



UNLIMITED CAD PERFORMANCE DEVELOPED BY ISD

# Installation Notes

HiCAD and HELiOS 2017

System requirements | Installation guide

Licensing | Update Information | First Steps

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# 1 System Requirements

## Please note:

### FIG turns into FGA

HiCAD 2017 comes with the new 2-D figures archives with the file name extension .FGA. Please use only this new .FGA format for conversion of existing 2-D .FIG files! For this purpose, use the new **Converter\_FIG\_To\_FGA.exe** tool in the HiCAD\exe directory.

When updating to HiCAD 2017 all standardly supplied 2-D parts (e.g. drawing frames) in the different installation directories will be converted from FIG to FGA by default during the installation. The data in the original state will be saved in a folder (resp. a ZIP archive) in the scene and catalogue directory. The converted files will be documented in a LOG file.

When creating an interface between HiCAD 2017 and HELIOS, you will be prompted to update the databases after a new installation or an update installation. The search for and management of 2-D parts will **only be possible after conversion of the database** and the existing .FIG files with the above mentioned tool.

### Licences

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

### Data Format


HiCAD 2017 (Version 2200) uses a different data format, i.e. .SZA files created with HiCAD 2017 cannot be loaded in older HiCAD versions.

## 1.1 Hardware Requirements for HiCAD

For the installation of HiCAD you can use any hardware that possesses current drivers for the operating systems used. Please note, for instance, that the graphics card drivers need to support the complete OpenGL instruction set. You also require a DVD drive.

Hardware requirements (minimum)	
Processor (CPU):	Intel or AMD processor with SSE2 support
RAM:	4 GB RAM
Hard disk:	approx. 5 GB free disk space
Screen resolution	1280 x 1024
Graphics card:	Fully OpenGL 2.0 capable graphics card with at least 128 MB memory. You can use the <a href="#">OpenGLCapabilityTester</a> to check whether the OpenGL capabilities of your computer are sufficient for HiCAD.
Supported operating systems:	Windows 10 Windows 8 Windows 7 (with current service pack and security patches)
Other:	For the output of reports, e.g. Sheet Metal cost calculations, you require Microsoft Office Version 2010 or higher.




 **To achieve optimal performance for large assemblies, the system should possess significantly more main memory than is considered sufficient for HiCAD at first glance. This enables the hard disk accessing operations Buffer memory, Undo and Switch drawing to be performed up to 4 times faster.**

- » Supported database systems (for HiCAD with HELiOS):
  - Microsoft SQL Server 2008 / 2012 / 2014 / 2016
  - Oracle Database Server 11g R1 / 11g R2 / 12c

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

Recommended hardware equipment (October 2017)	
Computer:	Fujitsu CELSIUS W570
Processor (CPU):	Intel® Core™ i7-7700-Processor, 8 MB, 4,2 GHz or Intel® Xeon® Processor E3-1280v6, 8 MB, 4,2 GHz or equivalent processor
RAM:	4 x 8 GB, DDR4, 2.400 MHz (incl. ECC) If you work with very large CAD drawings it could be recommendable to use computers with more RAM.
Hard disk:	1 x 512 GB, SSD SATA III Premium bay, 2,5 inch
Graphics card:	NVIDIA Quadro M2000 (4 GB)
Screen resolution	Full HD (1920x1080)
Operating system:	Microsoft Windows 10 (64 Bit)
Other:	Microsoft Office Version 2010 or higher.

 **Please note that insufficient graphics hardware will impair the performance and the quality of graphical representation!**

## 1.2 System Requirements for HELiOS Desktop (Standalone)

For the installation of HELiOS you may use any hardware possessing current drivers for the operating systems used. Please note, for instance, that the graphics card drivers need to support the complete OpenGL instruction set. Furthermore, a DVD drive is required.

Minimum Hardware Requirements for HELiOS Desktop (Stand alone)	
Processor (CPU):	Intel or AMD processor with SSE2 support
RAM:	1 GB RAM
Graphics card:	Graphics card according to CAD system or Viewer requirements
Operating system:	Windows 10, Windows 8 or Windows 7 (with current service pack and security patches)
Database systems:	Microsoft SQL Server 2008 / 2012 / 2014 / 2016 Oracle Database Server 11g R1 / 11g R2 / 12c

Recommended hardware for HELiOS Desktop with simultaneous HiCAD operation	
Computer:	Fujitsu CELSIUS W570
Processor (CPU):	Intel® Core™ i7-7700-Processor, 8 MB, 4,2 GHz or Intel® Xeon® Processor E3-1280v6, 8 MB, 4,2 GHz or equivalent processor
RAM:	4 x 8 GB, DDR4, 2.400 MHz (incl. ECC)
Hard disk:	1 x 512 GB, SSD SATA III Premium bay, 2,5 inch
Graphics card:	NVIDIA Quadro M2000 (4 GB)
Screen resolution	Full HD (1920x1080)
Operating system:	Recommended Microsoft Windows 10 (64 Bit) Windows 10, Windows 8 or Windows 7 (with current service pack and security patches)

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

Documents (in .pdf format) describing the installation procedure for the database system and the import and export of the database can be found in the Wiki at [Product Know-how > Documentation > HELiOS](#).

## 1.3 System Requirements for HELiOS Database

As of HELiOS 2017 you can use the following Server types as Database Servers (RDBMS):

- » Microsoft SQL Server, Versions 2008 - 2016
- » Oracle Database Server, Versions 11g R1 - 12c.

The requirements with regard to the hardware primarily depend on the specifications given by the respective RDBMS supplier (Microsoft / Oracle).

The following recommendations are meant to serve as a rough guideline:

<b>Operating system</b>	Microsoft Windows Server Version 2008 (64 Bit) or higher
<b>Processor</b>	Intel Pentium IV, Intel Xeon, AMD Opteron, AMD Athlon 64
<b>RAM</b>	At least 4 GB (with an increasing database size the RAM should also be increased to ensure optimum performance)
<b>Mass storage device</b>	Mass storage device: 10 GB available hard disk space (absolute minimum; the actual demand depends on the database size)
<b>Graphics</b>	Standard, SVGA or higher



**Please note:**

- **Virtual Servers are generally supported; it is important, though, that all requirements of the RDBMS suppliers are strictly observed. For performance reasons we recommend using native computers.**
- **For safety reasons domain controllers should not be used simultaneously as Database Servers or other Servers.**
- **The HELiOS Database Server, the HELiOS Vault Server and the ISD License Server can be installed and run simultaneously on one computer. However, the database should not lie on the same RAID system as the Vault. The Vault requires large harddrives while the database requires fast harddrives.**
- **If possible the Database Server should not be connected to the network with more than one network card.**
- **For safety reasons the HELiOS Spooler should not be run together with a HELiOS Database Server or a Vault Server on one computer.**

## 1.4 Hardware Requirements License Server

<b>Processor (CPU):</b>	x86 Processor for 32-Bit / x86-64 Processor for 64-Bit <b>Recommended:</b> 2 GHz Processor
<b>RAM:</b>	Minimum: 1 GB <b>Recommended:</b> 2 GB (with SQL Server: > 3 GB )
<b>Hard disk:</b>	1.2 GB free disk space
<b>Operating System (Server)</b>	Windows 10 Windows 8 Windows 7 (32 & 64-Bit) Windows Server 2016 Windows Server 2012 Windows Server 2008 (32 & 64Bit) Windows Server 2008 R2 (32 & 64Bit)
<b>IP/MAC Adress</b>	A static IP address is required for an error-free operation of the license server. For virtual servers a static MAC address needs to be available.



### Please note:

- **A license server program needs not necessarily run on a fileserver system or on a special hardware server; suitable will be any computer fulfilling the above-mentioned requirements.**
- **The license server must not be installed on the same computer as the ISD product (e.g. HiCAD/HELiOS) as both programs share system information regarding the licensing.**
- **An internet access is needed on the computer/server on which the licenses are managed.**

## 1.5 Hardware Requirements HiCAD Spooler

The system requirements for the 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).

Besides the Client operating systems Windows 7, 8 and 10 you can also use the Server operating systems Windows Server 2008 or Windows Server 2012. 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 7, 8 and 10 allow 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.

## 1.6 Hardware Requirements HELiOS Spooler

### Important Update note!

As of HELiOS version 2015 a new HELiOS Spooler is supplied. As it is an entirely new software, an update of the old Spooler is not possible.

Before installing the new HELiOS Spooler, please make a record of the old Spooler's settings, uninstall it, and then adjust the settings of the new Spooler accordingly.

Further information can be found in the HELiOS Help.

The system requirements for the HELiOS Spooler are analogous to those of your CAD system. The RAM should be at least as large as those of the utilized CAD systems. The reason for this is that the Spooler may, besides its automation as a Plot Server, also be used for other tasks, such as conversion of HiCAD drawings (e.g. to 3D-PDF if HiCAD is the CAD system).

Besides the Client operating systems Windows 7, 8 and 10 the Server operating systems Windows Server 2008 or Windows Server 2012 can be used. Whether a Server operating system is to be used depends on the license conditions for the utilized Microsoft operating system. Here, the number of allowed, simultaneous device connections is decisive.

- » Windows 7 and 8 allow 20 simultaneous accesses. This is enough for 20 Print Clients provided that all of them had actually been started. Please note however that each connection from a non-workstation will reduce this number accordingly.

Recommended hardware for HELiOS Spooler in conjunction with HiCAD	
Computer:	Fujitsu CELSIUS W570
Processor (CPU):	Intel® Core™ i7-7700-Processor, 8 MB, 4,2 GHz or Intel® Xeon® Processor E3-1280v6, 8 MB, 4,2 GHz or equivalent processor
RAM:	4 x 8 GB, DDR4, 2.400 MHz (incl. ECC)
Hard disk:	1 x 512 GB, SSD SATA III Premium bay, 2,5 inch
Graphics card:	NVIDIA Quadro M2000 (4 GB)
Screen resolution:	Full HD (1920x1080)
Operating system:	Microsoft Windows 10 (64Bit)
Database system:	See <a href="#">Compatibility Matrix</a>

## 1.7 Hardware Requirements HELiOS Vault Server

<b>Processor (CPU):</b>	Pentium III-compatible processor, Minimum: 1,0 GHz
<b>RAM:</b>	Minimum: 1 GB, <b>Recommended:</b> 4 GB or more
<b>Graphics card:</b>	VGA (no special requirements)
<b>Hard disk:</b>	<p>For software: 100 MB</p> <p>For user data: Depending on the amount of data to be expected, plus backup memory of <math>\geq 100\%</math></p> <p>(distribution over several volumes/drives possible, redundant array of independent disks (RAID) for primary user data recommended)</p>
<b>Operating system (virtual servers also possible):</b>	<p>Windows 10</p> <p>Windows 7 Professional</p> <p>Windows 7 x64 Professional</p> <p>Windows 8 Professional</p> <p>Windows 8 x64 Professional</p> <p>Windows Server 2008 SP2</p> <p>Windows Server 2008 SP2 x64</p> <p>Windows Server 2008 R2 x64</p> <p>Windows Server 2012</p>

## 1.8 Hardware Requirements HELiOS Smart Search

See Hardware Requirements HELiOS Vault Server



## 1.9 Further Installation Requirements

- » **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 installation if required.
- » The graphics card must support **Open GL 2.0 or higher**. If the hardware or driver does not support this standard, there will be shown a warning message when installing HiCAD and a compatibility mode will be used (with low graphic performance).
- » To be able to work with HELIOS, a database system must be available that has been prepared for HELIOS. For this you require
  - A Microsoft SQL Database Management system on your Server,
  - A HELIOS database imported with the **HELIOS Database Creator** and
  - An ODBC connection on the Clients.

Documents (in .pdf format) describing the installation procedure for the database system and the import and export of the database can be found in the Wiki at [Product Know-how > Documentation > HELIOS](#).

Current information on system requirements can also be found on the Internet at [www.isdgroup.com](http://www.isdgroup.com) at [Support > ISD Wiki > Product know-how > FAQ](#).

## 2 Installation

The DVD contains the installation files for:

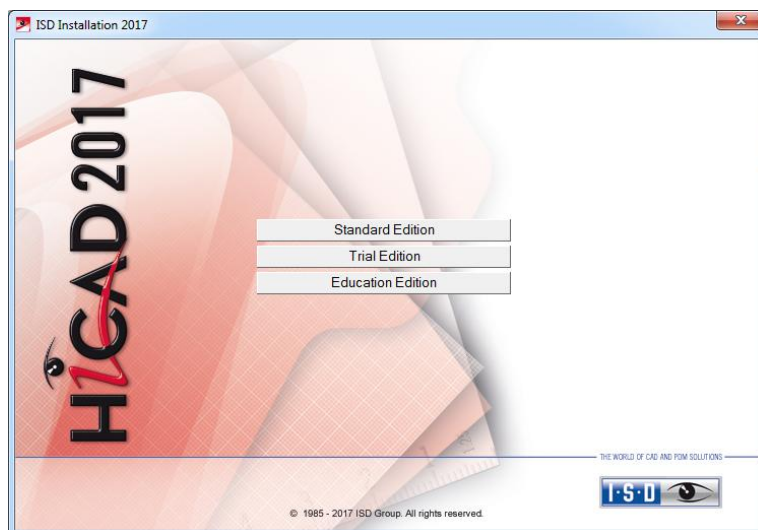
- » HiCAD
- » HELiOS Desktop (Standalone)
- » The Online Help
- » The HELiOS Vault Server
- » The HELiOS SmartSearch Server
- » The HiCAD Spooler
- » The HELiOS Spooler
- » HiCAD Viewer
- » The License Server (the Hardlock driver is normally no longer required)
- » The PostScript printer driver (required for the output of several views to a PDF file)
- » The HELiOS Database creator (to set up the HELiOS database for the very first time and import/export an existing database)

The DVD has been developed for Windows operating systems. When you insert the DVD, an installation wizard will be started automatically.

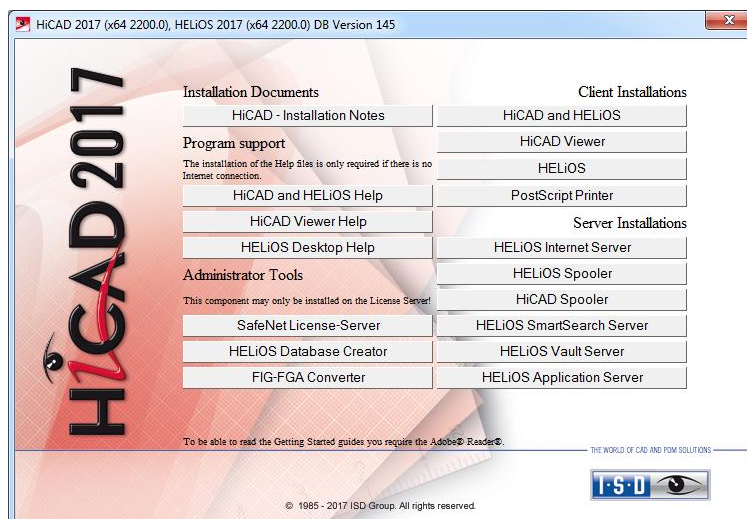


**The HiCAD and HELiOS version must be installed on the hard disk of the computer; it is not possible to start the programs from the DVD.**

If the Autostart function has been deactivated in the operating system, it is mandatory for the installation of HiCAD to start the **setup.exe** file from the root directory of the DVD; only in this way it is ensured that the version will recognize the operating system, and that the matching HiCAD version will be installed.

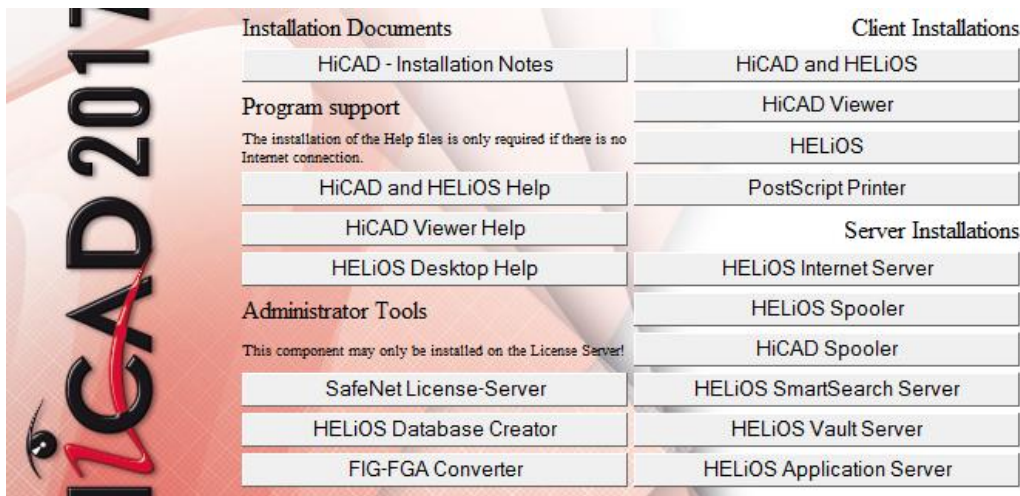


In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components.



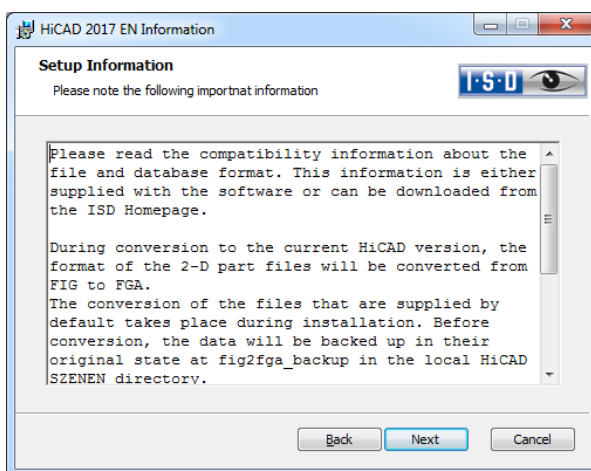
Leave this selection mask open, so that you can select the desired components one after the other.

## 2.1 Installing HiCAD

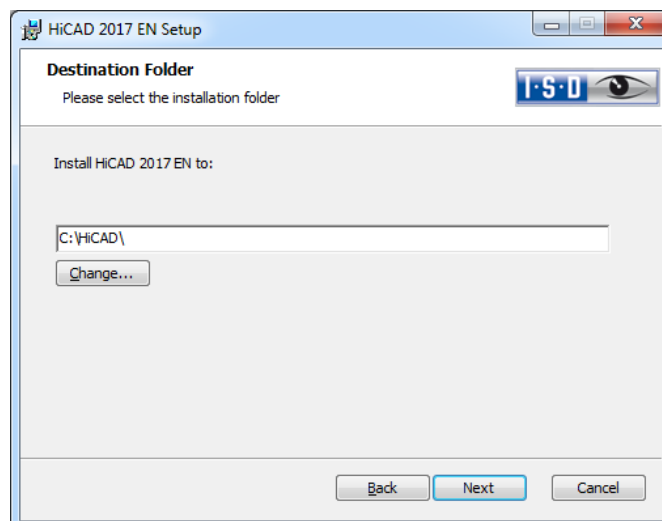


Click the **HiCAD and HELiOS** button to start the installation.

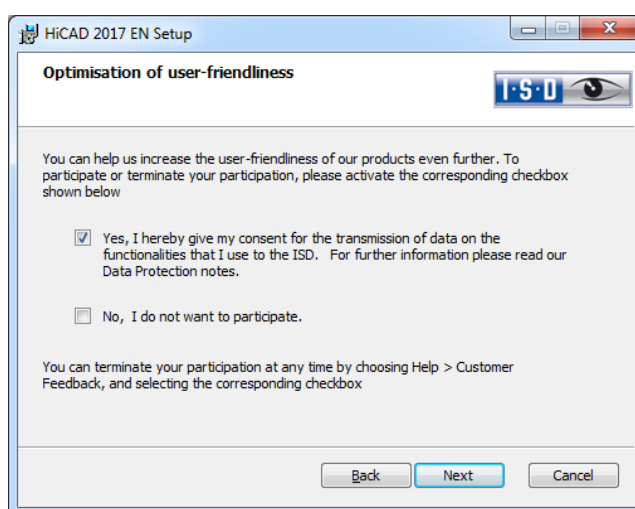
**Microsoft .NET Framework 4.0 or higher** and **Visual C++ Runtime Libraries** need to be installed on the computer before HiCAD/HELiOS can be used; these packages will be installed as part of the HiCAD installation if required.



First, important information about **data compatibility** will be displayed. Please read this information carefully.



Specify 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.

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

ISD will not

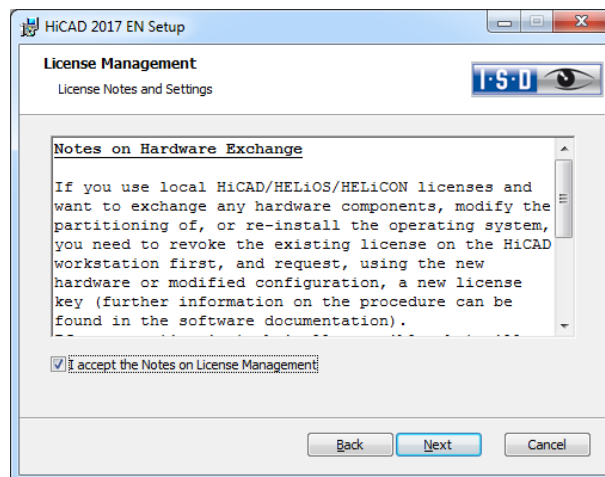
Store your name, address, or any other personal data.

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.



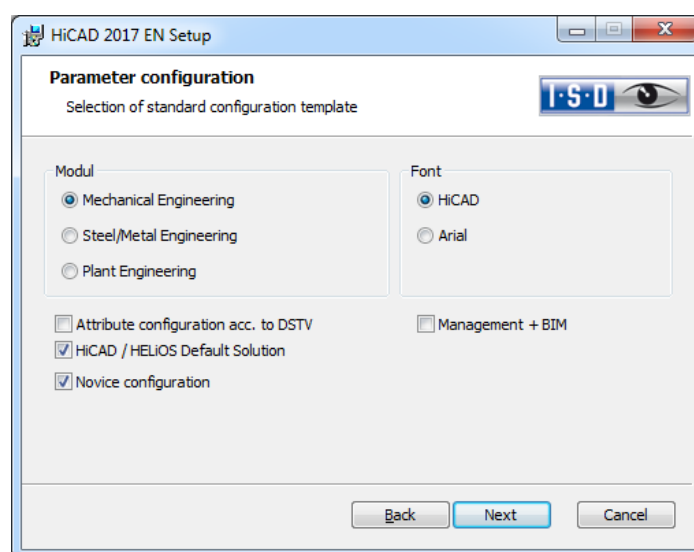
Please read the Notes on Hardware exchange carefully.

### Notes on 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 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 and click **Next**.

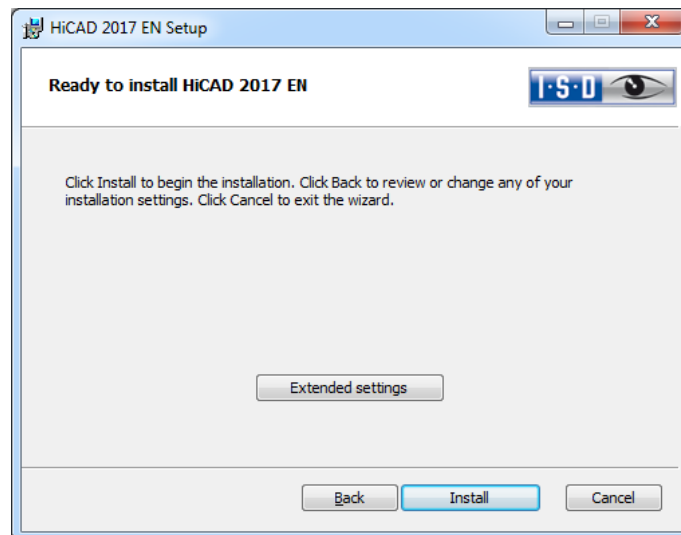


For different drawing areas HiCAD offers especially adjusted surfaces and configurations, e.g. for Mechanical Engineering, Steel Engineering and Plant Engineering. These can be selected during the installation of HiCAD.

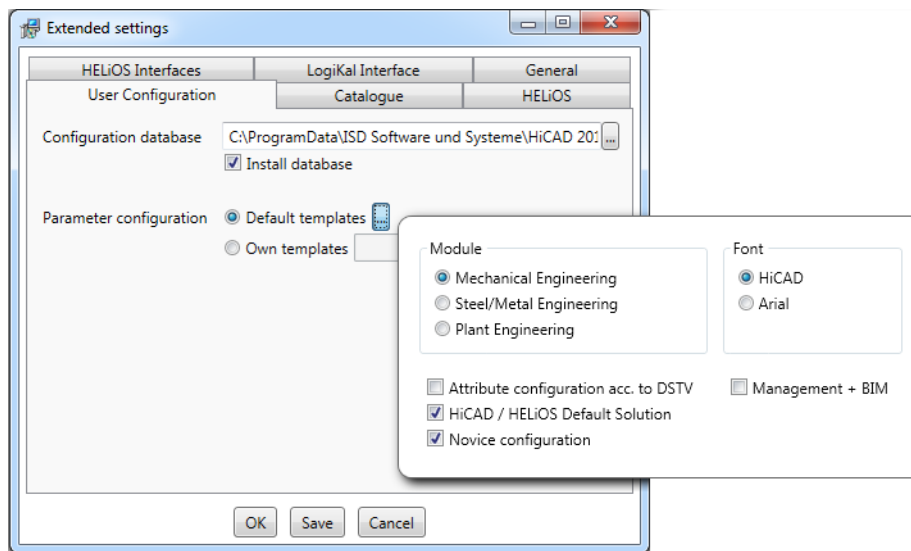
Depending on the **parameter configuration** the saved settings in the **CSV file** will be applied, too. The CSV file contains information on e.g. which files (e.g. HiCAD part masks or template files for labels) should be copied into the sys directory. In case of an update different system files in 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 Management + BIM).

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.

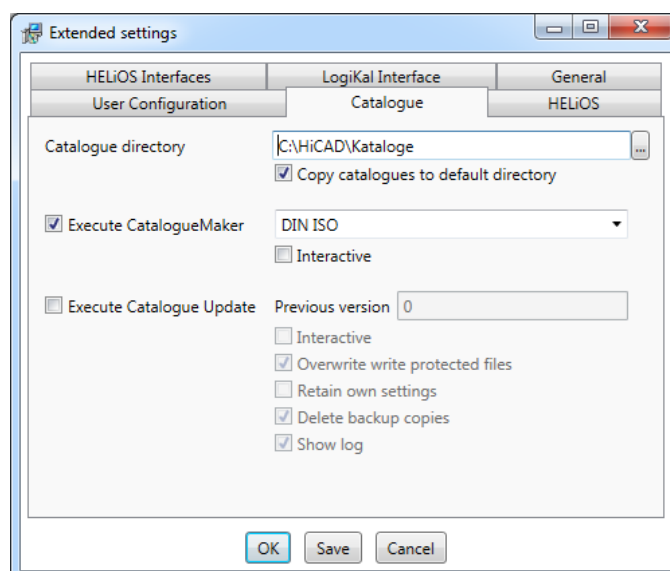


In the **Configuration Database**, customer-specific settings for various features such as dimensioning, annotations, workshop drawing creation or fitting of vertical ladders are stored. When performing an update, **customer-specific settings** can be applied. In addition, values that have not been modified 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 Management + BIM). 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).

