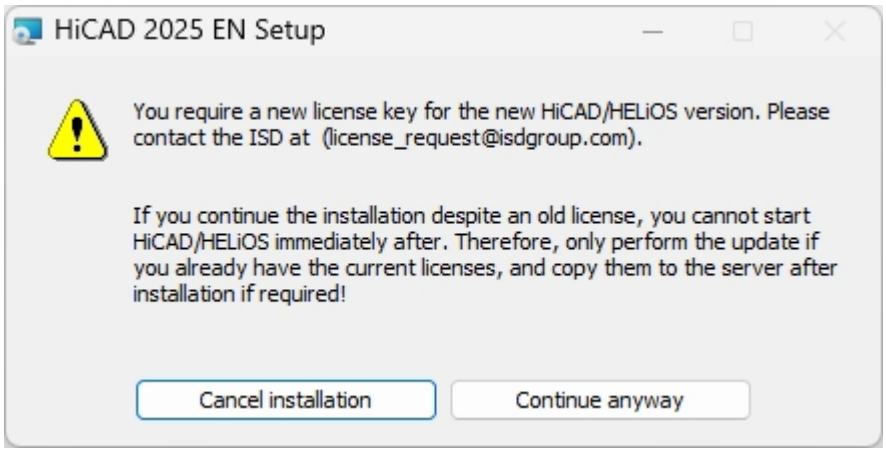
Click **Save** to save the **Extended settings** to an .ini file. If you place the .ini file in the installation directory when installing server licenses, the settings will be applied.

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



Click **Install**.

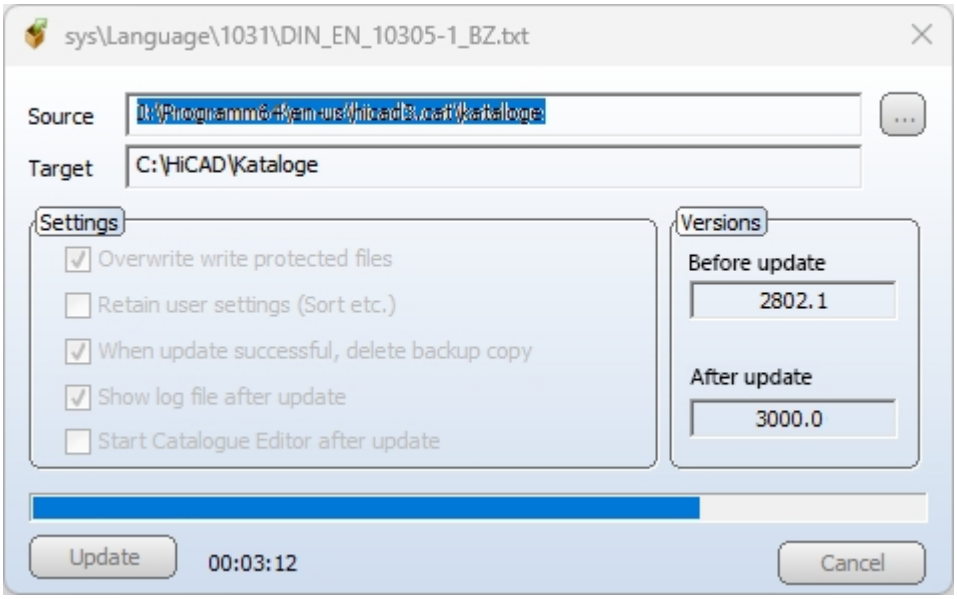
You will now be informed that you need a new license key for the new version.



Click **Continue anyway** to start the installation.

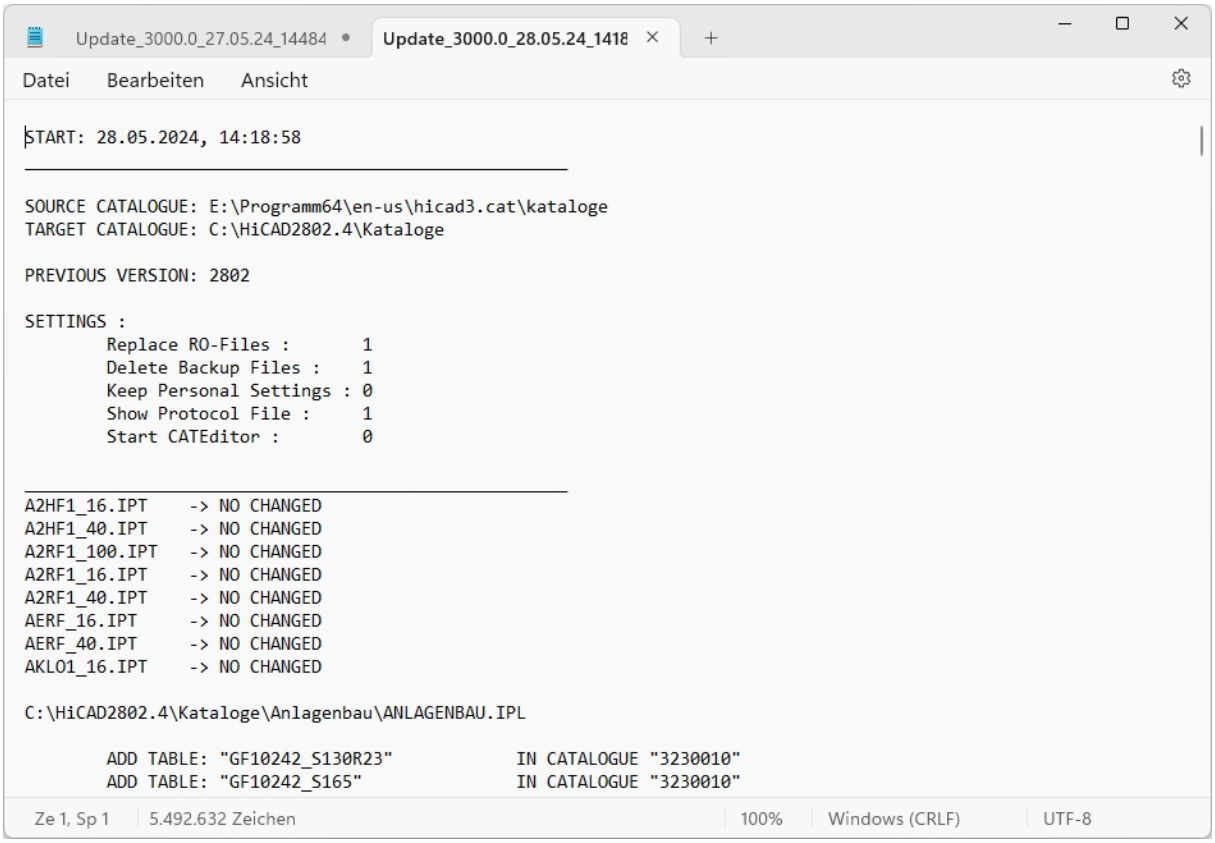
Towards the end of the installation you can specify the procedure for the updating of the catalogue files if you activated the **Execute CatalogueUpdate** checkbox in the **Extended settings** beforehand.

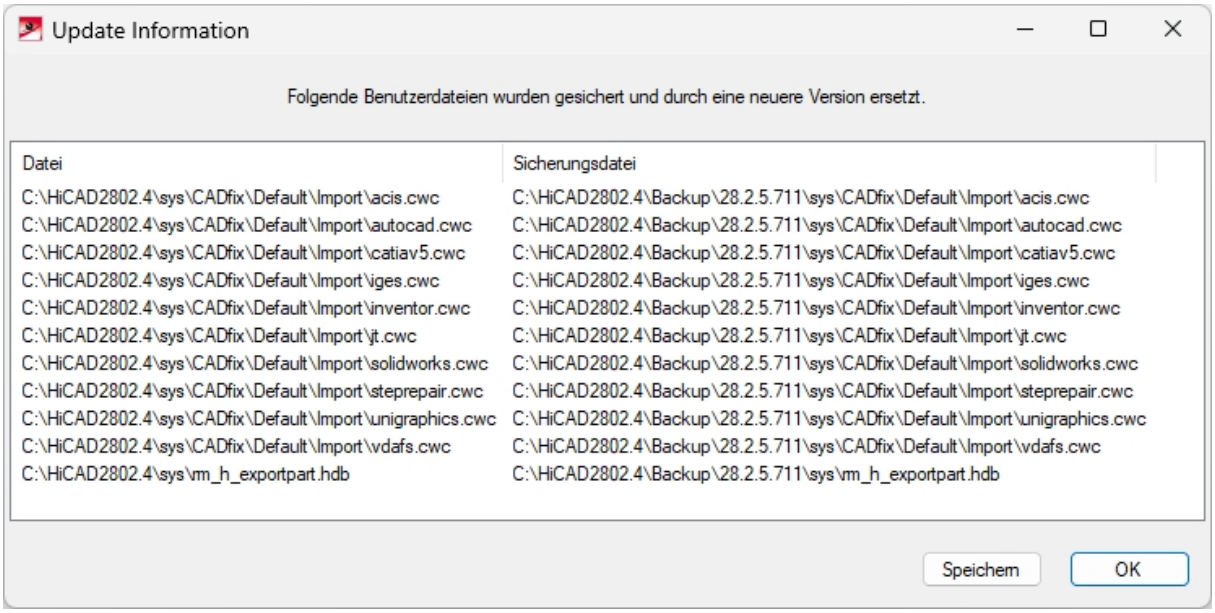
Please remember that HiCAD will check the version of the utilized version upon HiCAD start. If the catalogue directories are old there is a risk that HiCAD will search for catalogue entries which do not yet exist in the old catalogues. One example of this is the Textures that were integrated in the catalogue some time ago. If these are missing in the catalogue, you will have no access to these Textures in HiCAD. Use the CatalogueUpdate.exe program in the HiCAD EXE directory to update the catalogues



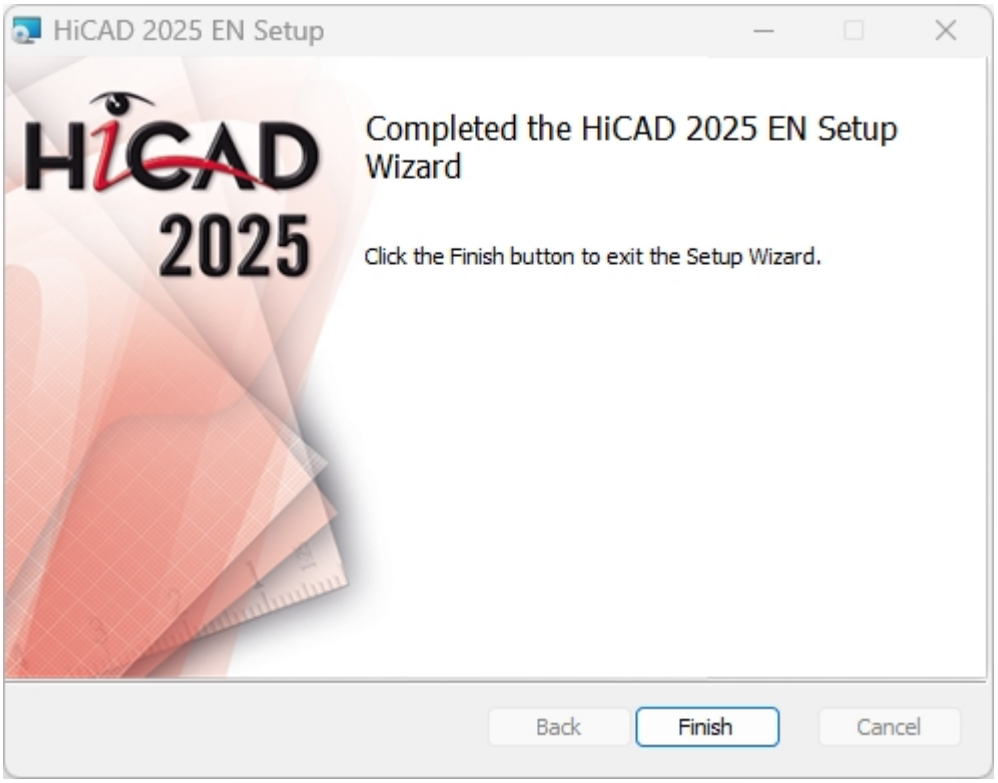
Specify the desired settings and click **Update**.

After successful updating, the update information for the replaced files will be shown in a dialogue window. The old files will be preserved and renamed, e.g. 0.mac > 0.mac.XXXX.





Click **Save** to save this list to a directory of your choice. Click **OK** to continue with the installation.



Click **Finish** to complete your HiCAD installation. .

If you have already activated the new Server License before the installation, you can start HiCAD now (Standard Konfiguration).

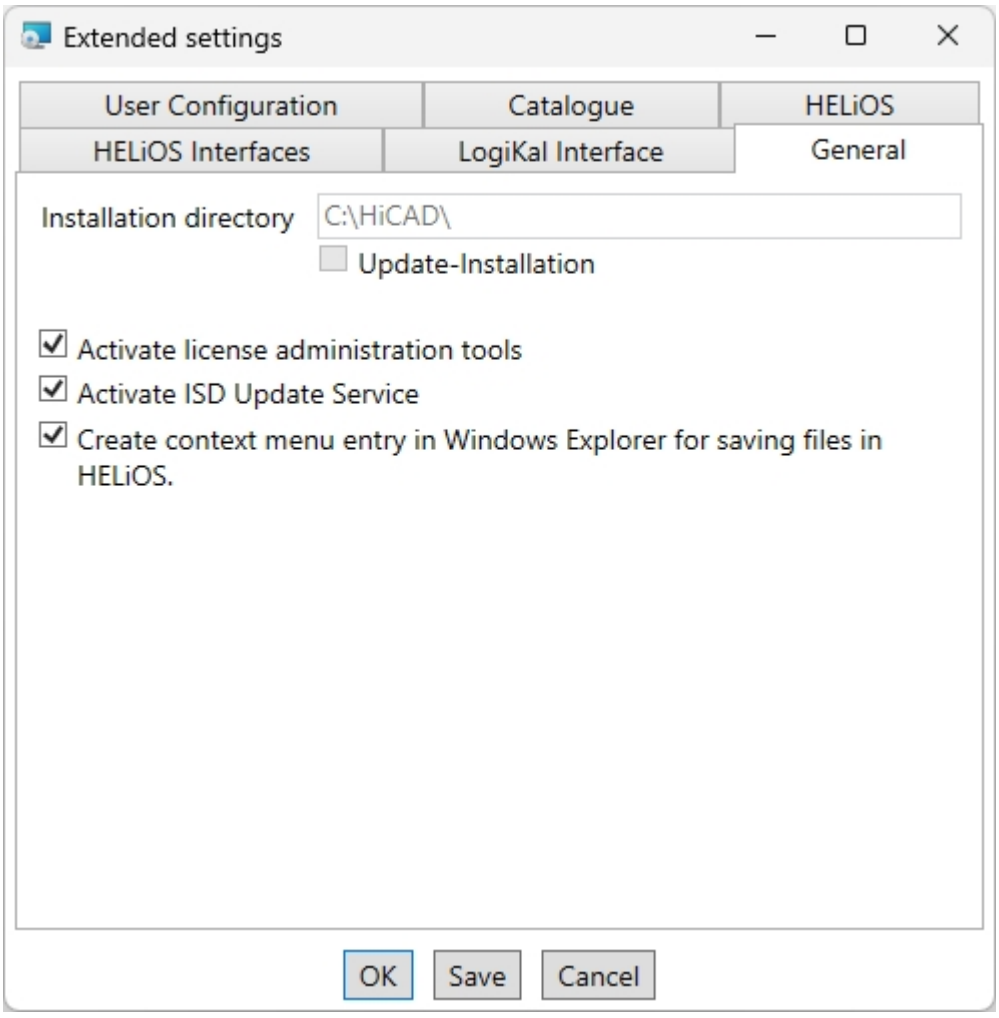
If you have a local license you need to activate it first before you can start HiCAD.

ISD Update Service

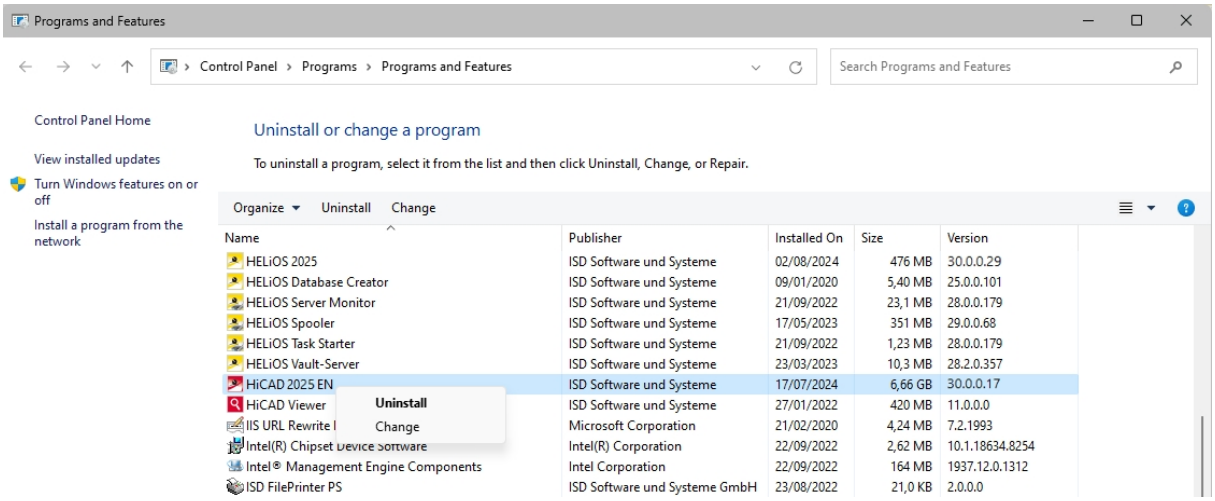
The automatic search for and installation of HiCAD/HELiOSupdates (Hotfixes). For this you require the program **ISDUpdateSvc.exe**, that you can either activate during installation of HiCAD or install via the Windows Control Panel afterwards.

Installing the ISD Update Service

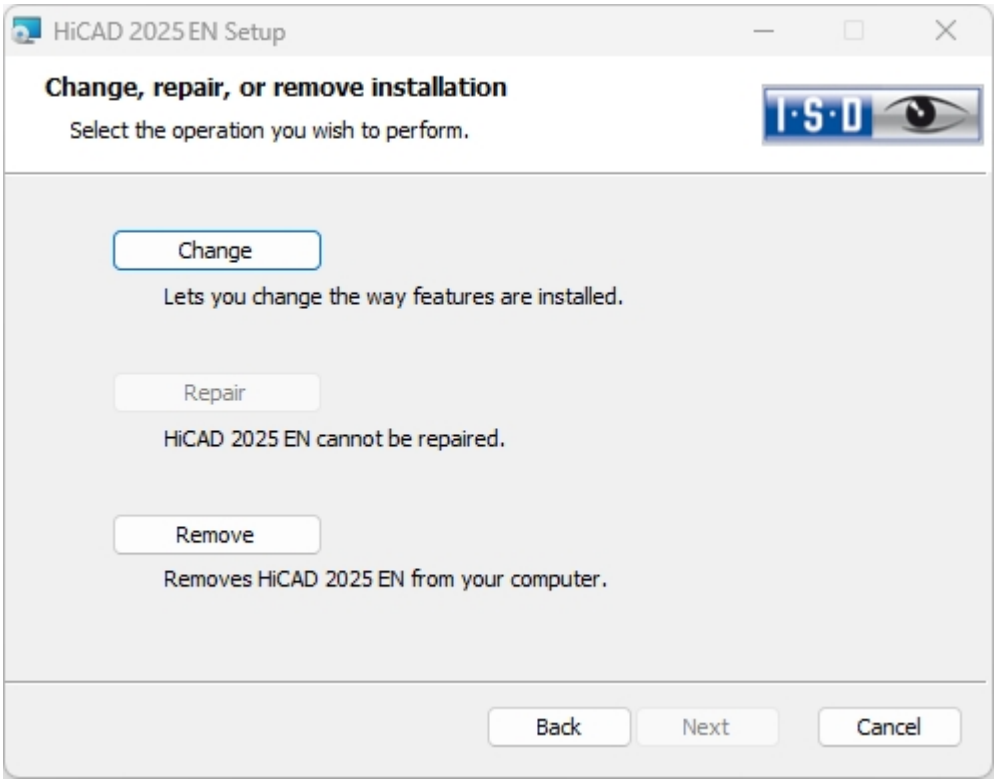
You can activate the automatic search for and installation of HiCAD/HELiOS updates (Hotfixes), either during the installation of HiCAD/HELiOS or, later, via the Windows Control Panel.

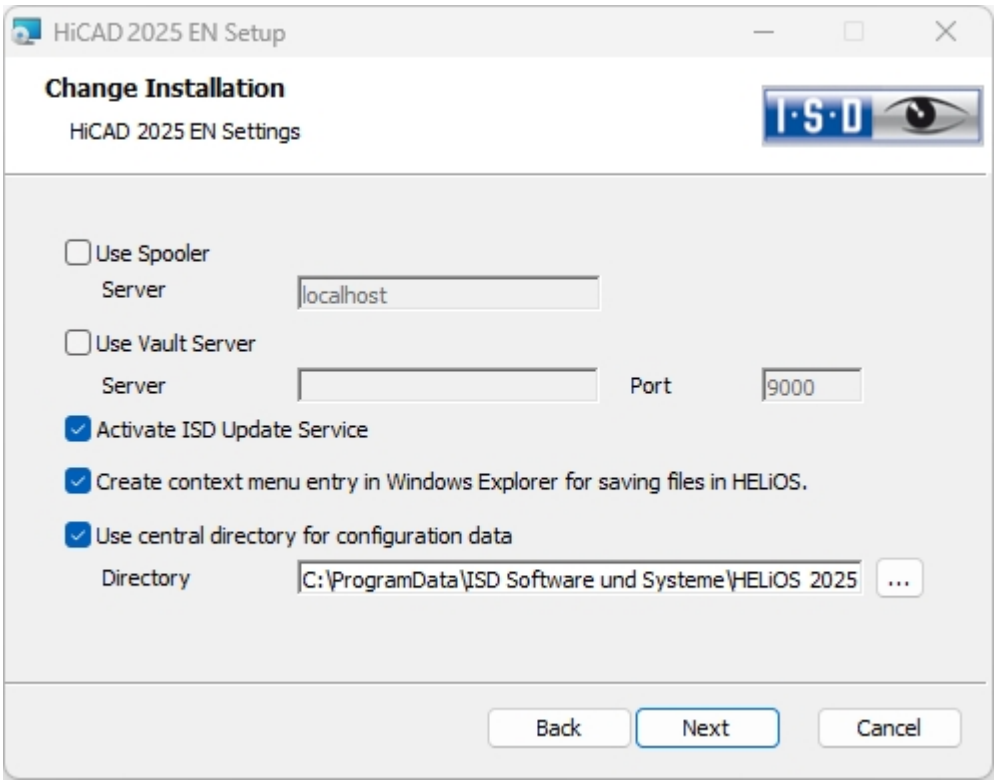


During installation you can go to **Extended settings > General** and activate the **Activate ISD Update Service** option to activate the automatic search for Updates on the ISD Server. You can also activate or deactivate this option afterwards via the Windows Control Panel.



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



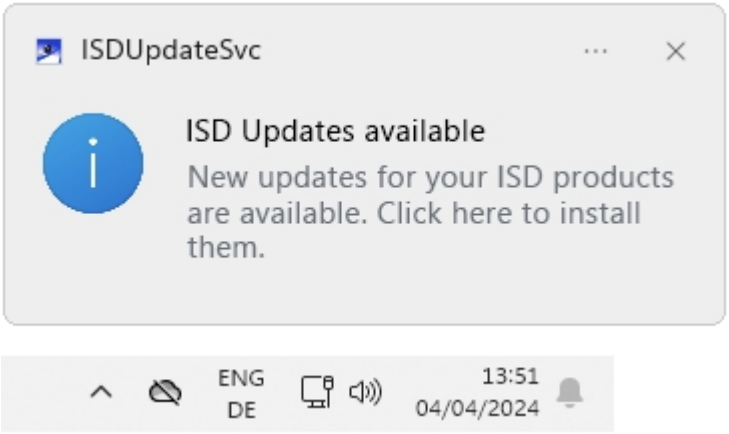


Checkmark **Activate the ISD Update Service** and click **Next**. After all options have been queried, click **Change**.

