

## How to Download and Install the 16D 3<sup>rd</sup> Ed Tool

**NOTE:** I depend on your feedback. If you find anything confusing or wrong in these instructions, by all means let me know, and in detail. If you have difficulties using the tool to do a sizing, please send a copy of the project file<sup>1</sup> that is giving you trouble so I can run it myself. Even if it is not something wrong, if it is just confusing, silly, ugly, or something not addressed, I want to know.

### Download:

To download the software installer, open a browser and in the address bar type (or copy and paste) **one** of the following links:

[http://mcadams.info/ils/16D3\\_R04\\_Ver\\_2.30\\_installer.exe](http://mcadams.info/ils/16D3_R04_Ver_2.30_installer.exe)

or

[http://mcadams.info/ils/16D3\\_R04\\_Ver\\_2.30\\_installer.zip](http://mcadams.info/ils/16D3_R04_Ver_2.30_installer.zip)

The zip file is only a zipped version of the exe file. Use the zipped version only if your IT system will not allow you to download an executable directly. You may have to have your IT do this whole process depending on your company's security procedures.

### SECURITY (optional):

*To help insure that the file you are downloading has not been tampered with, see the instructions below for checking the SHA-256 hash digest of the file. A matching hash digest insures with near-certainty that the file you downloaded is the same file that I put up on the server.*

#### **SHA-256 hash digest for the exe file:**

5eb4550f4343cddcee56bf23dc40f1ad163624e91ec2579c2e742007e0c8bfff7

#### **SHA-256 hash digest for the zip file:**

cffc95f2cb55900d4f2ea18f62a63ab2ff519a3d3cbce9f754fb2a9f0a6ac5c5

### Install:

If you downloaded the zip file, unzip it into a temporary folder to get the exe file. For either file type (exe download or unzip), double click the resulting 16D3\_XXXX\_Ver\_YYY\_installer.exe file to run the installer and install the software.

### Windows protected your PC:

Windows may not like you trying to run the installer. It may put up a dialog, with the only obvious button being "Don't Run". In small text in the upper left, you will (hopefully) find the link "More info". Click that. It should identify the file (16D3\_RxxVer\_y.yy\_installer.exe). and give you a new button "Run Anyway". Click "run anyway" to install.

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<sup>1</sup> The project file stores all of the information you type in about the accumulator system you are trying to size. It is a file with a name of the form: *YourAccumulatorProjectName.16D3*

## **“Install” the license file:**

Attached to an email, you will find your license file(s). The file(s) will have a name of the form  
*companyname.16D3lic*

or

*companyname-N.16D3lic*

The “-N” form is used when a company has more than one license. This N is reflected in your software serial number, which is in the form: cccnnnsss, where ccc is a company code, nnn is the license number, and sss is a serial number for the license. The license name without “-N” is normally associated with license 1 (serial number ccc001sss).

After installing the software, copy a single license file to **one** of the folders described below. You have two options. **Do not put a license in both locations and do not put more than one \*.16D3lic file on a given computer; some confusion could result.**

1) PREFERRED: The application subdirectory of the CSIDL\_COMMON\_APPDATA directory. In Windows 10 and 11, this will normally be c:\ProgramData\Interlink\_Systems\_ILS\ILS\_16D3\_Tool. If a license is not found in the Program Files directory, it will look here for the license. This directory will always be created when the program is executed, even if a license is not found. This is the preferred location for your current license file because any recent version of the program will look here.

Note: this directory may be hidden. To see it in Windows 11 File Explorer, select View, Show, then check Hidden Items.

2) The application subdirectory of the CSIDL\_PROGRAM\_FILES directory. In Windows 10 and 11, this will normally be folder c:\Program Files (x86)\Interlink\_Systems\_ILS\ILS\_16D3\_Tool\_Rxx\ where Rxx is the release level of the update you are downloading. You will find the file "API\_16D\_3rd\_Sizing.exe" in this directory.

This directory is created during the installation and some versions of the program look here first for a license. Putting the license here works fine until you install an updated version which may get put in a new directory. That new version will not find your license in its new directory. This can cause confusion if you have multiple version of the software with multiple copies of your license, some of which may be older than the others.