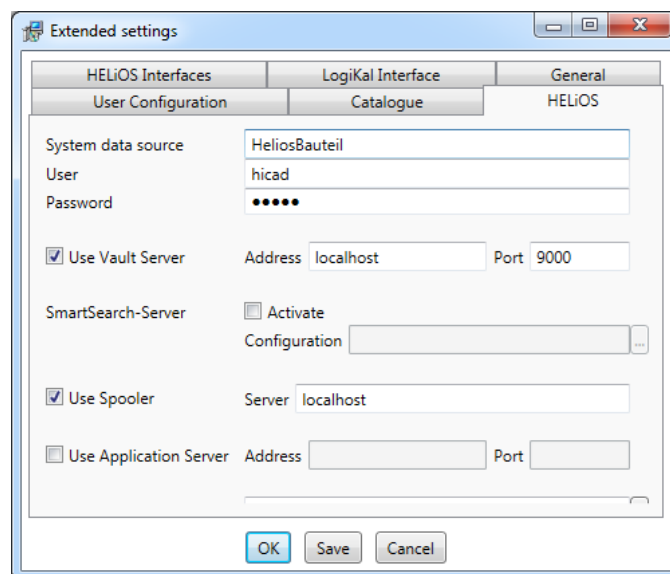
**Parameter configuration: No templates** is activated by default in Parameter Configuration. You can also change this setting subsequently, via the programs `..exe/ParKonfigComp.exe` (for the workstation) and `..exe/ParKonfigUser.exe` (for the User).






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**.

In case of **updates**, the existing configuration will be applied, and the **CatalogueMaker** will not be started automatically. If you want to add standards to the catalogues, the program can be called via **Start > All Programs > ISD Software und Systeme GmbH > Administration**.



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

If you 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.

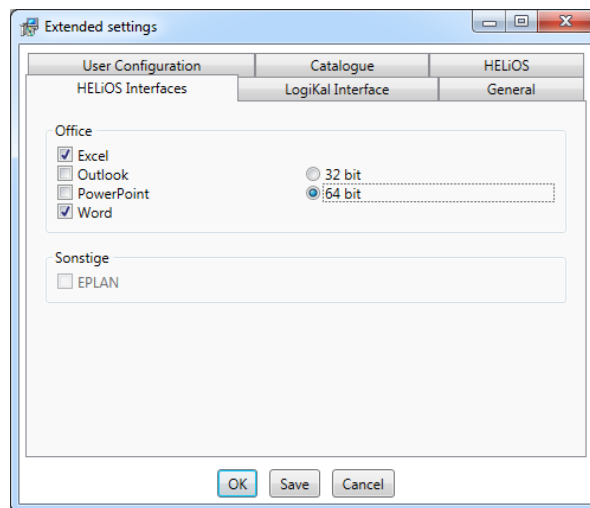
If you have not installed the Vault Server yet, you can do this now: Choose **HELiOS Options > Database > General > Vault Server** .

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 Spooler collects the print jobs and processes them, taking your settings into account.

Individual settings for the HELiOS surface can be transmitted to additional users and computers. To do so, create a ZIP file in HELiOS via **View > Settings > Export**. During the installation you can select and import the surface configurations for the HELiOS desktop under **UI configuration**.



The availability of interfaces with HELiOS depends on the programs that are installed on your computer. With the exception of the HELiOS interface, you can only use 32Bit versions with HELiOS 32Bit, and 64Bit versions only with HELiOS 64Bit. For MS Office it is generally possible to use a 32Bit Office with HELiOS (64Bit). However, for old BOMs an additional, special ODBC connection will be required. In such cases, please contact our Consulting team.

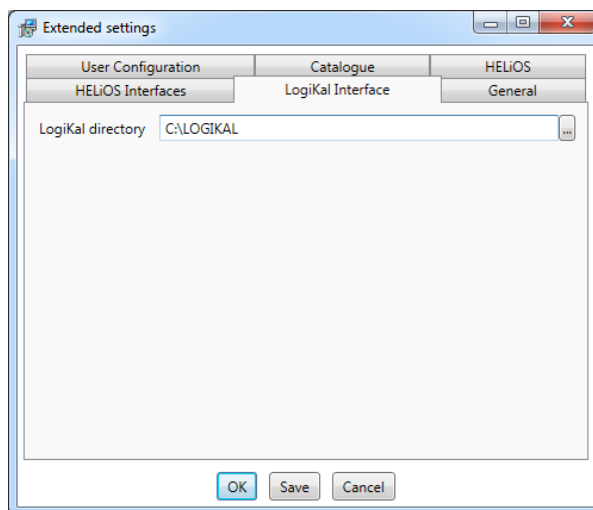
Multiple selections are also possible. The HELiOS functions will be integrated in the programs that are linked to HELiOS.



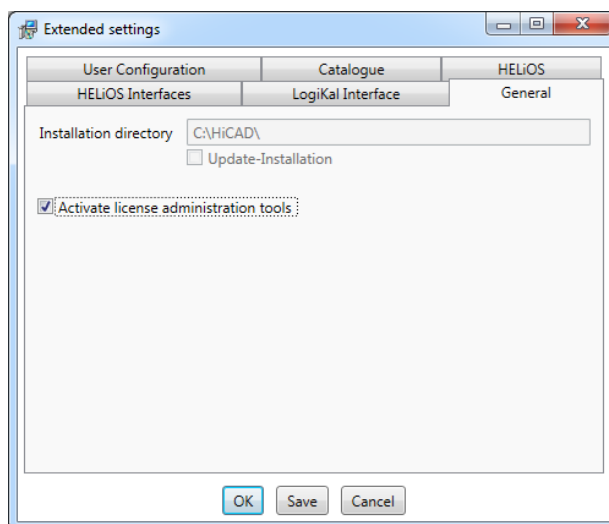
**Please note:**

- A [compatibility matrix](#) of the CAD systems can be found in the Wiki, at **Product Know-how > FAQ > System & Hardware > HELiOS Desktop**.
- **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 EPlan SyncService.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.



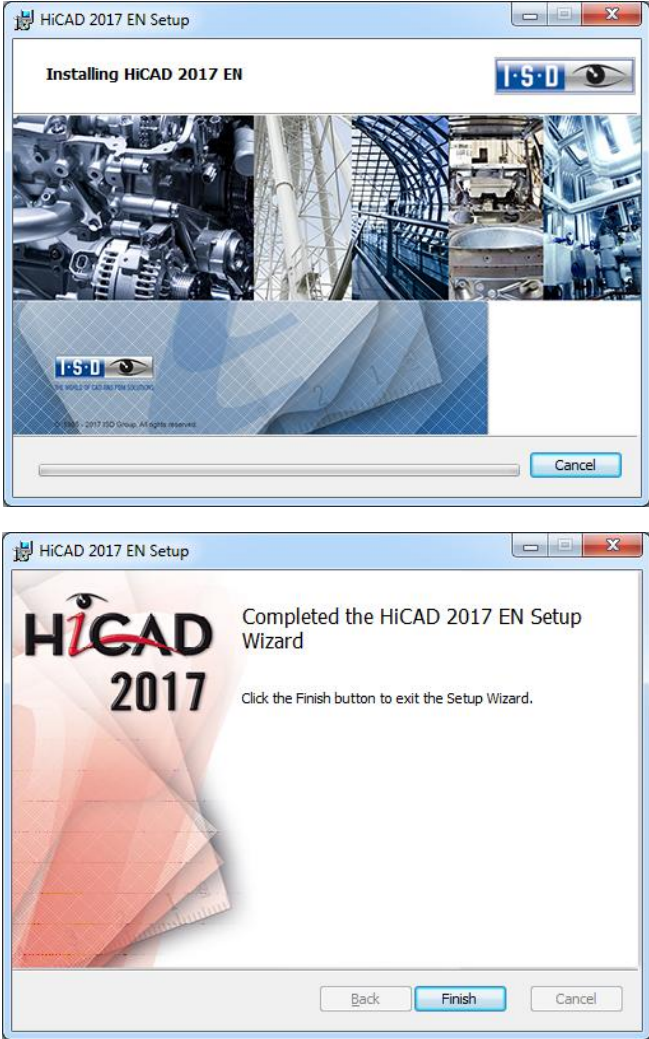
The **Activate license administration tools** must be activated for the installation of server licenses.

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

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



**In HiCAD, at Settings > Further directories you can set the paths for the database of the Configuration Editor, the Catalogue directory and LogiKal. These paths are located in the Windows Registry at HKEY\_LOCAL\_MACHINE\SOFTWARE\ISD Software und Systeme\HiCAD\nnnn.n. nnnn.n is the HiCAD version number, e.g. 2200.0.**

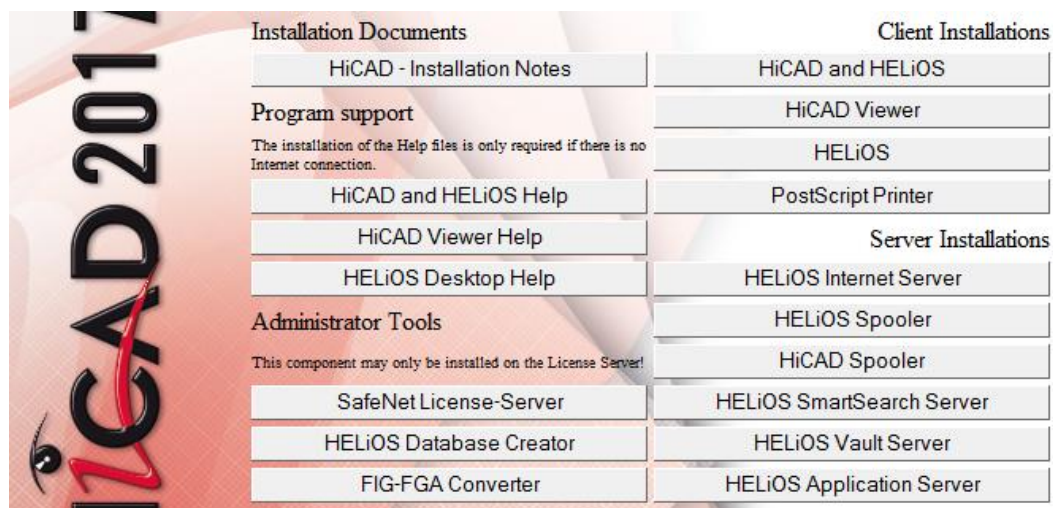


Click **Finish** to complete your HiCAD installation. If desired, you can use the buttons of the installation mask to install further software components.

## 2.2 Installing HELiOS Desktop (Standalone)

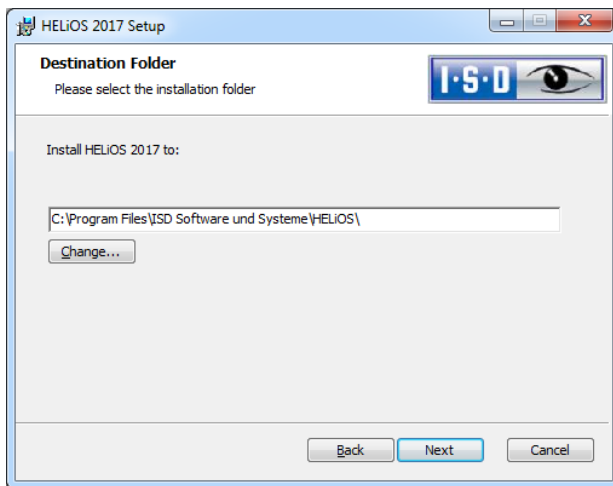
The HELiOS Desktop is normally installed automatically when you install HiCAD. Of course, you can also install HELiOS separately. To do this, start Windows. If Windows is already open, close all other applications. Insert the HELiOS DVD in your DVD drive. The installation wizard will be started automatically. Follow the instructions on the screen.

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



Click the **HELiOS** button.

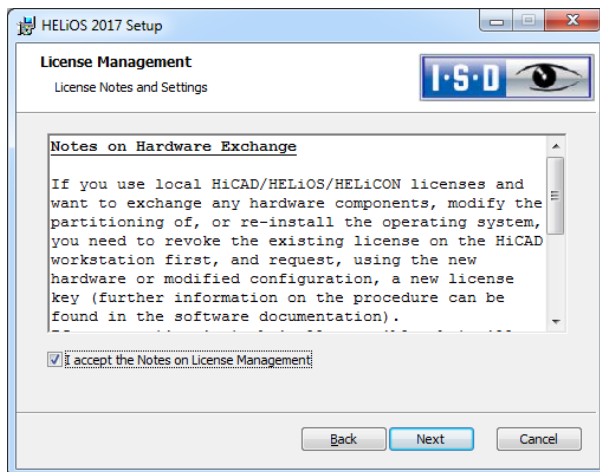




Select an installation directory.

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 placed of the FILEGRUP.DAT. The directory should be a shared network directory to which all Clients have access.



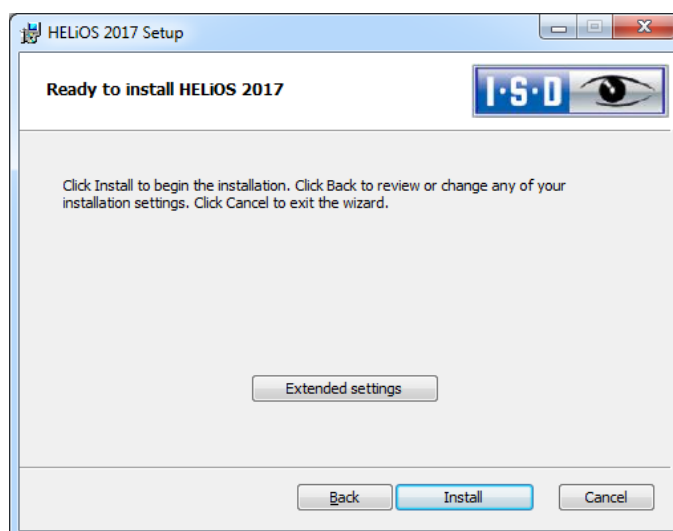
Please read the **Notes on Hardware Exchange** carefully.

### Notes on Hardware Exchange

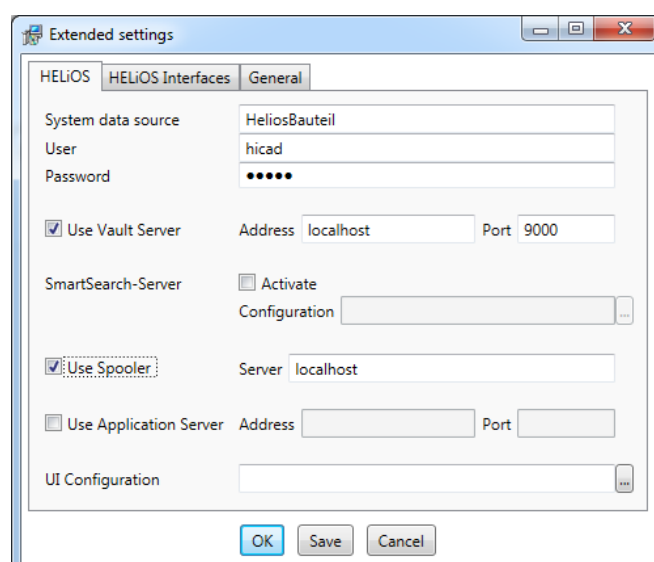
If you use local HiCAD/HELIOS licenses and want to exchange any hardware components, modify the partitioning of, or re-install the operating system, you need to revoke the existing license on the HiCAD workstation first, and request, using the new hardware or modified configuration, a new license key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



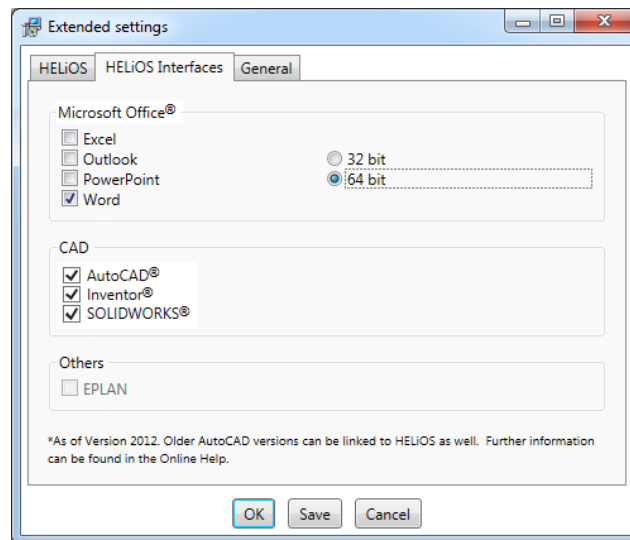
In case of a new installation you can specify an arbitrary name for the system data source. In case of an update, the existing data source will be offered. User and Password will be identical with the ODBC login.

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** .

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

Individual settings for the HELIOS surface can be transmitted to additional users and computers. To do so create a ZIP file in HELIOS via **View > Settings > Export**. During the installation you can select and import the surface configurations for the HELIOS desktop under **UI configuration**.



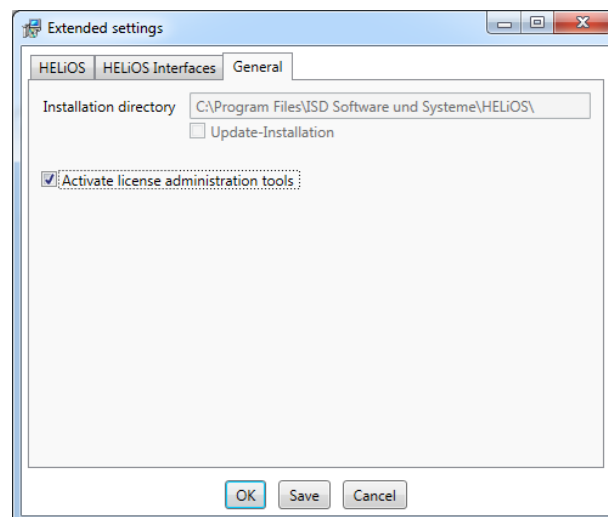
The availability of interfaces with HELiOS depends on the programs that are installed on your computer. With the exception of the HELiOS interface, you can only use 32Bit versions with HELiOS 32Bit, and 64Bit versions only with HELiOS 64Bit. For MS Office it is generally possible to use a 32Bit Office with HELiOS (64Bit). However, for old BOMs an additional, special ODBC connection will be required. In such cases, please contact our Consulting team.

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



**Please note:**

- **A [compatibility matrix](#) of the CAD systems can be found in the Wiki, at Product Know-how > FAQ > System & Hardware > HELiOS Desktop.**

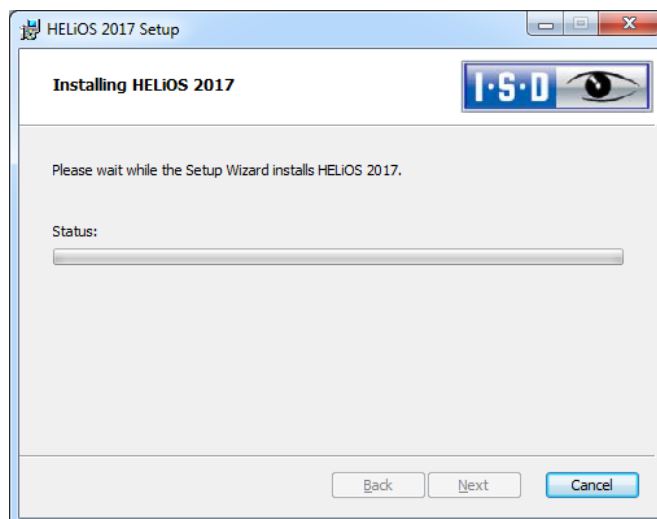


You require the **License Administration Tools** for the installation of server licenses.

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

Close the **Extended Settings** dialogue with **OK** and start the installation.



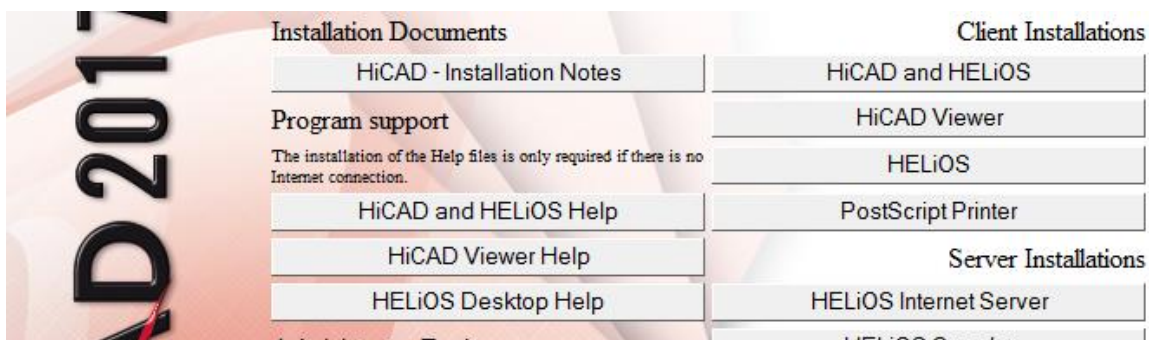


After successful installation, you will find the HELIOS shortcut on the Desktop for program launch.

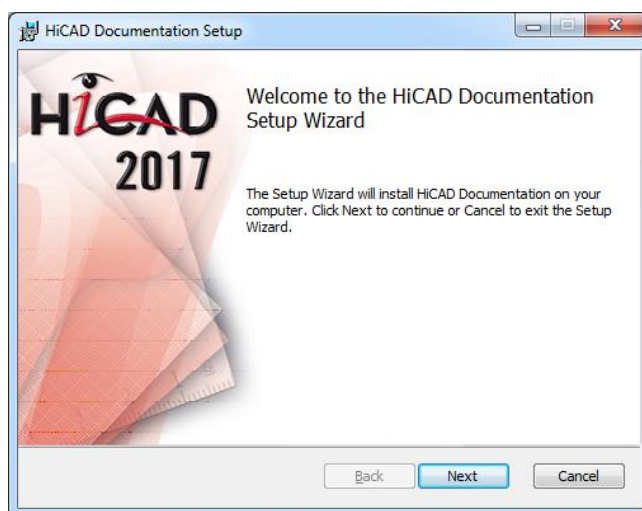
## 2.3 Installing the Online Help

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](http://www.help.isdgroup.com). Both versions of the Help can be directly launched from HiCAD. Please note that corresponding login data are required to access the Internet version of the Help.

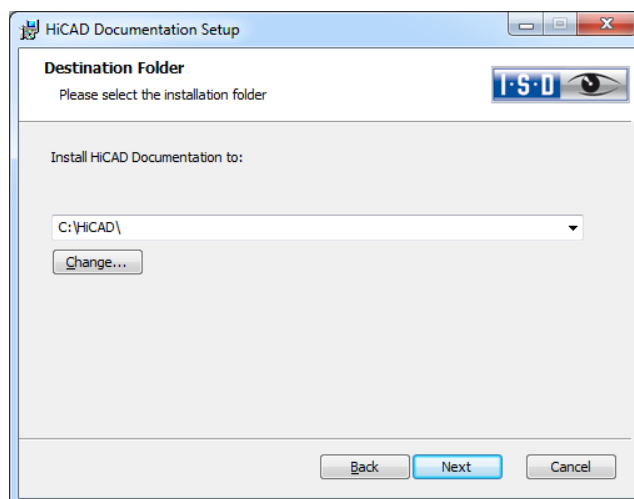
Start Windows to install the Help. If Windows is already open, close all other applications. Insert the DVD in the drive, which automatically starts the installation wizard. In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components. Please leave this selection mask open, so that you can, one after the other, install the desired components.



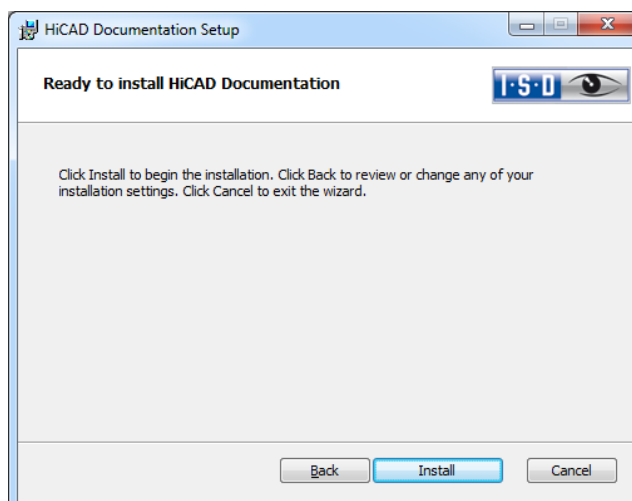
Click the **HiCAD and HELiOS Help** button.



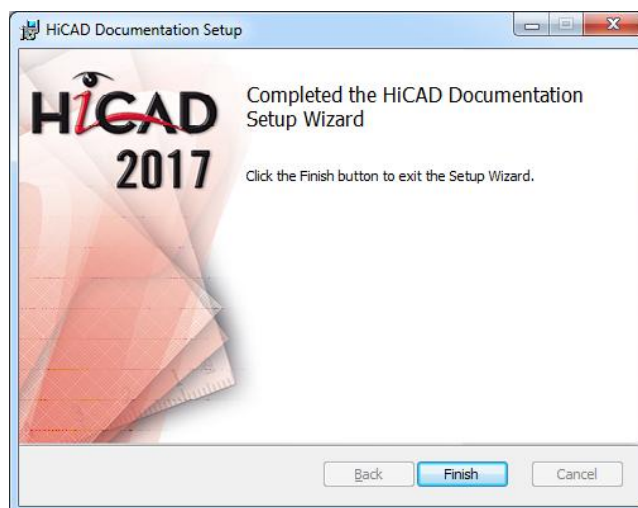
Specify the installation directory for HiCAD/HELiOS.



Click **Next**.




Click **Install** to start the installation.



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

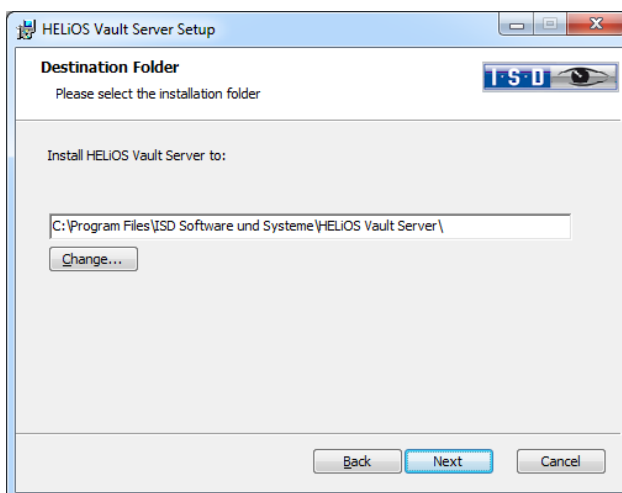
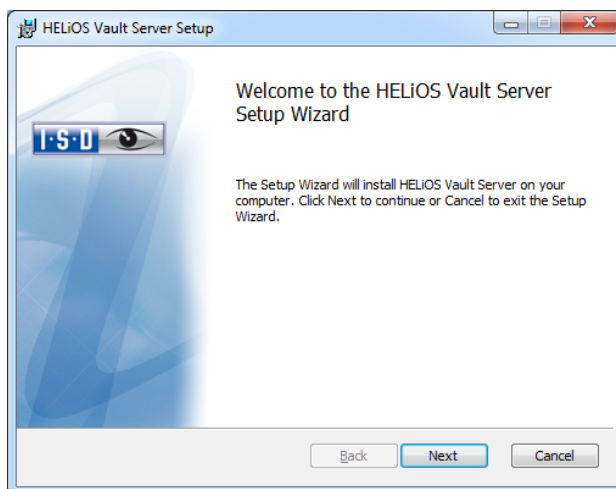
## 2.4 Installing the HELiOS Vault Server

Start Windows to install the Vault Server. If Windows is already open, close all other applications. Insert the DVD in the DVD drive, which automatically starts the installation wizard. In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components. Please leave this selection mask open, so that you can, one after the other, install the desired components.