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

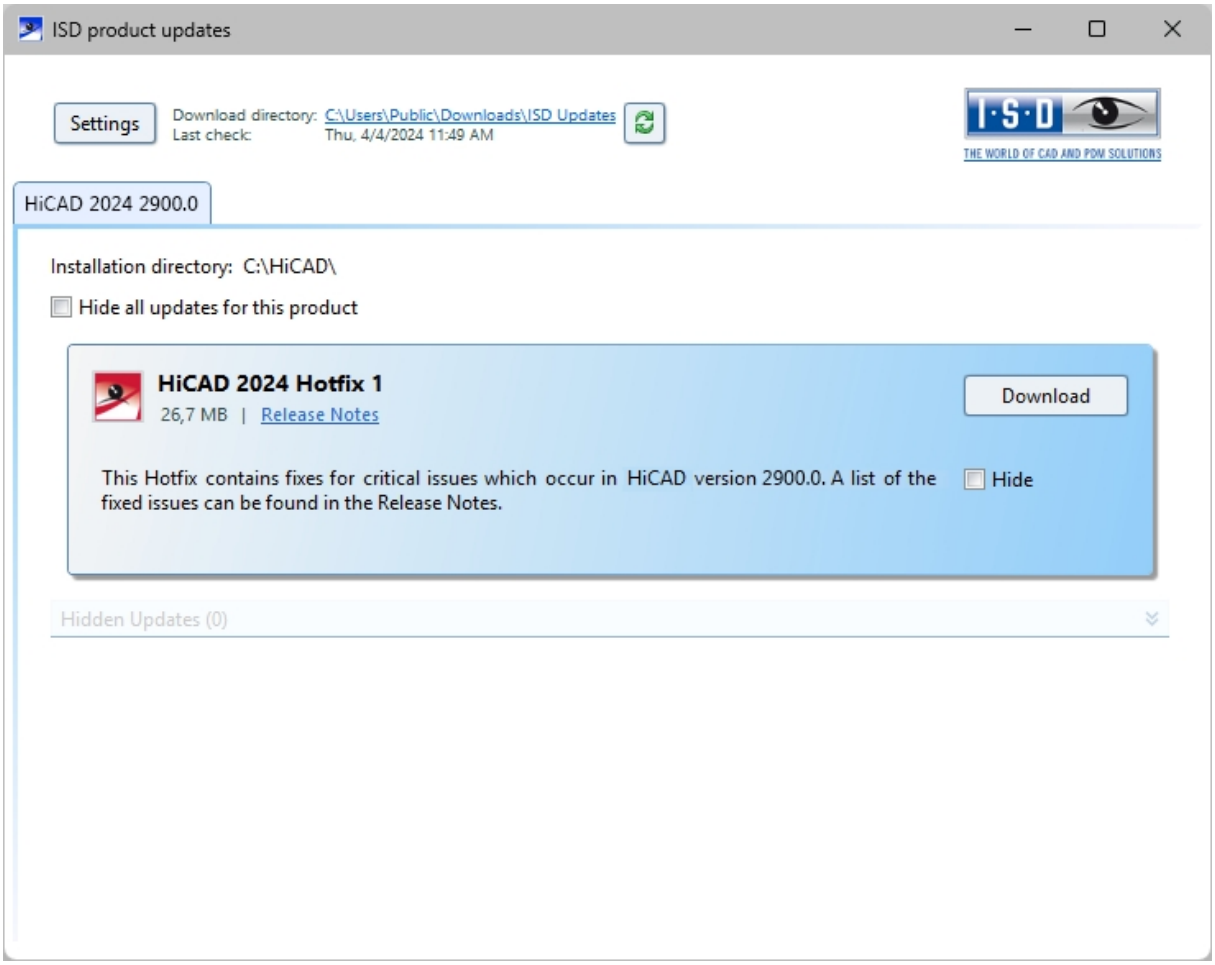
Using the ISD Update Service

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

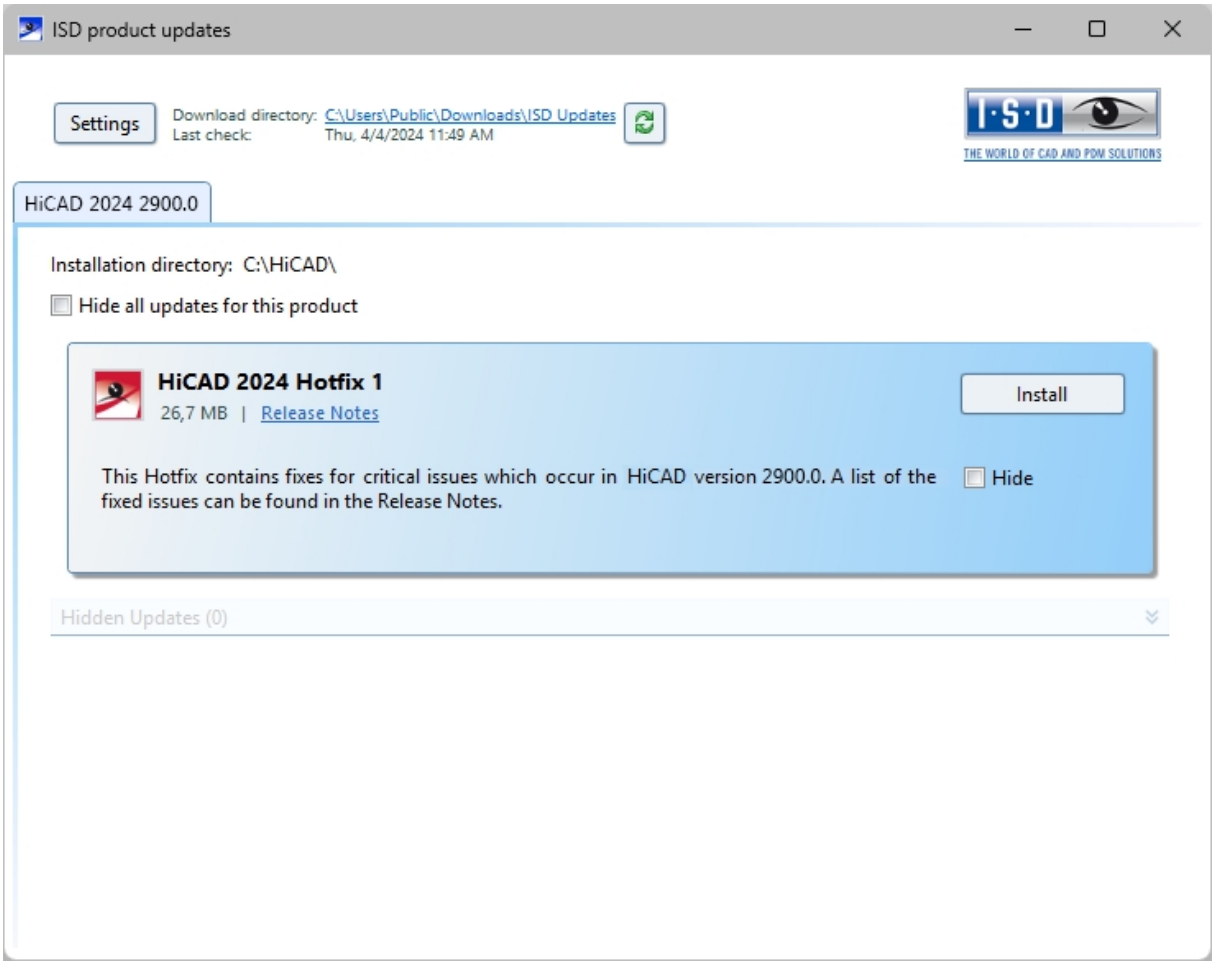


Click on the message or double-click on the icon at the bottom right to start the ISDUpdateSvc.exe program. You can also directly double click on the **ISDUpdateSvc.exe** file to start the program.

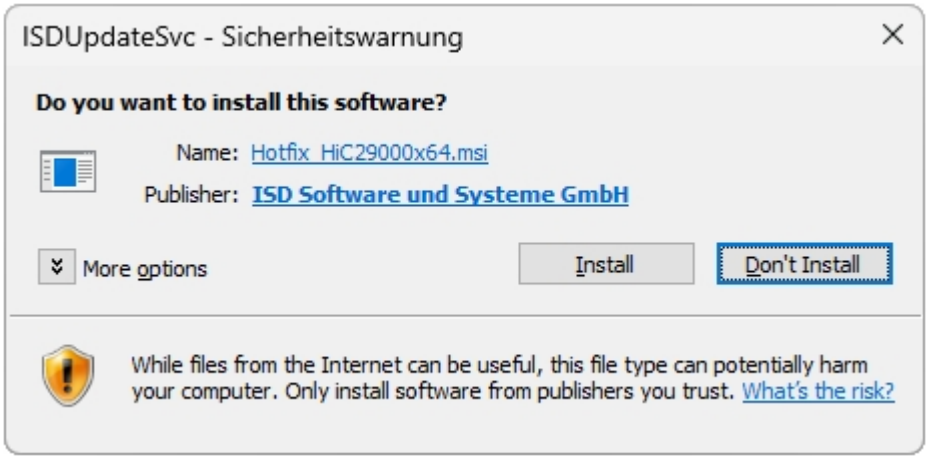
Confirm the query in the Windows User Account Control dialogue window.



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.



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



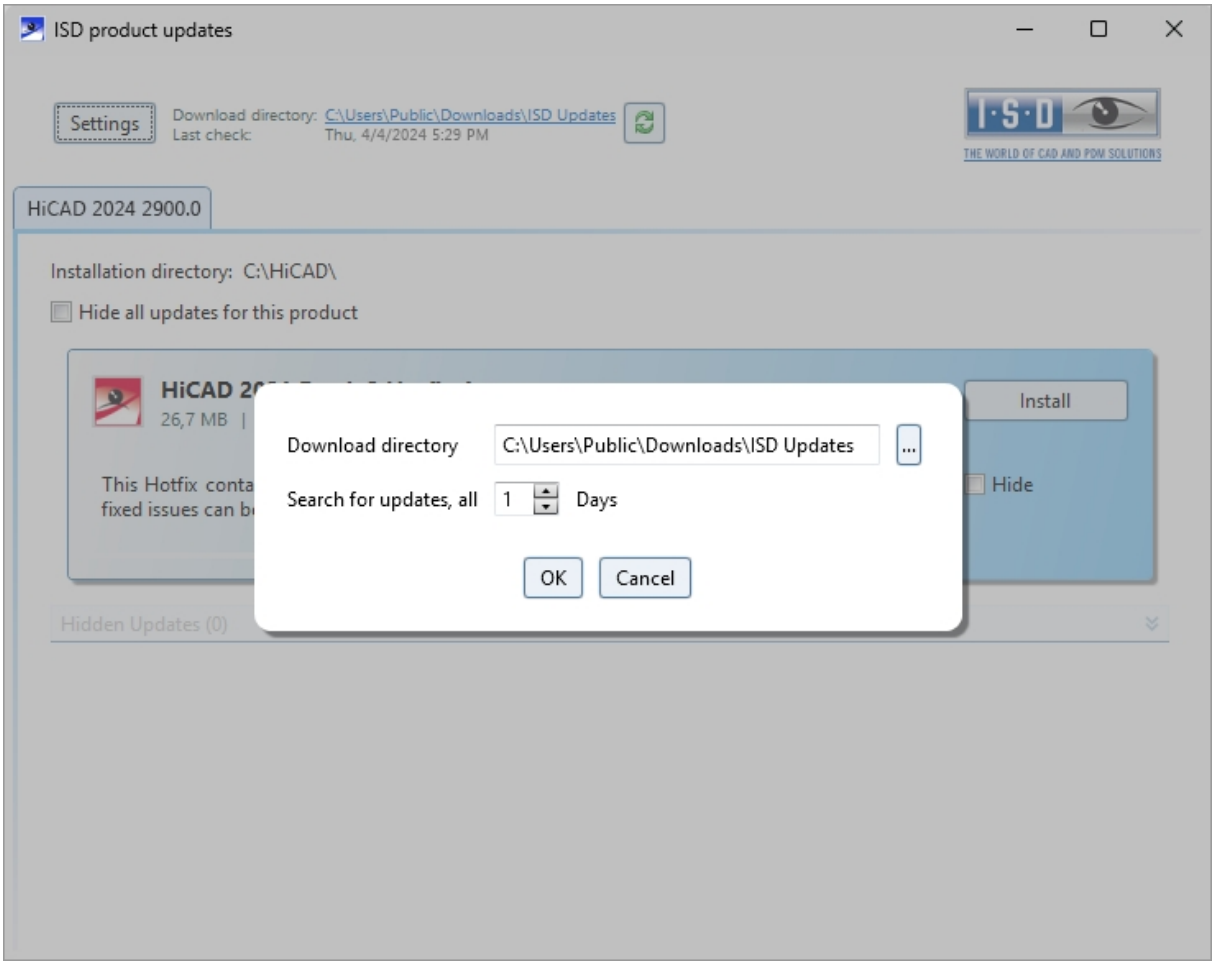
Confirm the Windows Security Warning with **Install**.

Follow the instructions on the screen to install the update.

The HiCAD Info window displays the current HiCAD version number (including build number) as well as the numbers of any installed hotfixes. To show the info window, click on **Help Topics and Information** and choose **HiCAD**.

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.

Update - Procedure for the modules Plant Engineering and Pipeline Planning

If you have already used the modules of a HiCAD version older than 2022, proceed as follows:

1. Backup

Make a backup of the current state of your database. In the file FILEGRUP.DAT in the *exe* directory of the existing old HiCAD version, check the entry located under 6:. The entry specifies the part directory for HiCAD Plant Engineering. This can be the local *PlantParts* directory of your HiCAD installation (e.g. *6:C:\hicad\PlantParts*) or a server directory, e.g. *6:\\MyServer\hicad\PlantParts*.

- If the Server directory has been entered here, make a backup of this Server directory.
- If the local directory has been entered here, make a backup of this local *PlantParts* directory.

2. Installation

Perform the **HiCAD Update Installation**. **Please do not start the programs yet.**

3. Realise required database state (only for Plant Engineering!)

- Start the ***DbPlantDataImport.exe*** program. Login as Administrator. Please note that you require all read and write permissions.
- Click on **Update HELiOS for Plant Engineering**.
- After completion of the process, close the program.

Part Variants

HiCAD currently offers more than 1000 part variants for Plant Engineering, which can be found in the PLANTPARTS sub-directory of your HiCAD installation. If you open a VAA file with the Variant Editor you will obtain extensive information about this variant.

Use the **DbPlantDataImport.exe** tool to import supplied (new) variants to your database if these are not yet contained in it.

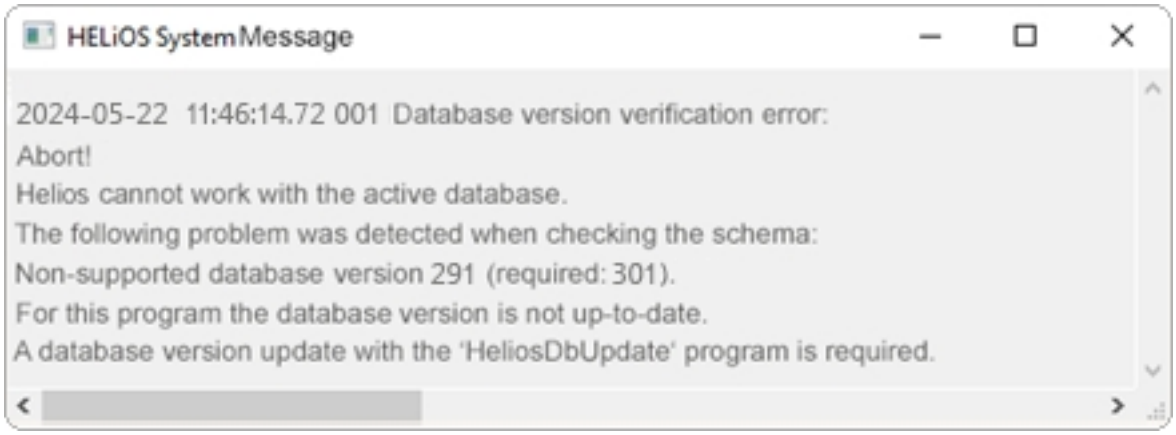
Please first check whether these variants do not already exist in your database!

Please note:

- To transfer new variants to the HiC catalogue, use the tool VARTOCAT.EXE or the Part data synchronisation function.
- With the PLANTPARTSLIST.EXE tool you can generate a list of the current Plant Engineering variants - in German, English, French, Italian and Polish. The list is written to a CSV file, which you can then open and edit with Microsoft Excel.

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:

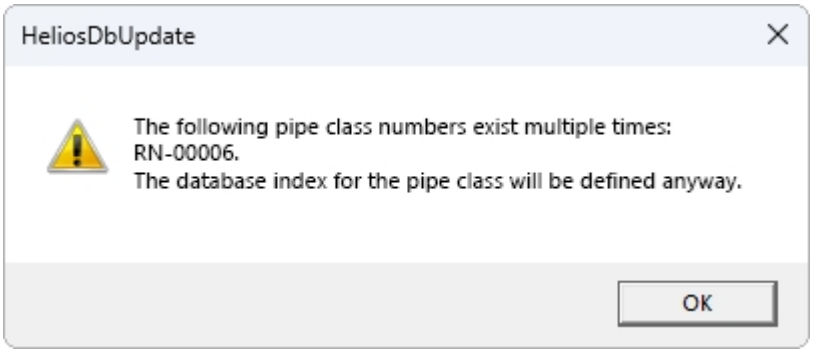
1. **Do a database backup**: You should make sure that a backup of your HELiOS database has been created before the update. This can be done with the HELiOS Database Creator or via your SQL server application. Please contact the ISD hotline if you have any questions or need support for your individual 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 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:

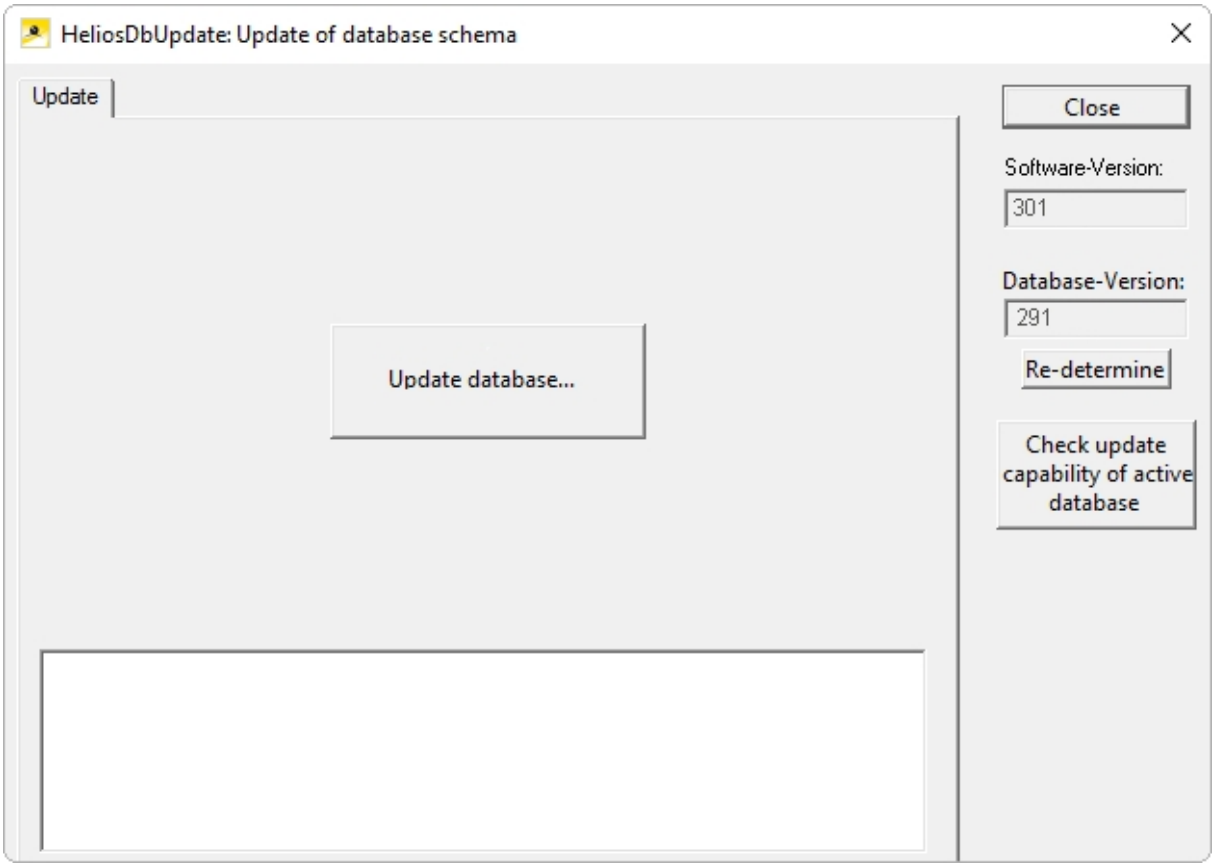
  "The functions for deriving project and folder structures have been extended. Currently it is not possible to derive folders which were created via action lists or which contain folders created via action lists with these functions. Since such folders exist in your database, please contact the ISD Consulting 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.

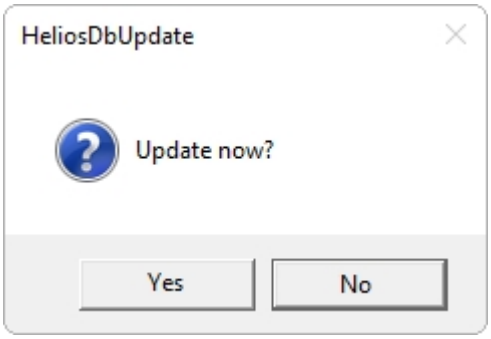
The following mask (software and database version may vary) will be displayed after starting the program:



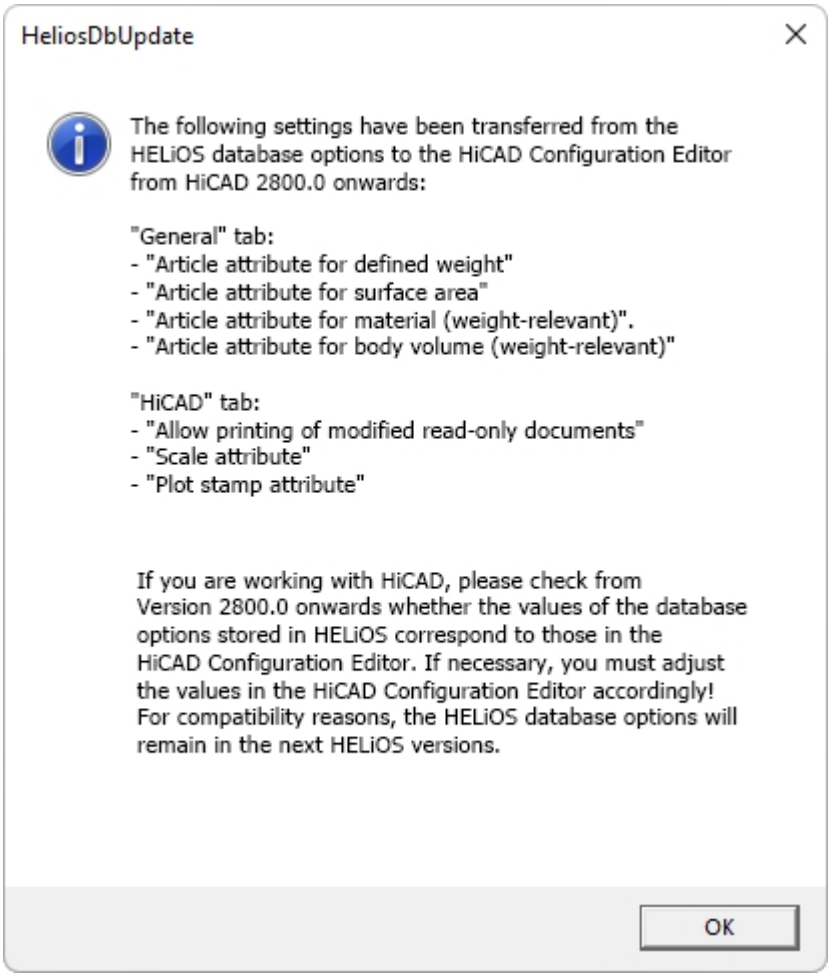
Click the **Update database...** button to start the update.

