Moving Helios 3D to the Network

This procedure describes how to move/copy Helios 3D from one station (workstation or server) to a server, which means a perfect copy including the same program version. The result will be a network installation that can be accessed by any client.

Please do not try changing the Helios 3D version during this procedure! We recommend updating the old installation and then starting the move process. The second option would be moving the old program version and after the new copy has been tested to your satisfaction, you can update that copy.

Preparation:

For this procedure a Microsoft SQL Server Express with enabled mixed authentication (‘sa’ account) must be installed on the server. The target server needs to have the same collation setting as the source SQL Server! Otherwise, it will be impossible importing the database. When both systems have the same country and region settings in Windows, there should be no collation conflicts.

For moving the database, you need SQL Server Management Studio (SSMS) for export on the old workstation and for import on the target system (new server in the network). If all SQL Servers involved can be access through the network, SQL Management Studio can be installed to a single station, otherwise it’s required on the old and the new system. The download is available on the Microsoft pages for free.

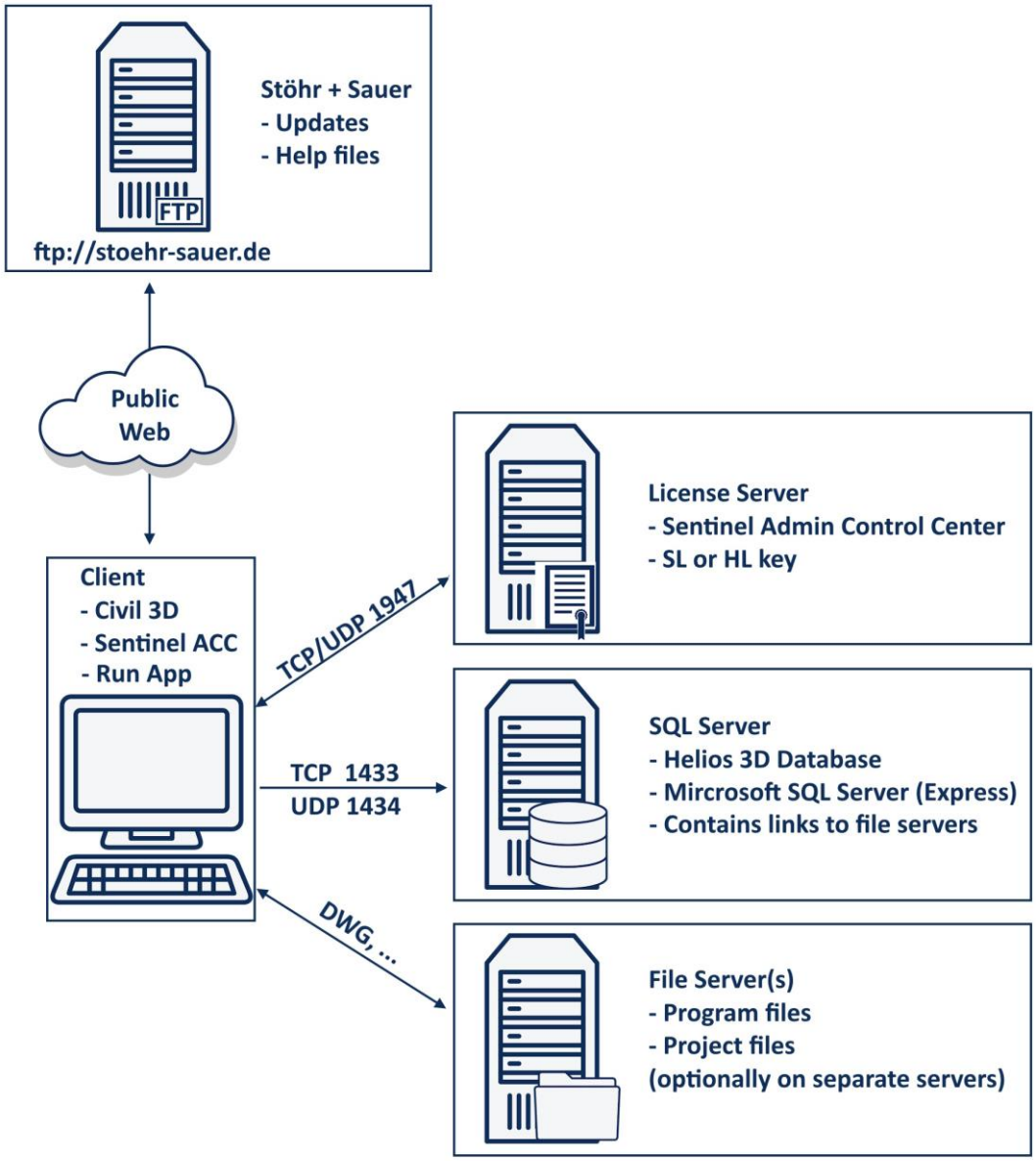
If you use a backup file of the database, you can read the Collation with SSMS (the path must get adapted):