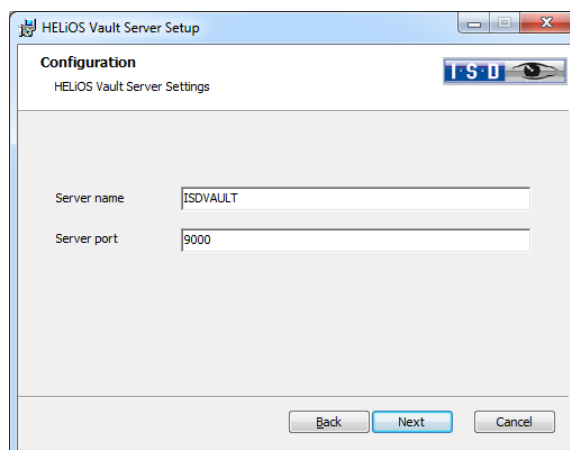
 In rare cases an older, manually installed version of the VaultServer might be found, which will not be modified (updated) as a precaution. If an error message appears, please contact our colleagues from the Hotline. E-Mail: [helpdesk@isdgroup.de](mailto:helpdesk@isdgroup.de)



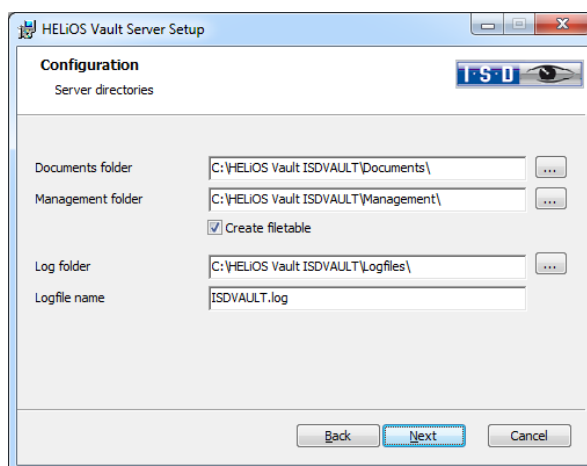
Click the HELiOS Vault Server button.



Specify the installation directory of the Vault Server.



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

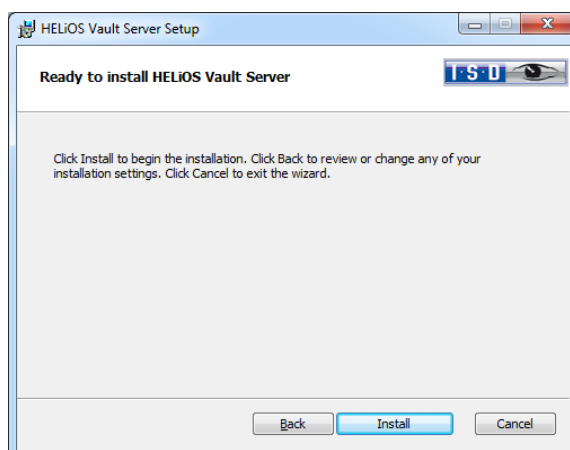


The Vault Server renames all documents that are managed in the database (e.g. SZA, DOC, XLS, ...) to \*.VDF. These VDF files are saved to the **Document directory**.

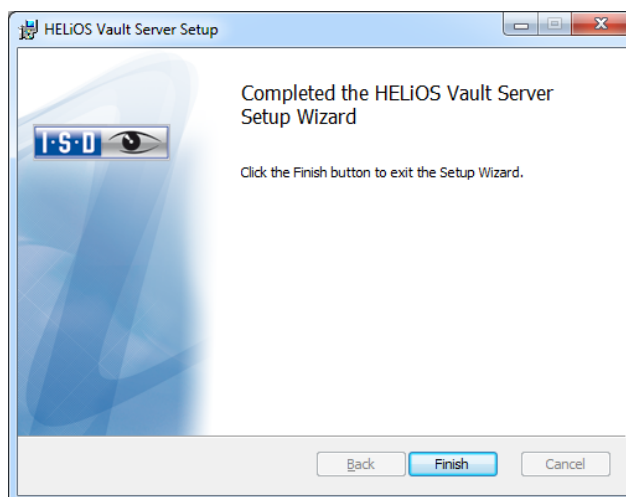
The files stored in the **Management directory** contain the assignments of the VDF file names to the “original file names”.

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

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



Click the **Install** button.



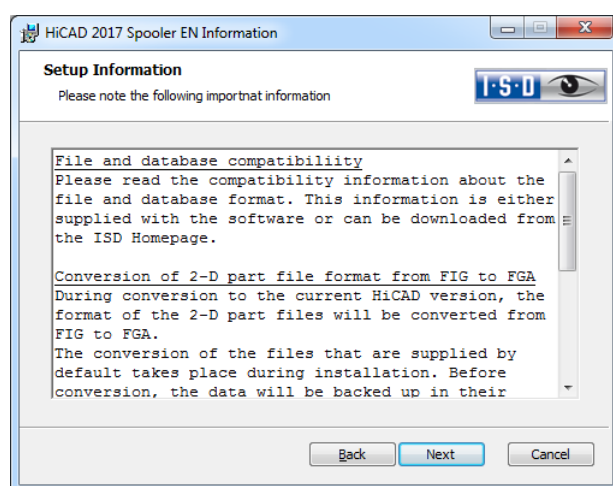
Click **Finish** to complete the installation of the Vault Server. You can now install further components offered in the selection mask if desired.

## 2.5 Installing the HiCAD Spooler

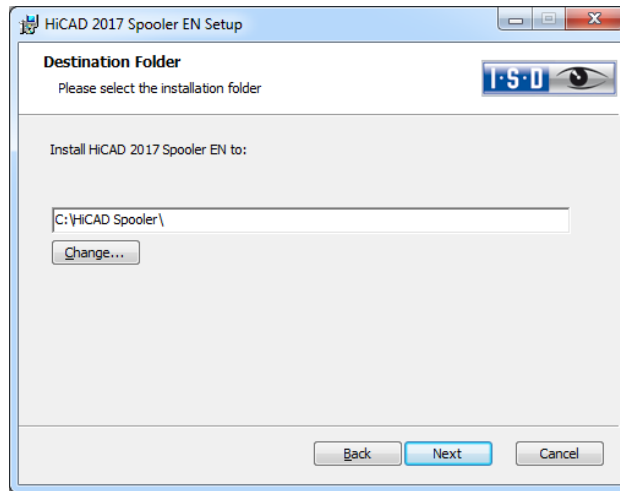
Start Windows to install the HiCAD Spooler. If Windows is already open, close all other applications. Insert the DVD in the DVD drive, which automatically starts the installation wizard. In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components. Please leave this selection mask open, so that you can, one after the other, install the desired components.



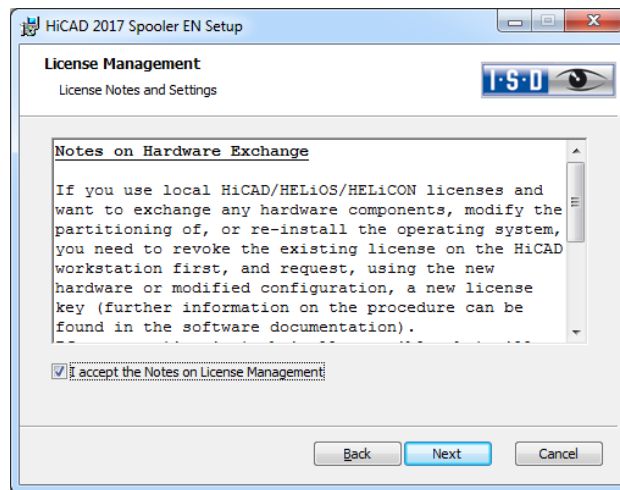
Click the **HiCAD Spooler** button.



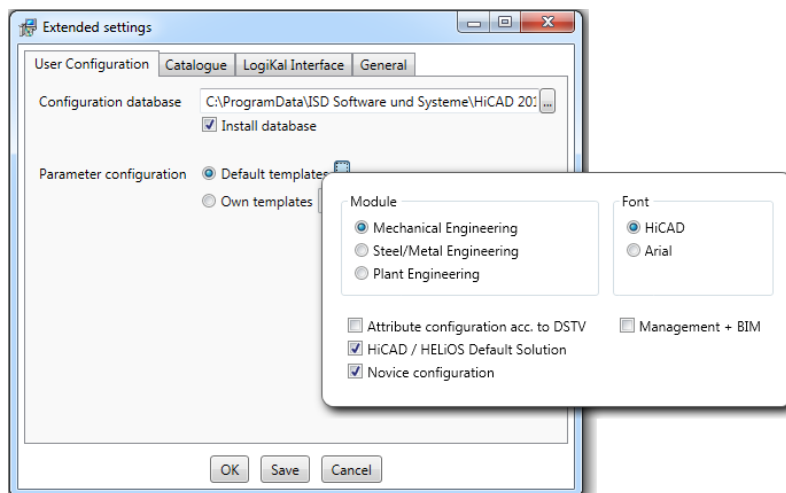
First, important information about **data compatibility** will be displayed. Please read this information carefully.



Specify the installation directory for the software.



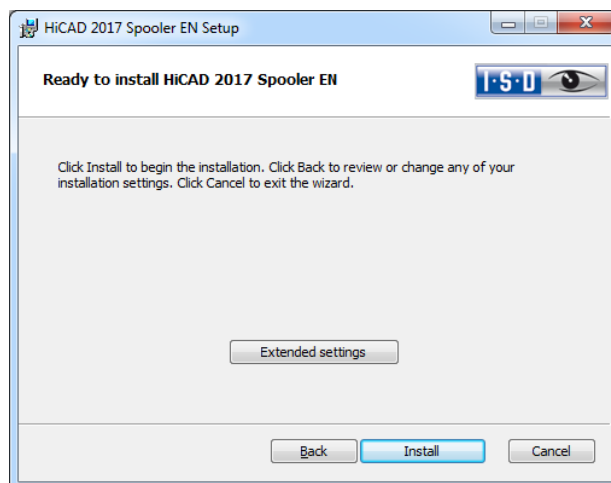
Please read the **Notes on Hardware Exchange** carefully. Accept the notes to continue with the installation.



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.

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





You can now click **Install** to start the installation, or modify the **Extended settings**, e.g. for the user configuration or the catalogues. The **Extended Settings** here are modified in the same way as the **Extended Settings** for the HiCAD.

Then click **Install**.



After successful installation, the **HiCAD Spooler** will be located in the program folder.

## 2.6 Installing the HELiOS Spooler

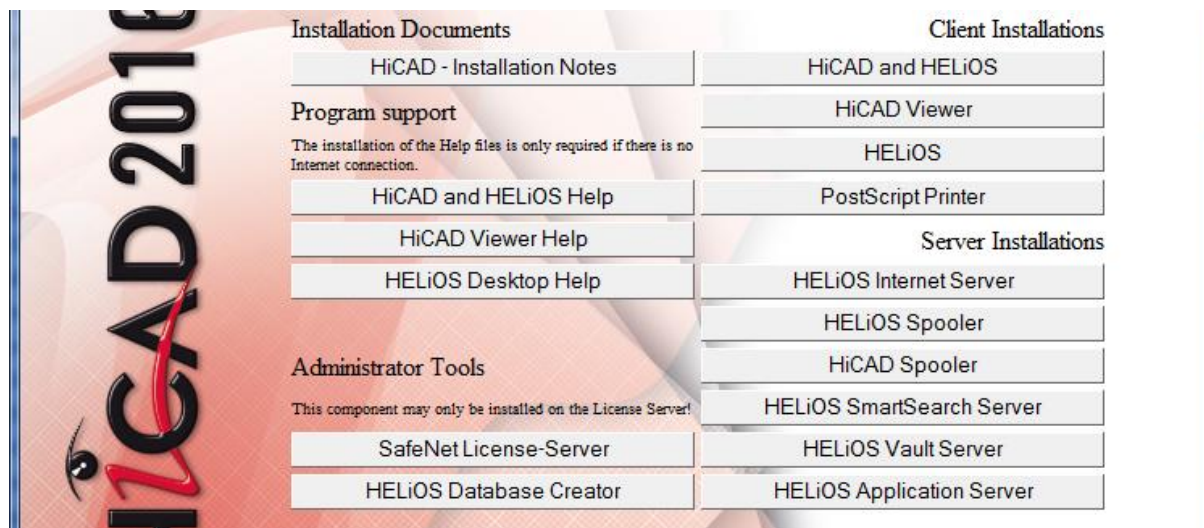
### Important note on installation!

As the HELiOS Spooler (as of HELiOS 2015, V 2000.0) is an entirely new software, an update of the old Spooler is not possible. Before installing the new HELiOS Spooler, please make a record of the old Spooler's settings, uninstall it, and then adjust the settings of the new Spooler accordingly.

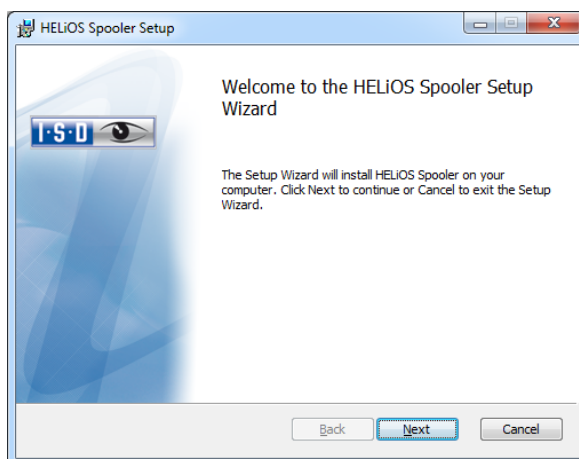
Further information can be found in the HELiOS Online Help.

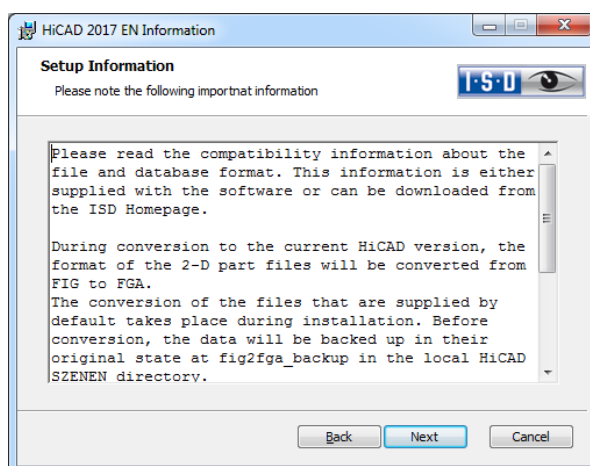
The HELiOS Spooler is only available as a 64Bit version, and supports only 64Bit applications.

To install the HELiOS Spooler, please start Windows. If Windows has already been started, please close all other applications. Insert the DVD in your DVD drive. The selection mask for various software components will then be displayed. Leave this mask open, and install one after the other, the required software components.

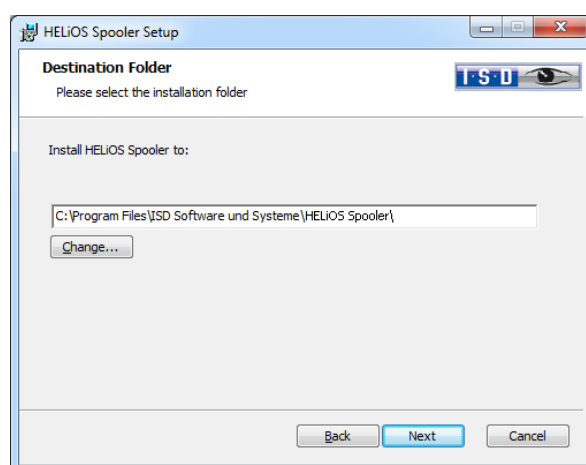


Click the **HELiOS Spooler** button.

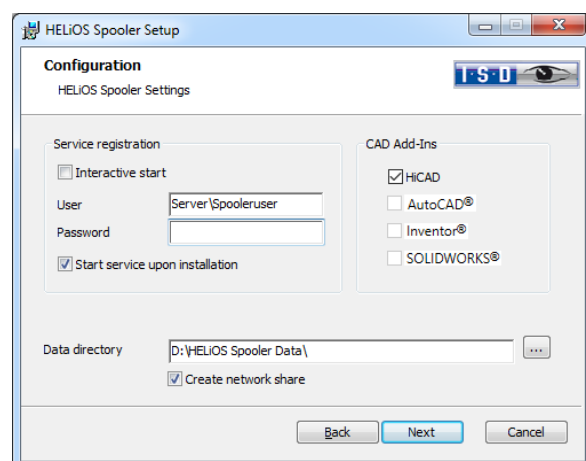




Specify the installation directory for the software.



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.

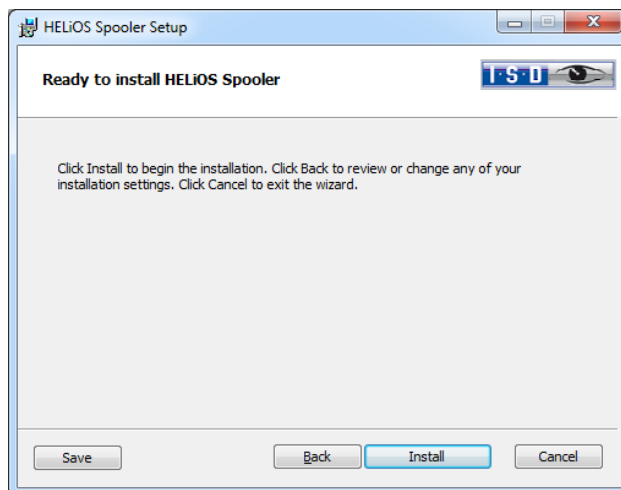
If you do not know the user yet, you can choose **Local system**. The Spooler will then run, initially without access to any printers, as a simple Windows system service. Now, select **Control Panel > Administrative Tools > Services**. Right-click the **HELIOS Spooler** and select **Properties**. On the **Log On** tab, switch to **This account** and enter the user name and the password (Caution: Should the password of the Spooler user change or expire one day, the authentication needs to be renewed accordingly in the Services list). If the

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

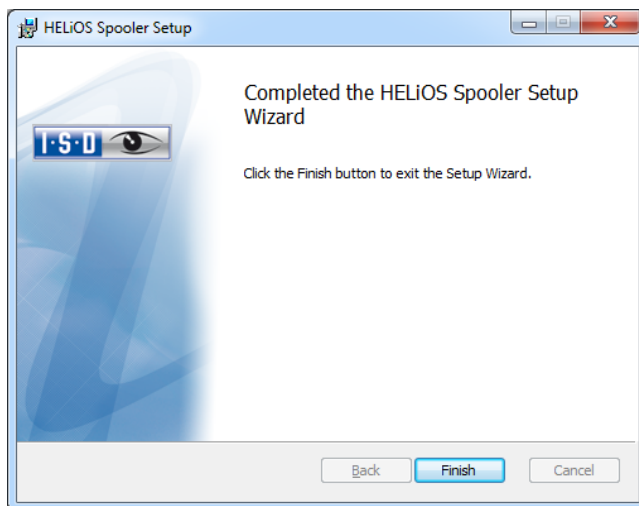
For starting the “interactive” configuration of the Spooler automatically, the file Helios.Spooler.exe from the installation directory must be invoked with the option “—no service”, for instance, either from the “Autostart” folder or via Windows task planning. If you have further questions, please contact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

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

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



You can now begin with the installation.



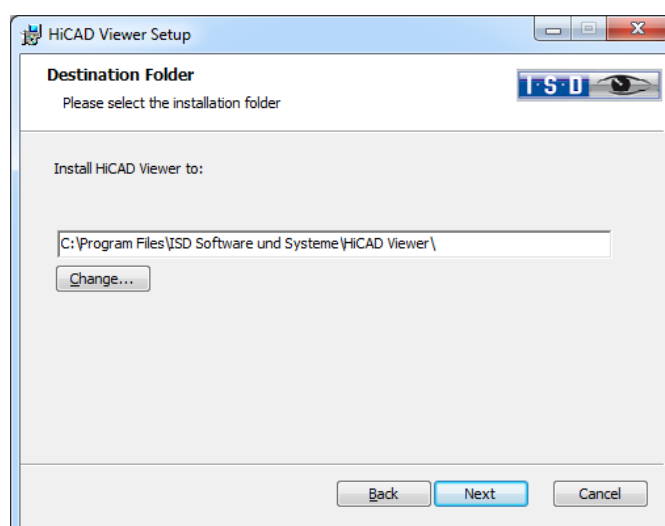
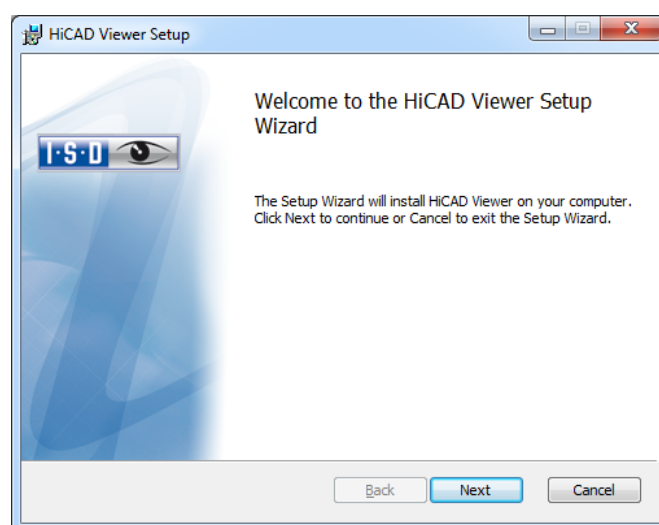
After successful installation the **HELiOS Spooler** will be located in the program folder.

## 2.7 Installing the HiCAD Viewer

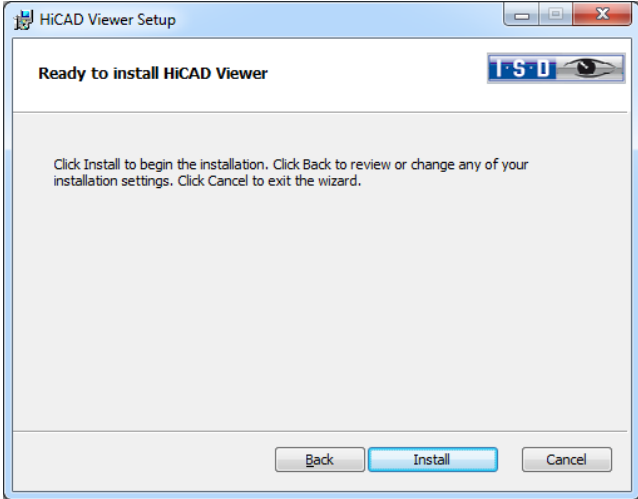
The HiCAD Viewer enables you to view drawings in HiCAD format (\*.sza, \*.szx) and output these drawings (in non-scale representation). This viewer is free of charge and may be provided free, without changing the scope of delivery.



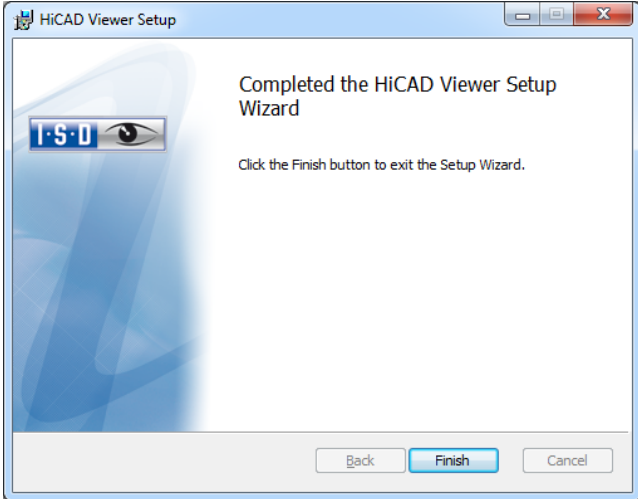
Activate the HELiOS Viewer.



Specify the installation directory for the software.



You can now begin with the installation.



Click **Finish** to end the **HiCAD Viewer** installation. You can now choose more components from the selection mask.

## 2.8 Installing the HELiOS Database Creator

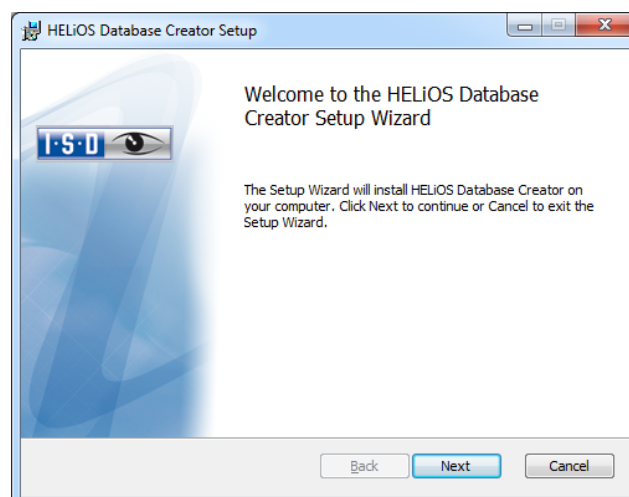
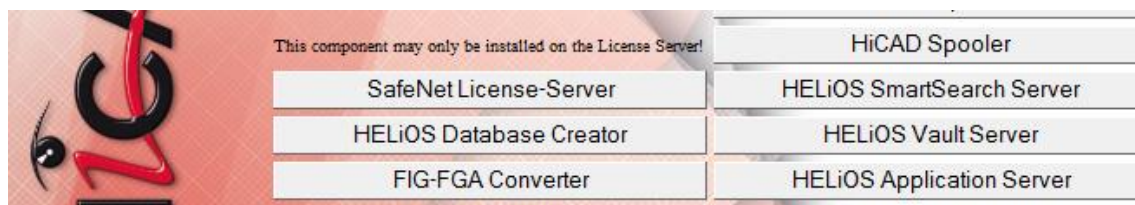
The HELiOS PDM modules (Document management, Part Management, Workflow etc.) are based on a relational database. Before you put HELiOS into operation, the Microsoft SQL Server database administration system needs to be installed on the server, a HELiOS database needs to be imported and a ODBC connection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

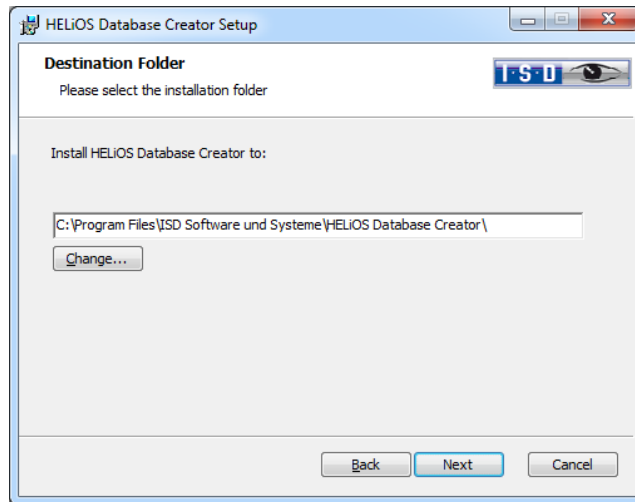


**All information about the correct procedure for the execution of the HELiOS Database Creator, as well as the previous and subsequent steps required for the setting up of a database server can be found in the user guide for the installation of the Microsoft SQL Server. You can find this document in the ISD Wiki at Product Know-how > Documentation > HELiOS.**

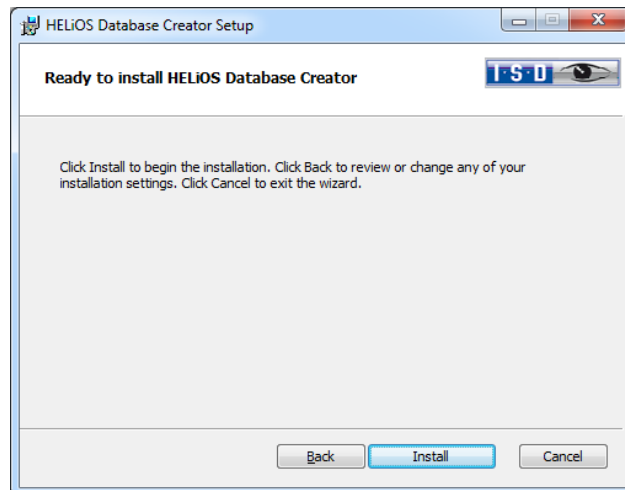
To install the **HELiOS Database Creator**, click the corresponding button in the selection mask. The start mask of the setup wizard will be displayed.