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

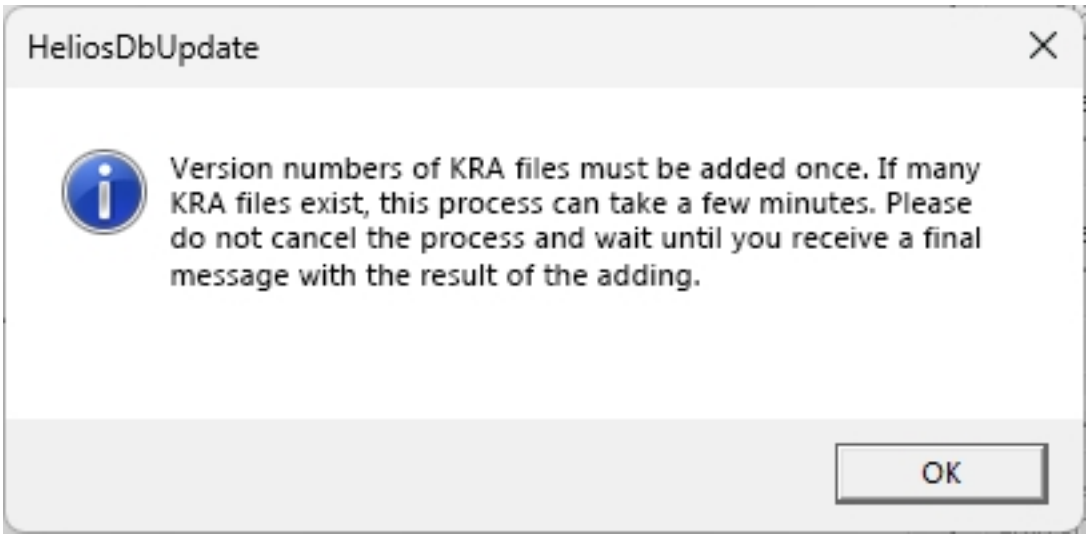
If you confirm this message with **OK**, another confirmation prompt is displayed.



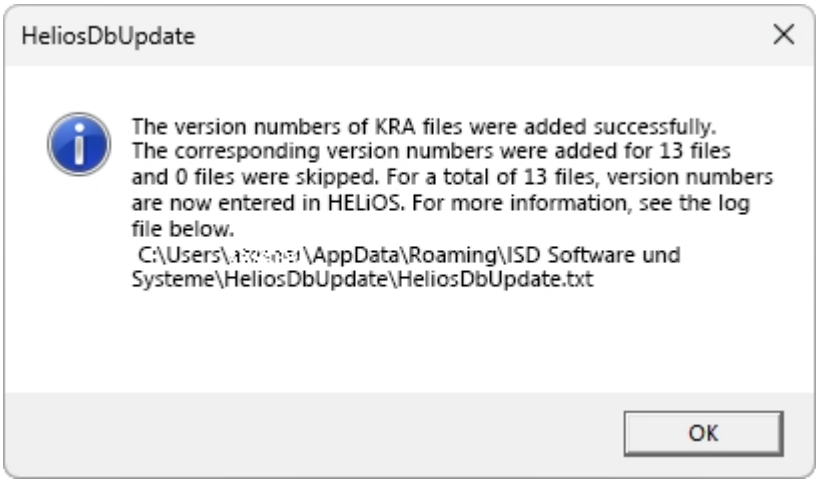
The update starts after confirming the security question with Yes and leads to the following message after a successful update.



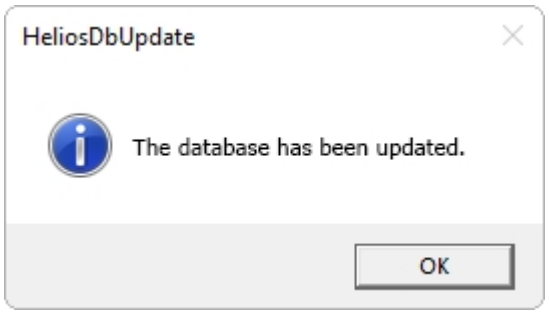
By switching from HELiOS Database Options to the HiCAD Configuration Editor, this important note will appear the first time you update to HiCAD 2023 or newer. Please read the note carefully.



Since version 2024, the version numbers of 3D parts (KRA files from HiCAD) have been stored in HELiOS. However, the version numbers are not available in HELiOS for existing data from customers who do not work with the vault. For this reason, the version numbers of the KRA files are now transferred to HELiOS.



After the transfer, you will find the log with further information in the displayed path. If the transfer fails, you have to call the tool again from the command line HeliosDbUpdate.exe /CheckKraVersion.



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.

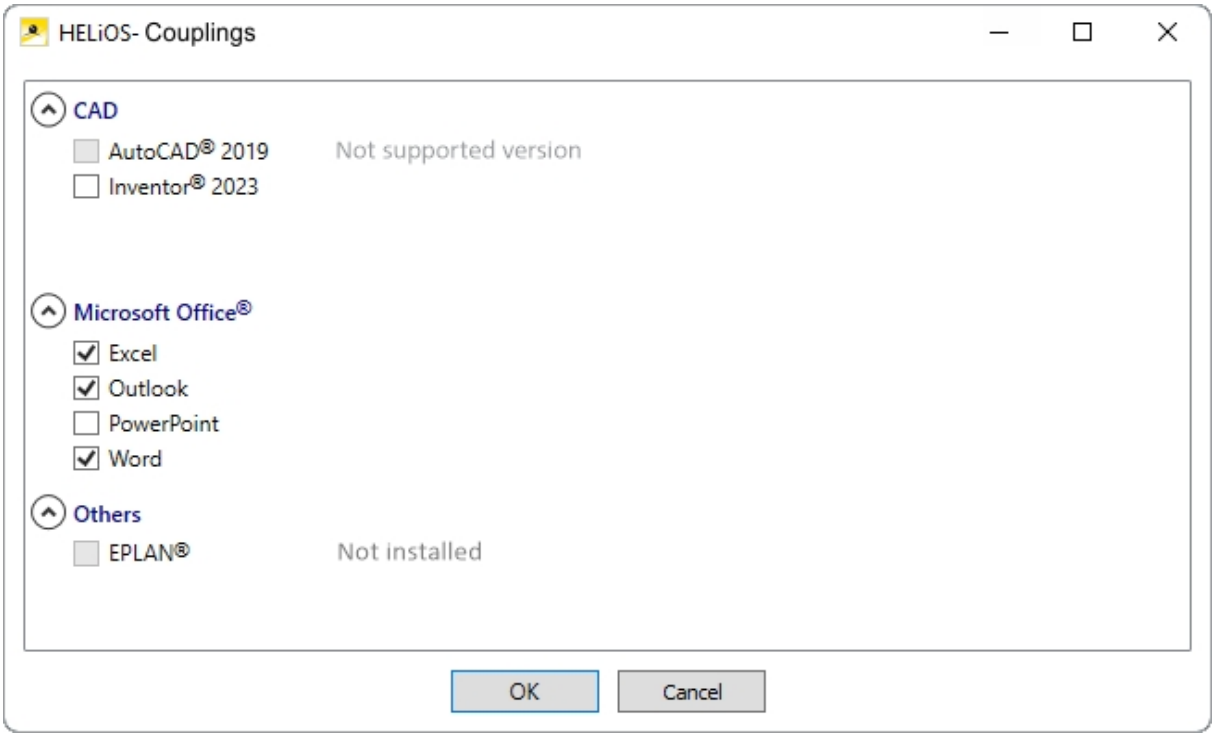
In this case, please contact our Hotline:
Tel: 02 31 / 97 93 - 166
Fax: 02 31 / 97 93 - 101
E-Mail: support@isdgroup.com

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.

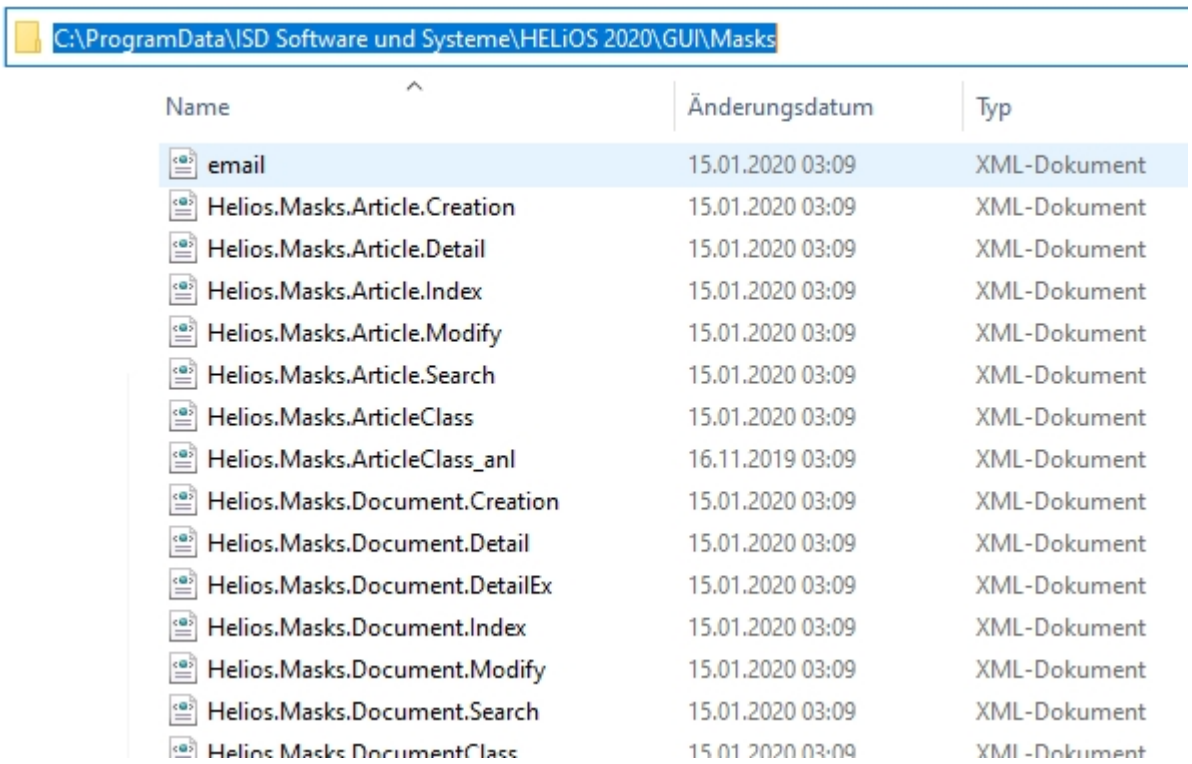
The revision of the mask editor has also led to a conversion of the mask format to XML. Mask files are now managed outside the installation directory.

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:

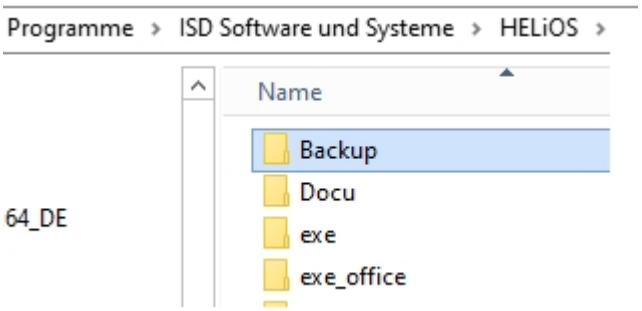
The masks of older versions that were previously stored in the \sys\ directory of the installation are automatically converted to the new XML format by an update installation of an older HELiOS version to HELiOS 2020 (V 2500.0) or higher and stored at**%Programdata%**.

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.



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\GUI\Masks.

New File Format for 2-D Files in HiCAD

Similar to the KRA files in 3-D there are now 2-D figure archives with the filename extension .FGA. This contain the previous 2-D data (.FIG), the DB attributes (.FIG.DBA2) as well as the attribute container data (.FIG.ATC) and replaces the former 2-D files. Moreover, the new FGA format allows the displaying of 2-D files in HiCAD Viewer and also contains the 2-D HCM files.

Discontinuation of old figure format (FIG)

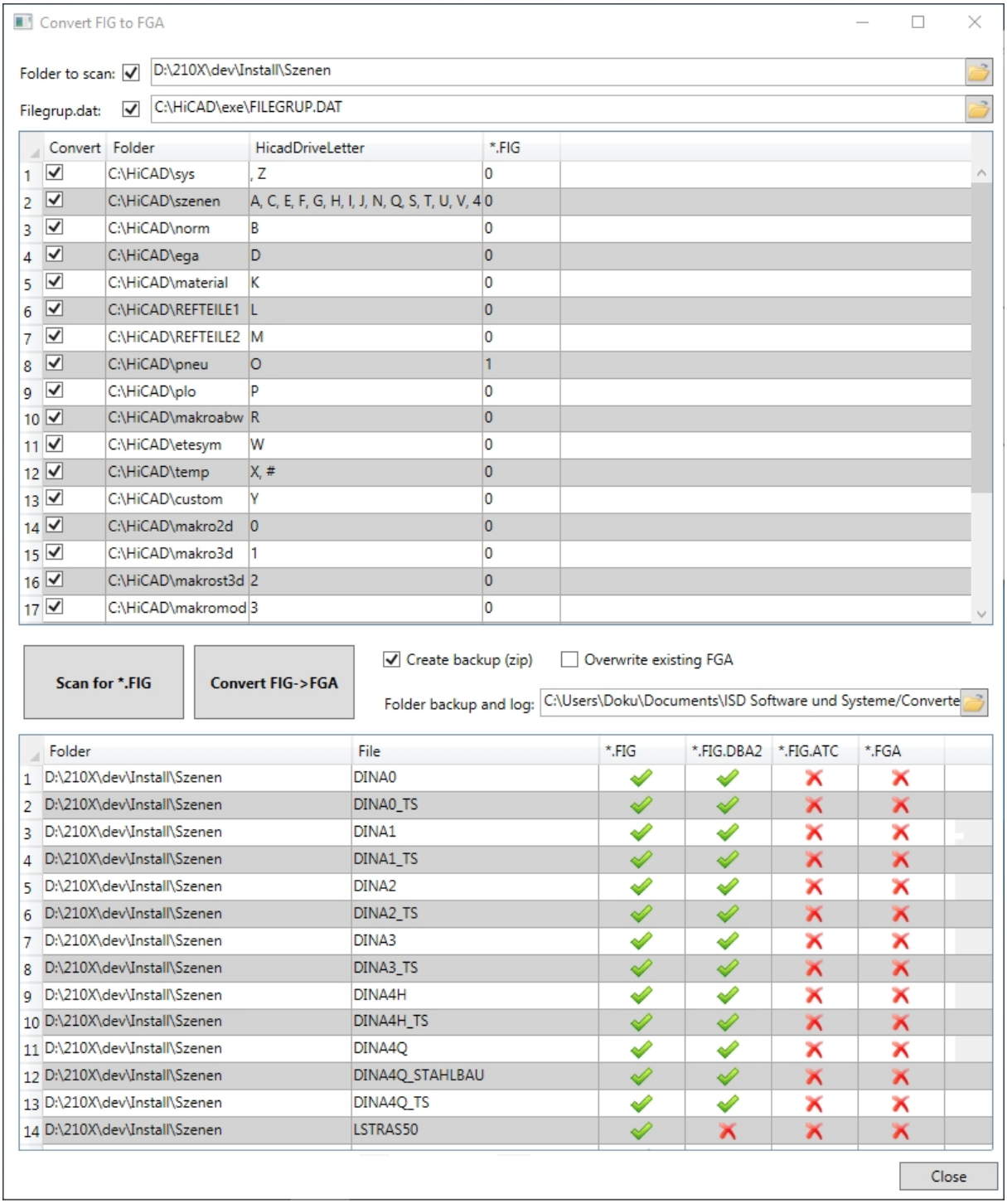
The following notes regarding FIG-FGA conversion are unnecessary if HELiOS is used in conjunction with the HELiOS Vault Server.

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.

Conversion of 2-D Data to the FGA Format

Start the **Converter_FIG_To_FGA.exe** program to convert the 2-D parts.



Folder to scan ☑

Enter the path of the folder that should be converted. Via this symbol you can select the folder in the Windows Explorer.

The folder will only be evaluated if there is an activated checkbox ☑ behind Folder to scan.

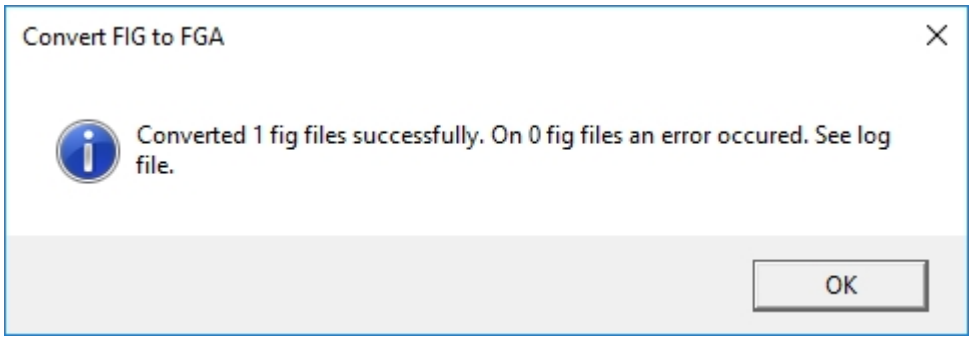
Filegrup.dat ☑

In order to search the directories in the Filegrup.dat for FIG files the checkbox behind Filegrup.dat has to be activated.

All directories from the Filegrup.dat that are activated ☑ will be considered when searching for FIG files.

☑ Create backup (zip)	If you have activated Create backup a ZIP file with all selected FIG files will be created.
Overwrite existing FGA	If you have activated the Overwrite existing FGA option, existing FGA files will be overwritten if the names are identical with the converted files.
Folder backup and log	Enter the path for the backup and log file here.
Scan for *.FIG	By pressing the Scan for *.FIG button you start the search for FIG files in the selected folders.
Convert FIG -> FGA	Via Convert FIG -> FGA you start the conversion. In the process all *.FIG, *.FIG.DBA2 and *.FIG.ATC will be deleted.

After the conversion the number of converted files will be displayed. Furthermore, the number of defective converted files will be shown. Further information regarding the error can be found in the LOG file.

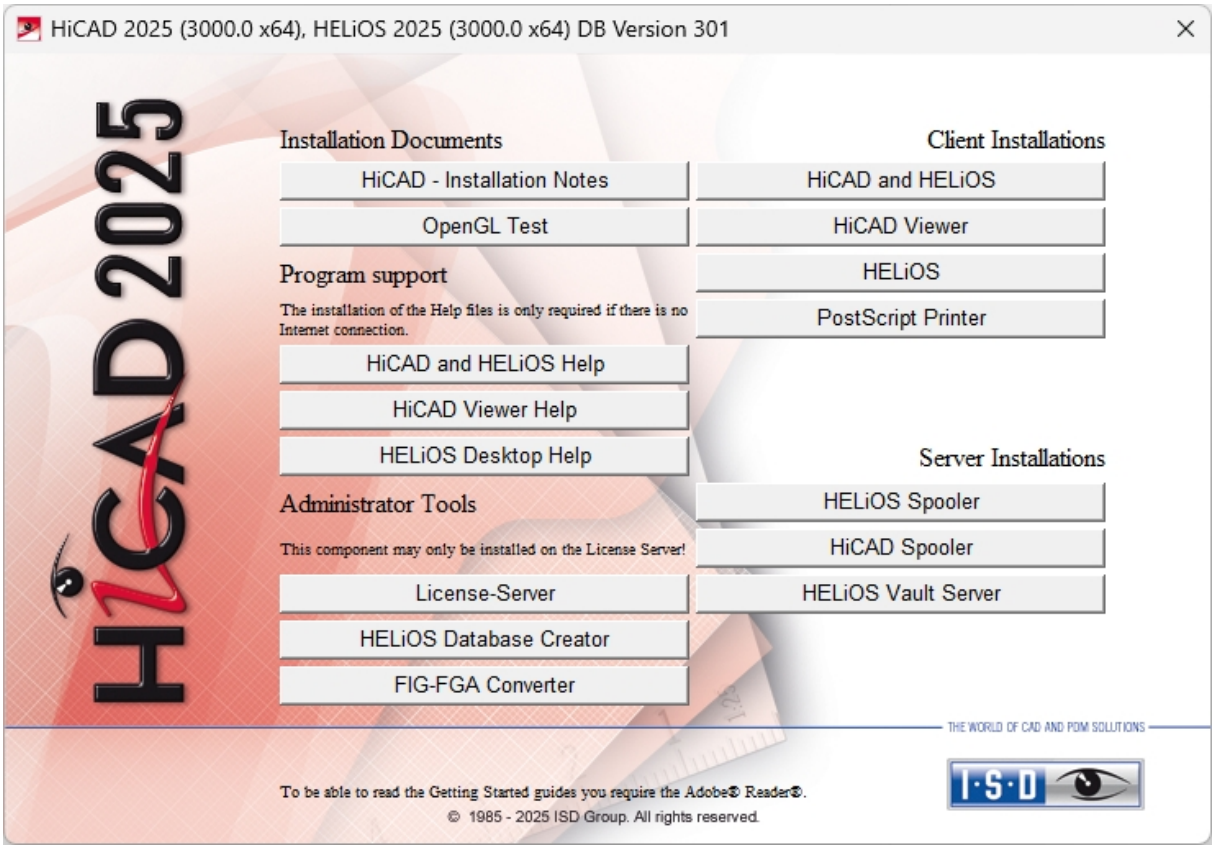


Installing the FIG-FGA Converter

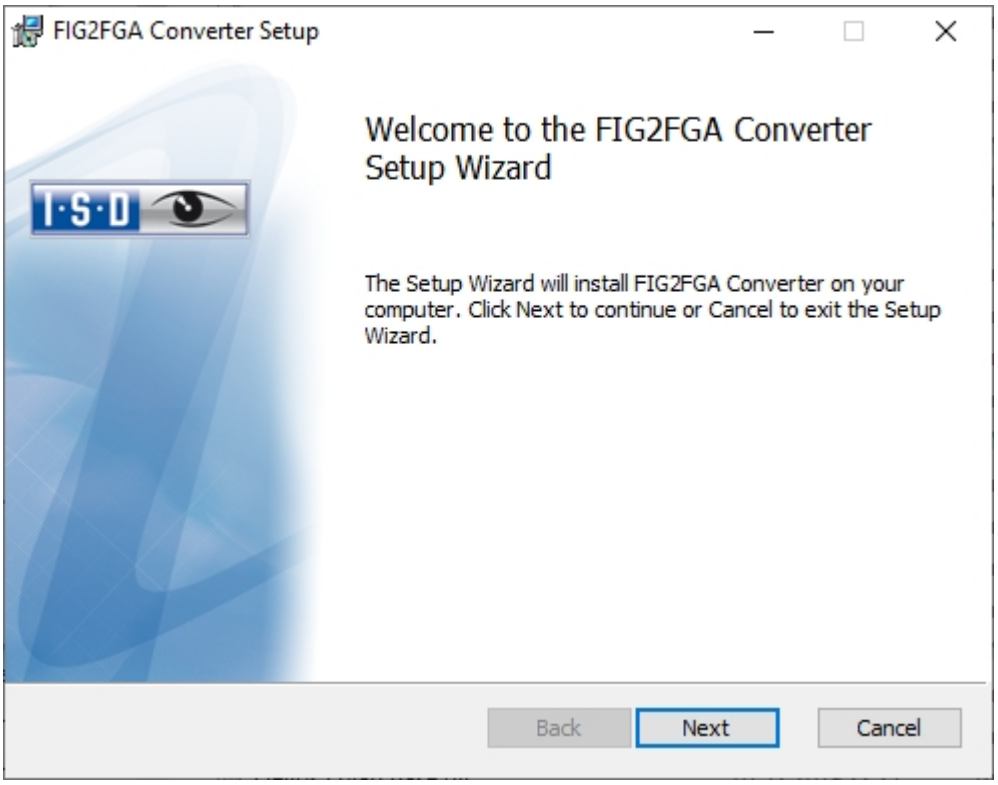
Start Windows to install the FIG-FGA Converter. If Windows has already been opened, close all other applications and start the installation wizard.