## **Other Directories of interest:**

A file named API\_16D\_3rd\_Sizing.ini stores information about where windows are located and other information about the program operation that allows continuity from one execution of the program to another. It will be created and maintained as you use the program and can be deleted if you wish. In Windows 10 and 11, this will normally be:

c:\Users\YourUserName\AppData\Local\Interlink\_Systems\_ILS\ILS\_16D3\_Tool.

There are example files covering all example cases in 16D 2<sup>nd</sup> Ed and 3rd Ed. The example files are stored in a different place. In Windows 10 and 11, this will be a folder like

c:\Users\Public\Documents\Interlink\_Systems\_ILS\ILS\_16D3\_Tool\_Rxx\

where Rxx is the release level of the update you installed.

When you get the program installed and running, the main user manual, help file for the 16D 3rd Ed Examples, and help file for the 16D 2nd Ed examples and for importing 16D 2nd Ed projects are accessible via the main menu, under Help. They are stored in the ProgramFiles directory as described above. This is the same directory that holds "API\_16D\_3rd\_Sizing.exe". They are normal PDF files, which you may copy and use as needed to support your use of the software.

**Finally:**

Please read at least the introductory sections of the manuals. The introductory sections contain a textbook of useful knowledge about the program and about the 16D 3rd Ed specification. The user manual contains a writeup about each data entry field and calculated output field in the program. If you have questions about what or why, you are likely to find the answer there. The manuals on the examples contain tips, discussions of each example, and errors in the 16D documents.

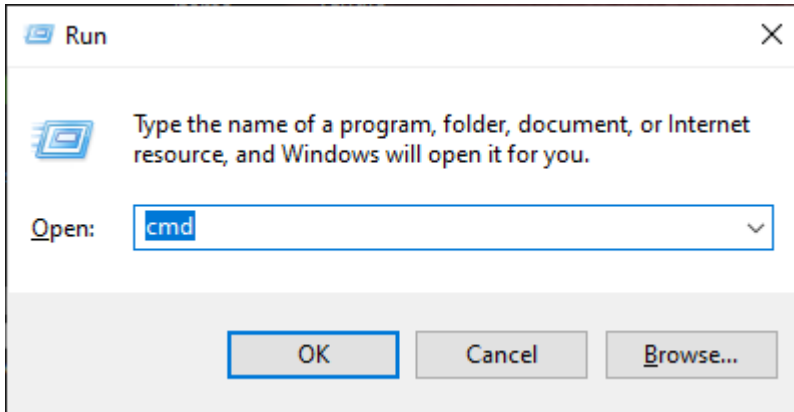
If you have any troubles with this installation, just send an email and I will do my best to help.

**James P. McAdams, PE**  
**[jpmcadams@sbcglobal.net](mailto:jpmcadams@sbcglobal.net)**

## Displaying the SHA-256 hash digest of a file on the computer

To use CertUtil to verify the integrity of the file you downloaded, follow the instructions below.

Bring up a command line window by right clicking the START icon in the lower left corner (they moved it toward the center in Windows 11) and, from the list that pops up, click "Run". In the text box of the window that pops up, type cmd and then click OK.



A black window will pop up with a command line. In the command line, type  
`cd "DirectoryYouDownloadedTo"`

then

`certutil -hashfile "NameOfTheFileYouDownloaded" sha256`

Note: The quote marks above are required since the path will contain spaces.

An example that I ran on my computer after downloading both files, Ver 2.23, follows:

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19043.2006]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jpmain>cd downloads

C:\Users\jpmain\Downloads>certutil -hashfile "16D3_R01_Ver_2.23_installer.exe" sha256
SHA256 hash of 16D3_R01_Ver_2.23_installer.exe:
234d811d4c14108c6329be267753d5622a8879347353da9818586140874d1fc4
CertUtil: -hashfile command completed successfully.

C:\Users\jpmain\Downloads>certutil -hashfile "16D3_R01_Ver_2.23_installer.zip" sha256
SHA256 hash of 16D3_R01_Ver_2.23_installer.zip:
b8b4dc785e8f6d869ca7715e67ff4e58bd46f53dbd61fa6e9aeb54f74bf9d414
CertUtil: -hashfile command completed successfully.

C:\Users\jpmain\Downloads>
```