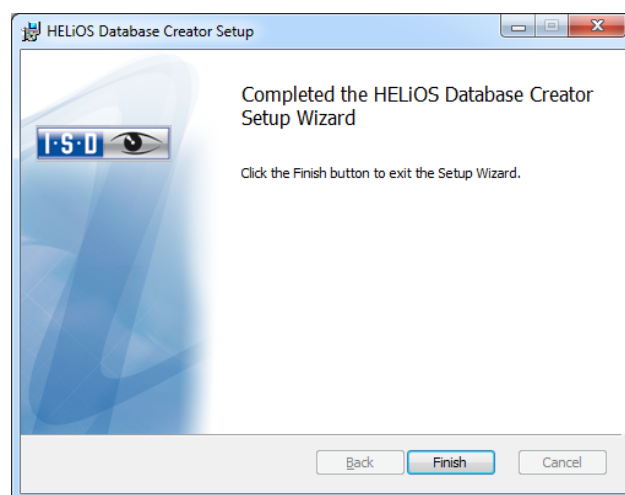
Click **Next** to start the installation.



Specify 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.



 Extensive information on the installation of the SQL Servers, the operation of the HELIOS Database Creator tool and the setting up of the ODBC connection on the clients can be found in the Wiki at [Product Know-how > Documentation > HELIOS](#).

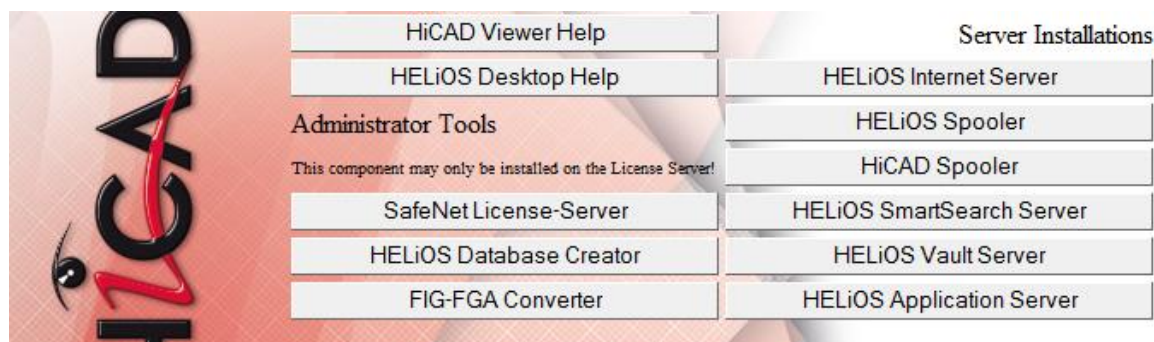
## 2.9 Installing the HELIOS SmartSearch Server

The **Smart Search** in HELIOS allows finding documents, assemblies, folders and projects on the basis of an overarching (including all object types) metadata and full text search.

For using **Smart Search**, an index server of **HELIOS Smart Search Server** must be installed. The only requirement for the installation is JavaRuntime Environment. If Java Runtime Environment is not available on the server yet, it must be installed, too.

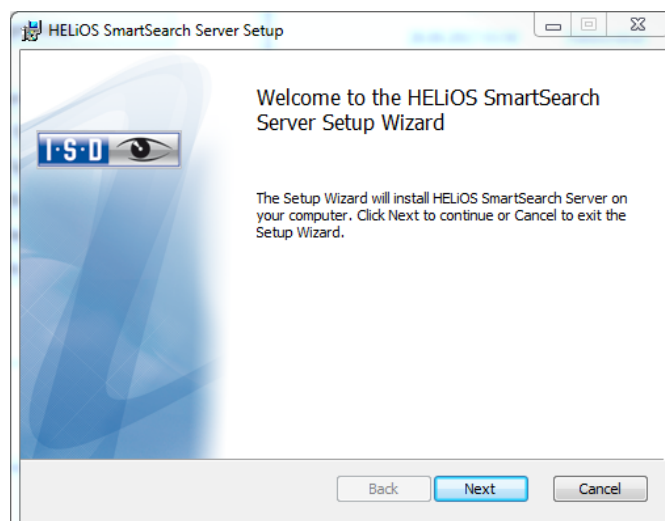
To install the **HELIOS Smart Search Server**, start Windows. If Windows is already open, exit all running programs. Insert the DVD-ROM into the DVD-ROM drive of your computer. The screen with the software components opens subsequently. The selection screen stays open, for that the necessary components can be installed successively.

If the Autostart Function is shut down in the operating system, it is necessary to run the file **setup.exe** from the main directory of the DVD-ROM, as only then it is ensured that the version identifies the operating system properly and the appropriate version will be installed.

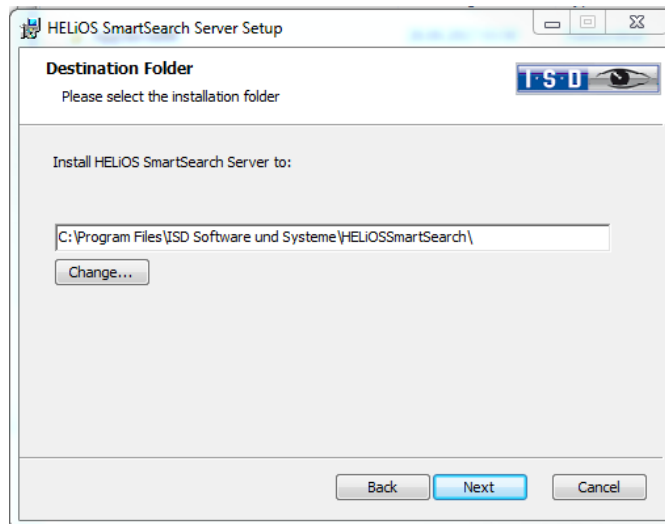


Activate **HELIOS SmartSearch Server**.

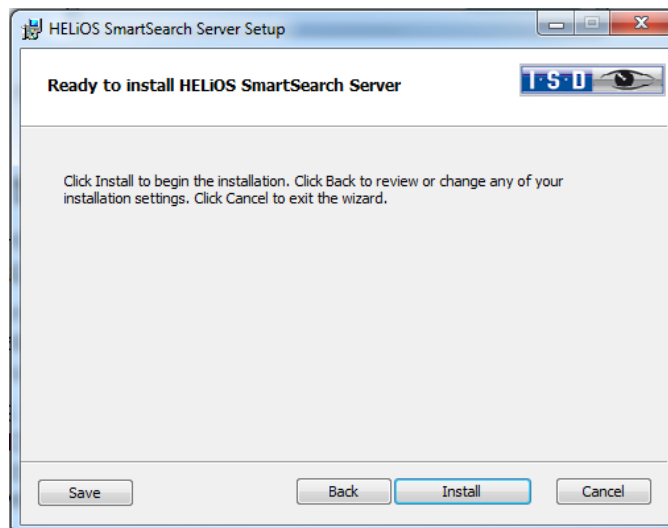
In case if there is no Java Runtime Environment available yet, it must be installed first.



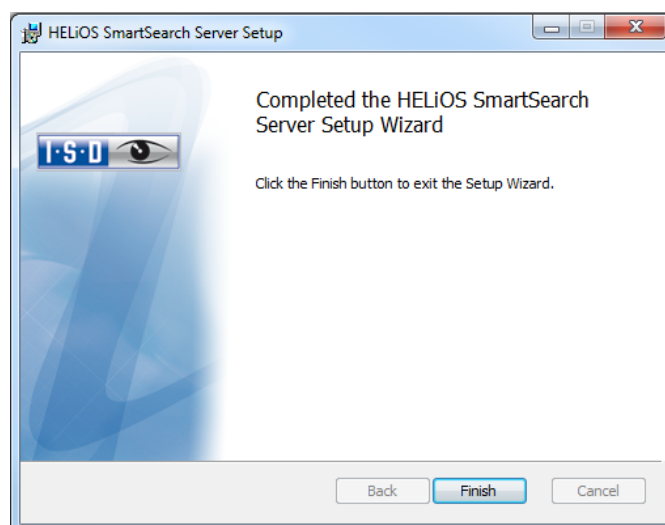
Click **Next**.



Select an installation directory of the HELIOS SmartSearch server and click **Next**.



You can start the installation now.



Click **Finish** to end the installation.

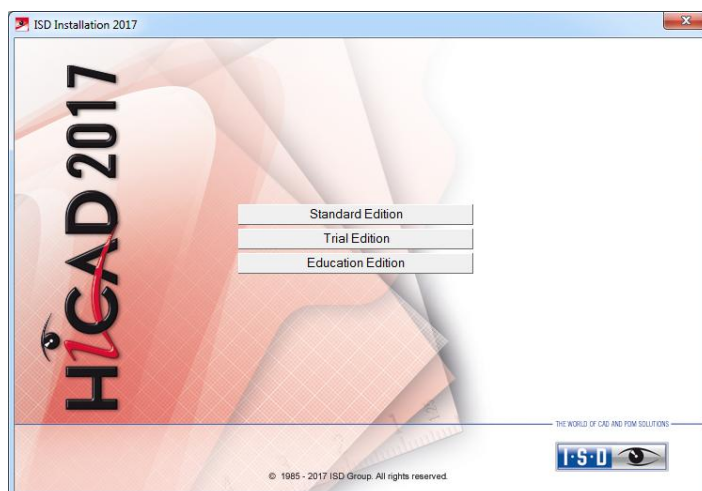
## 2.10 Trial Edition (Demo Version)

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.



**The license is free and valid for 60 days from the date of installation. Its transfer to other computers after its activation is not possible.**

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.

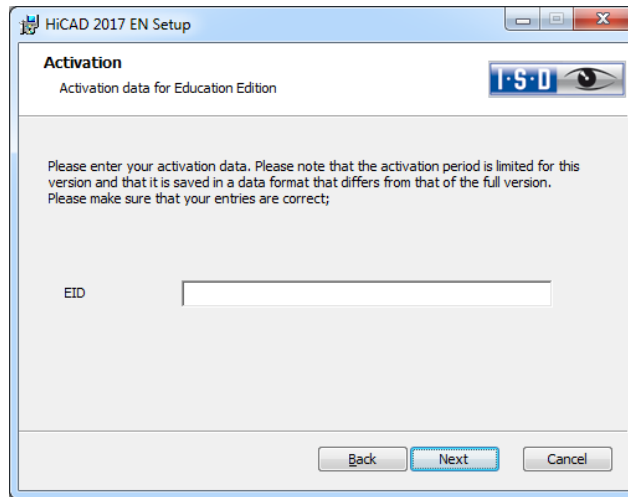


In the start mask of the Installation Wizard, click **Trial Edition**.

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.

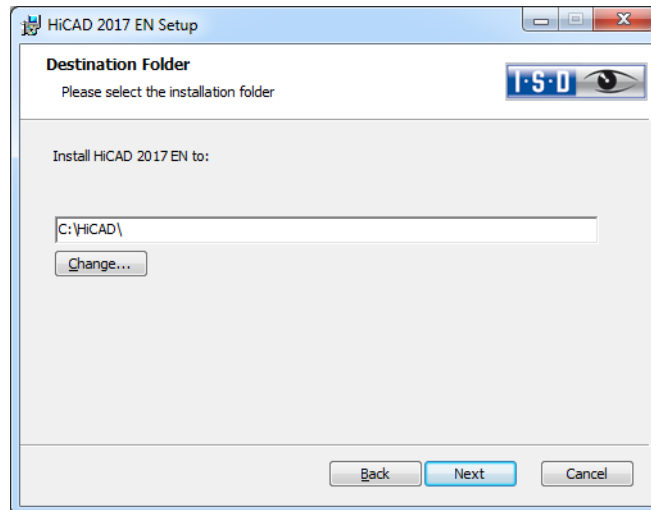


On the **Welcome...** window, click **Next** to start the installation.

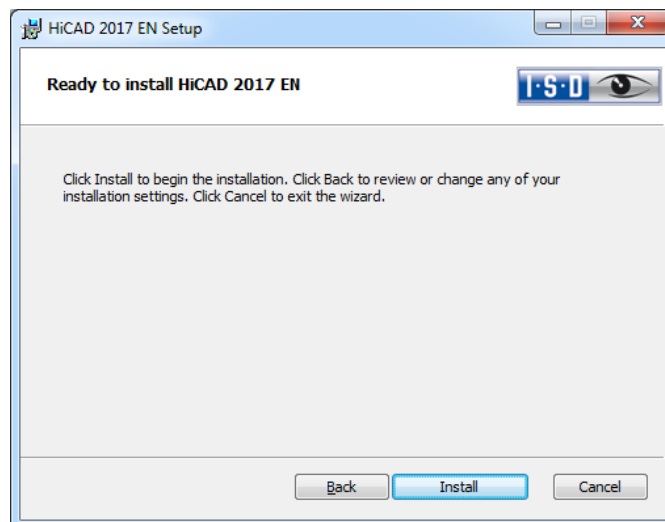


Enter the activation data for product activation and click **Next**.

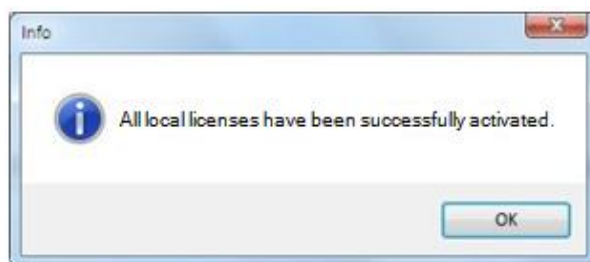
To obtain the activation data, please fill in the form on our website at [isdgroup.com](http://isdgroup.com) > **Products** > **Free demo version**.



Select an installation directory.



Click **Install**.



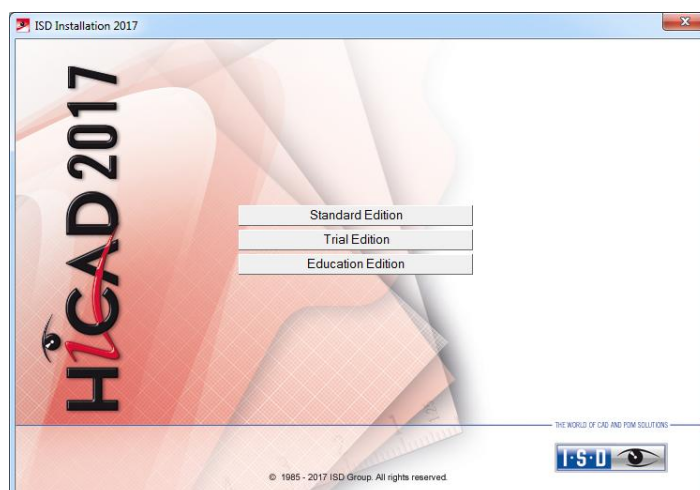
Click **OK** to complete the installation.

## 2.11 Education Edition (Student Version)

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 6.3).

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.

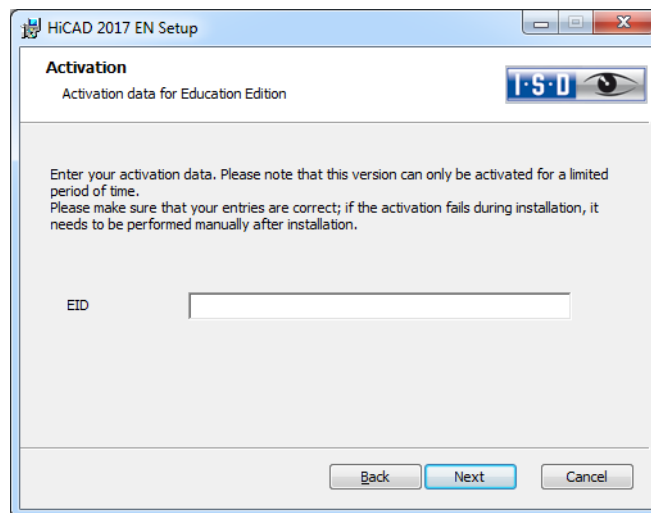


In the start mask of the Installation Wizard, click **Education Edition**.

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.

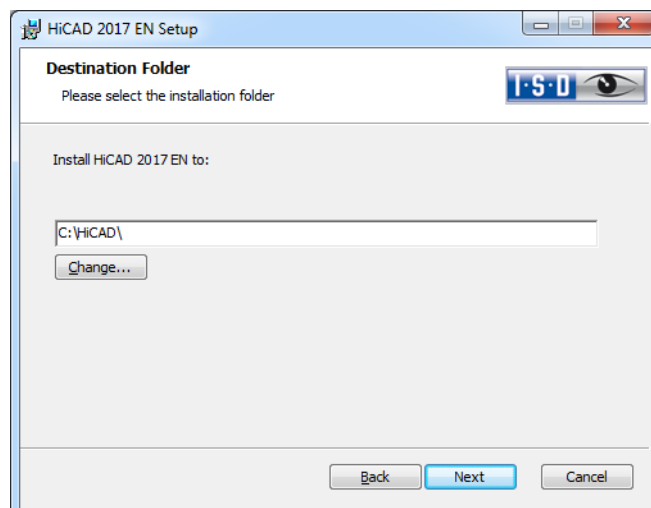


On the **Welcome...** window, click **Next** to start the installation.

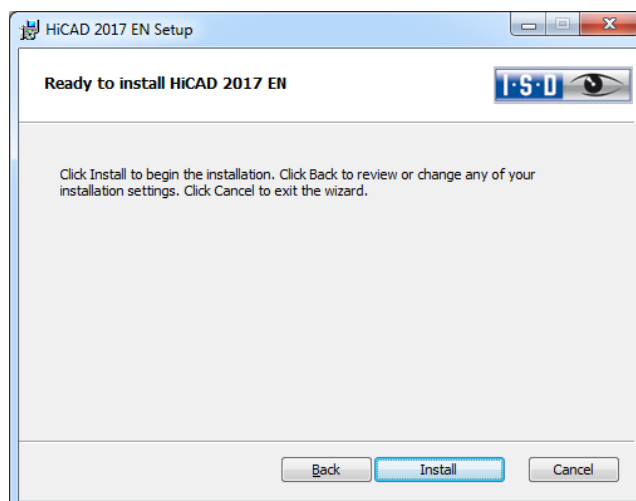


Enter the activation data for product activation and click **Next**.

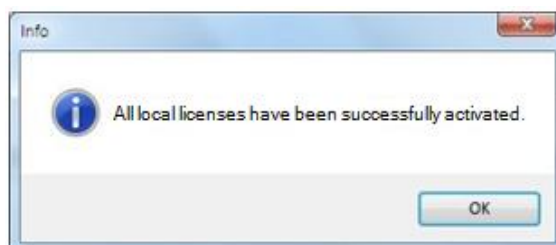
To obtain the activation data, please fill in the form on our website at [isdgroup.com](http://isdgroup.com) > **Products** > **Student version** and upload your student identity card or your matriculation certificate.



Select an installation directory.



Click **Install**.



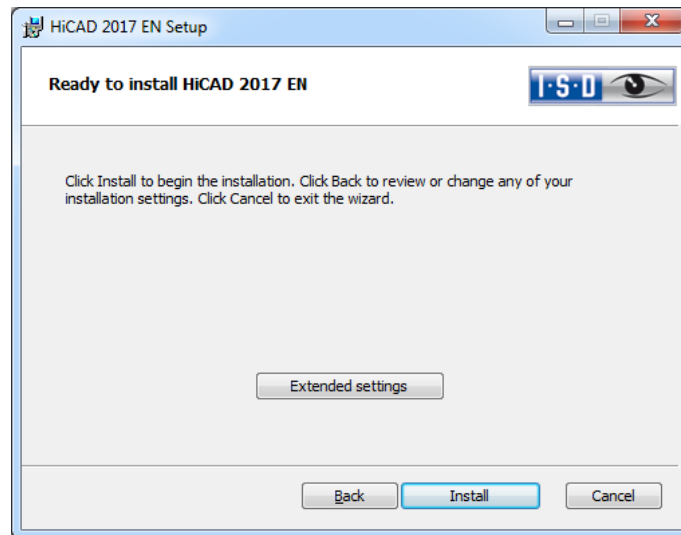
Click **OK** to complete the installation.

### 3 Procedure for Silent Installations

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

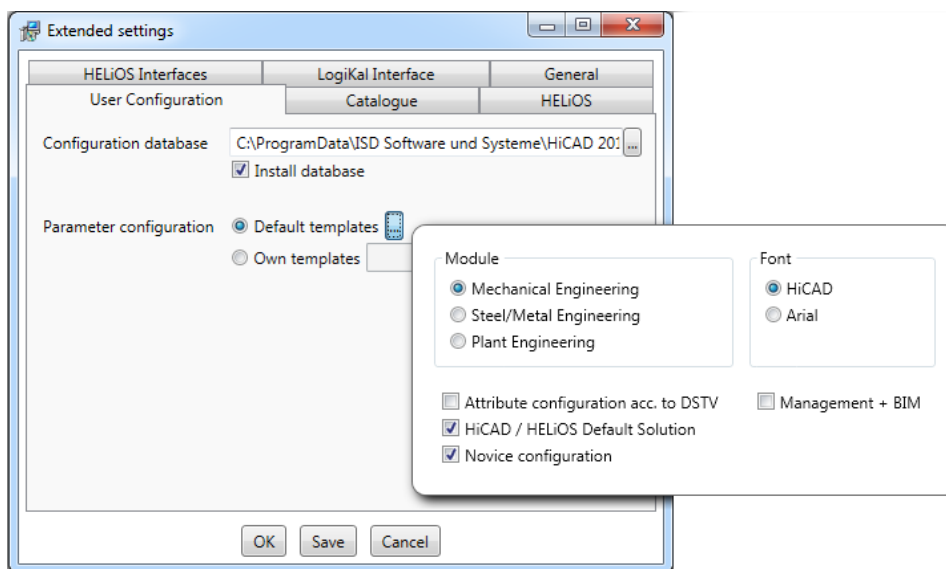
#### 3.1 Installation Settings

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**.

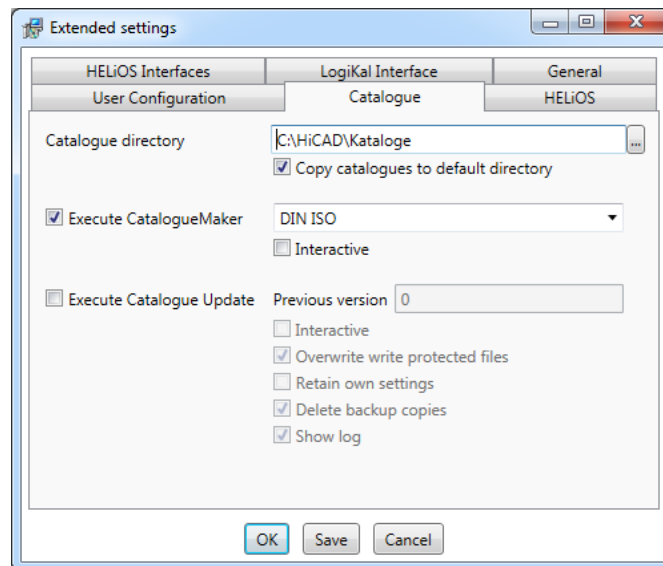


Here you can configure in particular the settings for the **User Configuration** and the **Catalogs** in such a way that user interactions will no longer be required.

- » Parameter configuration via CSV file,
- » Execute CatalogueMaker/CatalogueUpdate: Deactivate **Interactive** button.







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>" /!*v "<Log-Datei>"
```

or

```
msiexec /i HiCAD.msi SETTINGS="<Ini-Datei>" /!*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 `/*v "<Log-Datei>"` creates a log file of the installation which can be used for the diagnosis of installation problems.

### 3.1.1 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/de>).

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.