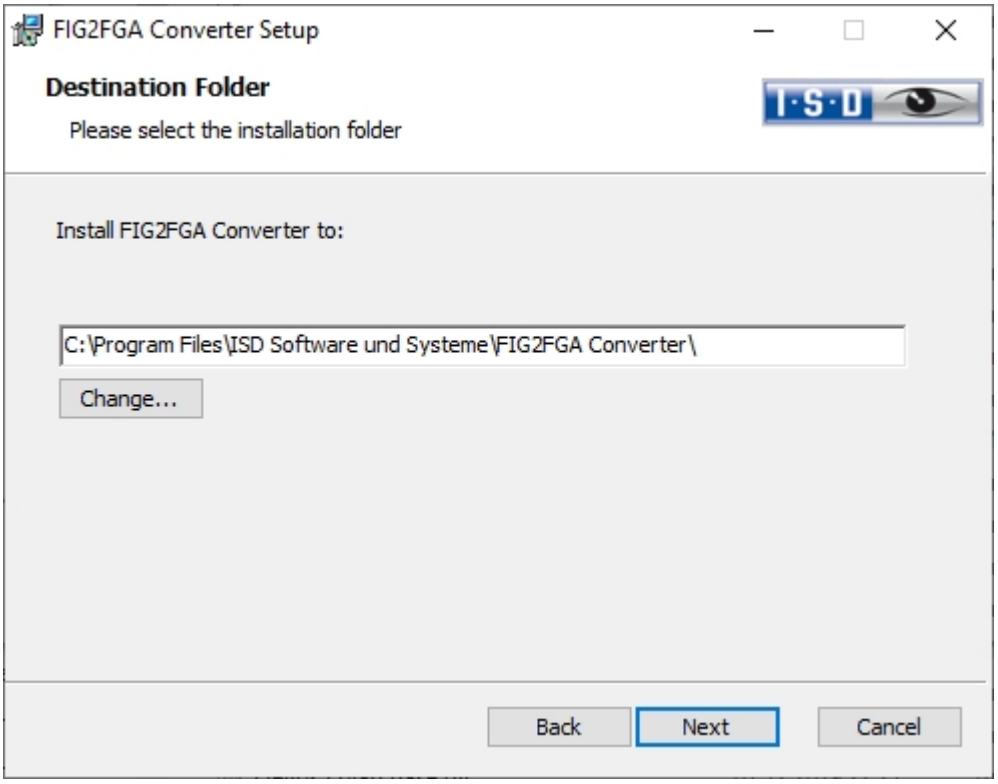
In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components.

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

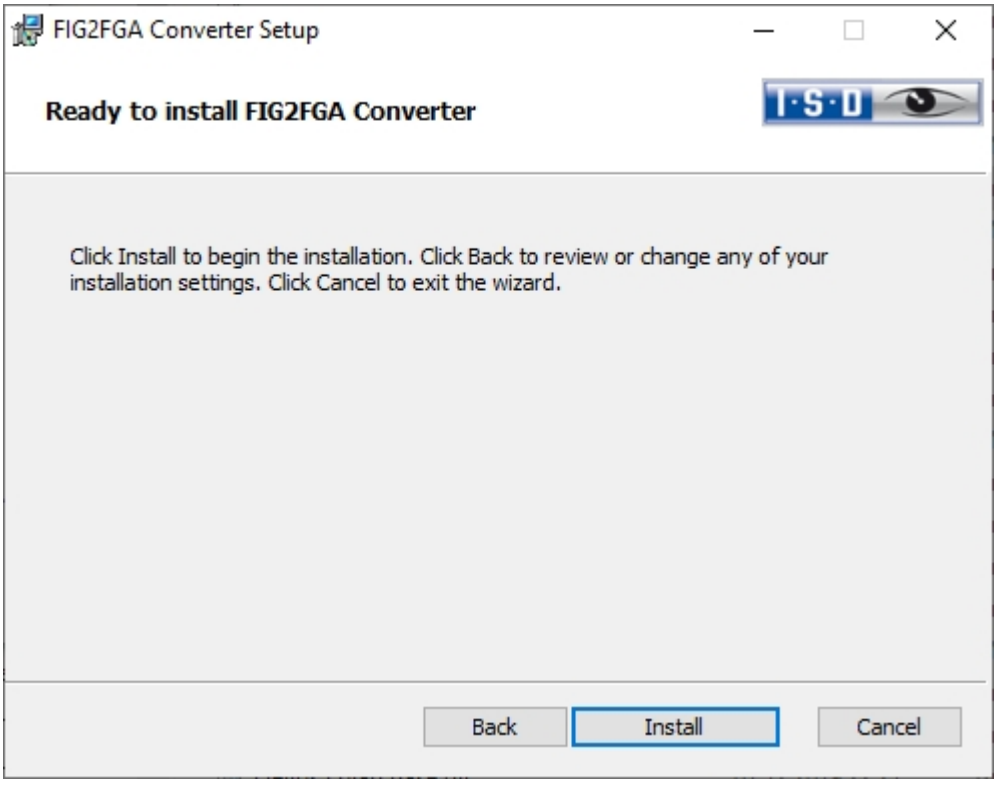


Click on the **FIG-FGA Converter** button.

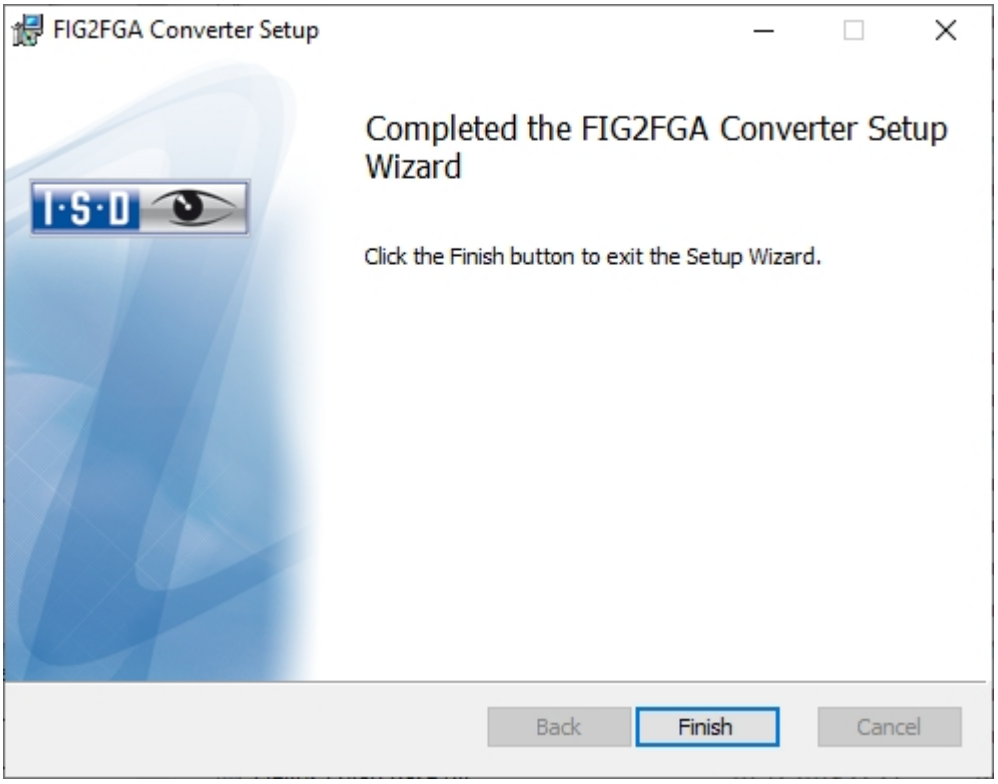




Enter the installation directory for the software.



Click **Install**.

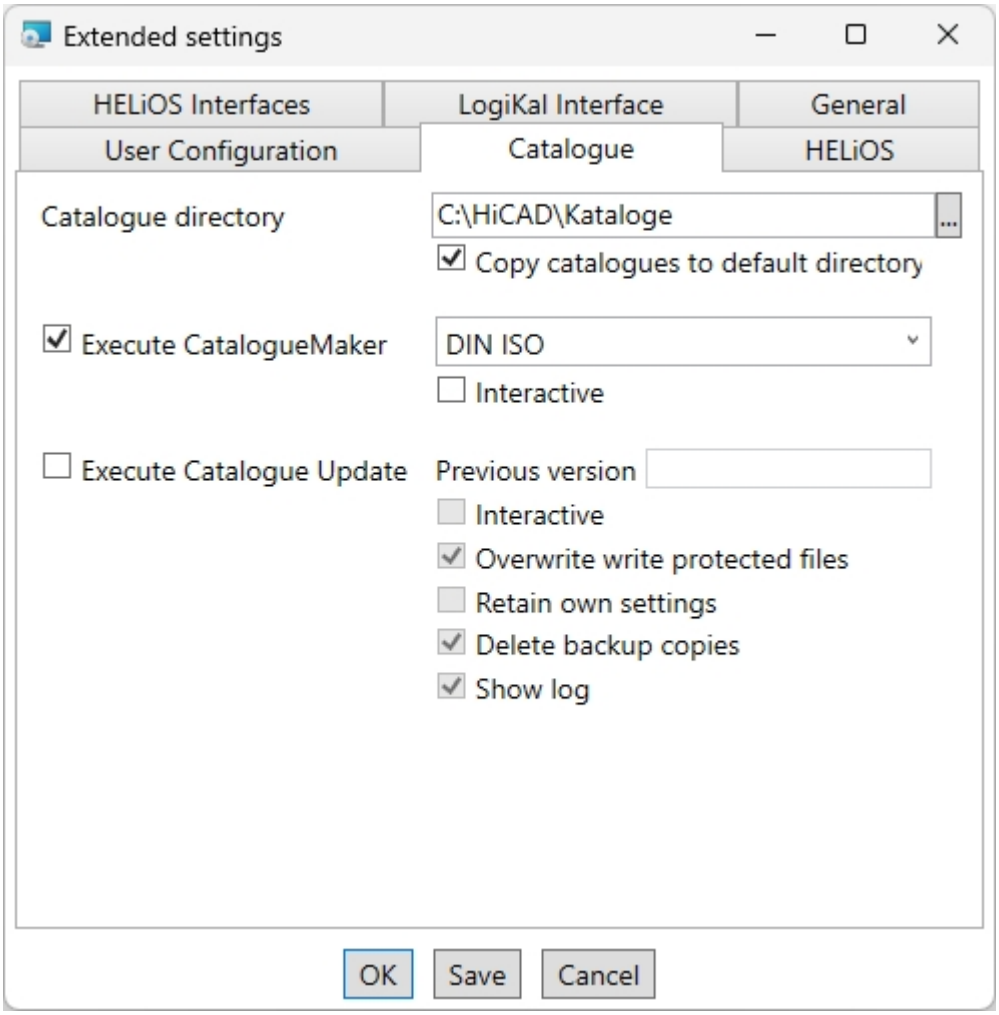


After successful installation the Converter_FIG_To_FGA.exe can be found in the program folder.

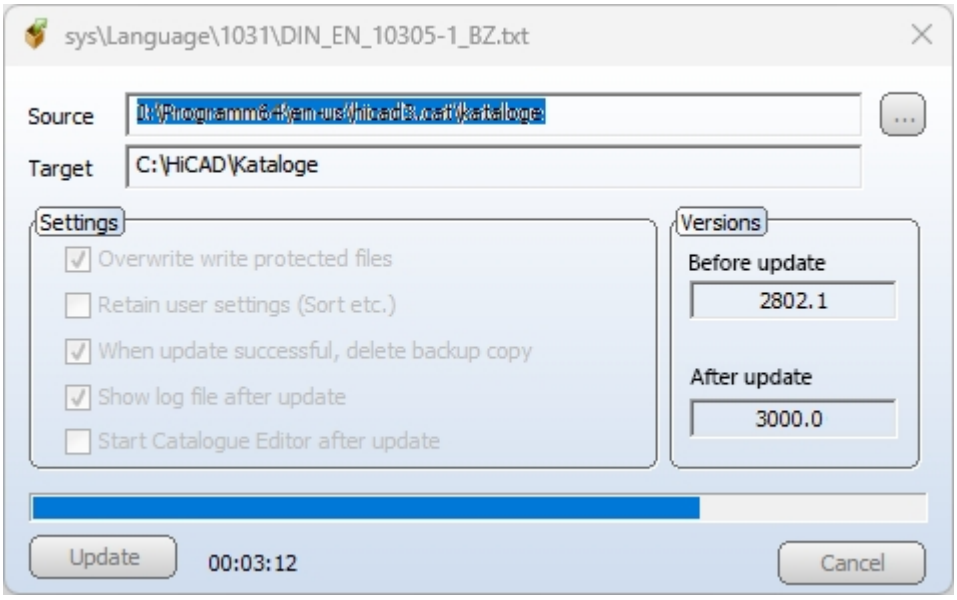
CatalogueMaker

CatalogueUpdate

The tool **CatalogueUpdate** is used to update the catalogues and can be started automatically or manually. When updating HiCAD, the existing configuration is adopted, the tool CatalogueUpdate.exe is only started automatically if you have set the check mark in the **Extended settings**.



If you want to add new tables to the catalogues or exchange catalogues with customers later, the program can be called from the EXE directory of the HiCAD installation.



For the automatic update during the update installation, the **Source** is preset. The path is automatically filled with the catalogues to be replaced.

If the program is started manually, then the source is to be selected as follows:

- for a HiCAD Update: **\Program64\de-de\hicad3.cat\Kataloge** on the DVD or in the ISO file of the update.
- in case of a HiCAD Patch: **\de-de\hicad3.cat\Kataloge** on the DVD or in the ISO file of the patch.

For foreign language installations, replace **de-de** with the corresponding language abbreviations, i.e. **en-us** (English) **fr-fr** (French), **it-it** (Italian), **pl-pl** (Polish).

Please note that the activation of the option **Retain user settings...** is possible, but not recommended. option is possible but not recommended. If you have activated the setting, some tables may not be displayed correctly. Check the log file if necessary.

Please note:

- For a version with a patch (i.e. .0 and .X), from HiCAD 2021 (e.g. version 2600.1) onwards, the catalogue is only installed once by the patch when reinstalling. Previously it was installed from the .0 and then updated from the patch, which of course takes much longer.
- During the update installation of the major release from HiCAD 2021 (e.g. from Version 2501 to 2600), the catalogue is updated only once from the patch of the previous version, instead of first from the base installation and then again from the patch as before. This also applies to the "silent installation".

CatalogueMaker

With the **CatalogueMaker** (HiCAD EXE directory) you can compile your individual selection of standards, whether a complete national standard or any combination of national and international standards. During a new or update installation, the CatalogueMaker is called up if the check mark is set in the **Extended settings**.

The CatalogueMaker is used to determine which series of standards are to appear in the parts catalogues (currently, series of standards for DIN, ISO, EN, ANSI and JIS are available); the selection of standards in the CatalogueMaker only affects the display of the parts catalogues, not their availability; this is still controlled by the licence selection in the configuration menu.

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)
  - Floating Lizenzen
- 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

HiCAD/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 HiCAD/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 HiCAD/HELiOS , you activate the licenses by means of the **License Activator** in the **ISD License Manager** (Folder [HiCAD/HELiOS installation directory]\exe\ISDLicenseManager.exe).

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 HiCAD/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 (Server)**.

To be able to use network licenses, a License Server needs to be installed on a computer without HiCAD/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 (HiCAD/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 HiCAD/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

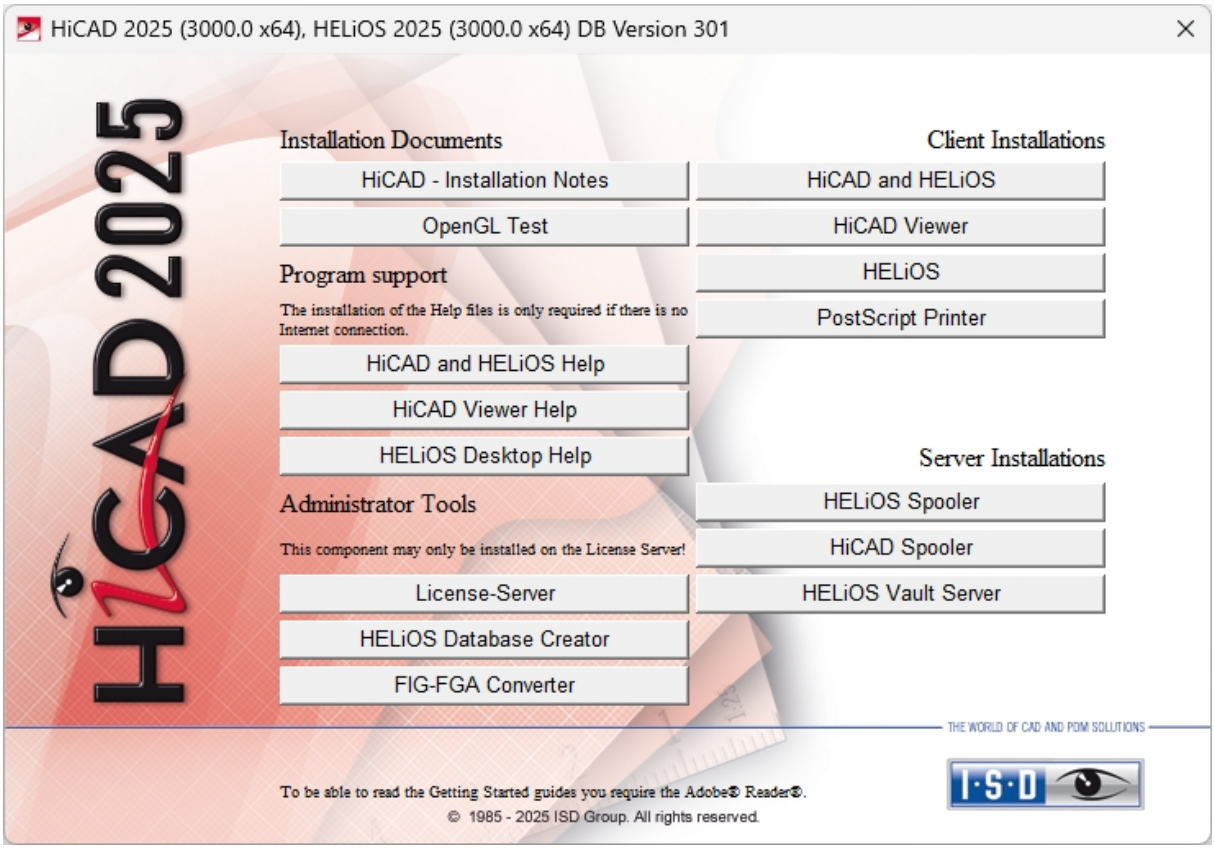
example, this license is exclusively available to you for a fixed period of time and cannot be returned to the server before expiration of this period.

Installing the License Server

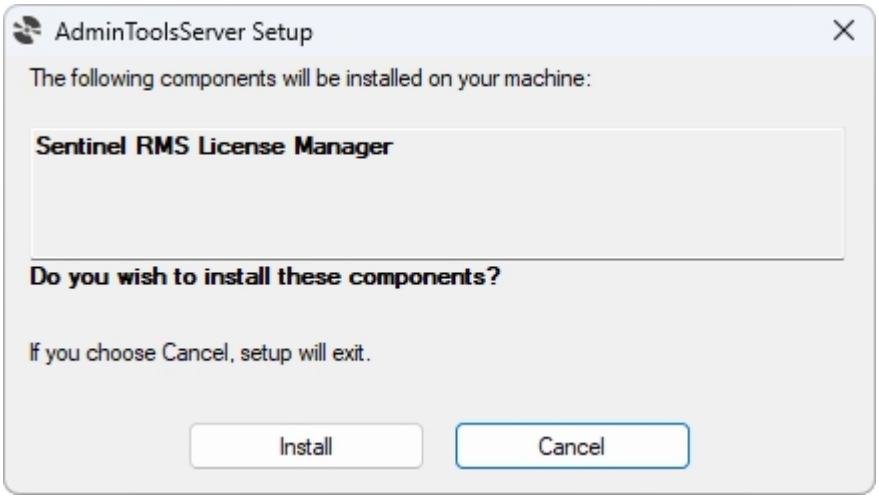
If you want tp perform a HiCAD/HELiOS update to Version 2025 and use a license server (i.e. work with network licenses), you require the License Server from the installation medium. If you have an older version, you must first uninstall it. This can be done via the Windows Control Panel. Uninstall the **Sentinel RMS License Manager** and, if present, the **AdminToolsServer**.

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

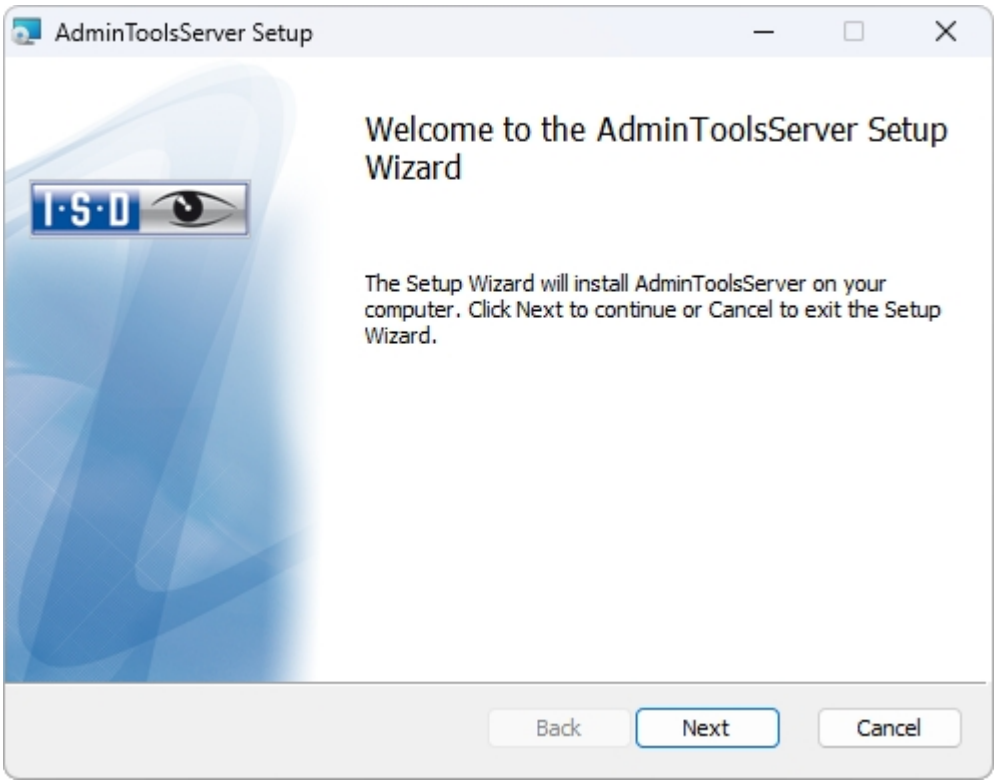
Click the **Standard Edition** button, which opens a mask with various selection options for software components.



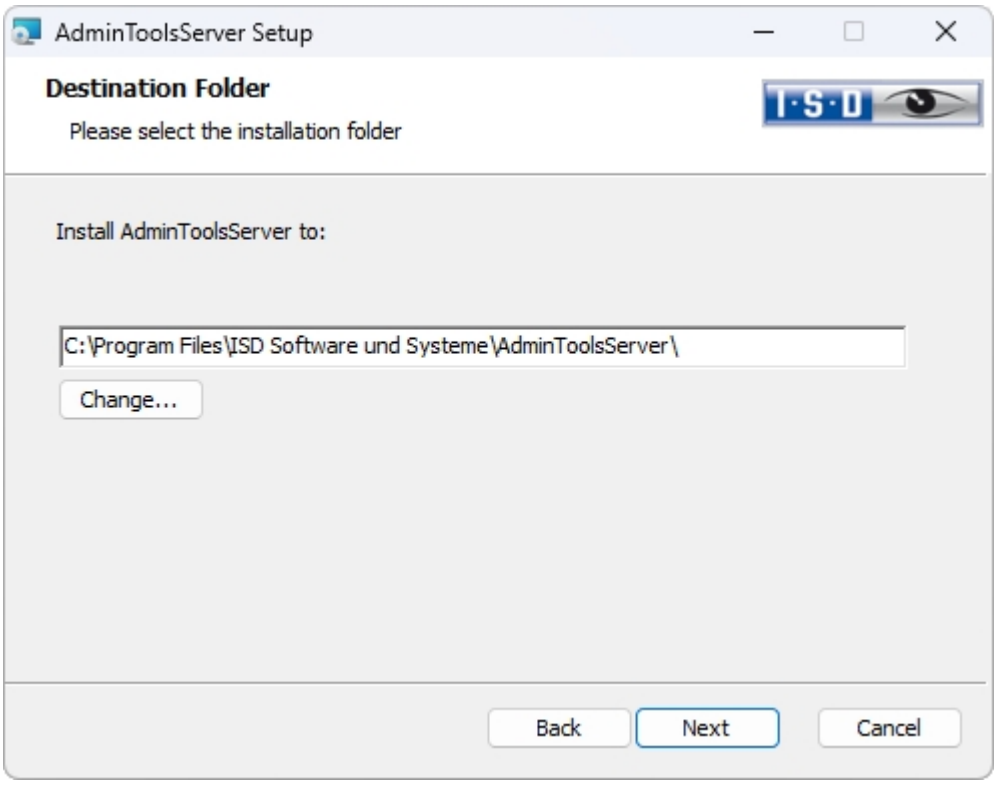
Start the installation of the **License Server**.