RESTORE HEADERONLY FROM DISK = N'C:\Program Files\Microsoft SQL Server\MSSQL15.SQL2019\MSSQL\Backup\Helios3D.bak'

The value is listed in the column “Collation”.

The following picture shows the general structure of a network installation with all communications. Please regard that:

- A single server can be used for all network components.
- The license server is not used with standalone licenses.
- The directories Projects and Library can also be put to separate servers.



We recommend the following procedure:

1. Install a Microsoft SQL Server (Express) to the new server, using the same or a later SQL Server version. (Please regard the above notes concerning the authentication mode and collation.)

2. Copy your database.

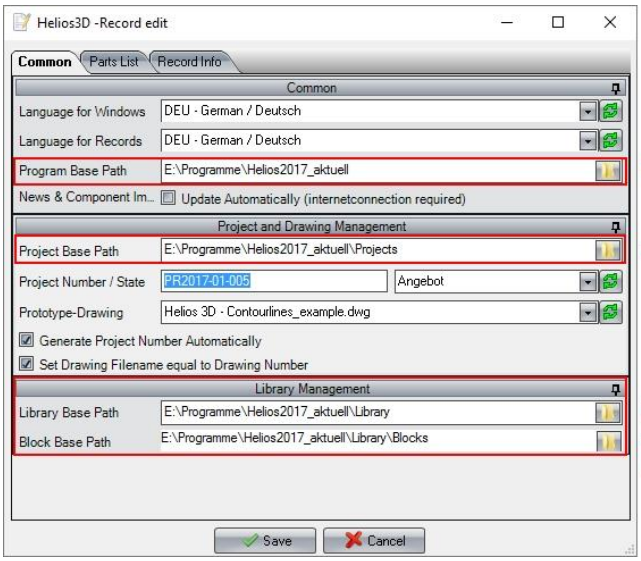
   For that you can create a backup of the original database and afterwards restore it on the new SQL Server. Both systems need SQL Server Management Studio installed to do the backup and restore procedure.

   It is recommended, activating the “sa” account for Helios on the original environment and also on the target SQL Server! Please test logging into Helios 3D with the "sa" account and check if you are allowed accessing the

system settings. Otherwise, there might be problems managing user accounts on the new server.

For help concerning moving or copying a database, as well as for checking the collation, please visit the Microsoft Webpages. These contain manuals for all supported versions in multiple languages.

3. Copy the complete Helios 3D installation folder, including the project and library folders (these two might be put to a location other than the installation folder). You can look up the set folders, when you open Helios 3D and go to the system settings.



main base path of the installation files

base path for all projects including the layout DWG files

base path for the library (array definition geometries, etc.)

base path for our block library, where you can define individual blocks for reuse geometries (e.g. inverter stations)

4. Paste the program folder to a server drive. All users need write access to the Helios 3D folder.

5. Go to the first Helios 3D client and run the setup.exe in the subfolder “Client Setup” of the network copy.

   This step will register the client to the Helios 3D database and the Sentinel driver, which is needed for the licensing, gets installed on the client.