**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 situation for HELiOS is slightly different. Here, the installation packages can be found in the folder Helios\heldsk64\ (for a HELiOS Desktop Standalone installation) or Helios\M-Versions\20??\, with ?? standing for the concrete year date of the HiCAD Version to be matched with an updated HELiOS.**

**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 programme.**

### 3.1.2 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 /! *v "<Log-Datei>"
```

or

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

As neither dialogues nor error messages are displayed, `/! *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/de-de/library/cc759262%28WS.10%29.aspx#BKMK\\_SetUI](http://technet.microsoft.com/de-de/library/cc759262%28WS.10%29.aspx#BKMK_SetUI)

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

### 3.1.3 Example of a Batch Installation incl. Redistributables and Log

```
@set SOURCE=\\entw042\Setups\HiCAD 2000
```

```
"%SOURCE%\vcredist_x86_10.0.40219\vcredist_x86.exe" /passive /norestart
```

```
@if errorlevel 1 echo Fehler bei Visual C++ Runtime Installation && goto error
```

```
"%SOURCE%\DotNetFX40\dotNetFx40_Full_x86_x64.exe" /passive /norestart
```

```
@if errorlevel 1 echo Fehler bei .NET Installation && goto error
```

```
msiexec.exe /qb!- /i "%SOURCE%\de-de\HiCAD.msi" /! *v
```

```
"%SOURCE%\logs\%COMPUTERNAME%\HiCADInstallLog.txt" SETTINGS="%SOURCE%\Config\setup.ini"
```

```
@if errorlevel 1 echo Fehler bei HiCAD Installation && goto error
```

```
@exit
```

```
:error
```

```
@echo Installationsfehler %errorlevel%
```

```
@net helpmsg %errorlevel%
```

```
@pause
```

## 4 Configuration

### 4.1 Configuration Management

As of HiCAD 2012 (Version 1700), HiCAD enables 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 1800.0)
- » BEMPAR.DAT (as of 1800.0)
- » DIMENSIONING\_SETTINGS.XML (as of 1800.0)
- » KRPGEN.DAT (as of 1801.0)
- » MASPARE.DAT (as of 1801.0)
- » FITTABLE\_SETTINGS.XML (as of 1801.0)
- » STBEMPAR.DAT (as of 1801.0)
- » TXTANSI.DAT (as of 1801.0)
- » STABMPAR.DAT (as of 1802.0)
- » AUBM3PAR.DAT (as of 1802.0)
- » ALG3DPAR.DAT (as of 1901.0)
- » FEATURE.DAT (as of 1901.0)
- » SCHRIF.DAT (as of 1901.0)
- » TXTFONT.DAT (as of 1901.0)
- » LINPAR.DAT (as of 1901.0)
- » SSWRITESTEP.DAT (as of 1901.0)
- » 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)

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 **Schlüsselnamen.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**. You can find this document

- » in the ISD Wiki at **Product Know-how > Whitepaper**
- » in the Docu\hicad sub-directory of your HiCAD installation as well as
- » on the start page of the Online Help at [www.help.isdgroup.com](http://www.help.isdgroup.com)

### 4.1.1 The Configuration Management for updates

When performing an update from HiCAD 2015 or HiCAD 2016, your settings from the existing configuration file **HICAD.CFGDB** of your previous HiCAD version will be transferred to the Configuration Management of HiCAD 2017, 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.

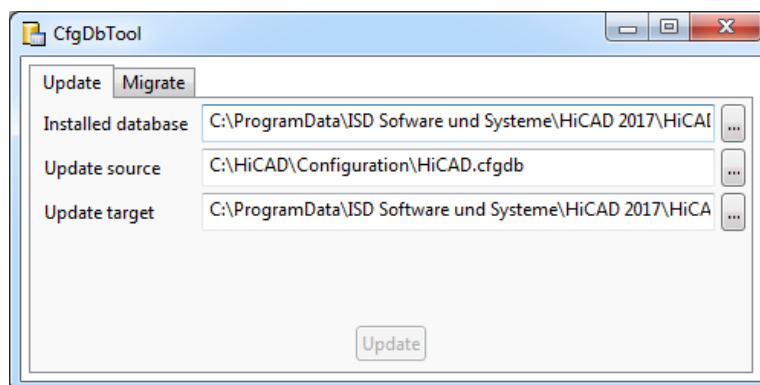
If HiCAD is started with the database of a newer Major Release, a corresponding message will be displayed. In this case, please use a compatible database to avoid error messages or unexpected behaviour.

### 4.1.2 The Configuration Management for new installations

If you perform a (new) installation of HiCAD 2017, 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** from HiCAD 2015 or HiCAD 2016 to the Configuration Management of HiCAD 2017, 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 HiCAD 2016.

- » 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.

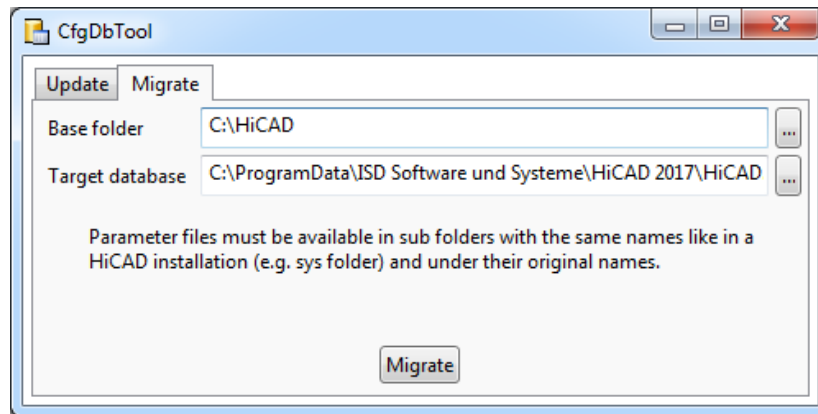
<b>Installed database</b>	The configuration database to be updated, i.e. (the configuration database of your previous HiCAD version 2015/2016).
<b>Update source</b>	The configuration database of the new version; the configuration database with the current ISD settings can be found in the folder: [HiCAD installation directory]\Configuration.
<b>Update target</b>	The result of the update. If you enter the same file here as in the <b>Installed database</b> , a backup of the previous configuration database will be created. You <b>cannot</b> enter the same database here that you entered in the <b>Update source</b> 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 2017.

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.

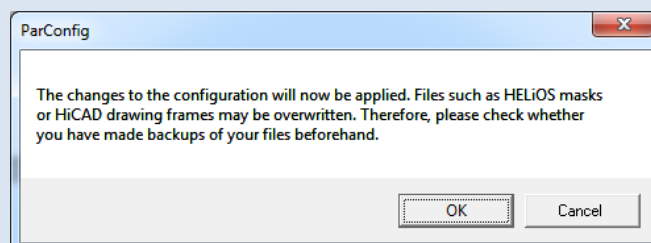
**Target database** Here you specify the database to which the data are to be transferred.

- » Select the directories.
- » Click the **Migrate** button to start the process.

## 4.2 Parameter Configuration

### Important note on updates!

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



If you confirm 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 Management + BIM). These files include, for example

- HiCAD masks for the part attributes (\*.HDX),
- HELiOS masks for projects, documents and articles (\*.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.

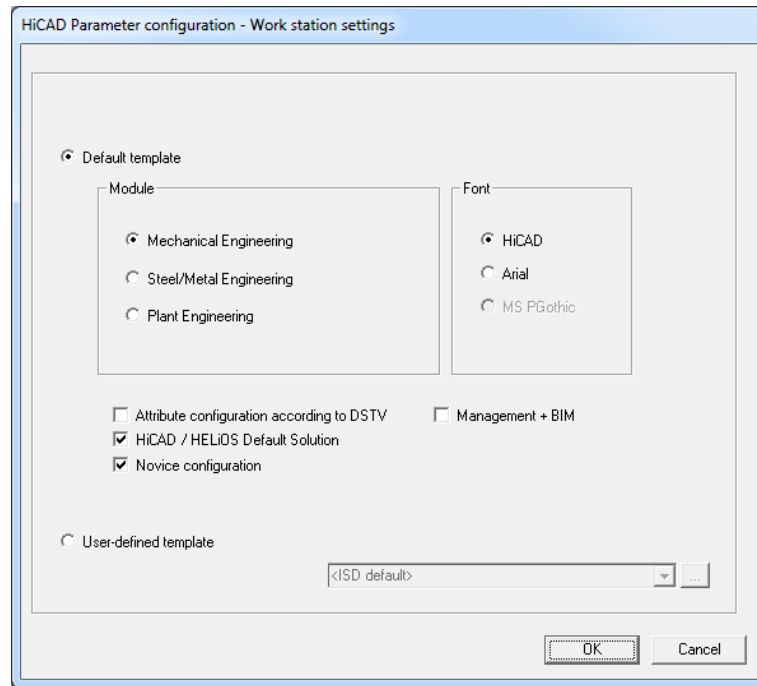
Via **Cancel** the operation will be terminated without any changes to the configuration.

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 Management + BIM). 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).



In the dialogue window you have the following setting options:

- » **Module**  
Here you choose the required field of engineering. The common HiCAD parameters are then configured for this area.
- » **Management + BIM**  
Provides the BIM-PDM configuration with typical civil engineering attributes, masks and title blocks.
- » **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.
- » **Management + BIM (Steel Engineering Drawing Management)**  
Provides the BIM-PDM configuration with the required civil engineering attributes.
- » **User-defined template**  
Activate this option if you want to use your own configurations. Then select the relevant configuration file.



**Important:**

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



## 5 Important Notes on Updates

Before making an update from HiCAD 2015 or 2016 to HiCAD 2017 you need to deactivate all licenses (Server licenses or local licenses). The procedures for Server licenses and local licenses are different.

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).

You can conveniently download the current HiCAD version in the [Download Area](#) in the ISD Wiki. On the corresponding DVD 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 subversion as the HELiOS version that was originally released with the corresponding Major Release.

### 5.1 Update 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 Versions 2015 or 2016 first, and then activate those for Version 2017.

You can start with the installation of HiCAD Version 2017 before or after activation of the new licenses; a starting of HiCAD is, however, only possible after activation of the new licenses.

The current Version of the **SafeNet License Server, Sentinel RMS License Manager 8.6.2**, can be found on the installation DVD of HiCAD 2017. 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 HiCAD 2017 Installation DVD.

Click the **SafeNet License Server** button. The installation guide can be found at Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**



Before you can use the new licenses of HiCAD Version 2017, you need to deactivate the old licenses for Version 2015 or 2016 with the help of the License Manager. This tool is located in the Windows start menu at **All programs > ISD Software und Systeme > Administration**.

After starting the **ISD License Managers** 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 Version 2015/2016 are highlighted (blue). Select the **Deactivate** button to revoke the activation of these modules (see Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**).

After confirming the deactivation of your old licenses, the ISD will send you an E-mail with one or several EIDs. These are required for the activation of the new licenses. The EID-code and the Password remain unchanged and can be used for the login and for the license activation again.

Follow the instructions given in the E-mail and start the **ISD License Manager**, which you can find in the Windows start menu at **ISD Software und Systeme > Administration** (C:\Program Files (x86)\ISD Software und Systeme\AdminToolsServer\exe) after installing HiCAD 2017.

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. **Activate** the licenses with a click on the same-named button (see Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**).

After successful activation you can start HiCAD.

## 5.2 Update Local Licenses

Before installing HiCAD 2017 you need to deactivate the local licenses for HiCAD 2015 or 2016 on your workstation. After installing HiCAD 2017 you need to activate the new licenses.

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

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

After confirming the deactivation of your old licenses, the ISD will send you an E-mail with one or several EIDs. These are required for the activation of the new licenses after installing the new HiCAD 2017 version. The EID-code and the Password remain unchanged and can be used for the login and for the license activation with the ISD License Manager 4.0 again.

After installing HiCAD, follow the instructions given in the E-mail and start the **ISD License Manager**, which you can find in the Windows start menu at **ISD Software und Systeme > Administration** (C:\Program Files (x86)\ISD Software und Systeme\AdminToolsServer\exe).

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

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

After successful activation you can start HiCAD.

## 5.3 Update of HiCAD

The ISD recommends performing an Update Installation when switching from HiCAD 2015 or 2016 to HiCAD 2017 or for the installing of Service Packs and Patches.

### Important note on updates!

When you run the tool **Computer Parameter Configurator** (HiCAD exe\ParKonfigComp.exe) – either during the installation/update (Extended Settings > User Configuration tab) or later – 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 Management + BIM). These files include, for example

- HiCAD masks for the part attributes (\*.HDX),
- HELiOS masks for projects, documents and articles (\*.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.**

### 5.3.1 Backups before installation

Before starting the HiCAD Update Installation, create backups 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.

#### 5.3.1.1 Backups of catalogues

Search 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\210X.X (or 200X.X) 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\_2016\_CATALOGUES.ZIP

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

### 5.3.1.2 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\210X.X (or 200X.X) in the CfgdbPath key you can see where the file HiCAD.cfgdb is located.

### 5.3.1.3 Backup of HELIOS database

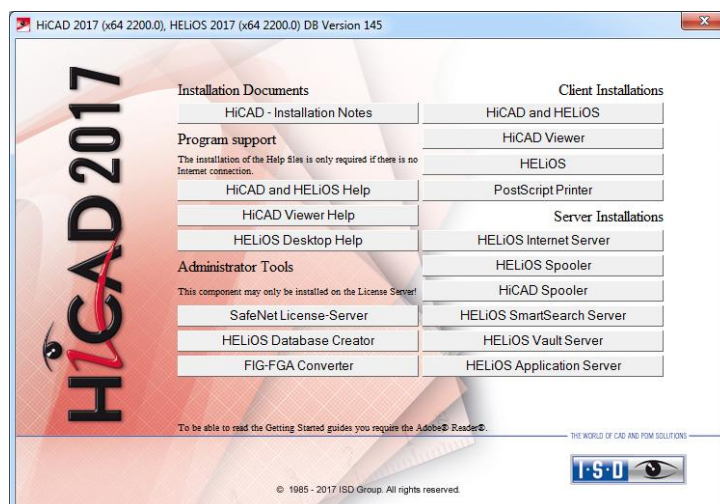
1. Open the **SQL Server Management Studio**. Select **Start > All Programs > Microsoft SQL Server 20XX > SQL Server Management Studio**.
2. Click **Connect**.
3. At the left side, right-click **bauteil...** in the list.
4. Select **Tasks > Back Up**.
5. Ensure that the backup will be stored in the archive folder. You can then compress the backup file (.bak) to a ZIP file.

## 5.3.2 Update Installation of new HiCAD Version

You can conveniently download the current HiCAD version in the [Download Area](#) in the ISD Wiki. On the corresponding DVD 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 subversion 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.

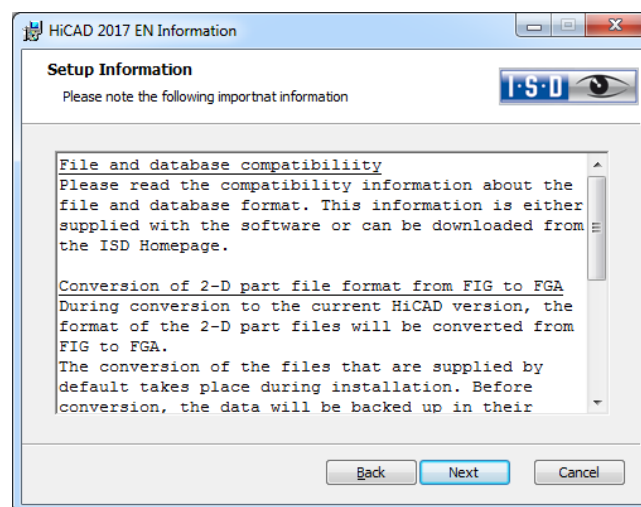
If the Autostart function has been deactivated in the operating system, it is mandatory for the installation of HiCAD to start the **setup.exe** file from the root directory of the DVD; only in this way it is ensured that the version will recognize the operating system, and that the matching HiCAD version will be installed.

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



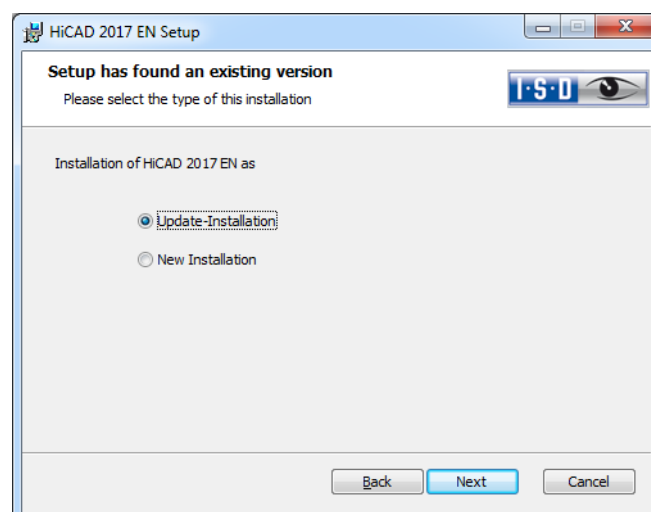
Leave this selection mask open, so that you can select the desired components one after the other.

Click the **HiCAD and HELIOS** button to start the installation.

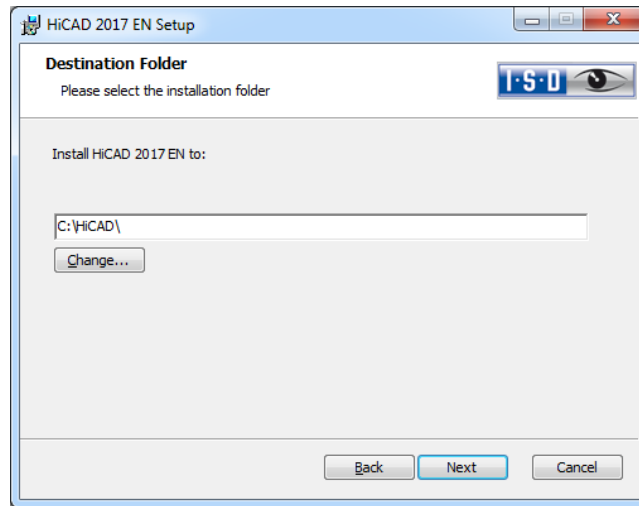


First, important information about **data compatibility** will be displayed. Please read this information carefully.

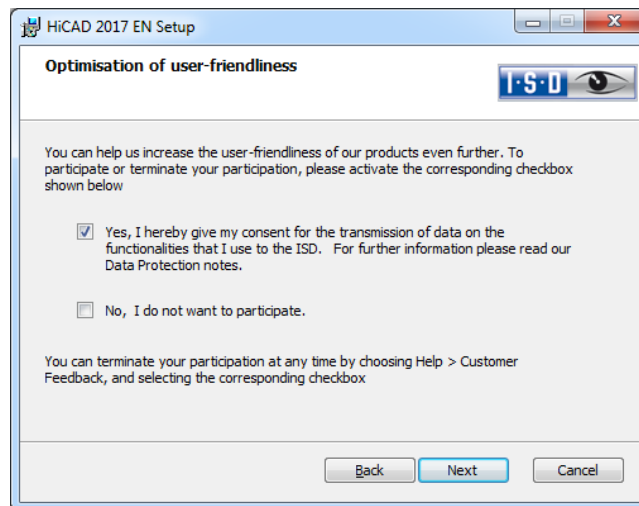
If the installation program finds an already installed HiCAD Version, this will be indicated in a corresponding dialog window:



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

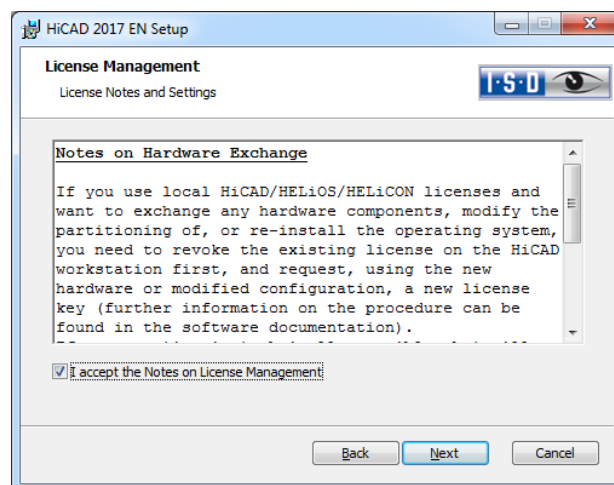


Select an installation directory.

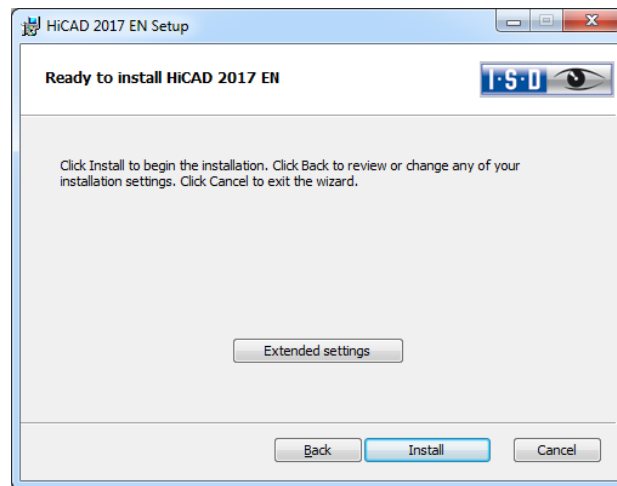


You can help us increase the user-friendliness of our products even further. To participate or terminate your participation, please activate the corresponding checkbox.

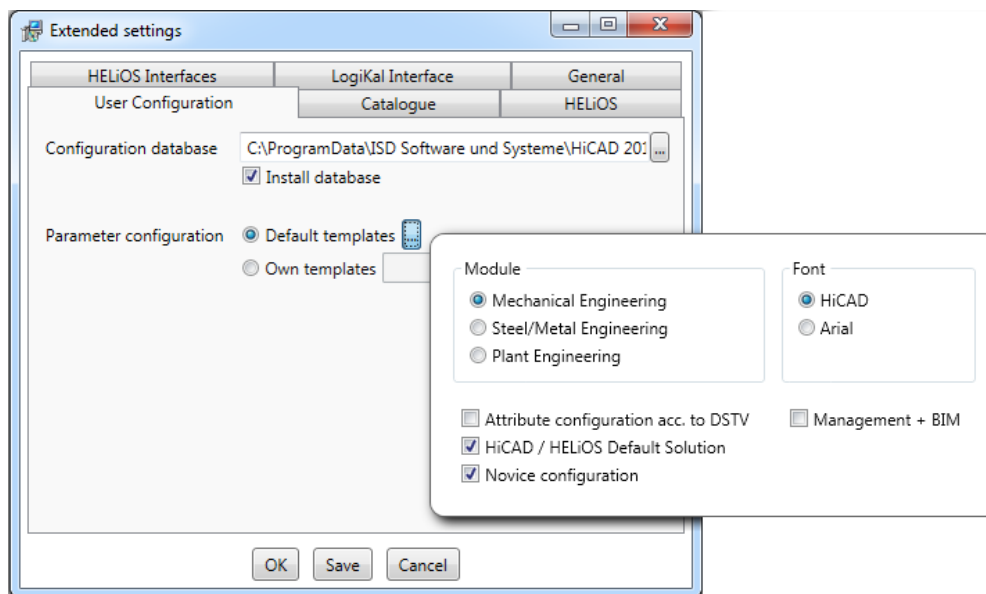
You can terminate your participation at any time by choosing **Help > Customer Feedback**, and selecting the corresponding checkbox.



Please read the Notes on Hardware exchange carefully. Accept the notes and click **Next**.



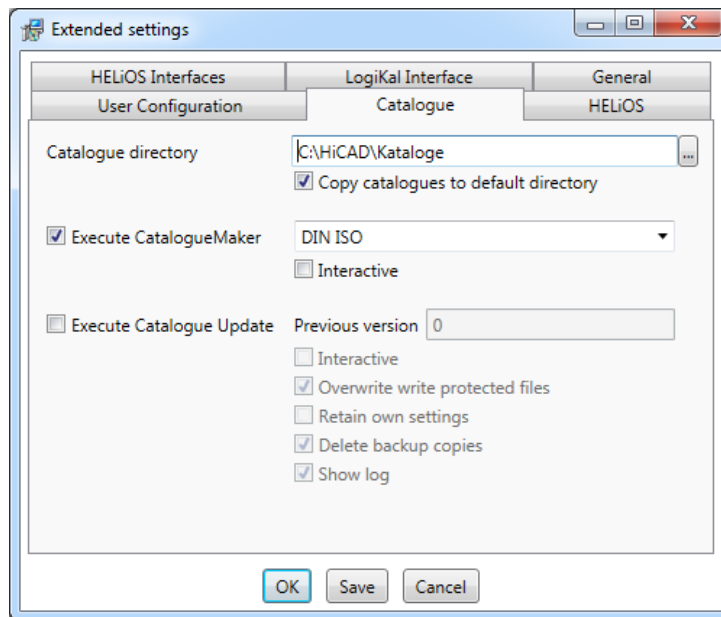
You can now start with the installation or modify the **Extended Settings**, e.g. for the user configuration, the catalogues, or HiCAD with HELIOS.



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 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.

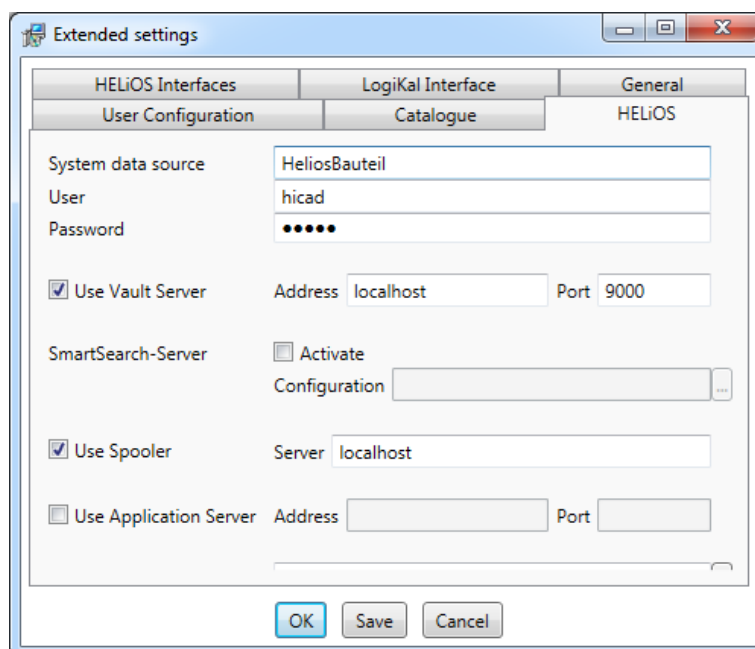
Depending on the selection in the **Parameter configuration**, the settings stored in the **CSV file**, too, will be applied. In a CSV file it is, amongst other things, specified which files (e.g. HiCAD part masks or template masks for annotations) are to be copied to the sys directory. When performing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

In case of **updates**, the existing configuration will be applied, and the CatalogueMaker will not be started automatically. If you want to add standards to the catalogues, the program can be called via Start > All Programs > ISD Software und Systeme GmbH > Administration.



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

If you 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.

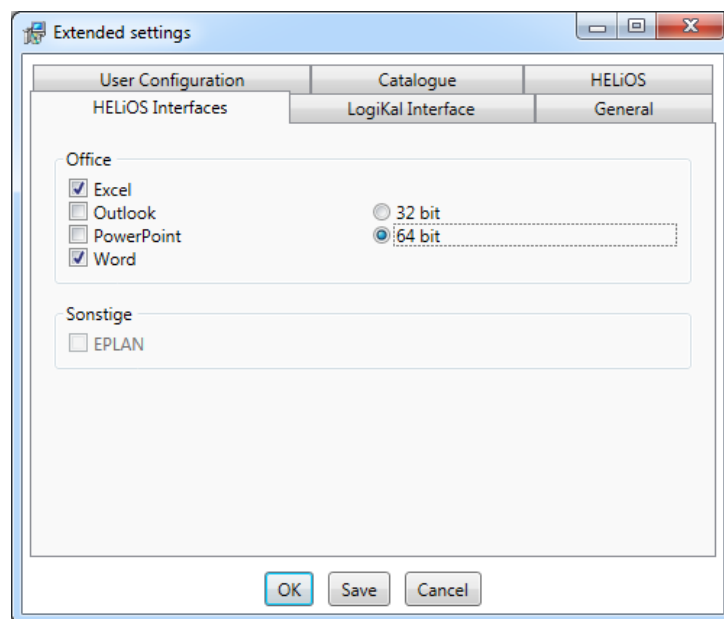
If you have not installed the Vault Server yet, you can do this now: Choose **HELIOS Options > Database > General > Vault Server**  .



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 Spooler collects the print jobs and processes them, taking your settings into account.

Individual settings for the HELiOS surface can be transmitted to additional users and computers. To do so create a ZIP file in HELiOS via **View > Settings > Export**. During the installation you can select and import the surface configurations for the HELiOS desktop under **UI configuration**.



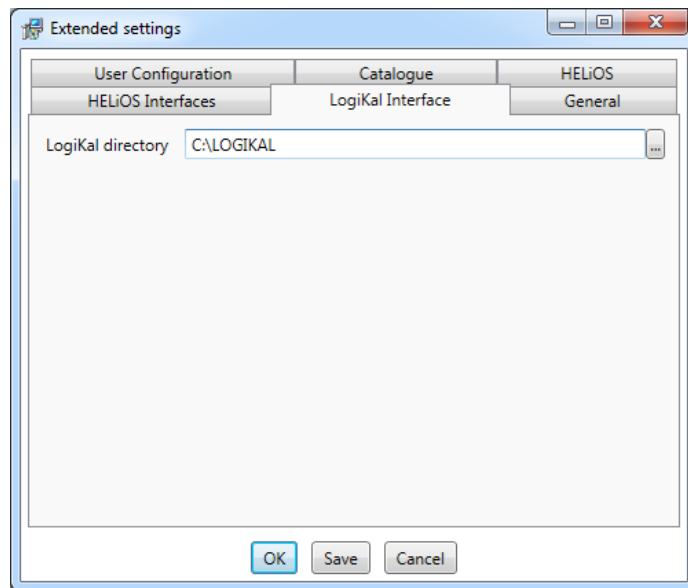
The availability of interfaces with HELiOS depends on the programs that are installed on your computer. With the exception of the HELiOS interface, you can only use 32Bit versions with HELiOS 32Bit, and 64Bit versions only with HELiOS 64Bit. For MS Office it is generally possible to use a 32Bit Office with HELiOS (64Bit). However, for old BOMs an additional, special ODBC connection will be required. In such cases, please contact our Consulting team.

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

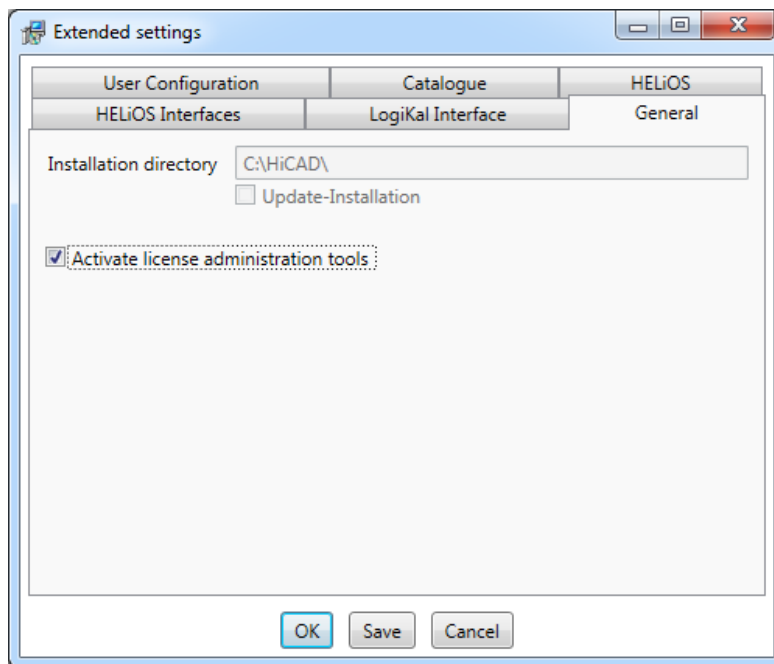


**Please note:**

- A [compatibility matrix](#) of the CAD systems can be found in the Wiki, at **Product Know-how > FAQ > System & Hardware > HELiOS Desktop**.




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



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

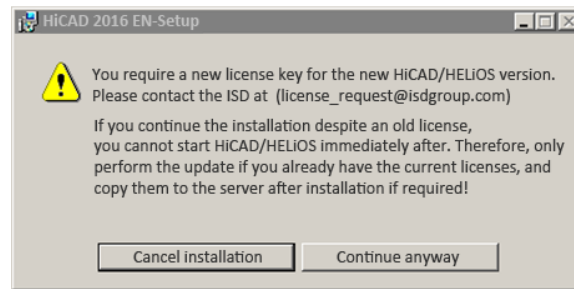
Click **Save** to save the **Extended Settings** to an INI file. If you place the INI file in the installation directory when installing server licenses, the settings will be applied.

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

 **In HiCAD, at Settings > Further directories you can set the paths for the database of the Configuration Editor, the Catalogue directory and LogiKal. These paths are located in the Windows Registry at HKEY\_LOCAL\_MACHINE\SOFTWARE\ISD Software und Systeme\HiCAD\nnnn.n. nnnn.n is the HiCAD version number, e.g. 2200.0.**

Close the **Extended Settings** dialogue window with **OK** and click **Install**.

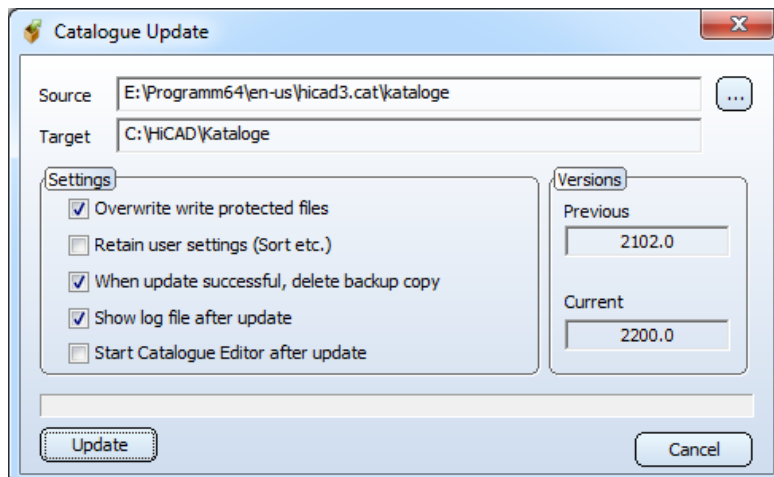
If you have not activated a new license yet, the following message will be displayed:



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 select **Cancel**, the catalogues will not be updated.

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.2002.