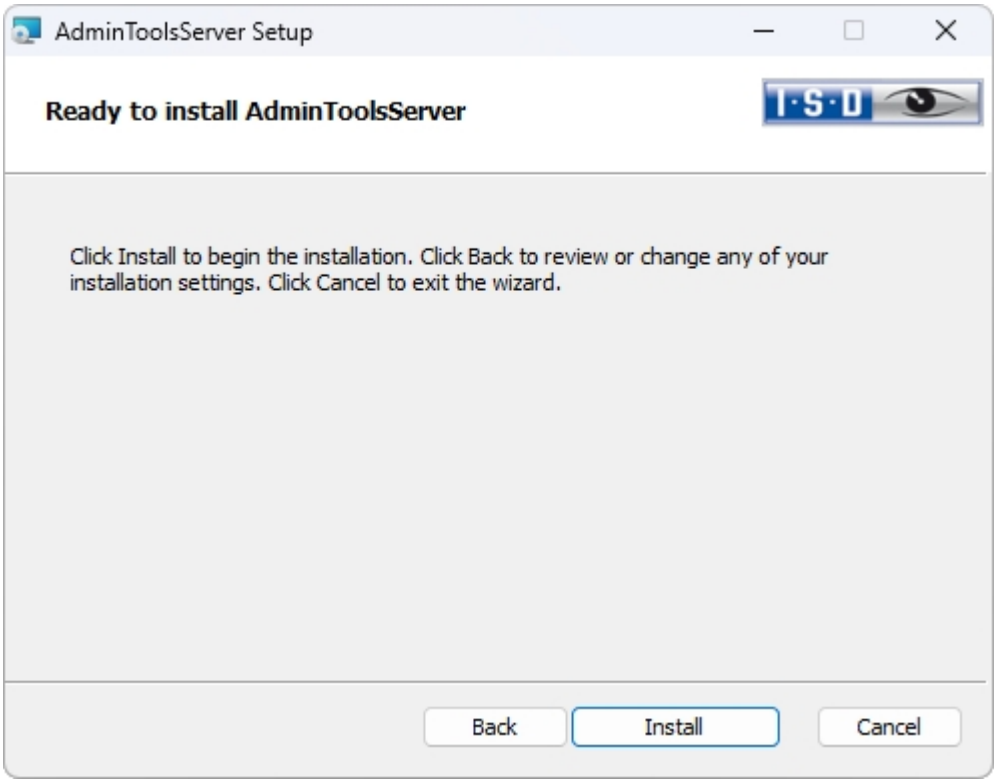
First, the system checks whether the Sentinel RMS License Manager is installed. If not, it is installed automatically.



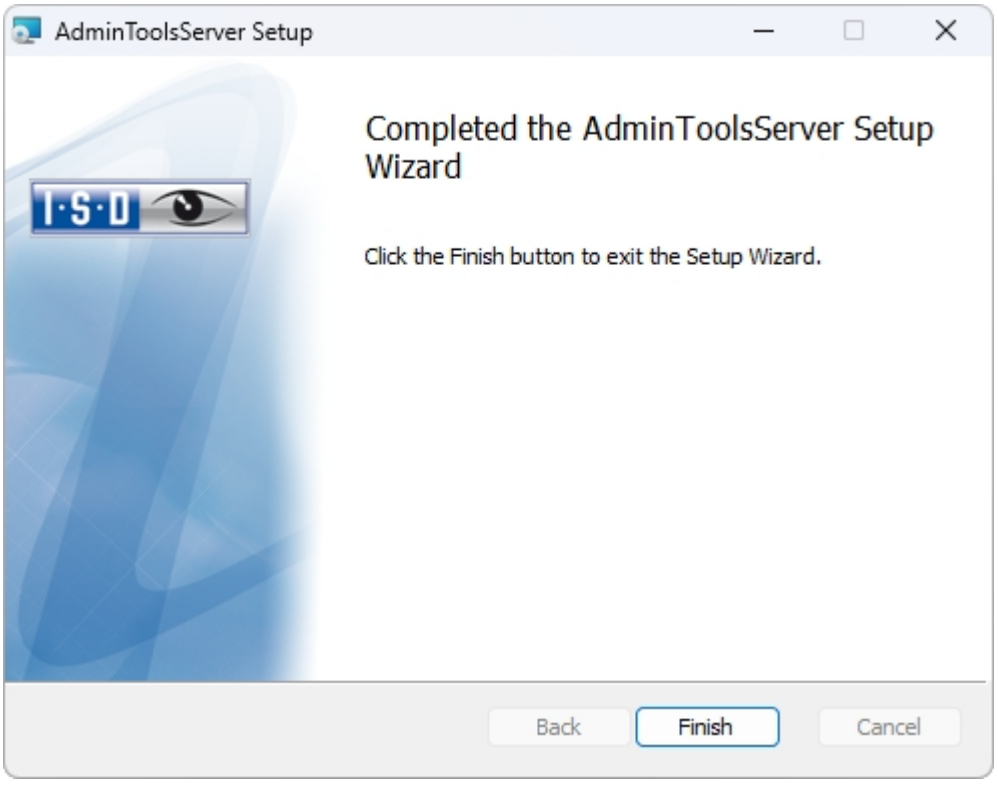
Activate the **Next** button.



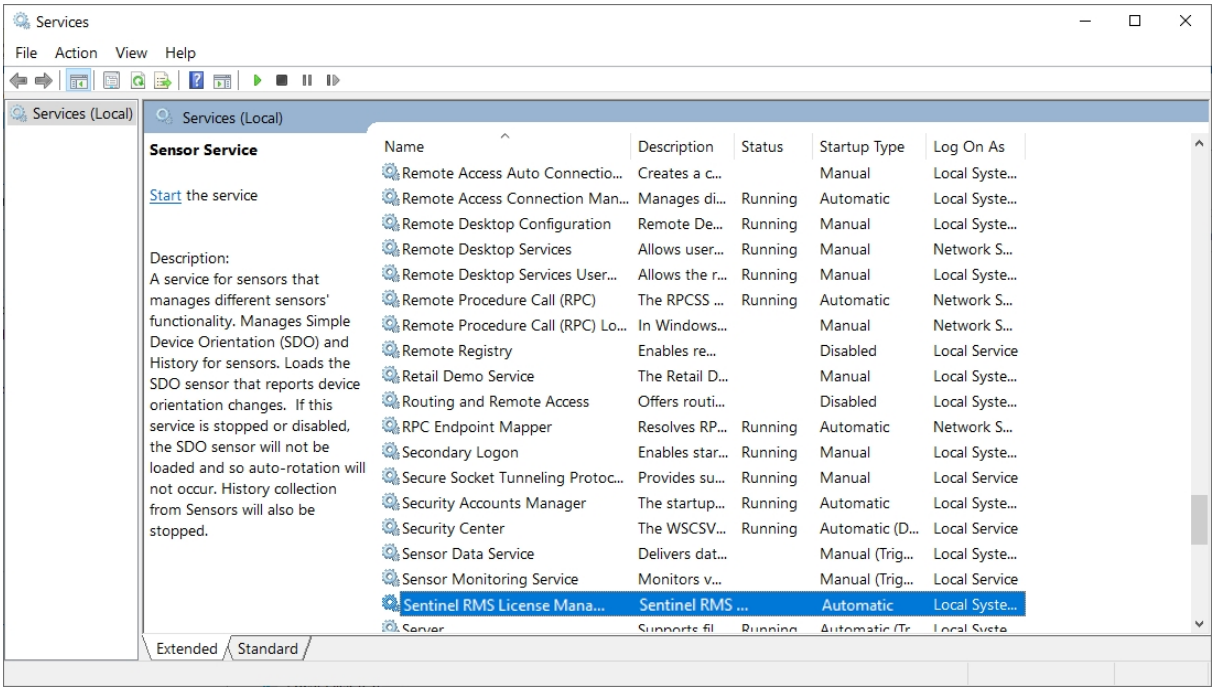
Accept the default path by clicking **Next**.



Then start the installation process.



After successful installation, you will find the Server service (Sentinel RMS License Manager) under Services. You can also start or stop it there. The **ISD License Manager (Server)** is located in the Windows Start menu under **ISD Software und Systeme**. The program file ISDLicenseManagerAdmin.exe is located by default in the C:\Program Files\ISD Software und Systeme\AdminToolsServer\exe\.



Important:

To ensure that the HiCAD/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:

To activate HiCAD/HELiOS, you always require the ISD License Manager that matches the version you use. For local client licenses, this is the ISD License Manager (ISDLicenseManager.exe) from the EXE directory of the HiCAD installation. For server licenses, use the ISD License Manager (Server) (ISDLicenseManagerAdmin.exe), which is located by default in Program Files\ISD Software and Systems\AdminToolsServer\exe.

AutoRequest Licenses

When acquiring a HiCAD/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 2024 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:**	09/22/2024
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 30.99	1	1	09/22/2024	Never expires	Enabled	Network
HiCAD steel engineering package	E103ATS2004 30.99	1	1	09/22/2024	Never expires	Enabled	Network
HiCAD steel engineering suite premium	E103STB2010 30.99	1	1	09/22/2024	Never expires	Enabled	Network
HiCAD Integration Module	E180CAH2001 30.99	2	2	09/22/2024	Never expires	Enabled	Network
HELiOS engineer from	E181HEL2010 30.99	2	2	09/22/2024	Never expires	Enabled	Network
HELiOS Spooler	E183SPO2001 30.99	1	1	09/22/2024	Never expires	Enabled	Network
HiCAD Point Cloud	F107PUW2001 30.99	1	1	09/22/2024	Never expires	Enabled	Network
Master License	MasterLic 30.99	15	15	09/22/2024	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

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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.

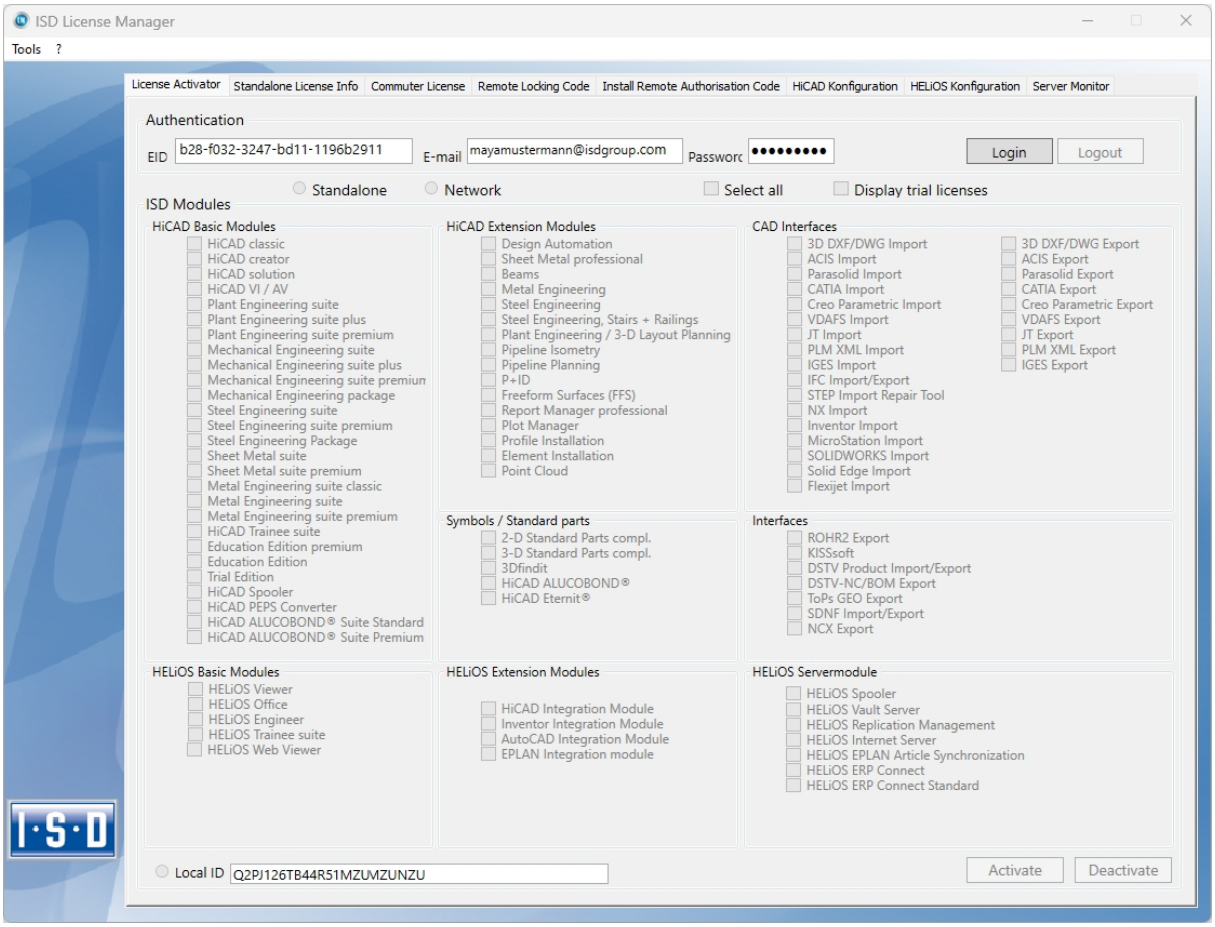
After installing HiCAD/HELiOS you can find the program in the Windows **Start** menu under **ISD Software und Systeme**. Please note that for the execution of some functions, administrator rights are required.

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 (Server) via the Windows Start menu under **ISD Software und Systeme GmbH**. Installed by default under Program Files\ISD Software und Systeme\ AdminToolsServer\exe\ISDLicenseManagerAdmin.exe.

To avoid errors when activating/deactivating licenses, perform an update of the new **License Server** and/or the **License Administration Tools** beforehand.



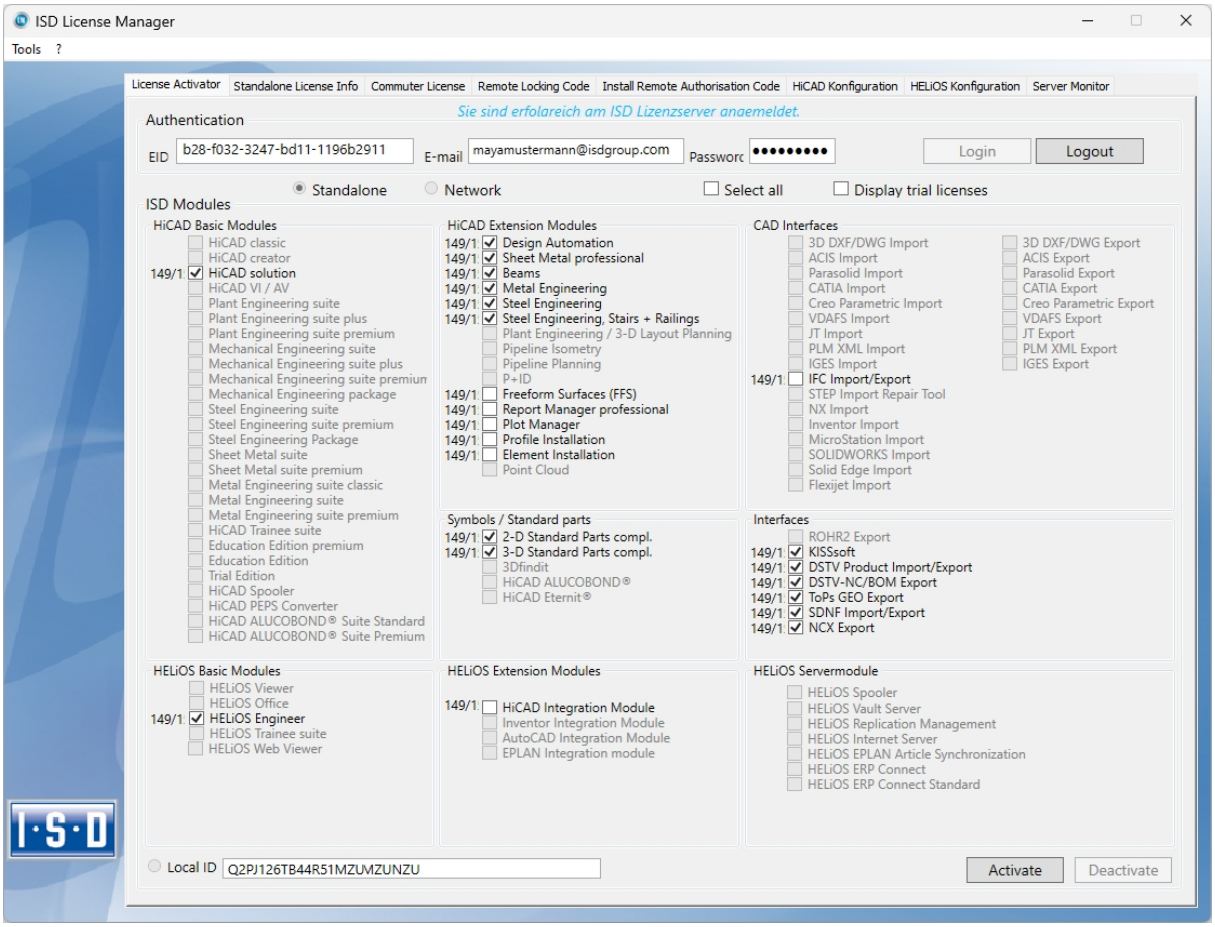
Activate the **License Activator** tab and enter the **Entitlement ID**, your **E-mail address** and your **Password**. New customers obtain their password from the ISD Hotline. With this password you can also access the Download Area.

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.

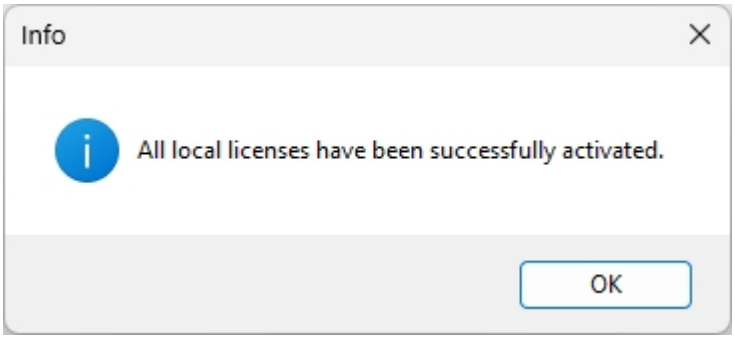
Activate Licenses

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 HiCAD/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

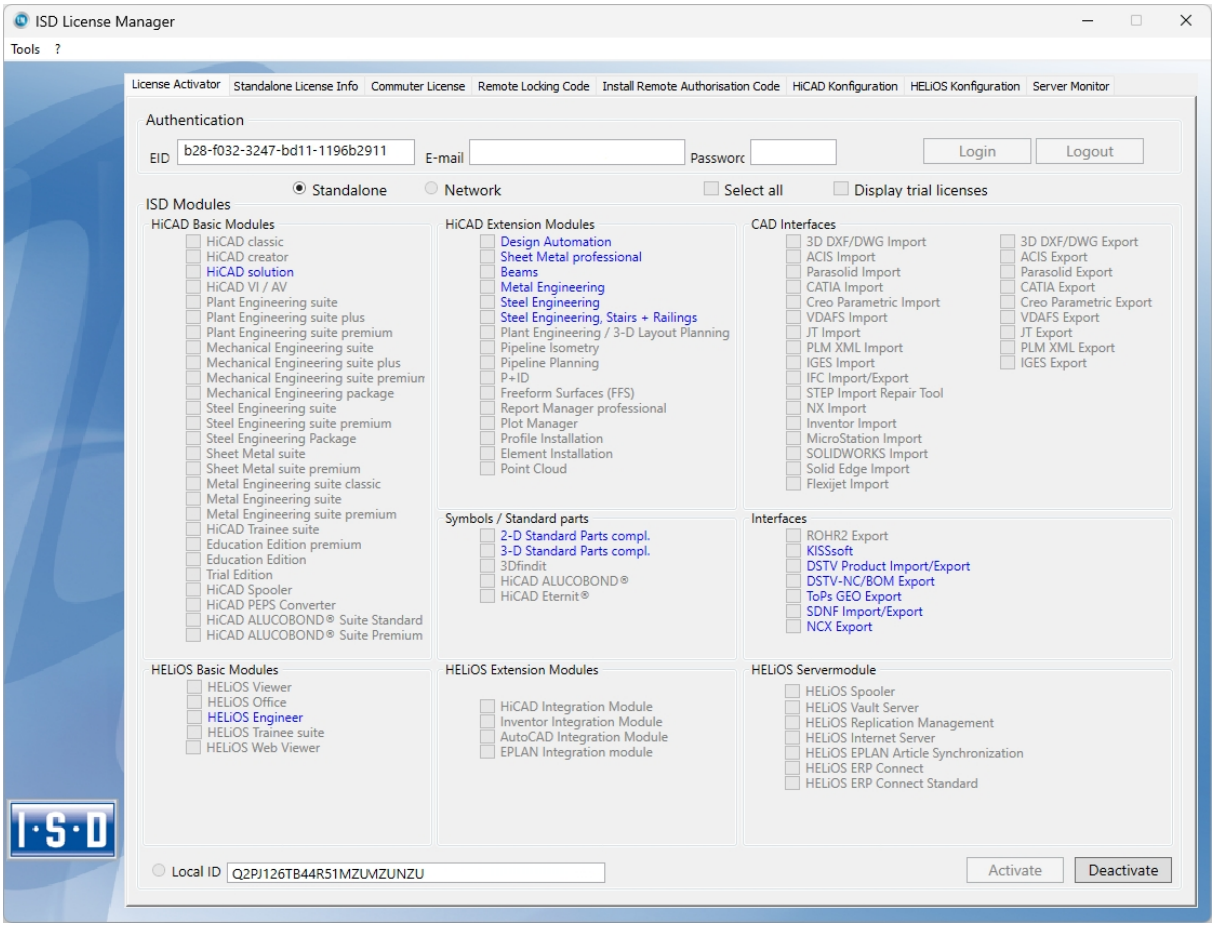
A deactivation of licenses for modules will be required in the following situations:

- 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.

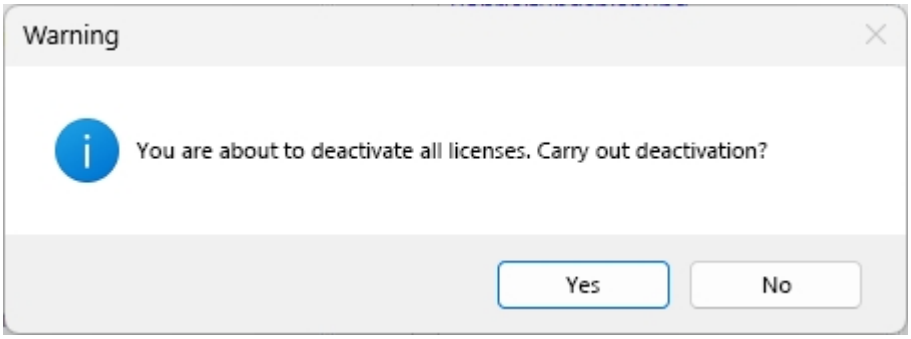
Close all HiCAD/HELiOS applications before deactivating local licenses or logging onto the License Manager.

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



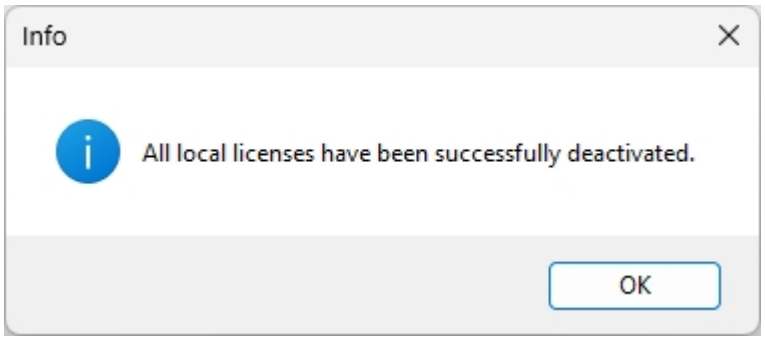
Click the **Deactivate** button to revoke the activation of the modules.