6. Start Helios 3D from the first client (the desktop link has been created during client setup) and log into the database on the new SQL Server. Go to the system settings in Helios 3D and change the paths (program, project and library base path) accordingly.

   For SQL Servers on the network, the set paths will be used from any client for accessing data, so please make sure these paths work for any client (e.g. drive letter). After this step the installation will be ready to use.

7. Setting up new clients:

   For any client that should access a new server installation/copy, you just need to once start the client setup! Old clients just need to renew the desktop link.

   Civil 3D usually doesn't allow remote access, which is needed for applications on the network to start a local Civil 3D installation. You can allow remote access by changing the Acad.exe.config file in your Civil 3D installation folder. For a default installation it is located in

   „C:\Program Files\Autodesk\AutoCAD *Version#*".

   You can copy the existing file and edit the existing one or replace the original by the equally named file inside the Helios 3D installation folder.

   When changing the config file manually, the red line must get added to the 1st <runtime> section:

   <runtime>

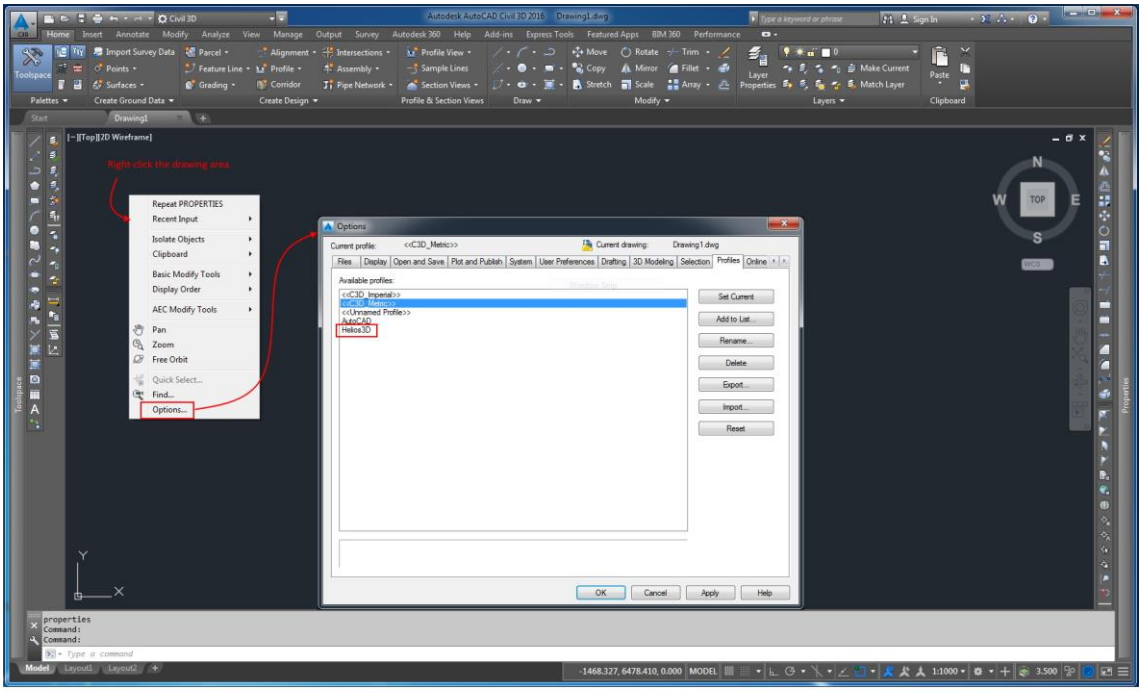
   <loadFromRemoteSources enabled="true"/>

   </runtime>

Adjusting old clients to the new installation copy:

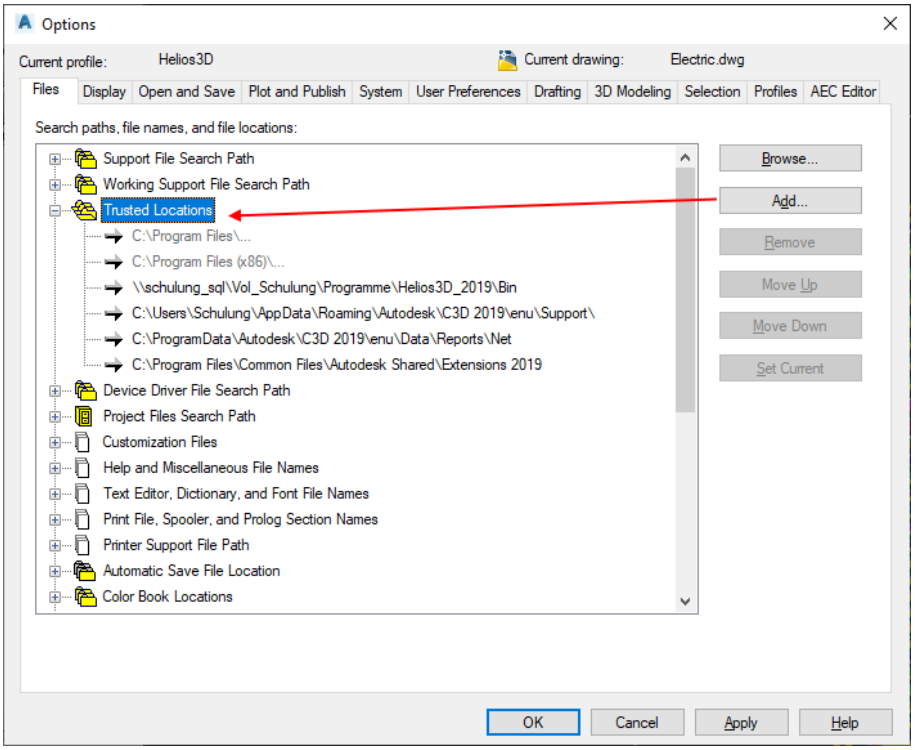
From Helios 3D version 2017, the Civil 3D profile needs being changed or replaced, so the DLL file get loaded properly.

The easiest way would be deleting the old profile in the Civil 3D options (the standard profile name is "Helios3D"). Next time Civil 3D gets started out of Helios, that profile should get recreated automatically. Individual adjustments to the old profile are lost after this procedure.



As alternative, you can manually adjust the program path set in the existing profile. For that open the options, set the profile “Helios3D” as current and add the “Bin” directory of the installation as 1st “Support File Search Path”. The entry must be moved to the top of the list, as the 1st ACAD.LSP file found on startup will be used!

Additionally, the “Bin” directory should be added to the Trusted Locations.


Options
Current profile: Helios3D
Current drawing: Electric.dwg
Files
Display
Open and Save
Plot and Publish
System
User Preferences
Drafting
3D Modeling
Selection
Profiles
AEC Editor
Search paths, file names, and file locations:
Support File Search Path
Working Support File Search Path
Trusted Locations
C:\Program Files\...
C:\Program Files (x86)\...
\\schulung_sql\Vol_Schulung\Programme\Helios3D_2019\Bin
C:\Users\Schulung\AppData\Roaming\Autodesk\C3D 2019\enu\Support\
C:\ProgramData\Autodesk\C3D 2019\enu\Data\Reports\Net
C:\Program Files\Common Files\Autodesk Shared\Extensions 2019
Device Driver File Search Path
Project Files Search Path
Customization Files
Help and Miscellaneous File Names
Text Editor, Dictionary, and Font File Names
Print File, Spooler, and Prolog Section Names
Printer Support File Path
Automatic Save File Location
Color Book Locations
Browse...
Add...
Remove
Move Up
Move Down
Set Current
OK
Cancel
Apply
Help