```

Update_22000_140217_114256.log - Editor
Datei Bearbeiten Format Ansicht ?
START: 14.02.2017, 11:42:56

SOURCE CATALOGUE: E:\Programm64\en-us\hicad3.cat\kataloge
TARGET CATALOGUE: C:\HiCAD\kataloge

PREVIOUS VERSION: 2102

SETTINGS :
  Replace RO-Files : 1
  Delete Backup Files : 1
  Keep Personal Settings : 0
  Show Protocol File : 1
  Start_CATEDitor : 0

CONVERT *.FIG -> *.FGA
Path for backup and log files: c:\HiCAD\kataloge

A2HFL_16.IPT -> NO CHANGED
A2HFL_40.IPT -> NO CHANGED
A2RFL_100.IPT -> NO CHANGED
A2RFL_16.IPT -> NO CHANGED
A2RFL_40.IPT -> NO CHANGED
AERF_16.IPT -> NO CHANGED
AERF_40.IPT -> NO CHANGED
AKLO1_16.IPT -> NO CHANGED

c:\HiCAD\kataloge\Anlagenbau\ANLAGENBAU.IPL
ADD TABLE: "GF10242_S130R23" IN CATALOGUE "3230010"
ADD TABLE: "GF10242_S165" IN CATALOGUE "3230010"
ADD TABLE: "GF_212501_T_45" IN CATALOGUE "3230010"
ADD TABLE: "STUTZEN_FL1" IN CATALOGUE "1010011"
ADD TABLE: "A2HFL_16" IN CATALOGUE "4100010"
ADD TABLE: "A2HFL_40" IN CATALOGUE "4100010"
ADD TABLE: "A2RFL_100" IN CATALOGUE "4100010"
ADD TABLE: "A2RFL_16" IN CATALOGUE "4100010"
ADD TABLE: "A2RFL_40" IN CATALOGUE "4100010"
ADD TABLE: "AKLO1_16" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVH" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVM" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVR" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVRM" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVRN" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVSRF" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVSRM" IN CATALOGUE "4100010"
ADD TABLE: "ARM2WVSRN" IN CATALOGUE "4100010"
    