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

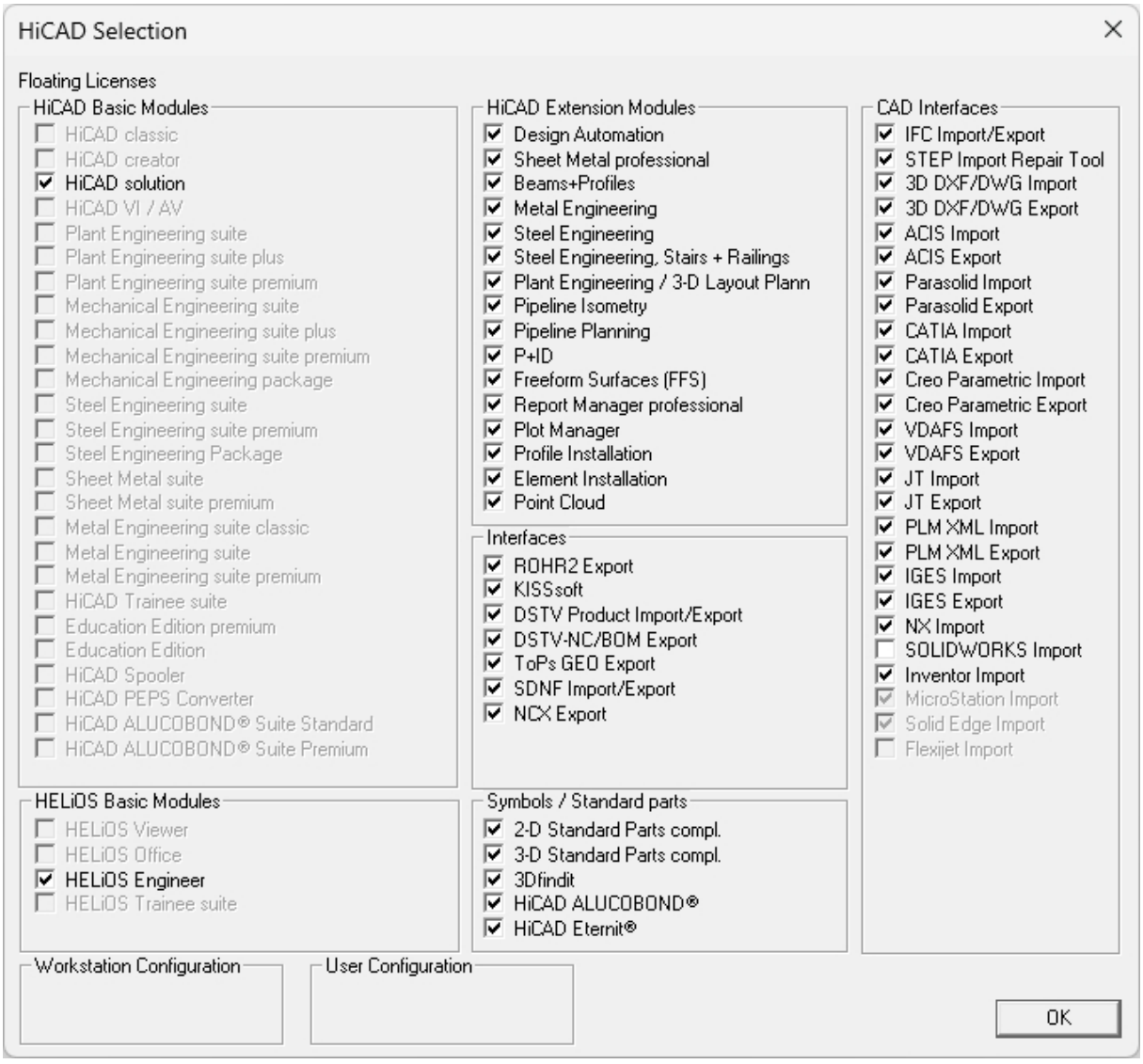
As all licenses are stored on the ISD Server, you can, in case of an interrupted connection or an accidental deletion of licenses, restore all licenses by logging in with your Entitlement ID. The restoring will only function if the hardware was not changed (see Deactivate Licenses).

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.

Floating Licenses

If you have acquired a HiCAD Extension Module with the property **Floating-able at runtime**, you can activate/deactivate them during the current HiCAD session. To do this, click on the m HiCAD nach dem **Help** icon on the top right of the HiCAD screen and choose the option **Floating Licenses**. The HiCAD module selection window will be displayed:



If one Extension Module is (de)activated, the Extension Modules that are prerequisites for this module will also be (de)activated (if they are also floating-able at runtime).

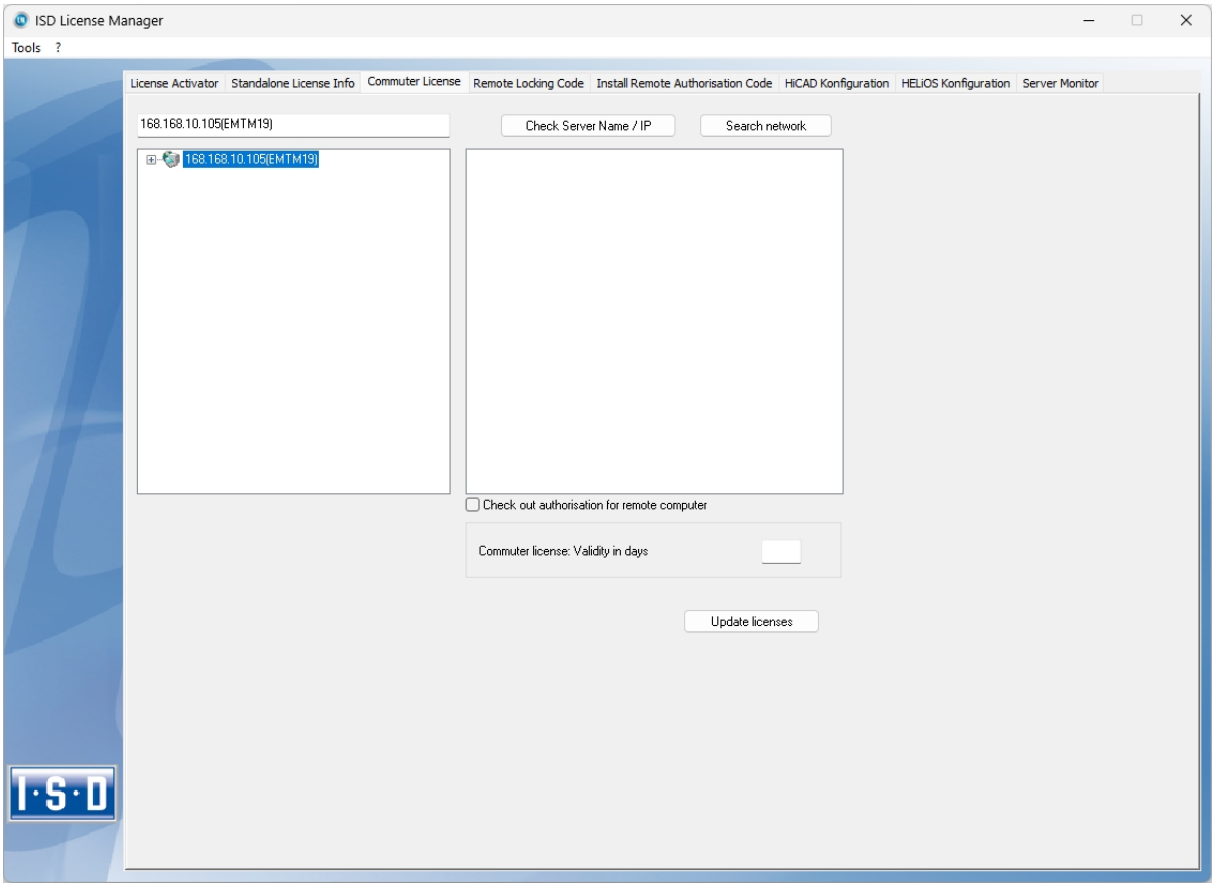
Commuter Licenses

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:

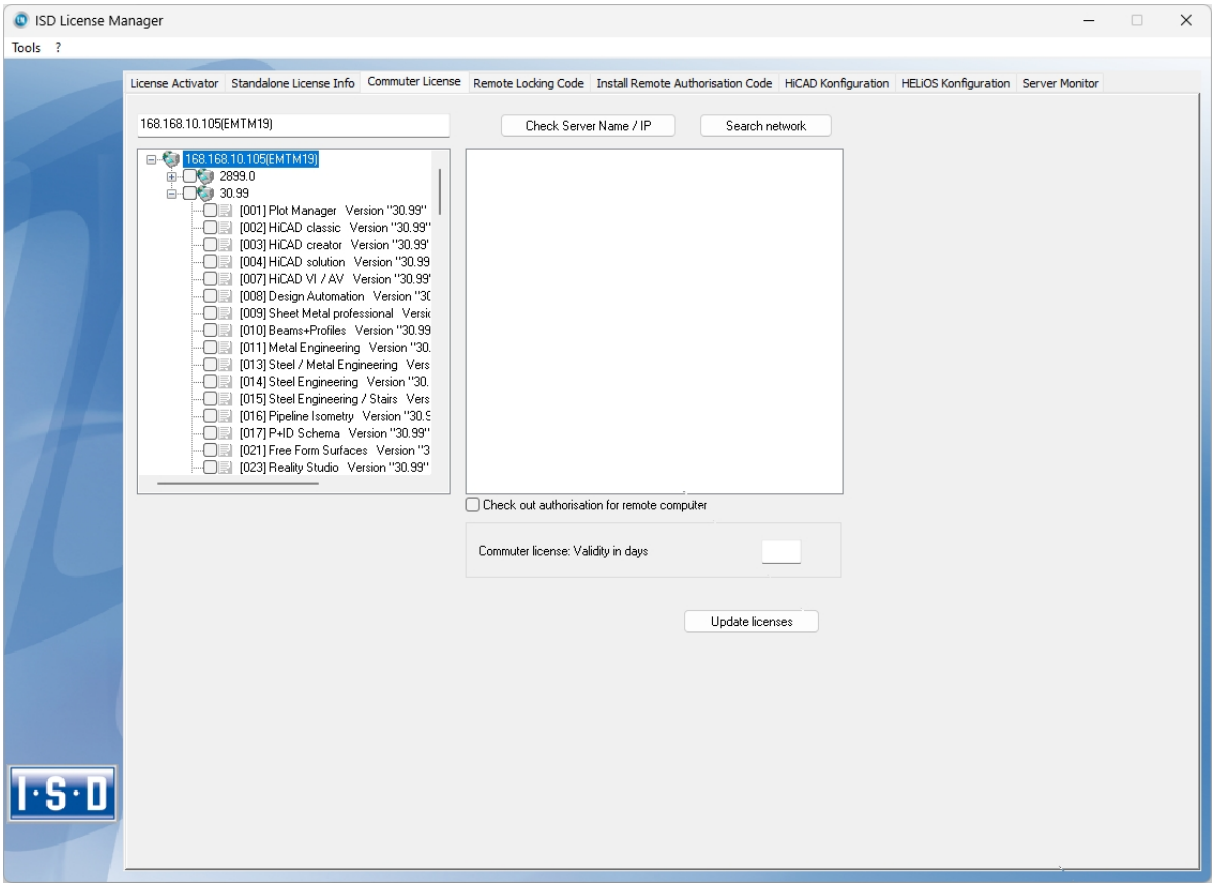
- Checking Out Commuter Licenses, with Network Connection
- Checking Out Commuter Licenses, without Network Connection

Checking Out Commuter Licenses, with Network Connection

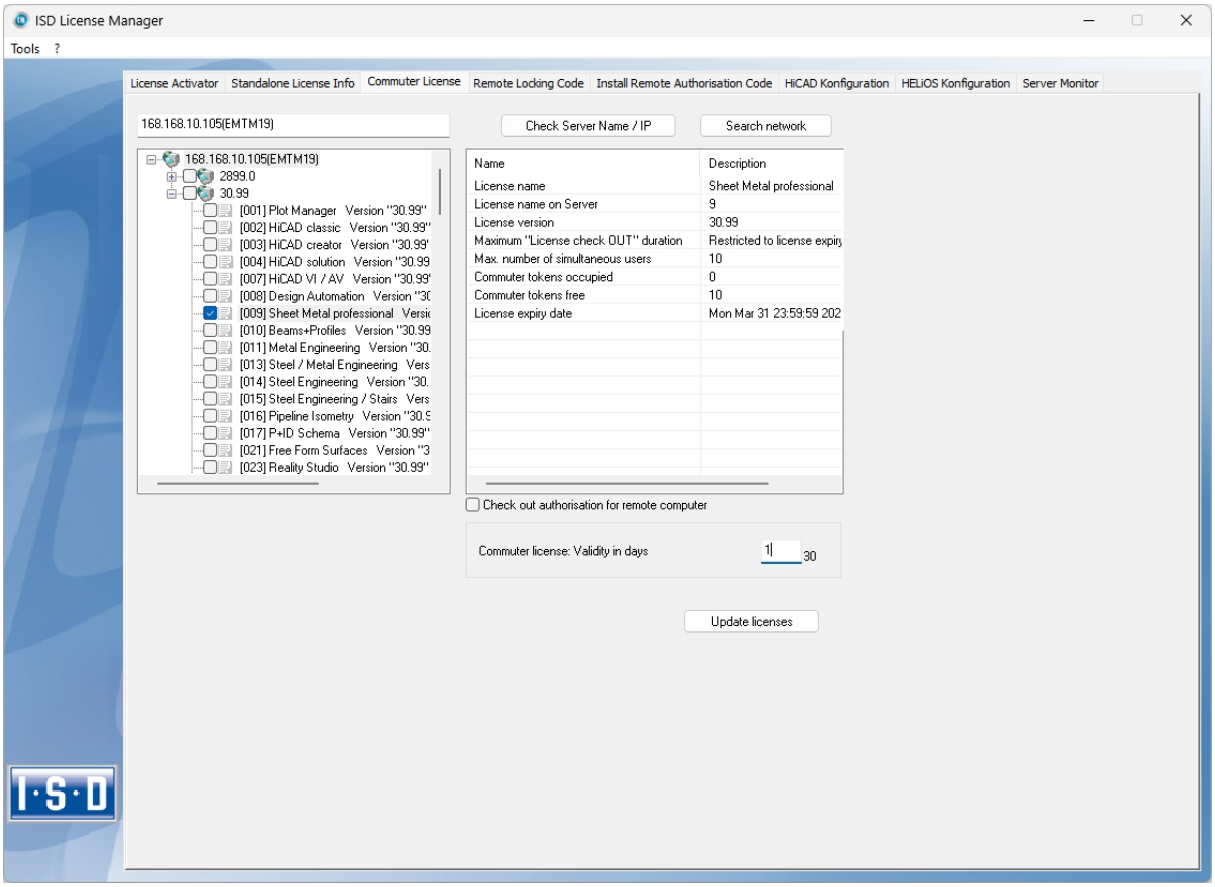
Start the **ISD License Manager (Server)** (while a connection to the Server still exists). Switch to the **Commuter License** tab.



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.

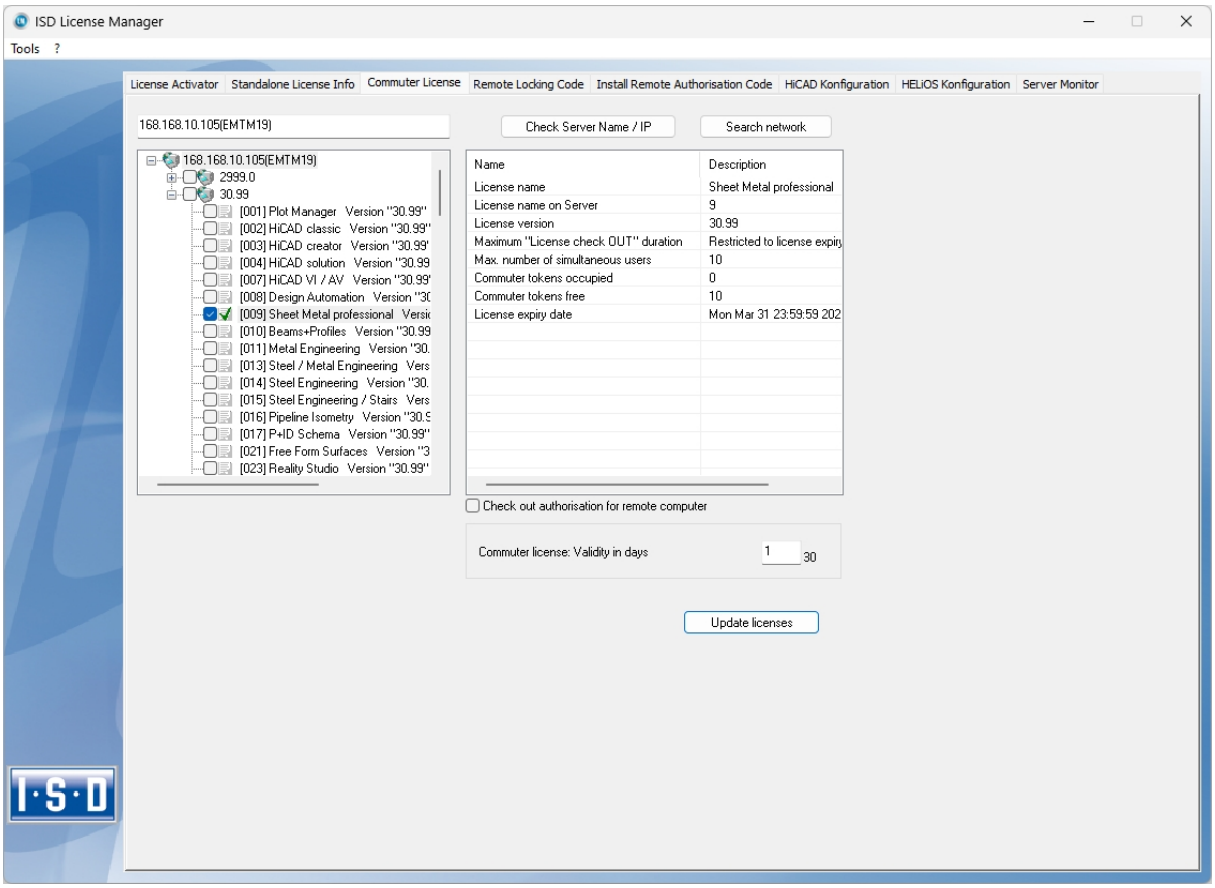


On the right hand side, information on the selected license is displayed.

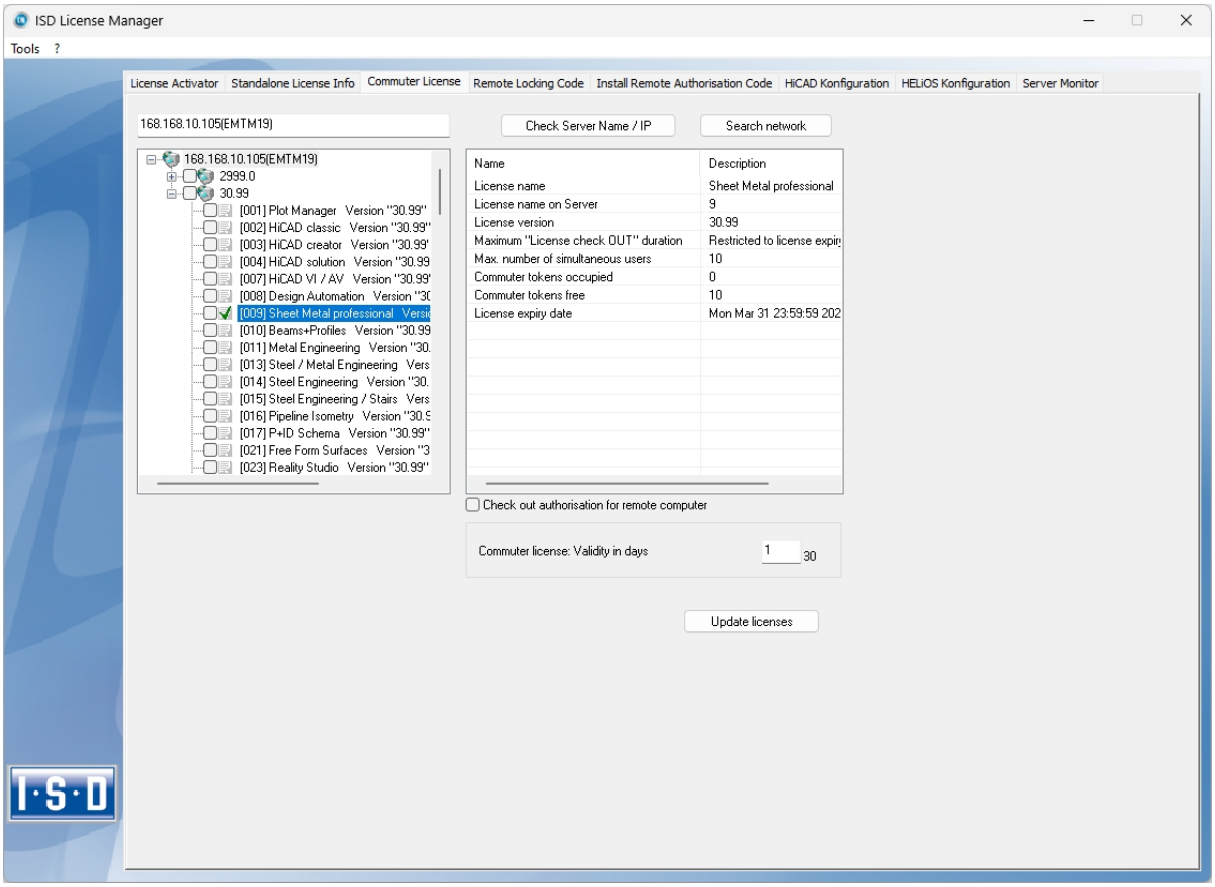
In the **Commuter license: Validity in days** field, you enter the number of days that you want the commuter licenses to remain checked out from the Server. The maximum number of days is 30. By default (or if a “0” is entered), the value is set to 1.

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 HiCAD/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

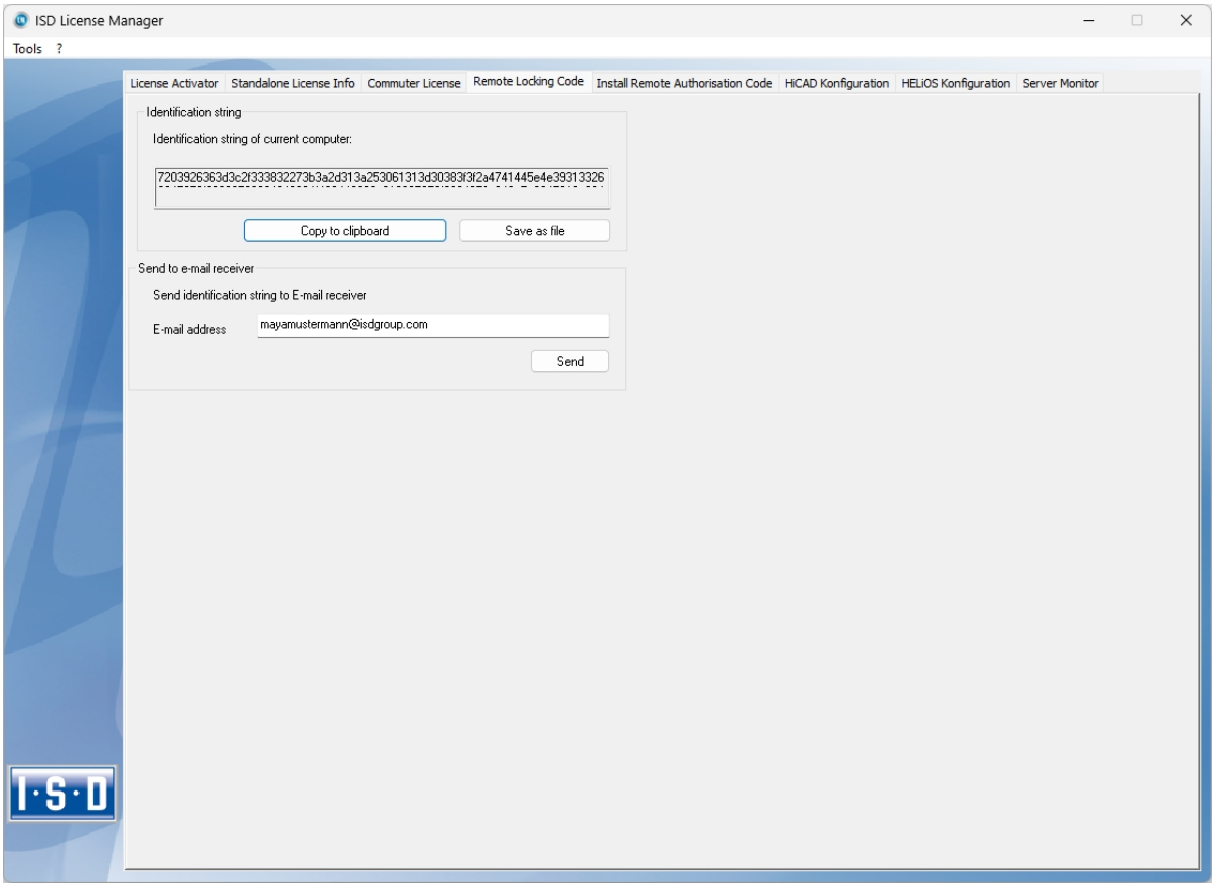
Commuter licenses can also be drawn from the License Server without an existing network connection. For this **Administrator rights** are required.

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.