```

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



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

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

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

## 5.4 Data Compatibility HiCAD/HELiOS 2017 (Version 220X.x)

Please note that 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. 2200.x, 220X.x) will be using the same data format, and no HELiOS update will be required.



**When updating from older HiCAD versions to version 220X.x, please note the information given below. Updates to version 2017 are only possible from version 2016 (version 210X) or 2015 (version 200X).**

Update from version	HELiOS-Update	Changed HiCAD data format
HiCAD 2016 (Version 210X)	✓	✓
HiCAD 2015 (Version 200X)	✓	✓



**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.**

## 5.5 Perform Installation

The installation of version 2017 can be carried out by a technician of the ISD or by the customer.

In this context, please note the following recommendations by the ISD:

- » HiCAD without HELiOS
  - Update of version 2016 or 2015 to version 2017: Can be carried out by experienced users with sufficient background knowledge.
  - Update of version 2014 (or older) to version 2017: An update is not possible. The update installation from version 2008 (or older) additionally included a data conversion from ANSI to UNICODE format. Please contact our Consulting team.
- » HiCAD with HELiOS
  - Update of version 2016 or 2015 to version 2017: An installation by the ISD is recommended.
  - Update of version 2014 (or older) to version 2016: An update is not possible. The update installation from version 2008 (or older) additionally included a data conversion from ANSI to UNICODE format. Please contact our Consulting team.
- » 3rd party CAD with HELiOS
  - Update of version 2016 or 2015 to 2017: An installation by the ISD is recommended.

## 5.6 New File Format for 2-D Files

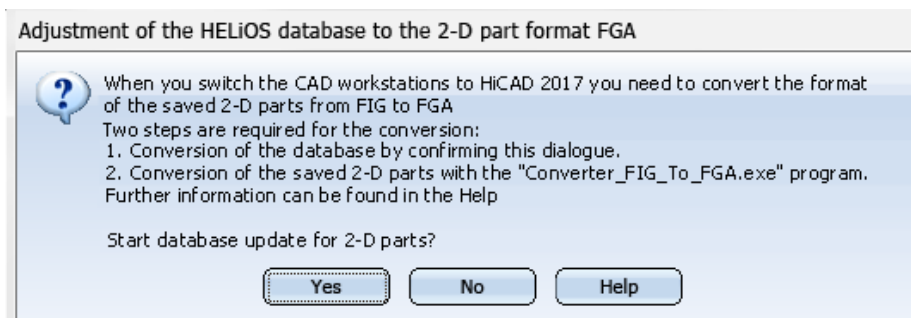
Similar to the KRA files in 3-D there are now 2-D figure archives with the filename extension **.FGA**. This contains the previous 2-D data (.FIG), the DB attributes (.FIG.DBA2) as well as the attribute container data (.FIG.ATC) and replaces the former 2-D files. Moreover, the new FGA format allows the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

**HiCAD 2017** comes with the new 2-D figures archives with the file name extension **.FGA**. Please use only this new **.FGA** format for conversion of existing 2-D **.FIG** files! For this purpose, use the new **Converter\_FIG\_To\_FGA.exe** tool in the HiCAD\exe directory.

When updating to **HiCAD 2017** all standardly supplied 2-D parts (e.g. drawing frames) in the different installation directories will be converted from FIG to FGA by default during the installation. The data in the original state will be saved in a folder (resp. a ZIP archive) in the scene and catalogue directory. The converted files will be documented in a LOG file.

When creating an interface between HiCAD 2017 and HELIOS, you will be prompted to update the databases after a new installation or an update installation. The search for and management of 2-D parts will **only be possible after conversion of the database** and the existing **.FIG** files with the above mentioned tool.

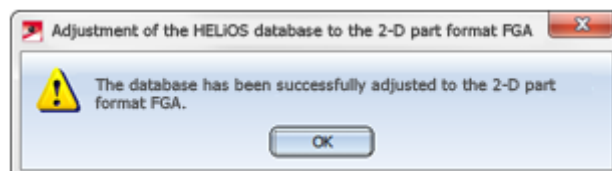
If you are managing your HiCAD files with HELIOS a message will appear after an update or a new installation of HiCAD 2017 when you start HiCAD 2017 as administrator:



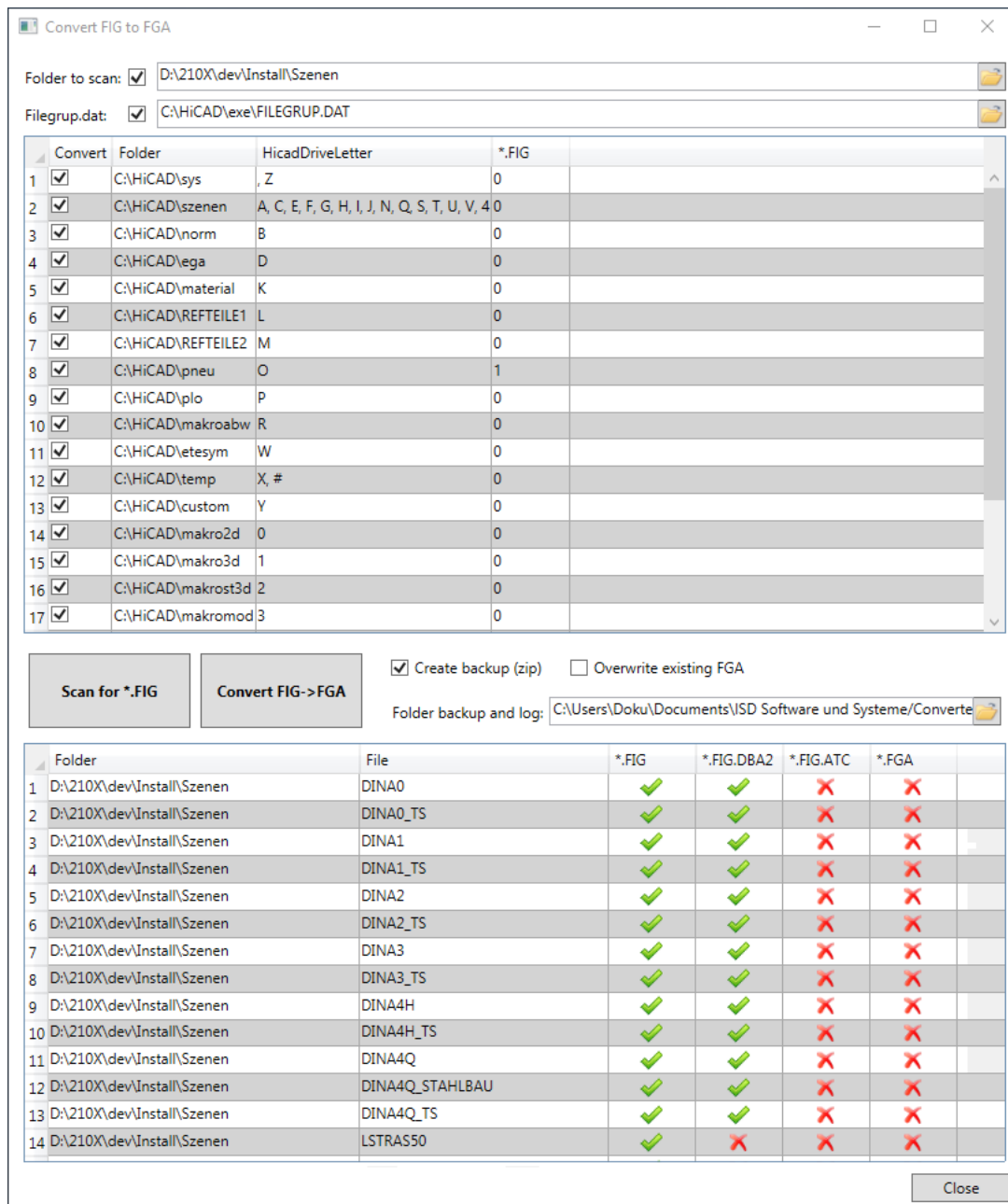
By clicking **Yes** you convert the files to the database. This means that the 2-D part name contained in the data will be changed from \*FIG to \*.FGA. Moreover, the database now only searches for FGA files. Therefore, you also have to convert the 2-D parts into FGA files by using the **Converter\_FIG\_To\_FGA.exe** program.


If you have installed HiCAD 2017 for testing purposes, you will have to click **No** when the message appears. Older HiCAD versions (before HiCAD 2017) cannot load FGA files. A database conversion cannot be undone.

After the conversion the following message appears:



Now start the **Converter\_FIG\_To\_FGA.exe** program to convert the 2-D parts.

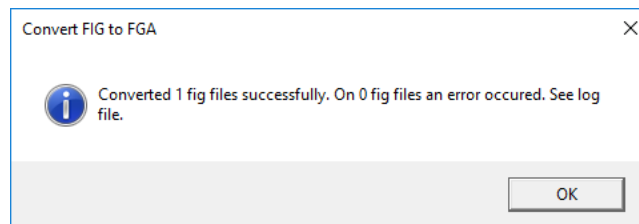


<p><b>Folder to scan</b> <input checked="" type="checkbox"/></p>	<p>Enter the path of the folder that should be converted. Via this symbol  you can select the folder in the Windows Explorer.</p> <p>The folder will only be evaluated if there is an activated checkbox <input checked="" type="checkbox"/> behind <b>Folder to scan</b>.</p>
<p><b>Filegrup.dat</b> <input checked="" type="checkbox"/></p>	<p>In order to search the directories in the Filegrup.dat for FIG files the checkbox behind <b>Filegrup.dat</b> has to be activated.</p> <p>All directories from the Filegrup.dat that are marked with a tick <input checked="" type="checkbox"/> will be considered when searching for FIG files.</p>
<p><input checked="" type="checkbox"/> <b>Create backup (zip)</b></p>	<p>If you have activated <b>Create backup</b> a ZIP file with all selected FIG files will be created.</p>
<p><input checked="" type="checkbox"/> <b>Overwrite existing FGA</b></p>	<p>If you have activated the <b>Overwrite existing FGA</b> option, existing FGA files will be overwritten if he names are identical with the converted files.</p>



<b>Folder backup and log</b>	Enter the path for the backup and log file.
<b>Scan for *.FIG</b>	By pressing the <b>Scan for *.FIG</b> button you start the search for FIG files in the selected folders.
<b>Convert FIG -&gt; FGA</b>	Via Convert FIG -> FGA you start the conversion. In the process all *.FIG, *.FIG.DBA2 and *.FIG.ATC will be <u>deleted</u> .

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.



### 5.6.1 Installing the Converter\_FIG\_To\_FGA

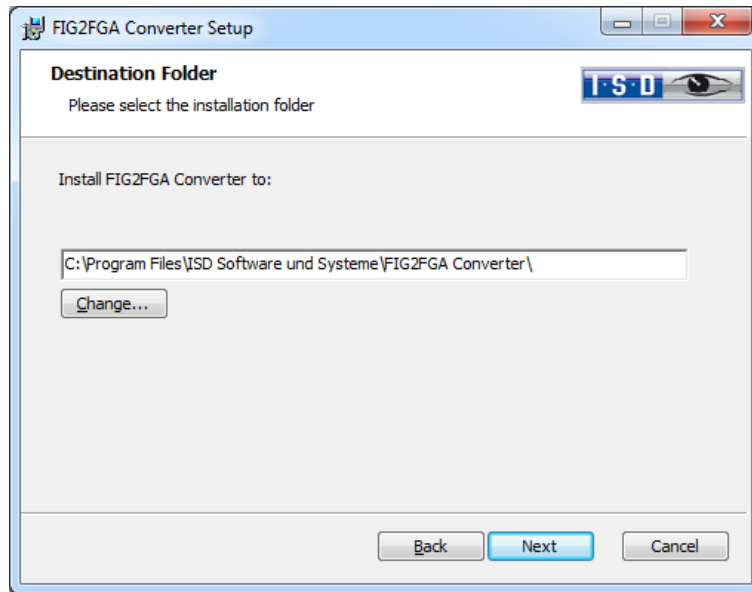
Start Windows to install the **Converter\_FIG\_To\_FGA**. If Windows is already open, close all other applications. Insert the DVD in the drive, which automatically starts the installation wizard. Follow the installation instructions on the screen.

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

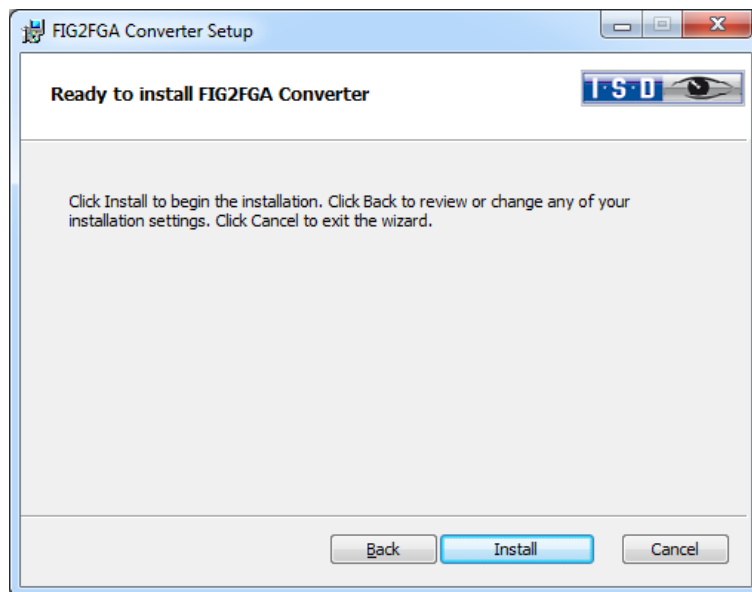


Select **FIG-FGA Converter**.

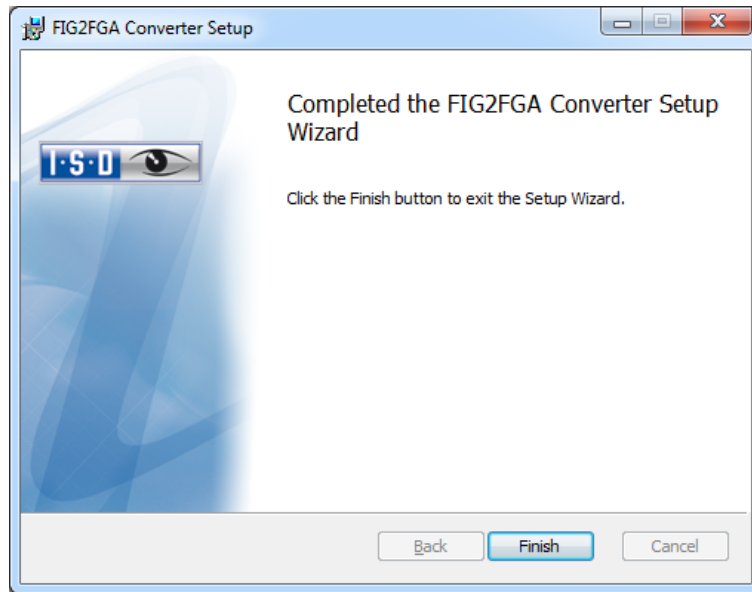




Specify the installation directory for the software.



Click the **Install** button.



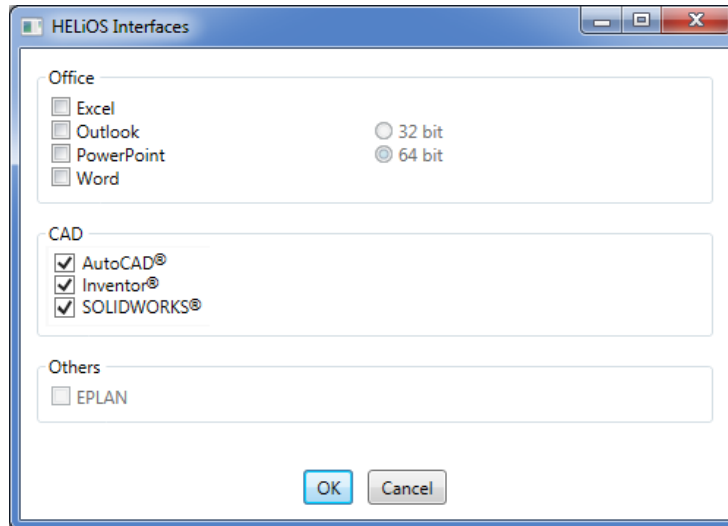
After a successful installation the Fig2FGA Converter can be found in the program directory and can be called up in HiCAD/HELiOS.

## 5.7 Manual Registration of the Multi-CAD AddIns with HeliosCouplings.exe

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 (inte /exe/ directory of the HiCAD installation).

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



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

The respective software has to be installed in the system.

## 5.8 CatalogueMaker

The CatalogueMaker is called automatically by the installation program in case of a **new installation**.

It specifies which standard series is to be shown in the standard part catalogues (at the moment standard series are available for DIN, ISO, EN, ANSI and JIS). The selection of the standards in the CatalogueMaker influences the display of the standard parts only, not their availability. This will still be controlled by the license selection in the configuration menu.

The existing configuration will be taken over automatically in case of an **update**; the CatalogueMaker will not be started automatically. If you want to add standards to the catalogues, the program can be called in the ISD program group in the start menu via "Administration".

## 5.9 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.

## 5.10 Important Notes on Plant Engineering and Pipeline Planning

If you have used the HiCAD modules **Plant Engineering** or **Pipeline Planning** with a HiCAD version **older than** Version 2016, it is mandatory that you read the information on update procedures given in the [Online Help](#) and also in the [PDF document "Plant Engineering/Pipeline Planning – Notes on Updates"](#).

## 5.11 Update Training

ISD now offers a 2-day Update Training for new versions. Further information on training dates can be found on the attached form or our website: [www.isdgroup.com](http://www.isdgroup.com) / **Support / Training**.



## 6 Licensing

HiCAD/HELiOS can be activated via three license types:

- » Network licenses
- » Standalone licenses (local licenses)
- » Commuter licenses



**In the HiCAD directory DOCU you can find an Online Help for the Licence Manager. You start the Help by calling the LICENSEMANAGER.HTML file in the folder Docu\tools\LicenseManager.**

**In the ISD Wiki you can find the PDF document Use Case: Checkout Licenses at [Product Know-how > Whitepaper](#).**

### 6.1 General Information about Licensing

#### Local (Workstation-Specific) Licensing

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.

#### Network (Server-Controlled) Licensing

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.

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.



**A static IP address is required for correct operation of the license server!**

## 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.



**If you activate a license while the WLAN card is switched on, this license will only be valid and visible when the WLAN card is switched on. If, however, the license is activated while the WLAN card is switched off, the license will always be valid, no matter whether the WLAN card is switched on or off.**

In the ISD Wiki at [Product Know-how > Whitepaper](#) you can find the PDF document **Use case: Checkout Licenses**.

## 6.2 Network Licenses

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

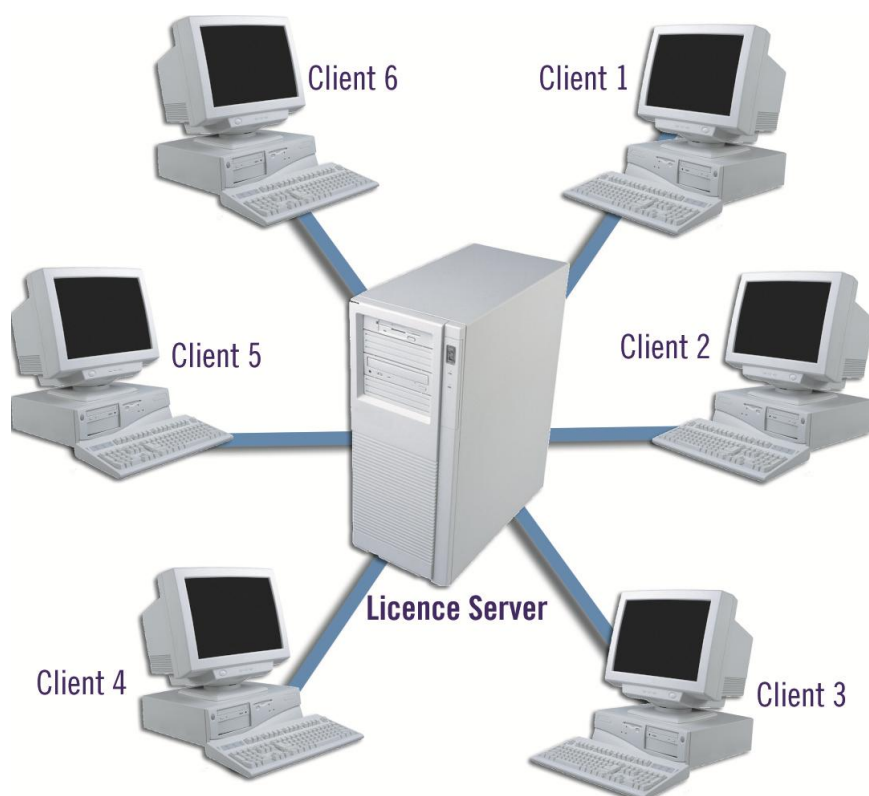
The license server enforces and manages licensing in multi-user environment. It keeps track of all the licenses and handles requests from network users who want to run a HiCAD/HELIOS application, granting authorization to the requesters, or denying requests if all licenses are in use.

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 installations 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).



### Please note:

- **As of HiCAD 2012 (Version 1700), parallel installations of license servers and ISD products (i.e. 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 a correct operation of the License Server!**

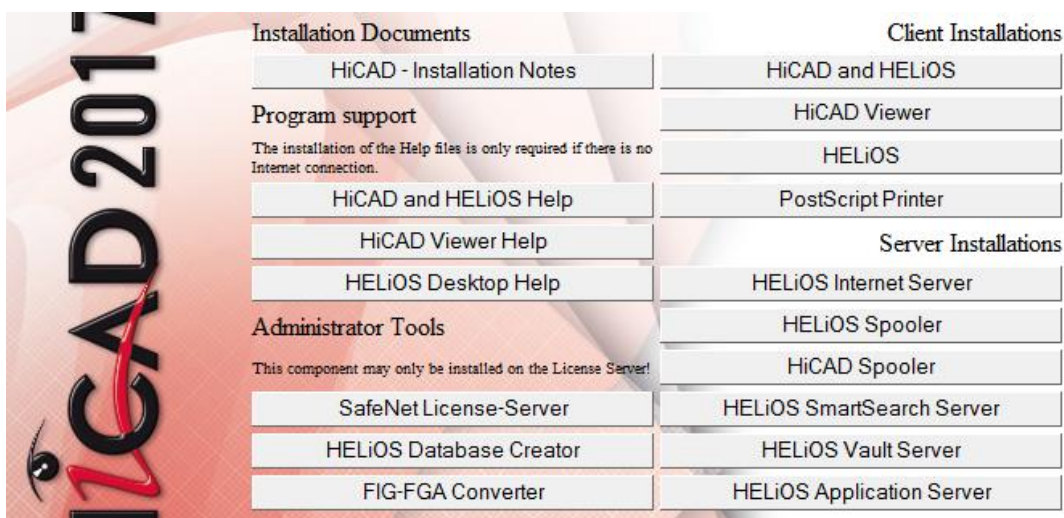


## 6.2.1 Server Installation

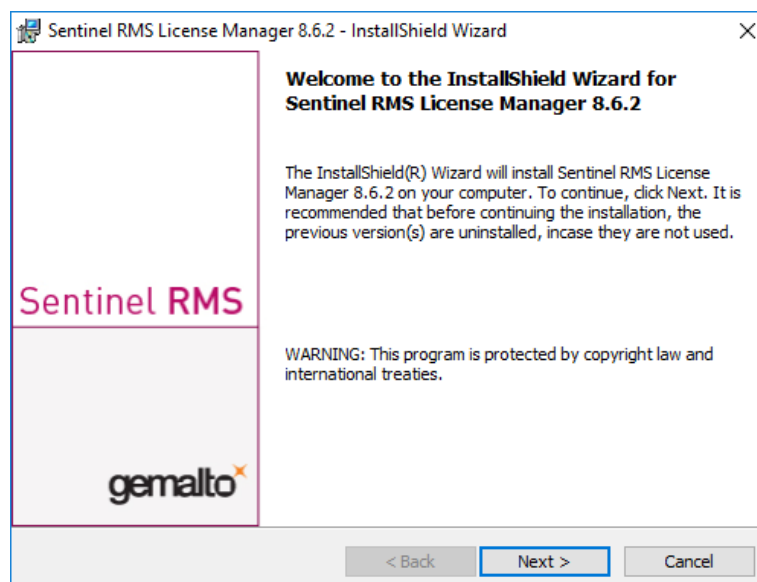
The **SafeNet License Server** is installed from the HiCAD DVD. Start Windows. If Windows is already open, close all other applications. Insert the DVD in the DVD drive. The installation wizard will be started automatically. In the installation wizard, click the **Standard Edition** button, which opens a mask with various selection options for software components.

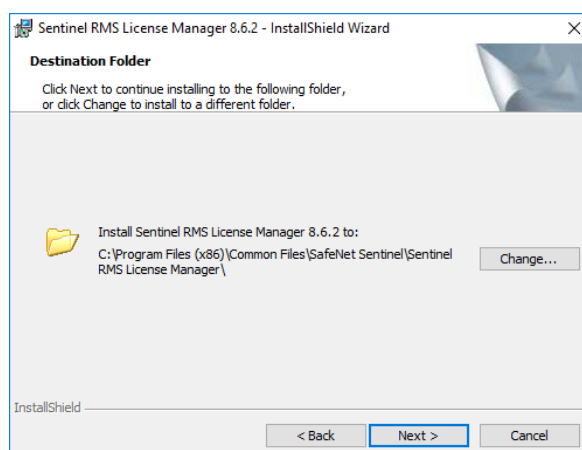
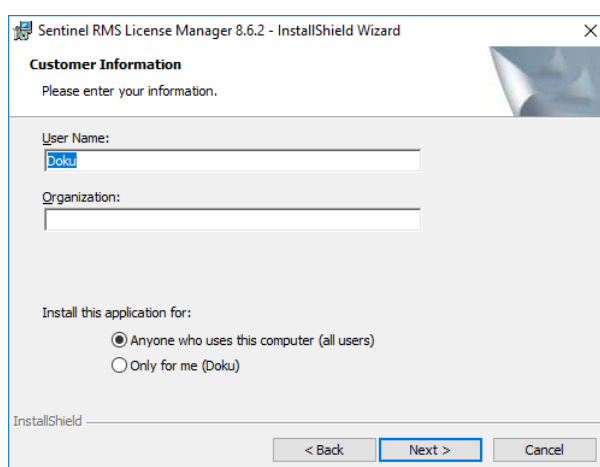
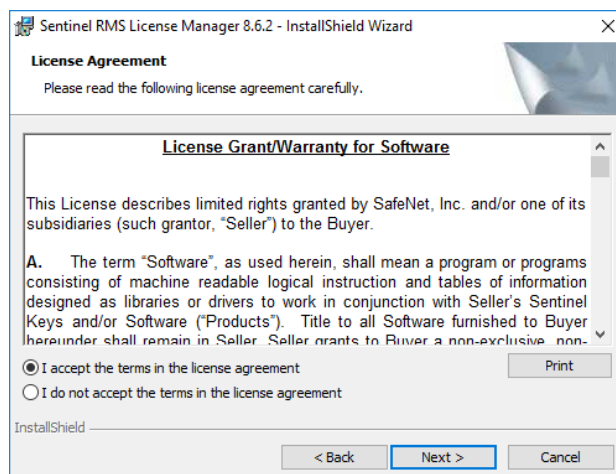


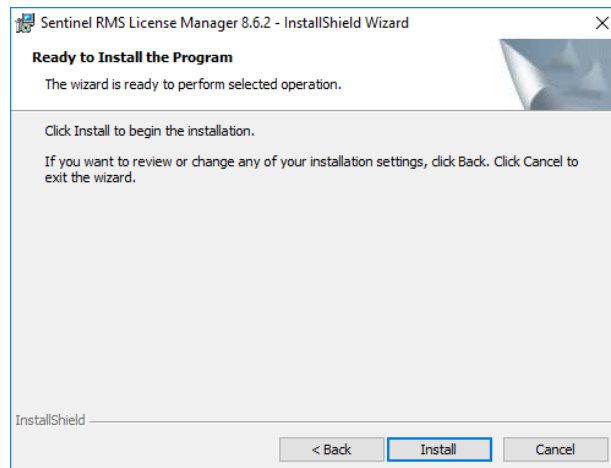
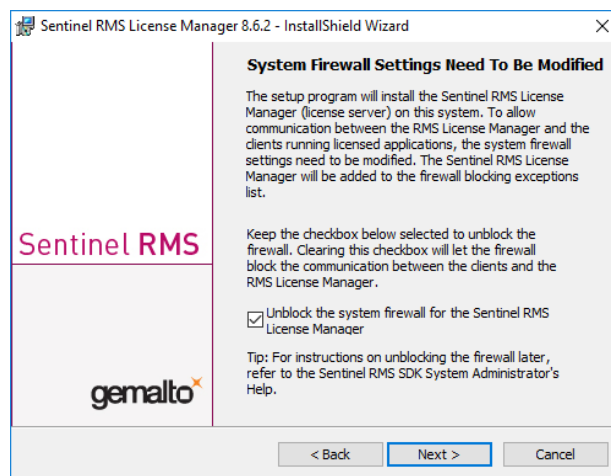
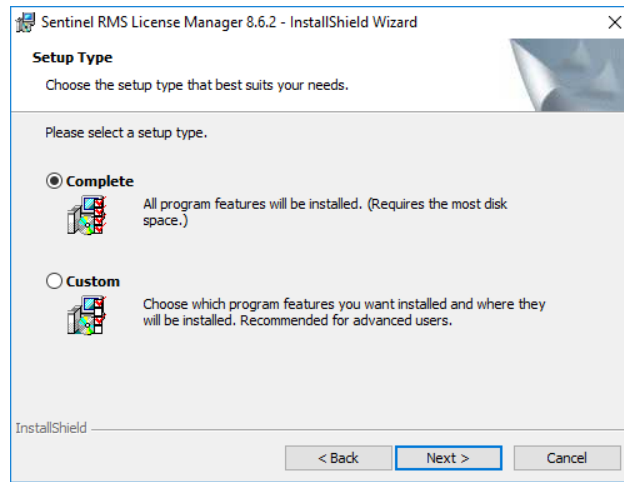
**If you want to perform a HiCAD update to Version 2017 and use a license server (i.e. work with network licenses), you require Version 8.6 of the SafeNet License Server. If you have installed an older version, you need to uninstall it before re-installing the SafeNet License Server.**

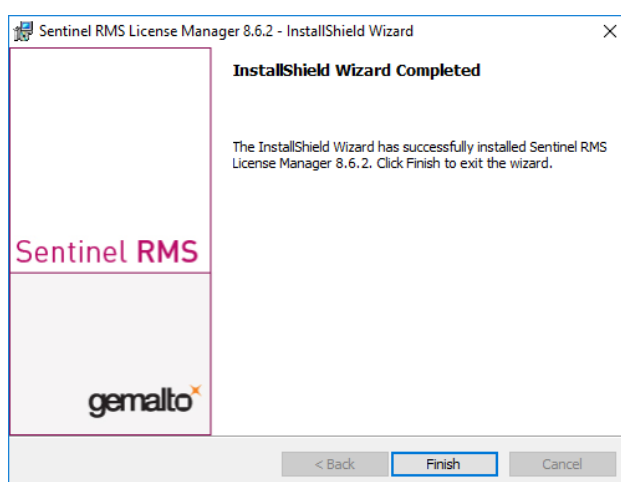
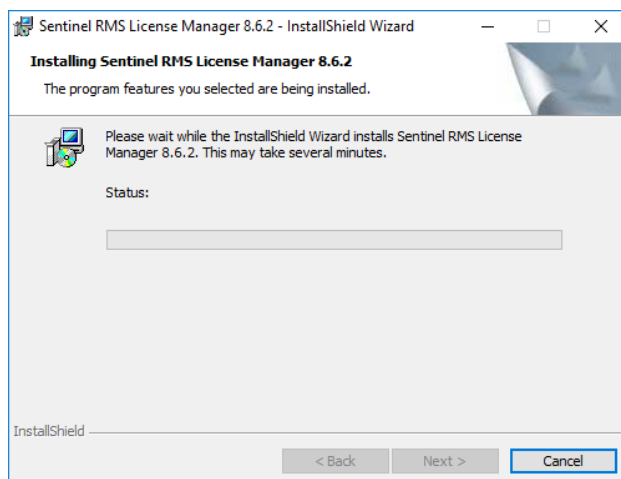


Click the **SafeNet License Server** button to start the installation.

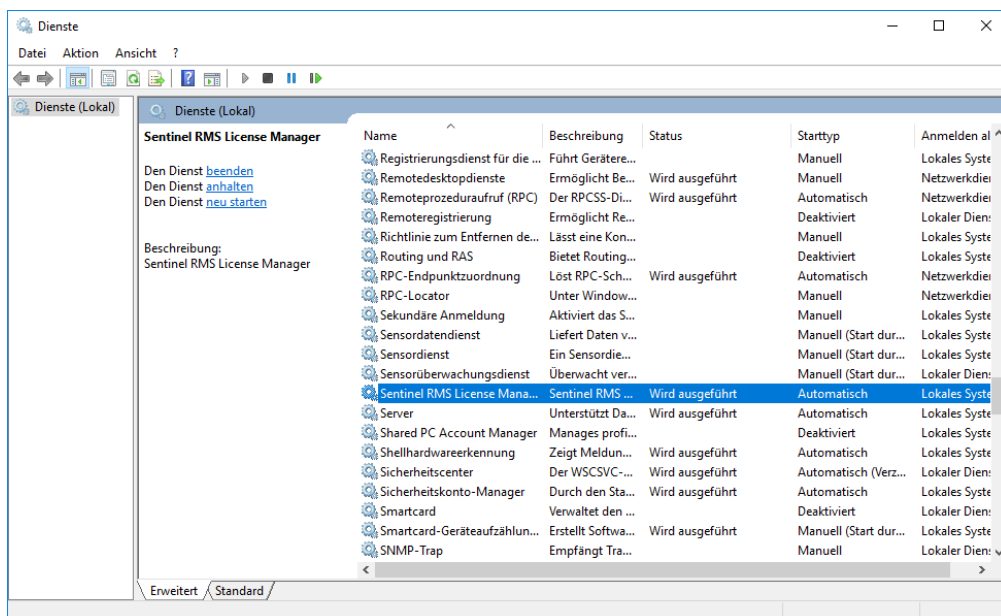








After successful installation you will find the Server (Sentinel RMS License Manager) under Services. From here you can also start and end the License Server.



## 6.2.2 Client Configuration

To ensure that the HiCAD/HELIOS Client finds 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.

## 6.3 Licensing via Entitlement ID (License Activator)

Thanks to the enhanced ISD License Manager the communication between the customer and the ISD could be facilitated significantly.

### 6.3.1 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: activation@isdgroup.de [mailto:activation@isdgroup.de]  
 Gesendet: Mittwoch, 18. Januar 2017 09:36  
 An: Musterfrau, Nadine  
 Betreff: EMS - Entitlement Certificate

Dear musterfrau@isdgroup.de,

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

Entitlement Details					
EID:	2ddbc643-343e-4ec4-aed4-7bd5bc44cfe1	Start Date:	01/18/2017		
Customer:		End Date:	Never Expires		
Contact:	musterfrau@isdgroup.de				
Associated Products					
Product number	Quantity	Remaining quantity	Start Date	End Date	Status
E102SOL1001 2100.0	2	2	01/18/2017	03/31/2017	Enabled
E107BIB1001 2100.0	2	2	01/18/2017	03/31/2017	Enabled
E130SMB1001 2100.0	2	2	01/18/2017	03/31/2017	Enabled
MasterLic 2100.0	2	2	01/18/2017	03/31/2017	Enabled

Now, follow the steps given below to activate and manage your entitlement:

1. Start ISD License Manager.
2. Change to tab "License Activator"
3. Log on using the EID, registered E-Mail and Password (ISD download area password).
4. Check licenses to activate.
5. Click on Activate button.

For further assistance, contact us using the following details:

Contact No. - Tel. +49-(0)231-9793-166

Email - [hotline@isdgroup.de](mailto:hotline@isdgroup.de)

Sincerely,  
 ISD Software und Systeme GmbH Team

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**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!**

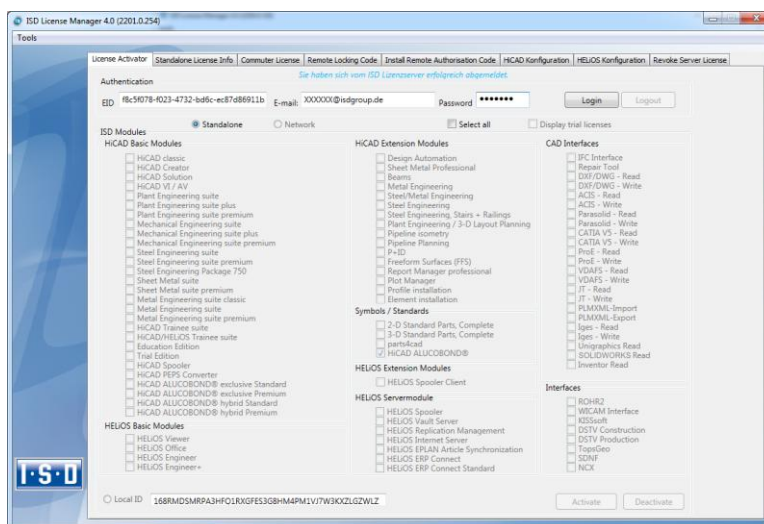
After installing HiCAD/HELIOS you can find the program in the Windows Start menu at **ISD Software und Systeme > Administration**. Please note that for the execution of some functions, administrator rights are required.

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



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

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

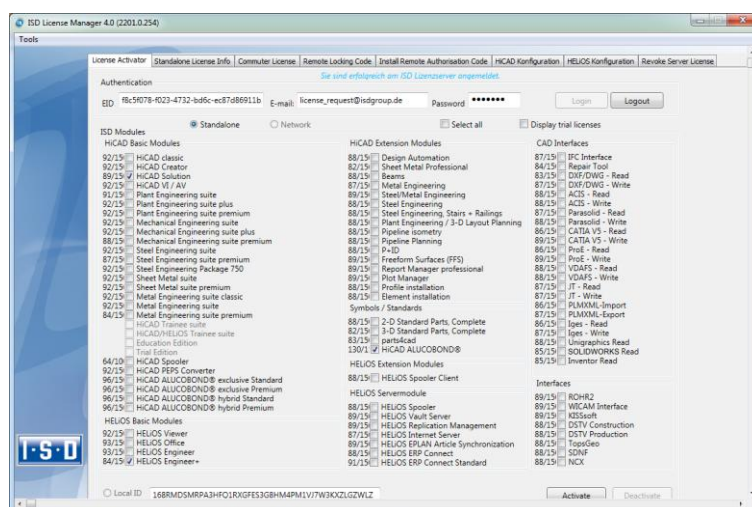


After entering the data, click **Login**. The ISD License Manager connects to the ISD License Server and the acquired licenses will be displayed.

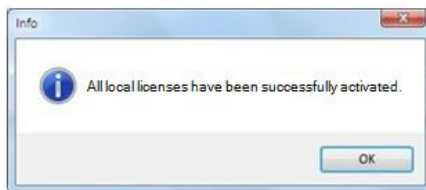
This process may take several minutes. You can then activate the licenses.

### 6.3.2 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 start working 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**).

### 6.3.3 Deactivate Licenses

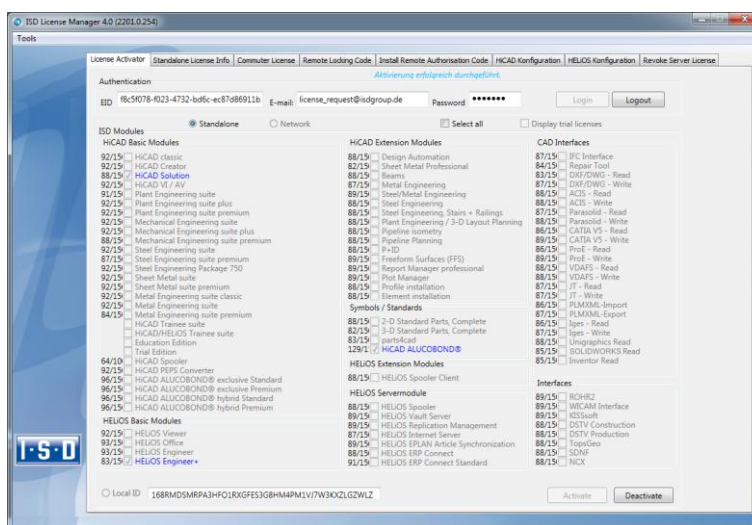
A deactivation of licenses for modules will be required in the following situations:

- » Exchange of hardware or changing of hard disk partitioning
- » Update of the operating system (e.g. from Windows 7 to Windows 8)  
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.

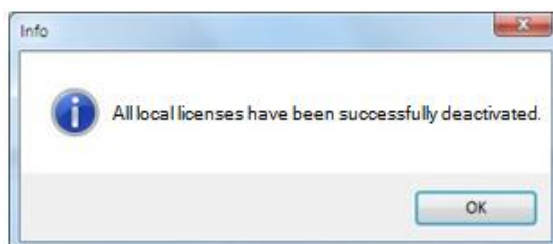


A selection is not possible, as you need to deactivate all modules, no matter whether local licenses or network licenses.



**The deactivation must not be disrupted, e.g. by a logout or the closing of ISD License Manager!**

After successful deactivation the following message will be displayed:



### 6.3.4 Trial Licenses

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

### 6.3.5 Reconstruction of Licenses

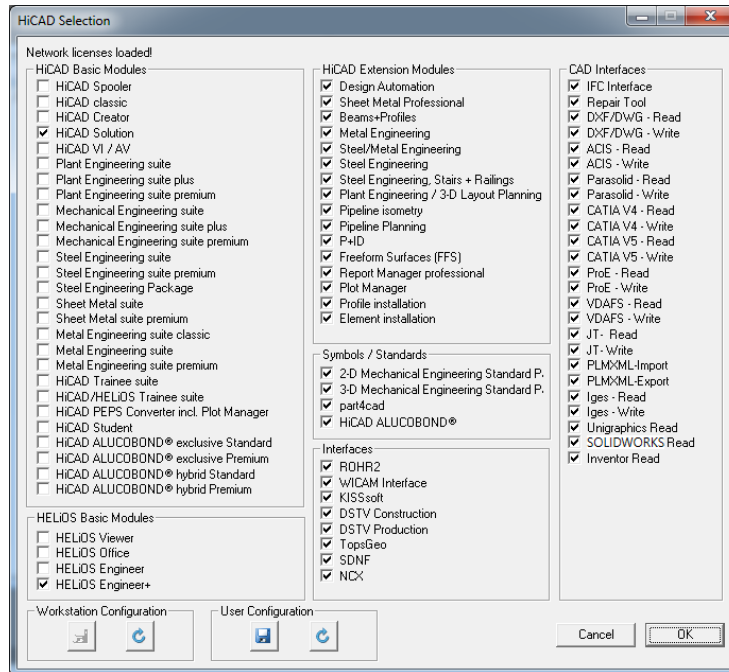
As all licenses are stored on the ISD Server, you can, in case of an interrupted connection or an accidental deletion of licenses, restore all licenses by logging in with your Entitlement ID. The restoring will only function if the hardware was not changed (see 4.2.3.3 Deactivate Licenses).

### 6.3.6 Notes Regarding 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.

### 6.3.7 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. The **HiCAD Selection** dialogue 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).

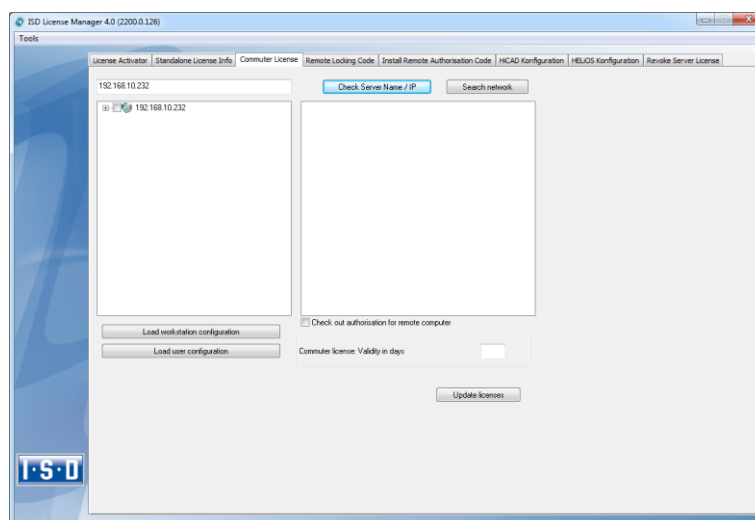