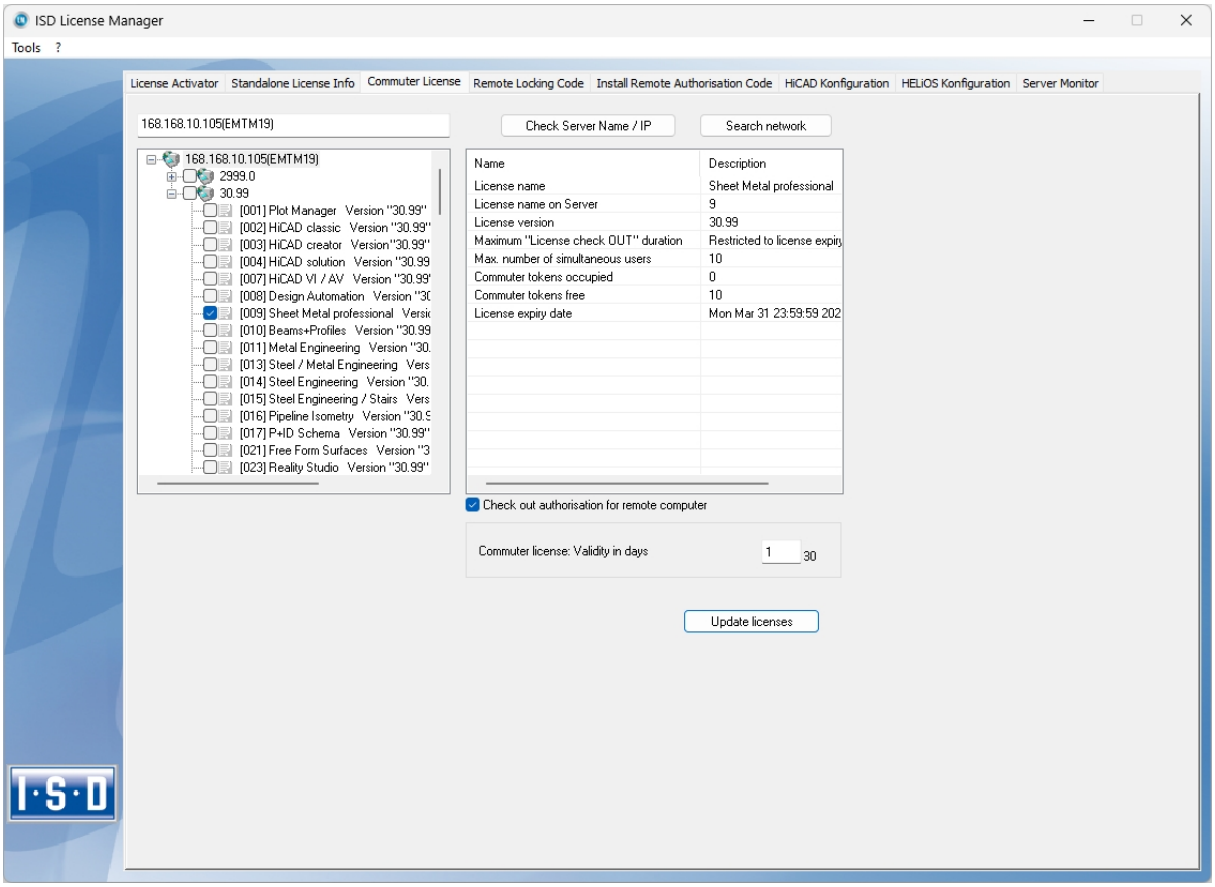
As long as commuter licenses are checked out in this way, it is not possible to update the network licenses on the server. The same applies when buying new modules/licenses and changing the configuration.

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



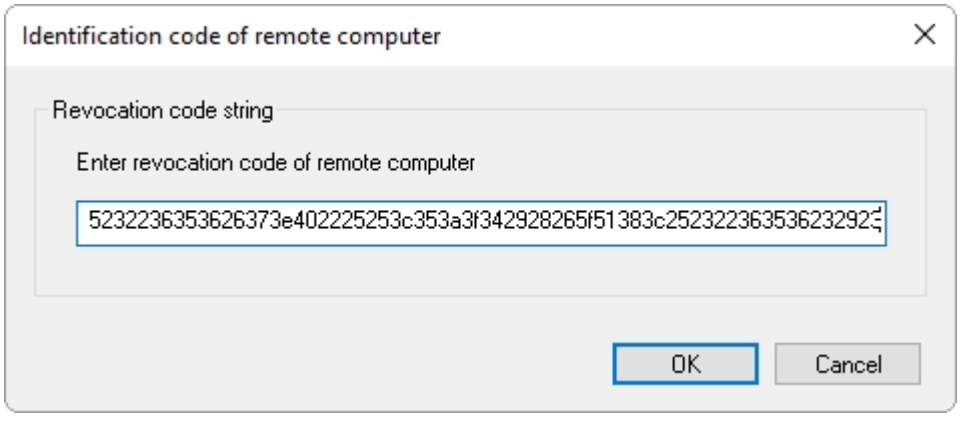
Then, the Client sends the generated character set to the Administrator (via E-mail or over the phone).

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

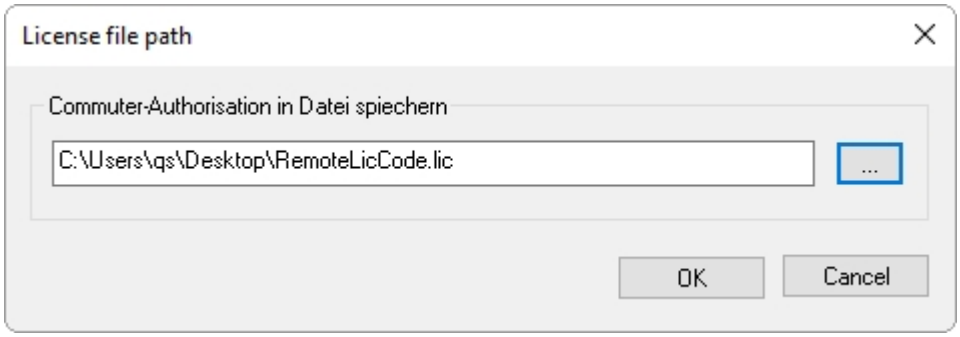


The License Server will be selected, and the required licenses (modules) are activated in the left window. In the **Commuter license: Validity in days** field, you enter the number of days that you want the commuter licenses to remain checked out from the Server. The maximum number of days is 30. By 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.

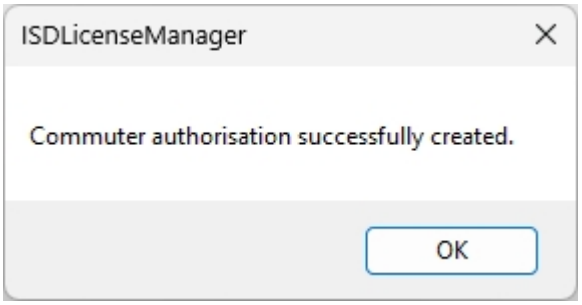
A click on the **Update licenses** button opens a new dialogue window, in which the administrator enters the character set received from the Client



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

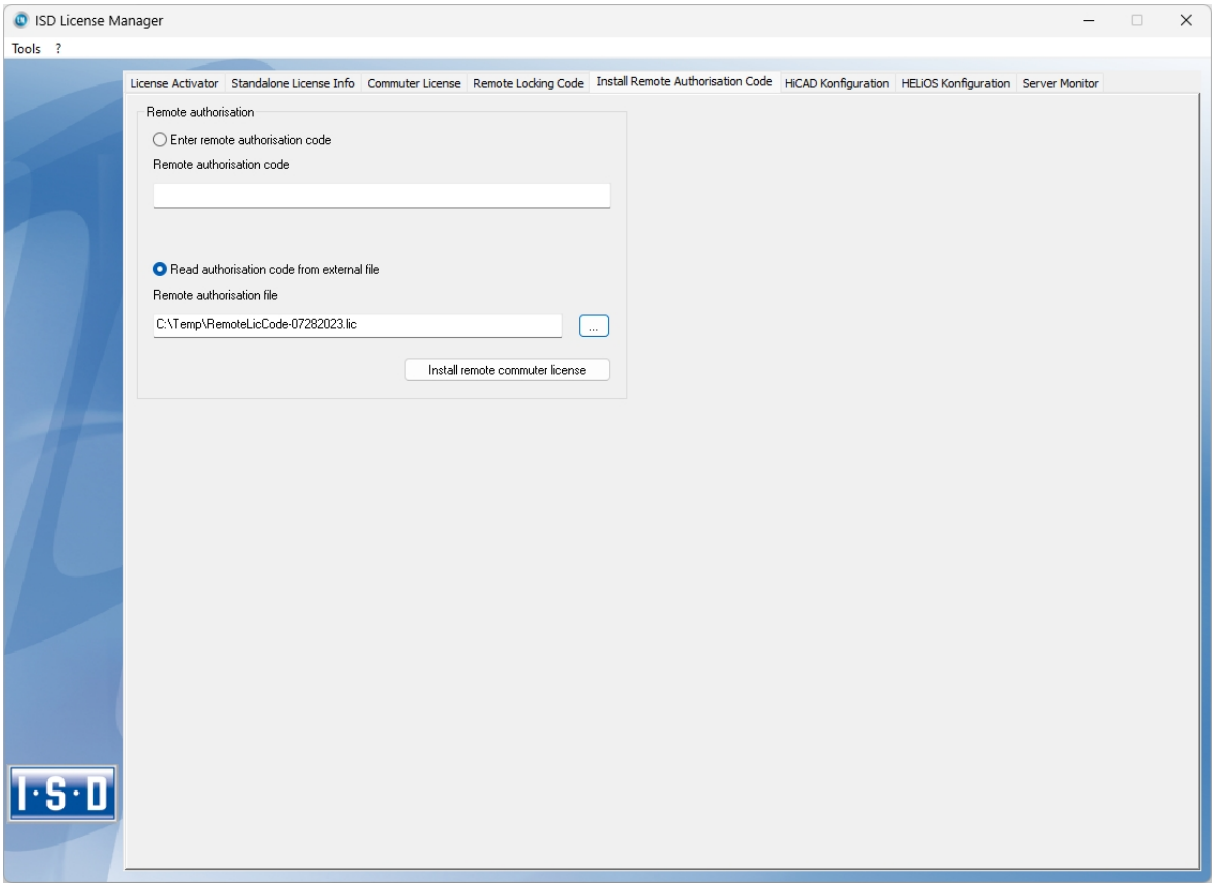


Here the Administrator enters the target path and the file name for the licenses to be swapped out. Make sure that a unique file name is used, for example, by including in the file name the host name of the remote computer and the expiry date.

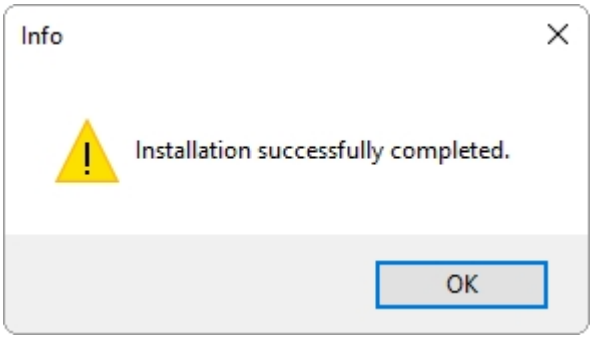


Click **OK** to check out the commuter licenses from the License Server and swap them out to a file, e.g. RemoteLicCode.lic.

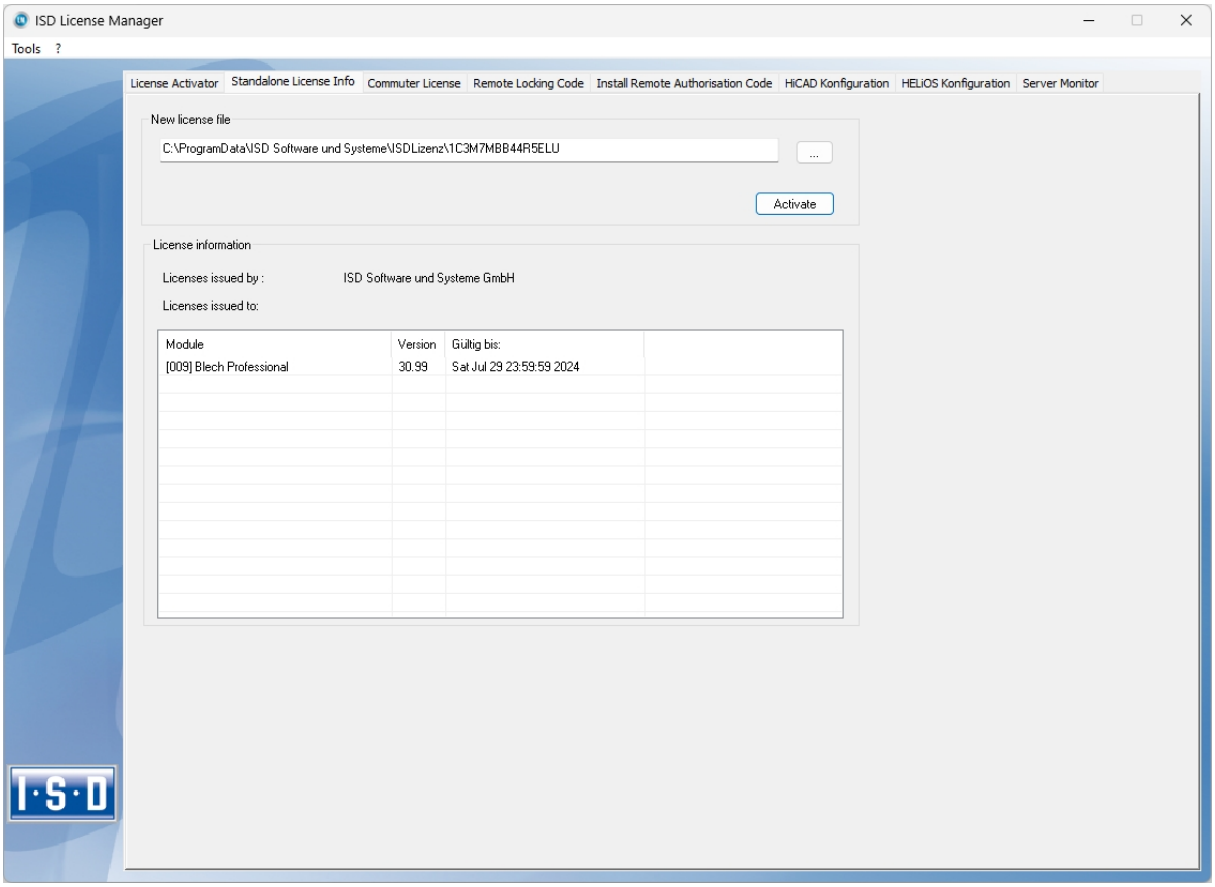
After receiving the file with the commuter licenses, the Client starts the **ISD License Manager** again and activates the **Install Remote Authorisation Code** tab.



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.

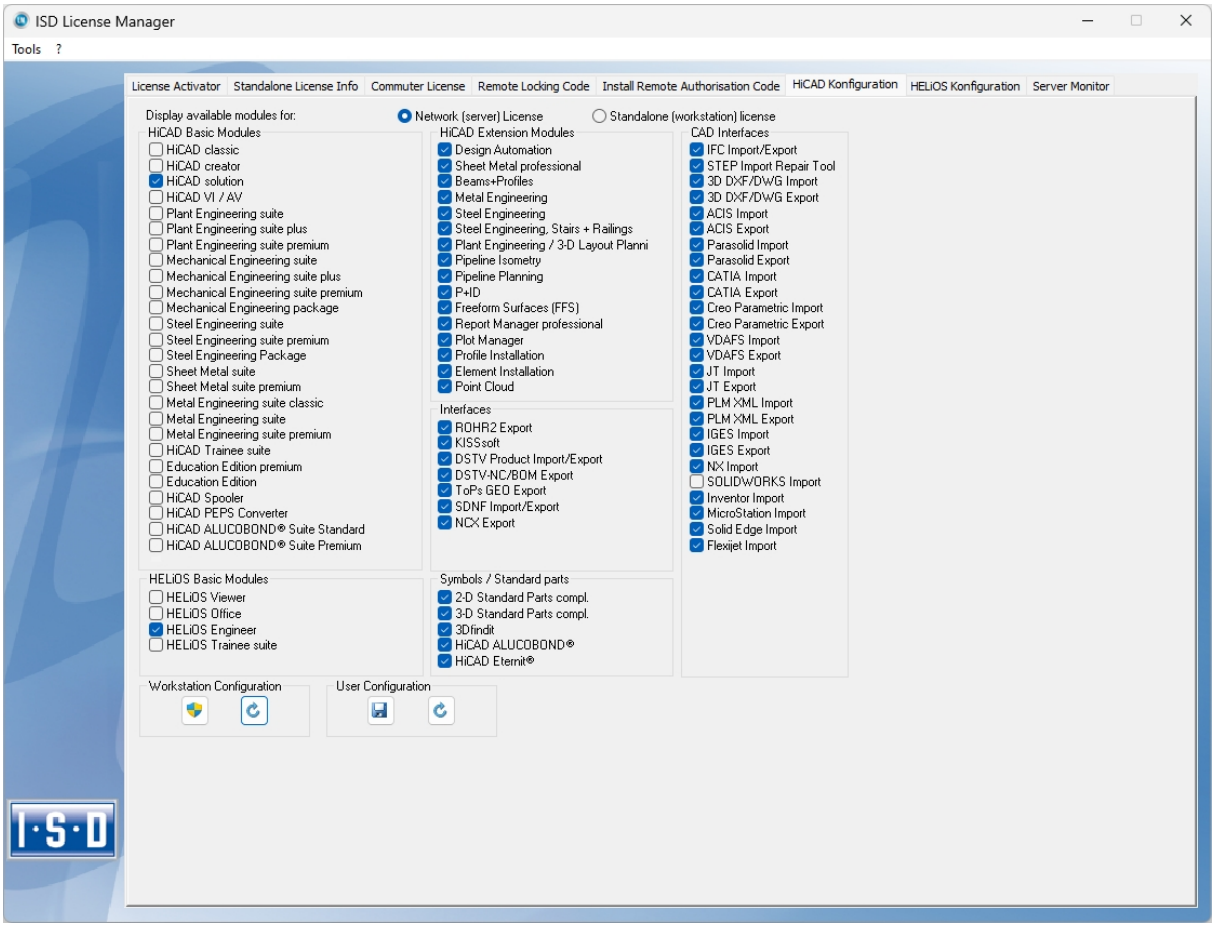


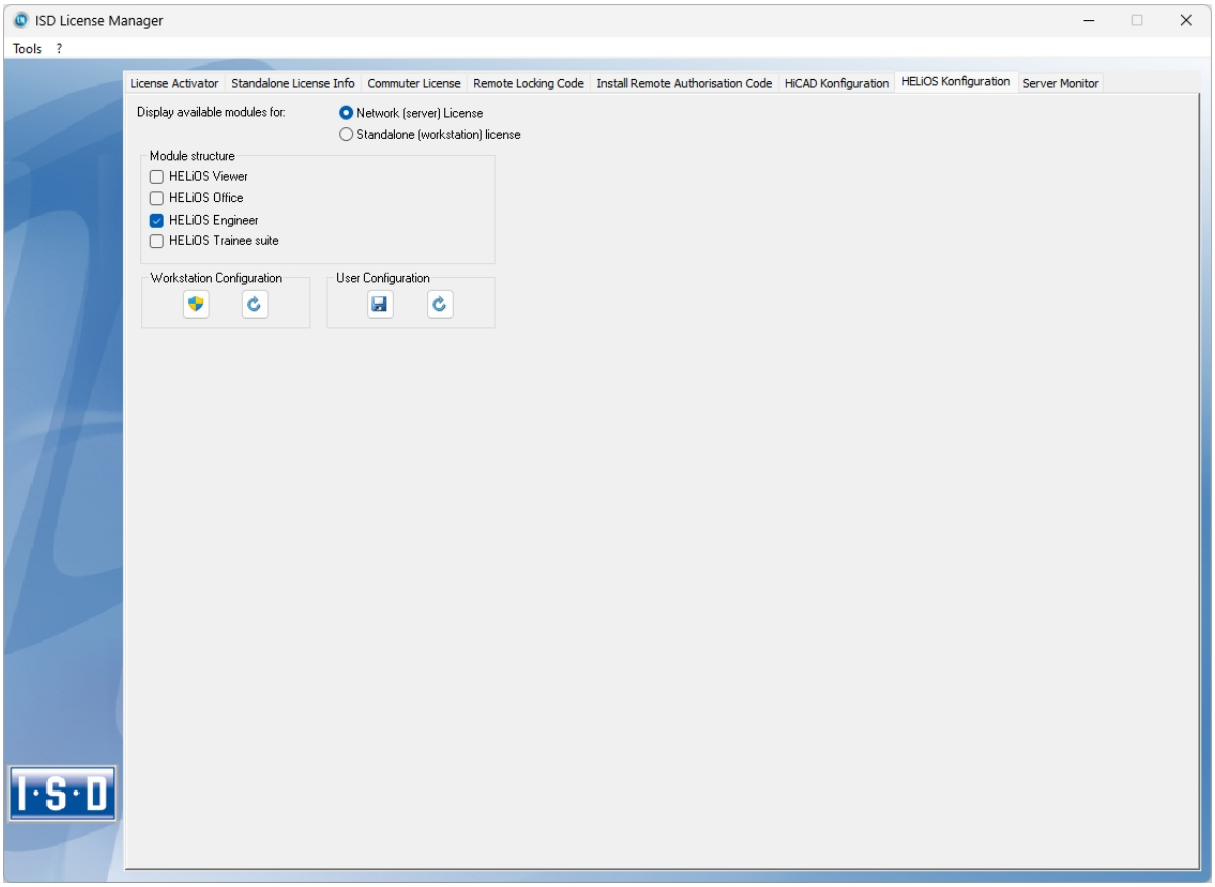
To update, the Client must click on the **Activate** button. The information which licenses are installed locally on the computer will then be provided to the Client.

License Configuration

Some cases may require the use of only certain specific licences on a computer. Example: On the Server HiCAD Creator and HiCAD Solution licenses are available. On one Client, HiCAD is to be started with a HiCAD Creator license; on another Client, with a HiCAD Solution 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 HiCAD configuration tab will be displayed before the start of HiCAD/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 **HiCAD Configuration** or **HELiOS Configuration** of the **ISD License Manager** tool you have the option to save a workstation or user configuration for individual Clients.

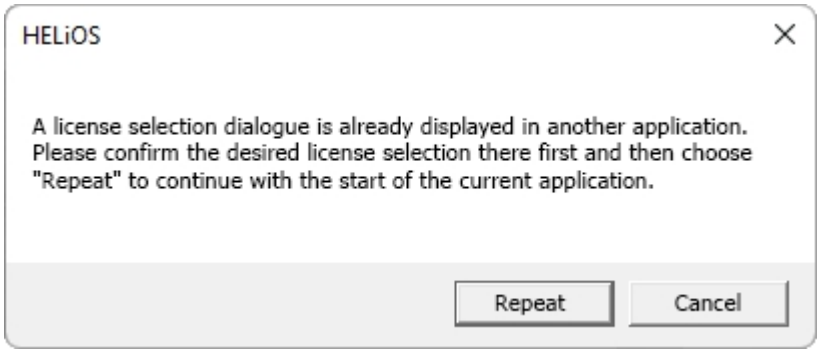
- **Save as workstation configuration**: This configuration will be saved for all users of this computer. When HiCAD/HELiOS is started, the selection window is no longer displayed (administrator rights are required for this).
- **Save as user configuration**: This configuration is only saved for the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

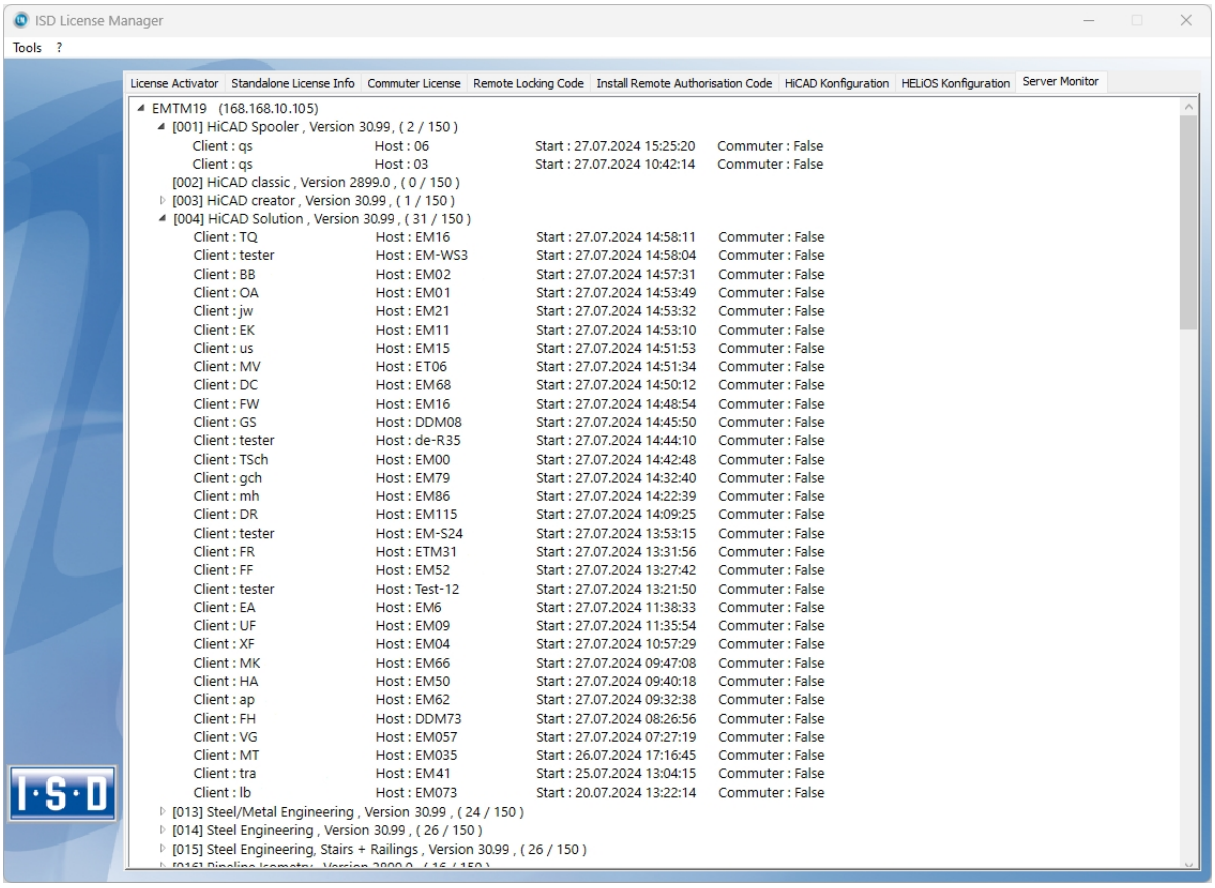
Server Monitor

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 HiCAD and 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

- HiCAD at a Glance
- Start HiCAD
- DLL Check
- Start Center
- Close HiCAD
- HELiOS at a Glance
- Start HELiOS
- What's New in Version 2025?

HiCAD at a Glance

HiCAD is a versatile CAD with a unique, combined 2-D/3-D approach, innovative functions, comprehensive industry solutions and an integrated PDM component. State-of-the-art technologies and a multitude of automatisms help you speed up your daily routine tasks. And simulation and analysis tools enable you to find and correct possible collisions and errors in your product models at very early design stages.

Performance characteristics:

- Microsoft Windows Standard
- GUI with multifunctional toolbar (Ribbon)
- Combined, fully associative working in 2-D and 3-D
- From 2-D to 3-D via model reconstruction
- Part-oriented designing
- Combined free ("direct") and parametric modelling
- Information + Communication Navigator (ICN)
- Automatic object snap and context menus (opened via right-click)
- Access to extensive symbol and standard part libraries (also online)
- Function simulation with the HiCAD Constraints Manager (HCM)
- Mounting, transport and motion simulations
- Free-form surface (FFS) technology
- Part referencing
- Feature technology
- Material Editor and lighting models
- Integrated Product Data Management (PDM) with HELiOS
- Transfer of data from other systems (CATIA, STEP, DXF, DWG etc.)
- BOM creation, PPS interface, data transfer to NC machines
- Powerful and versatile industry solutions
- Modular, expandable structure

Start HiCAD

You start HiCAD by

- Selecting the HiCAD symbol via the Start button on the Windows task bar (**Start > All Programs >ISD Software und Systeme > HiCAD**), or
- via the HiCAD icon on the Desktop of your computer.

Once you have started HiCAD, the input window for License Management is initially displayed, followed by the HiCAD Start Centre (provided that it has not been deactivated).

If you use HiCAD in conjunction with HELiOS, a login may be required to start HiCAD.

To make the best possible use of the numerous new features and enhancements offered by HiCAD, 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 HiCAD. 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**.

Please note:

During the start of HiCAD it is checked whether the required version of .NET Framework is actually installed. If this is not the case, an appropriate error message will be displayed and HiCAD will be closed.

DLL Check

Due to entries in the Windows-Registry, more and more libraries from third parties (DLL file) are integrated when HiCAD is launched, e.g. in order to capture messages or outputs to the screen. Some examples are

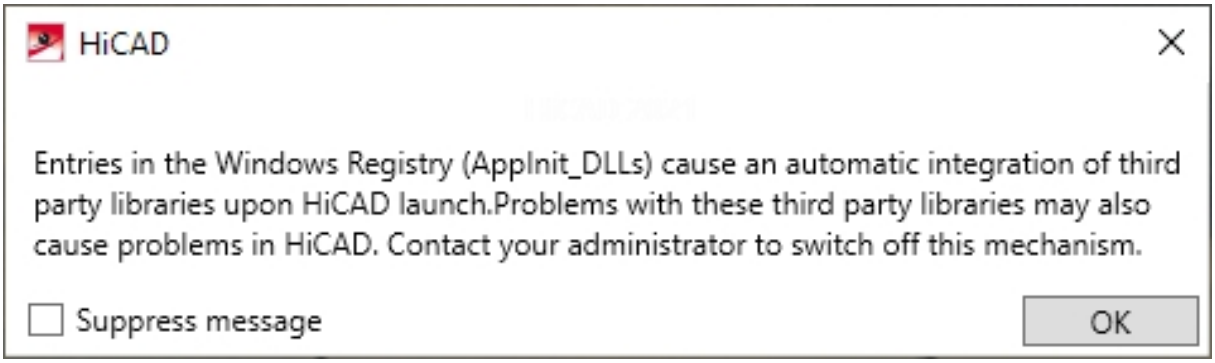
- Virus scanners,
- PDF creation programs,
- Programs for recording of screen activities,

etc. These files can sometimes cause problems.

When you start HiCAD, it will first be checked whether DLL files are assigned to the Registry value AppInit in the Registry key

- HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Windows (64-Bit)
- HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Windows NT\CurrentVersion\Windows (32-Bit)

If this is the case, the following message will be displayed:



Activate the **Suppress message** checkbox if you do not want this message to be displayed upon future HiCAD starts. Also inform your administrator about the message. The message will not reappear until the Registry value changes again, i.e. not until other DLLs will be loaded!

To display the message again independently of this, set the value for the key **CheckBoxState** in the Windows registry at

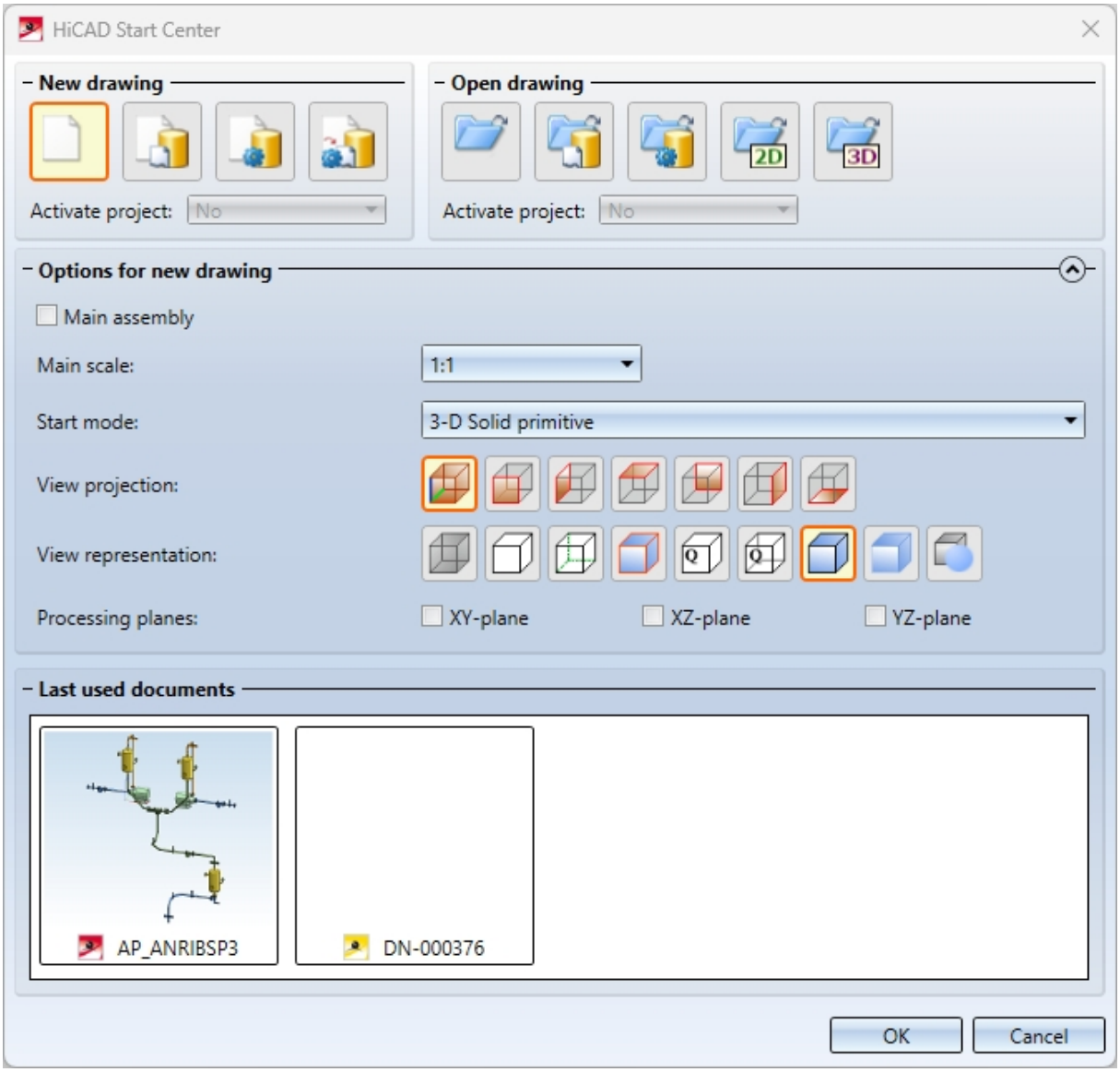
- HKEY_CURRENT_USER\SOFTWARE\ISD Software und Systeme\HiCAD 2025]\Splash Screen

to 0.

Important:
Be careful when editing the Registry! The entering of incorrect values or the deleting of values may destablilize the operating system!

Start Centre

When you start HiCAD for the first time, the **Start Centre** will be displayed, which has been designed to facilitate your first steps of drawing creation.



- When you call the Start Centre again, the last set values will be displayed as default values.
- The settings you have selected for the start action **New drawing** will even be used in HiCAD if you call the **New drawing** function while the Start Centre is inactive.

If you want to create a new drawing, specify whether you want to create a **Main assembly** by activating the same-named checkbox. This will make the drawing a main assembly drawing.

- **Part drawing** (aka Detail drawing)
  In a part drawing (detail drawing) you divide your drawing into main parts and sub-parts. To define the part structure you use so-called dummy parts which symbolise the assembly. You then assign assembly-relevant main parts and sub-parts to these dummy parts. Instead of dummy parts you may as well use the special part type Assembly.
- **Assembly drawing**
  You can define 3-D drawings directly when creating the assembly drawing and - if you are working in parallel

with HELiOS - enter them into the database. This provides significantly more efficiency, particularly for referencing, itemisation and BOM-creation.

Options

- **Enter drawing into database**
  If you are working with HELiOS you can define whether you want to the new drawing to be entered into the database. HiCAD will prompt you to specify the document master data once you exit the Start Centre. If not, you will be prompted to enter the name of the drawing file.
  Activate, if desired, the project to which you want to assign the drawing.
- **Scale**
  Here you can preset the scale of the drawing.
- **Start mode**
  Here, choose the start mode you want to be activated once you exit the Start Centre, e.g. **2-D**, if you want to start the drawing in 2-D or **3-D Extruded solid**, if you want to start your drawing by creating an extruded solid in 3-D.
- **Create processing planes (3-D only)**
  Here you can specify which of the standard processing planes you want to create. Activate the appropriate checkbox.
- **View projection and View representation (3-D only)**
  If you want to work in 3-D, use these functions to pre-set the model view and the view representation.

Open drawing

If you have chosen **Openg drawing** as start mode, you can specify whether you want to load the drawing via the database, the Explorer or via an interface. As with a new creation, you may also activate the project directly.

Close HiCAD

To close HiCAD,

- just click on the icon at the top right , or
- Click on the ISD Button at the top left and choose **End**.

If HiCAD drawings are still open at this point, you have the option to save them. HiCAD distinguishes between the currently open drawing, i.e. the one that you see on your screen, and other drawings that are also still open. If a file with the same name already exists, you can either save the drawing under a different name, or overwrite the existing file with the same name. Please note however that no backup copy will be created in this case!

Important:

When closing HiCAD, all files except for the auto-saved files will be removed from the TEMP directory of your HiCAD installation.

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.

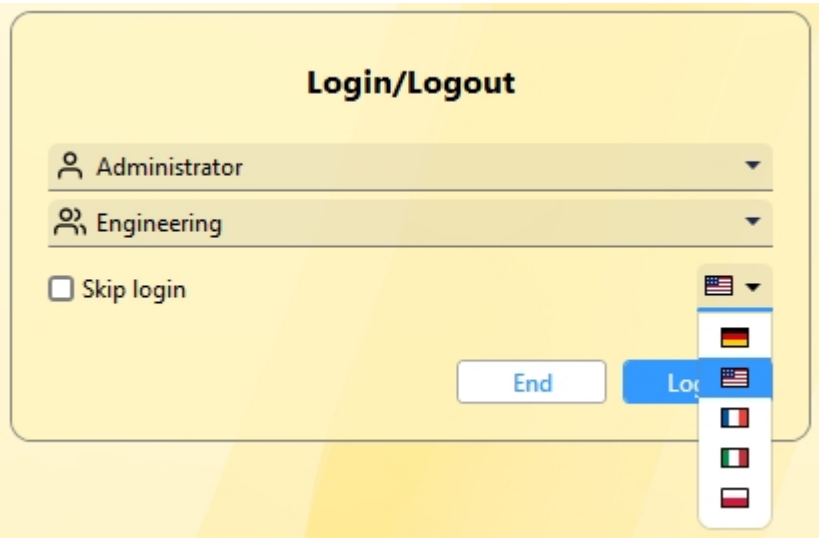
If you have not closed HELiOS correctly during your last session, you will receive an error message from the Vault Server.

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.



User 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 2025?

An extensive overview of all changes and enhancements of HiCAD 2025 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.

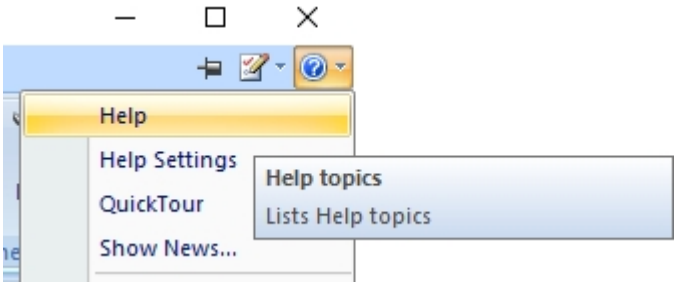
How to Use the Help

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

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

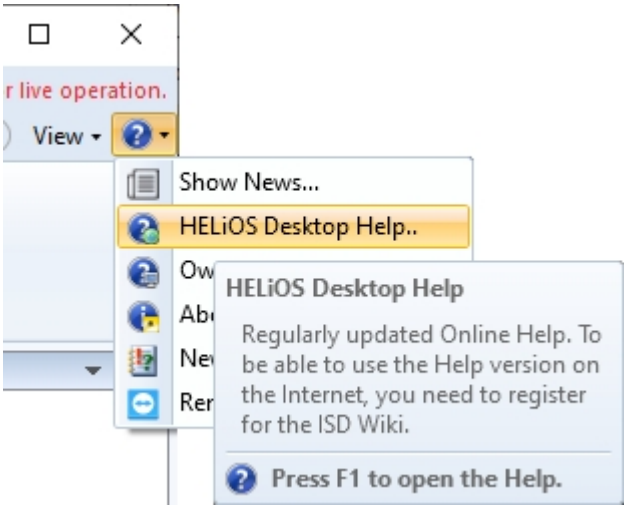
The Help is available both locally (status of the installation DVD) and on the Internet (regularly updated) at help.isdgroup.com. Both versions of the Help can be called from HiCAD/HELiOS.

You can call the Help in HiCAD via the **Help Topics and Information** menu.



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

Click on the button to call the HELiOS Help.

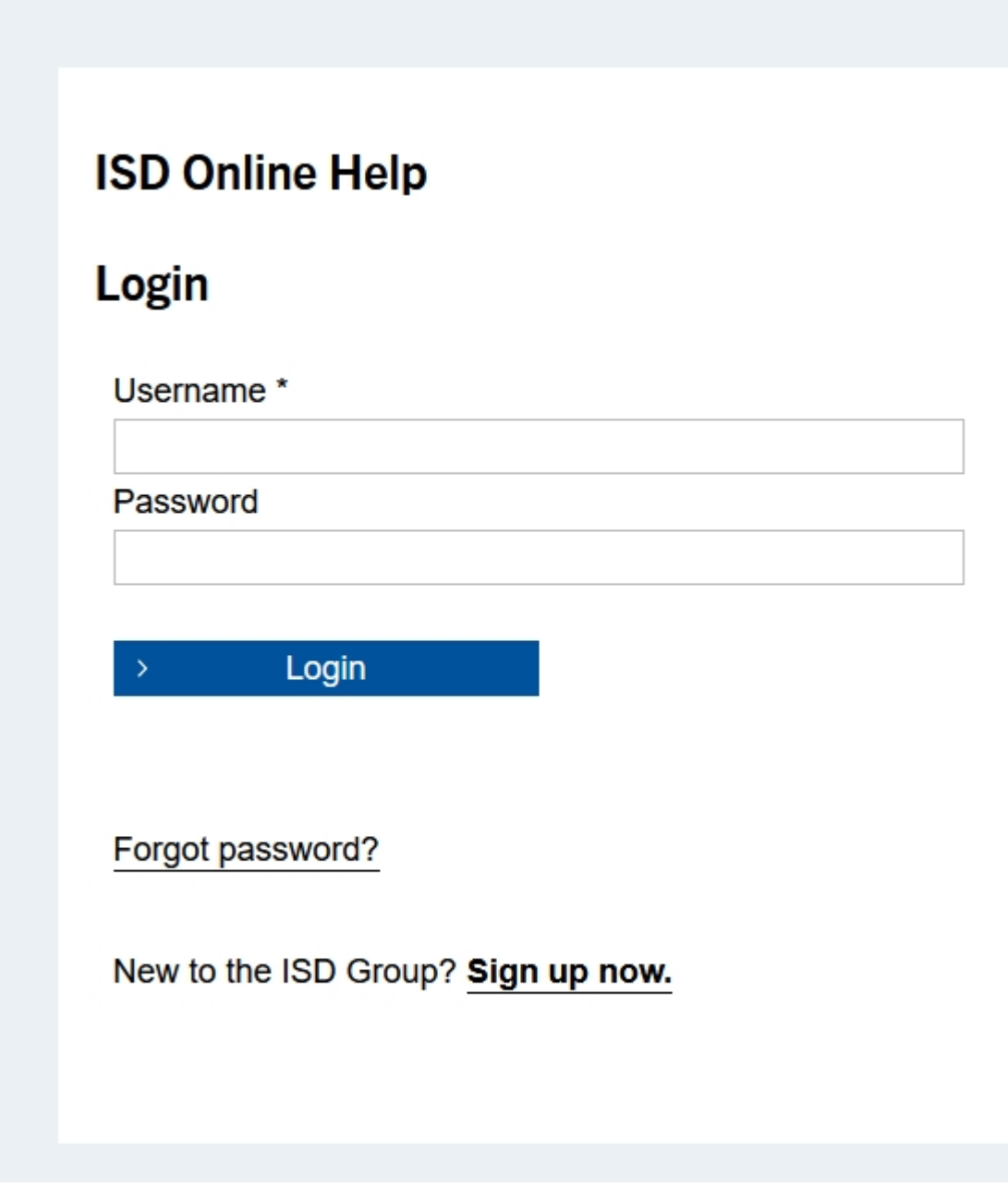


Choose > **HELiOS Options** to determine which version of the Help will be used.

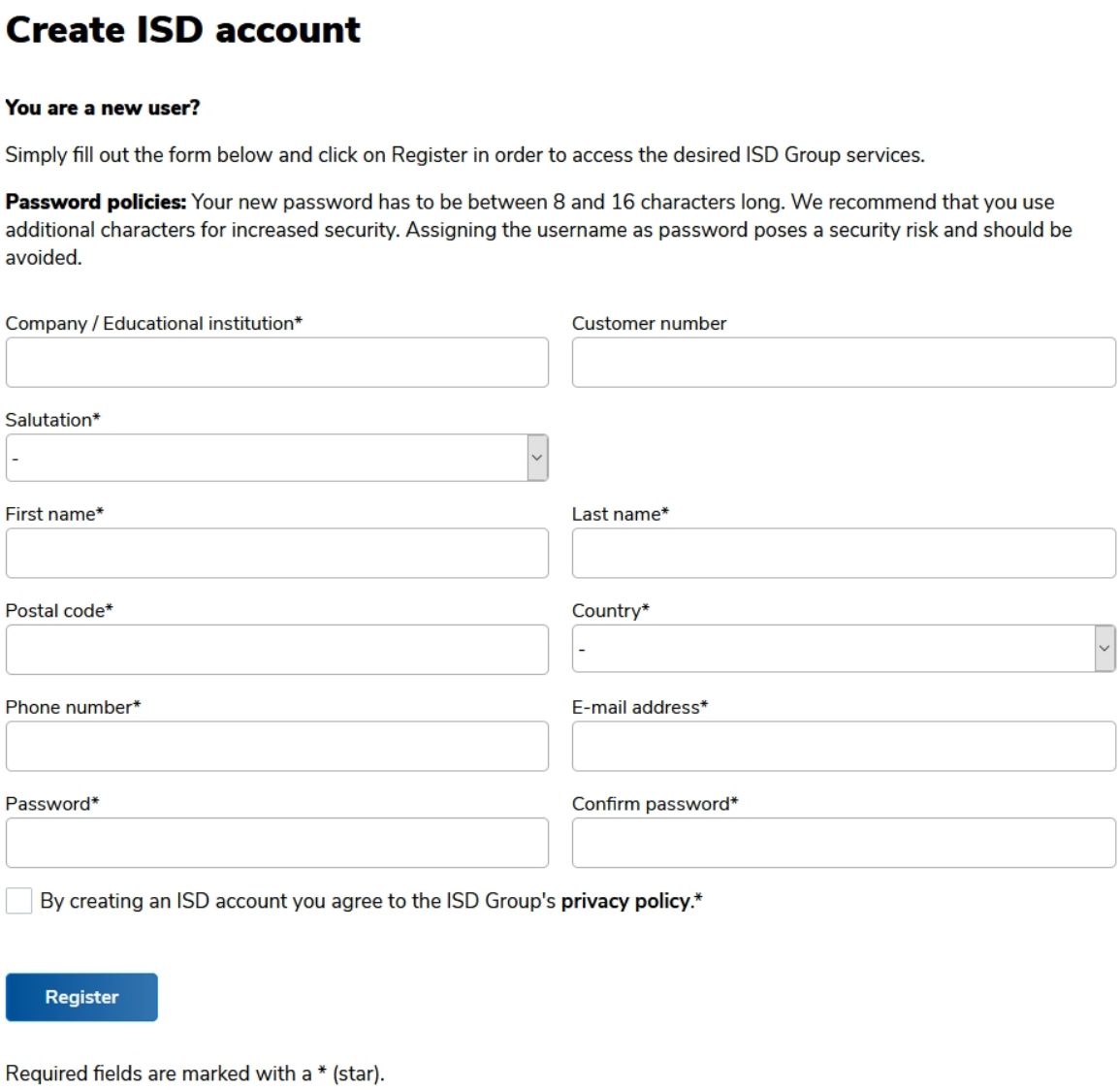
Please note:
If you move the cursor over a function on the Ribbon and press the **F1** key, the Help page for that specific function will be displayed.

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.



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.



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 **HiCAD and 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.

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