## 6.4 Commuter Licenses

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:

- » Via direct checkout from the License Server
- » Via checkout from License Server, without network connection

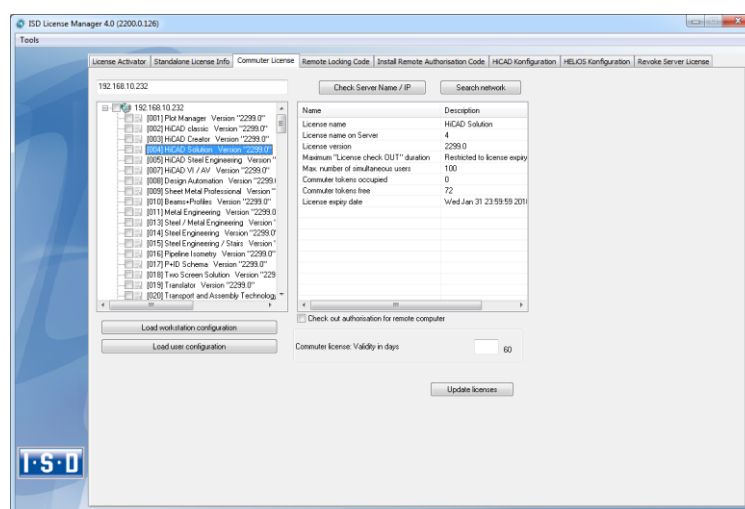
### 6.4.1 Direct Checkout from License Server

Start the **ISD License Manager 4.0** application (while a connection to the Server still exists). Switch to the **Commuter License** tab.




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

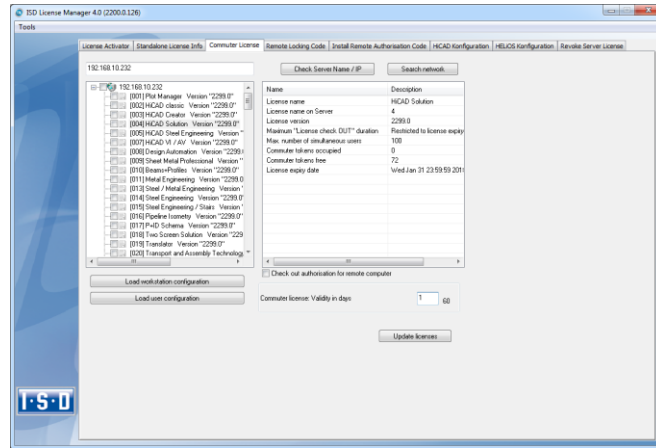
Expand the tree structure of the found Server by a click on the “+”-sign. The result looks as follows:



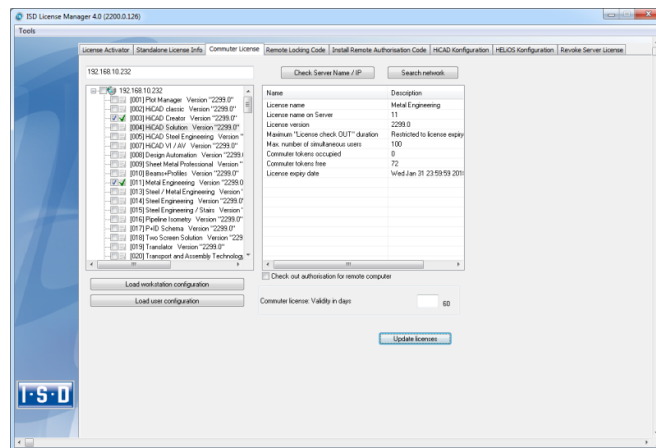
Select the required licenses by activating the corresponding checkboxes on the left hand side. On the right hand side, information on the selected license is displayed.

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

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

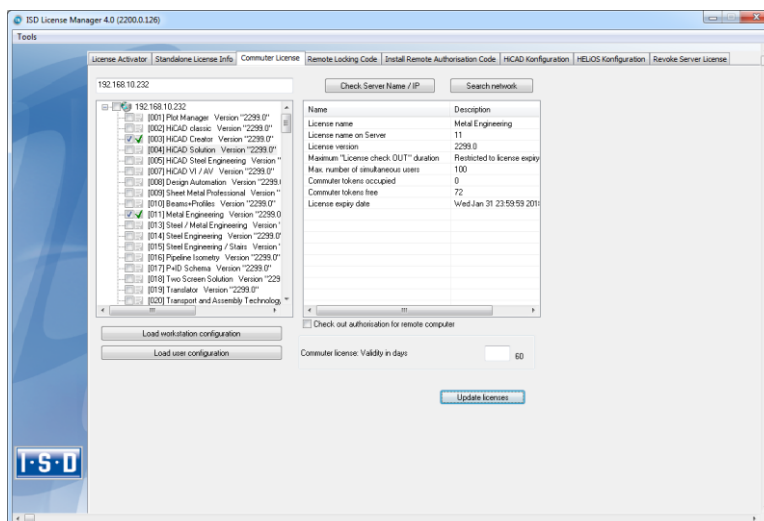


After entering the expiry date for the commuter licenses, click the **Update licenses** button. Commuter licenses are checked out from the Server.



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 net.

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.



## 6.4.2 Checkout from License Server, Without Network Connection

Commuter licenses can also be drawn from the License Server without an existing network connection.

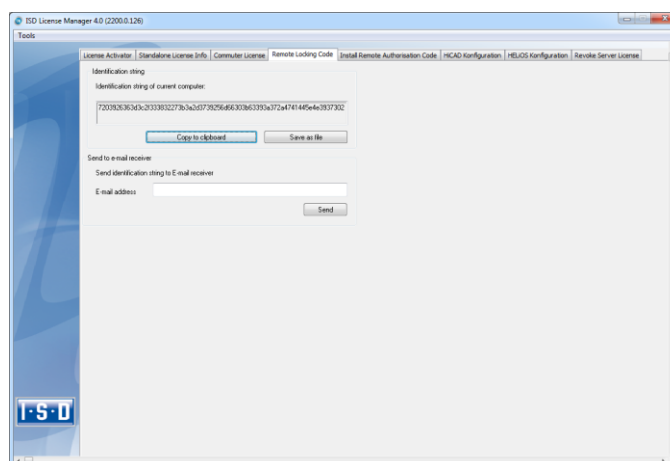


**Please note that administrator rights are required.**

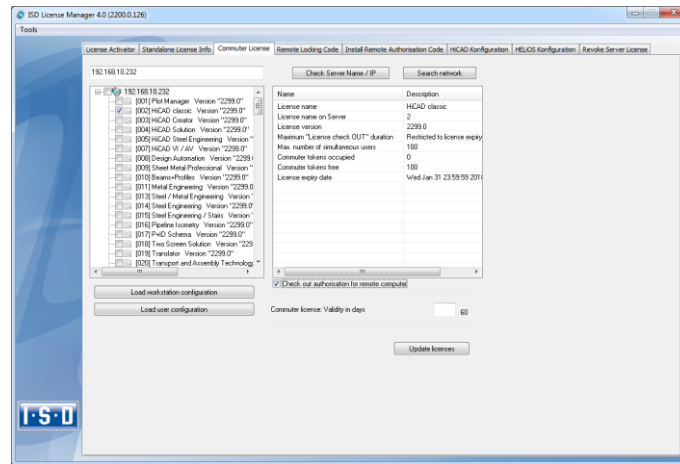
**Commuter licenses checked out in this way cannot be returned to the License Server! This means that the commuter licenses that have been checked out from the Server are only (automatically) made available again after their expiry date.**

Several steps are required for this, by the administrator having a network connection to the License Server, as well as by the Client having no network connection to the License Server.

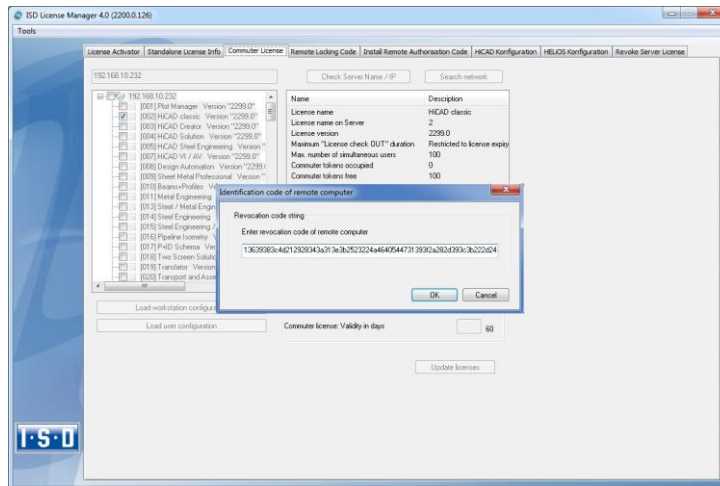
The Client starts the **ISD License Manager** tool, switches to the **Remote Locking Code** tab and sends the generated character set to the administrator (via E-mail or over the phone).



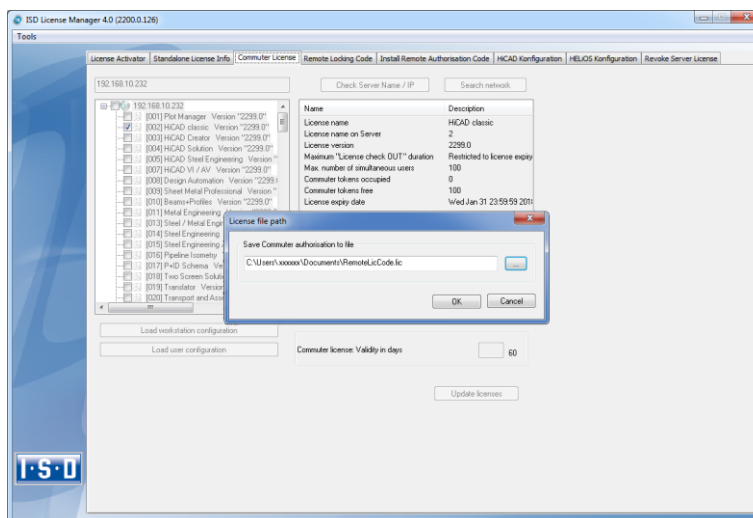
The administrator starts the **ISD License Manager** and switches to the **Commuter License** tab. The License Server is selected, and the required licenses (modules) are activated in the left window. To checkout a remote commuter license the administrator now needs to activate the **Check out authorisation for remote computer** checkbox. Administrator rights are required.



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

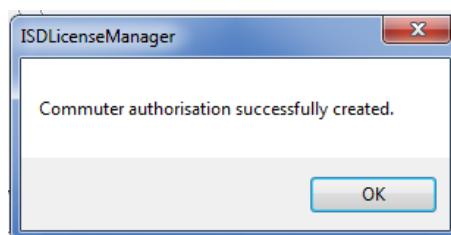


After selecting **OK**, another dialogue opens, in which you enter the target path and the file name for the licenses to be swapped out.



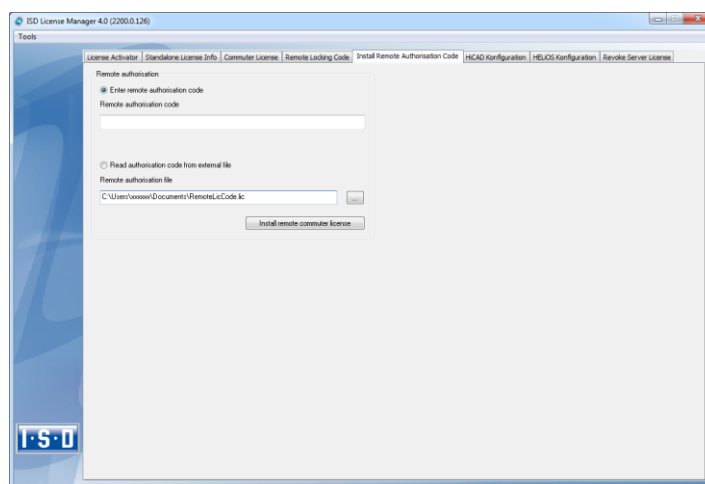
Select **OK** to check out the commuter licenses from the License Server and swap them out to a file, e.g. RemoteLicCode.lic.



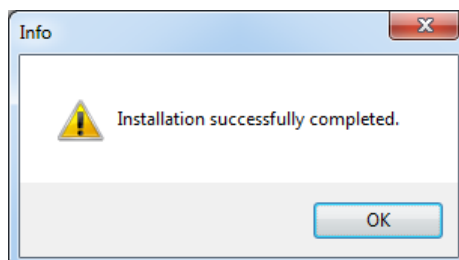


The successful checkout will be confirmed. The administrator then sends the file, RemoteLicCode.lic, to the Client.

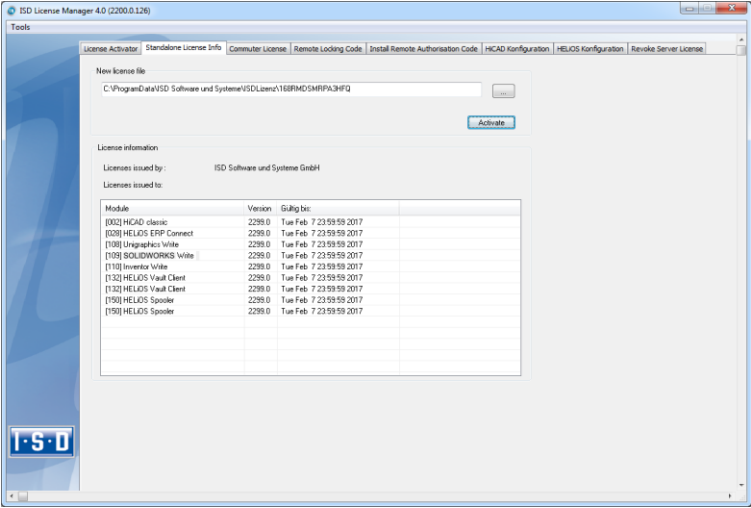
After receiving the file with the commuter licenses, the Client starts the **ISD License Manager** again and activates the **Install Remote Authorisation Code** tab. Here the received commuter licenses can be installed directly via file selection or via copying of the file contents.



Click the **Install...** button to install the commuter licenses on the Client.



After successful installation, switch to the **Standalone License Info** tab. Press the **Activate** key. You are now informed which licenses are installed locally on the computer.



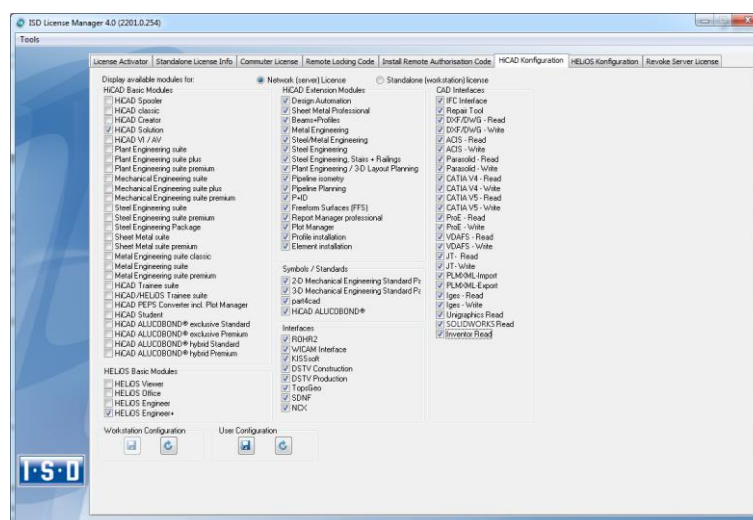
## 6.5 License Configuration

Some cases may require the use of only certain specific licences on a computer. Example: On the License Server, **HiCAD creator** and **HiCAD solution** licences are available. On one Client, HiCAD is to be started with a HiCAD creator license; on another Client, HiCAD is to be started 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/HELiOS 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.**

### 6.5.1 License Configuration HiCAD

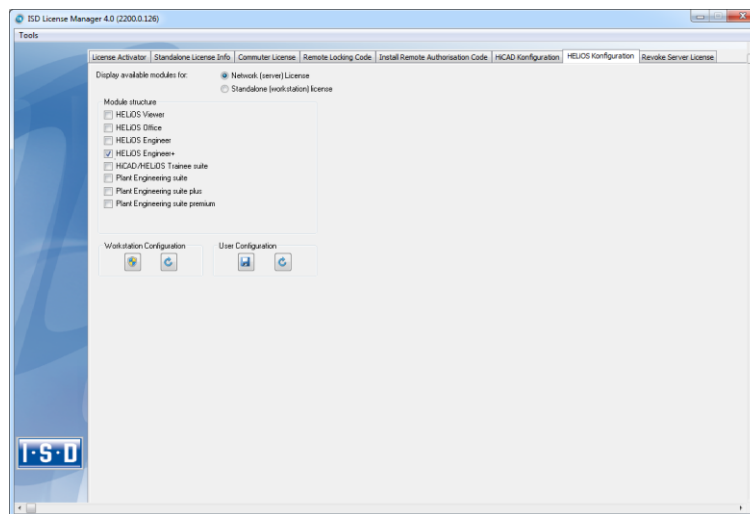


On the **HiCAD Configuration** tab of the **ISD License Manager** tool you have the option to save a workstation or user configuration for individual Clients.

- » **Save as workstation configuration:** This configuration will be saved for all users of this computer. When HiCAD 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 is started, the selection window with the saved configuration is always displayed.

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

## 6.5.2 License Configuration HELiOS



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

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

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

## 6.6 Important Softlock/Hardlock Information

When using the softlock/hardlocks as selector for the license file, please note that for system-inherent reasons the date must not be reset! Such resetting causes a blocking of the softlock/hardlock that can only be revoked by the ISD by means of a re-programming. In such cases, we would have to charge you the costs of this unnecessary additional work.

A change of the system time is possible, as long as it is not date-comprehensive.

If you deem such date conversion absolutely necessary, please inform our staff on the hotline in good time.

### ISD Software und Systeme GmbH

Phone: 0049 - 231 / 97 93 - 166

Fax: 0049 - 231 / 97 93 - 101

Mailto: [helpdesk@isdgroup.de](mailto:helpdesk@isdgroup.de)



**IMPORTANT: If you have a 64Bit version of HiCAD/HELIOS, the hardlock can no longer be used as a license file selector due to missing driver support!**



**After performing an update (from Version 2008 or older) to HiCAD and HELIOS Version 2012 (or 2013) you need to return your workstation dongle to the ISD! After this you can no longer use old HiCAD and HELIOS Version.**

## 6.7 Theft of a Workstation

The user is responsible for appropriately insuring the HiCAD/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.

## 7 HiCAD at a Glance



HiCAD is a universal CAD system with true 2-D/3-D associativity, innovative functions, comprehensive industry solutions and an integrated PDM component. Up-to-date working techniques and numerous automatisms help you abridge routine tasks. Simulation and analysis tools enable you to detect and prevent possible collisions within your product models at early design stages.

- » Performance characteristics:
  - Microsoft Windows standard and GUI based on the Windows “Ribbons” technology
  - Combined working in 2-D and 3-D
  - Assembly-oriented design engineering providing top performance even for very large assemblies
  - Transparency and clearness thanks to convenient search functions, filters and multiple selection options
  - Extensive symbol and standard part catalogues
  - Simulation and analysis tools
  - Standardisation and automation
  - Direct modelling and parametric design
  - Integrated product data management with HELiOS
  - Data transfer from other systems (CATIA, ME10, STEP, DXF, DWG etc.)
  - BOM-creation, PPS interface, transfer to NC programs
  - Comprehensive industry solutions for Steel/Metal Engineering, Plant Engineering, Sheet Metal processing and Plant Engineering
  - Individually extendable due to a modular structure

## 8 First Steps in HiCAD

### 8.1 Start HiCAD

You **start** HiCAD by:

- » using the Windows task bar (Start) to choose the **Programs** folder and then clicking the HiCAD icon  in the **ISD ...** menu, or
- » by clicking the HiCAD icon  on your desktop.

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.

In order that you can take full advantage of the numerous new features and enhancements offered by HELiOS 2016, a **News window** with videos explaining the new and changed HELiOS functionalities will be shown upon HiCAD start. 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. We recommend using the **Show most recent news** option to ensure that you will never miss any news about HELiOS.

If you have selected **Never show** 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**.



**During the launch 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 is issued and HiCAD is closed.**



## 8.2 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

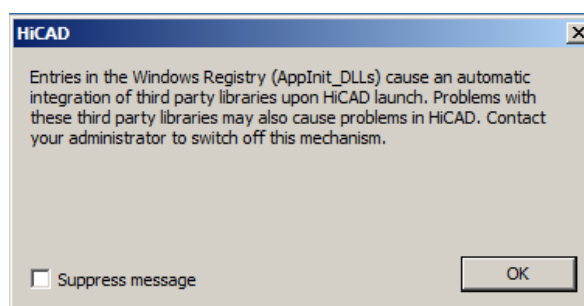
- » Virus scanners,
- » PDF programs,
- » Programs for the recording of screen activities,

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 (64Bit)
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Windows NT\CurrentVersion\Windows (32Bit)

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!

If you want to completely suppress the message, you can also set the registry value **CheckBoxState** in the registry key

HKEY\_CURRENT\_USER\Software\ISD Software und Systeme\HiCAD [year version, e.g. 2017]\Splash Screen


to 1.



**Be careful when editing the Registry! The entering of incorrect values or the deleting of values can destabilize the operating system!**

## 8.3 Close HiCAD

To **close** HiCAD,

- » click the **Close** icon  or
- » click the ISD button and select **End**.

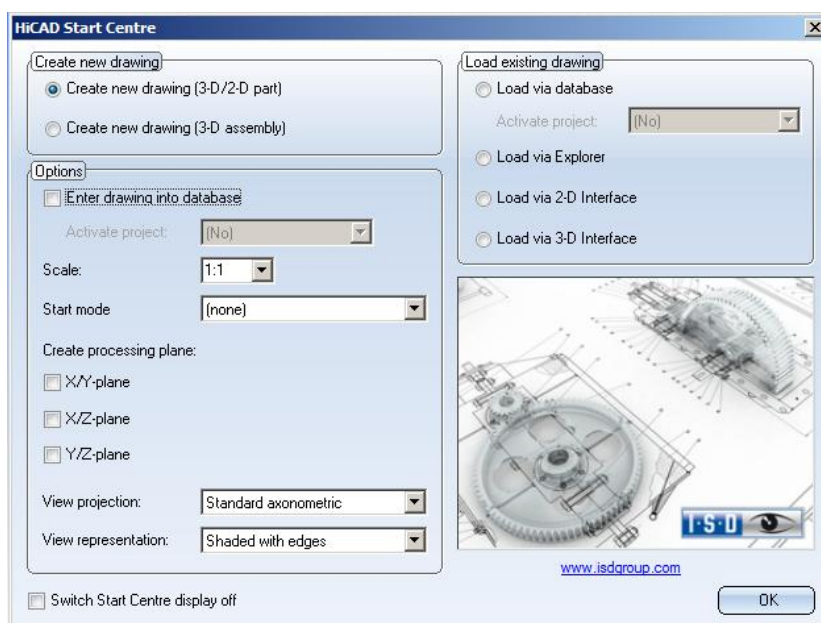
If any HiCAD drawings are still open at this point, you have the option to save them. You distinguish between the current drawing that you see on the screen, and the other, still open drawings. If a drawing file with the same name already exists, you can save the drawing under a different name, or overwrite the existing drawing. Please note that no backup copy of the file will be created in such cases!



**When you close HiCAD, all files, with the exception of the automatic data backups, will be removed from the TEMP sub-directory of your HiCAD installation.**

## 8.4 The Start Centre

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



Please note:

- » Click on the graphic to obtain information about the version number.
- » When you call the Start Centre again, the values that you set last will be displayed as default values.
- » The settings you have selected for the **Create new drawing** start action will even be used in HiCAD if you call the **New drawing (without DB)** function.

### 8.4.1 Create New Drawing

If you want to create a new drawing, specify whether you want to create a part drawing or an assembly drawing by activating the appropriate checkbox.

- » **Part drawing (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 component 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.

## 8.4.2 Options

### » Enter drawing into database

If you are working with HELIOS you can define here whether you want to the new drawing to be entered into the database. If you activate this checkbox, 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.

## 8.4.3 Load Existing Drawing

If you have chosen **Load existing 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.

## 8.4.4 Switch Start Centre Display Off

If you activate the **Switch Start Centre display off** checkbox and click **OK** to exit the Start centre, the current settings will apply as the default settings for whenever you start HiCAD again and create new drawings. The Start Centre is then no longer displayed. To re-activate the Start Centre display and to change the settings, choose the Activate Start Centre function. The changed settings will be applied when starting HiCAD again.

If you click **OK** to exit the Start Centre, the current settings are used as the default setting if, on the other hand, you exit the Start Centre by pressing the ESC key or the  icon, the settings are ignored.

## 9 HELIOS at a Glance

On the way to the finished product, time expenditure, the cost situation and product quality can only be optimised if all departments of a company work together 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, distribution and management of the data that is required for the 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.

Thus, the know-how of the company will be used optimally, redundant work can be avoided and error sources will be eliminated.


HELIOS combines Product, Process and Peripherals Management to form a single system, thus making HELIOS the knowledge reservoir of your company.

HELIOS can be integrated in your overall CAD system or used as a stand-alone system, the so-called HELIOS Desktop.

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

## 10 First Steps in HELiOS

### » Program Call

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

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

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

### » News window

In order that you can take full advantage of the numerous new features and enhancements offered by HELiOS 2016, a **News window** with videos explaining the new and changed HELiOS functionalities will be shown upon HiCAD start. 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. We recommend using the **Show most recent news** option to ensure that you will never miss any news about HELiOS.

### » Registration

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


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 (see below).

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

### » Login

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

- Activate the **Login**  function on the QuickAccess toolbar.
- Select a different user.
- If required, change the active project and confirm the new settings with **Login**.

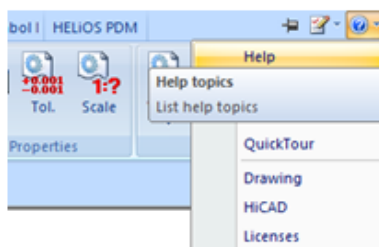
## 11 How to Use the Help

The Online Help provides you with information, descriptions and examples on all functions and techniques which are available in HiCAD – from 2-D and 3-D to the integrated PDM functionality, Sheet Metal Processing to Steel/Metal and Plant Engineering.

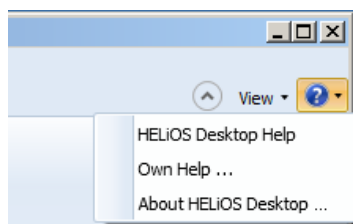


**Please note that the scope of available functions may vary, depending on the configuration level of your HiCAD product. This means that some of the functions described in the Online Help may not be available.**

The Help is available both locally (status of the installation DVD) and on the Internet (regularly updated) at [help.isdgroup.com](http://help.isdgroup.com). Both versions of the Help can be called from HiCAD via the Help Topics and Information item (“?” icon on the top right of window). You can select your preferred Online Help type via ? > **Help Settings**.

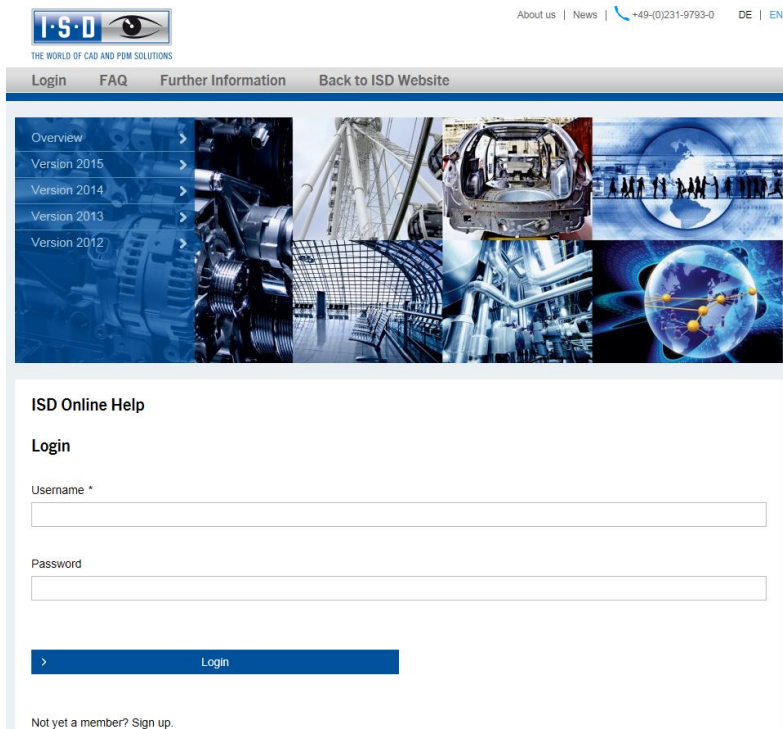


You call the HELIOS Help via the HELIOS Desktop Help menu item.



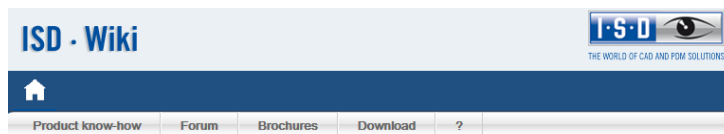
To be able to use the Internet version of the Help, you need to register for the ISD's new company Wiki once. This will not only give you access to the new Help, but also provide you with many other information which will be made available shortly in the ISD Wiki (Forum, Download area etc.).

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



### Register for the ISD Wiki

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



### Sign up

Full Name

Email

Username

Password

Confirm Password

Already have a username and password? [Log in here](#)

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

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


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



## 12 What's New in Version 2017?

A detailed overview of all new features and enhancements contained in HiCAD 2017 can be found in the **What's New?** topic of the Online Help.

You can also click on the  button in the Help.

An overview of new features in PDF format will open if you click the  button in the Download area of the Wiki.



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