# MSVision

*Dedicated to Mass Spectrometry*

# MS VISION TECH TIPPS SERIES, PART V — INSTALLING WATERS MASSLYNX UNDER WINDOWS 10

In part V of our tech tipps series we will cover a topic which is relevant if you are working with an older Waters MS system under Windows 7 and need to switch to Windows 10 because of the lack of Microsoft support for the older operating system version.

Attempting to install older MassLynx versions can be disappointing when working with Windows 10. This relates to most versions and SCN's (Software Change Notes) before version 4.2. The reason is that the installer file is not able to register all the DLL files coming with the installation due to an incompatibility issue with this Windows version. This causes MassLynx not to start up properly, start up with parts of the layout missing or generating C++ errors.

A DLL file is a library that contains a set of code and data for carrying out a particular activity in Windows. Apps can then call on those DLL files when they need that activity performed. DLL files are a lot like executable (EXE) files, except that DLL files cannot be directly executed in Windows. Instead, DLL files are designed to be called upon by other apps. In fact, they are designed to be called upon by multiple apps at once. The "link" part of the DLL name also suggests another important aspect. Multiple DLLs can be linked together so that when one DLL is called, a number of other DLLs are also called at the same time.

## How to register 32- or 64-bit DLL files in Windows 10

The Regsvr32 tool is a command line program that can be used to register and unregister DLL and ActiveX (OCX) controls in the Windows operating system. Note that if you receive an error message, you may be using the 64-bit version of the command and not the 32-bit version as both are present in a 64-bit Windows 10 installation. As the older Masslynx executables are 32-bit programs you need to use the 32-bit version of Regsvr32.

- The 64-bits version can be found here Drive\Windows\System32\regsvr32.exe

- The 32-bits version can be found here Drive\Windows\SysWoW64\regsvr32.exe

where 'Drive' is the harddisk Windows was installed on (default C:). *Remark: yes, if you look at the directory names it seems wrong, but it is actually correct!*
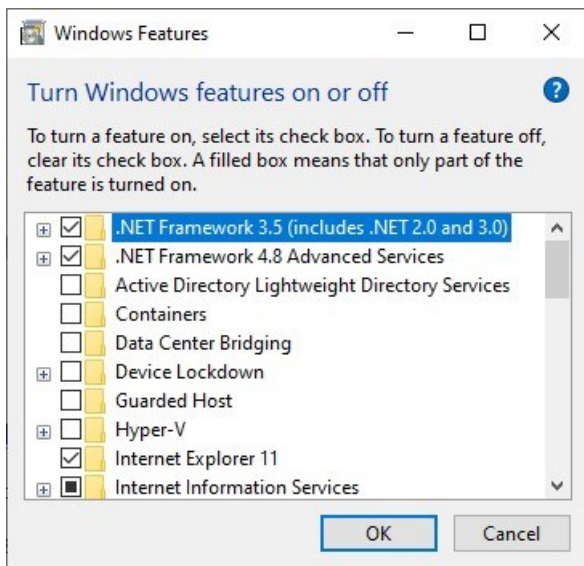
## Before you start

Before you start changing anything on your system please make sure all installation disks and license codes are available to you for the installation. Also, it is always a good idea to check whether a valid (and working!) image disc of the current working installation is existing. If not, please start with creating such an image disk to ensure you can always easily go back to a known working status! We have tested the described installations multiple times, so we are sure they are working. However, we cannot test every possible hard- and software combination and software installations might have been changed by your IT department as well, not allowing specific procedures without involvement of the IT team. So, if you have a centralized IT department, please also make sure they are able to support you when things go eerie and you need them!

## Prerequisites for installing MassLynx

The following Windows features should be enabled in Windows 10 for MassLynx to function properly;

- .NET Framework 3.5 (includes .NET 2.0 and 3.0) (all options)
- .NET Framework 4.8 Advanced Services (all options)
- Internet Information Services

These options can be found under 'control panel' -> 'programs' -> 'turn Windows features on or off'
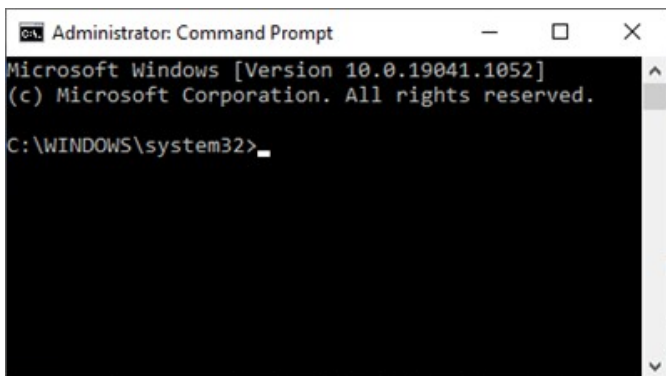
## FIND OUT MORE AT WWW.MSVISION.COM

Depending on how old the MassLynx version is and the selected application managers like TargetLynx etc. it sometimes might be necessary to install previous versions of C++ redistributables as older files tend to be affected by newer versions. By installing the older version this might correct a possible problem. These install packages are called 'vcredist_Xxx.exe and install runtime components of Visual C++ Libraries. They can still be downloaded.

If needed, start with the 2005 redistributable and install both the X86 and X64 versions of the package and work your way up testing MassLynx in between installs.

Registering the DLL files coming with the MassLnx Installation

First remove MassLynx completely if already installed, then install MassLynx but do not run the program yet. To register the DLL files which were installed in the several MassLynx directories you need to open an elevated command prompt which can be done by right clicking 'Command Prompt' located in 'Windows System' in the menu and click 'run as administrator'



Now you can start registering all the DLL files manually in the MassLynx directory and its sub-directories by typing the following commands at the command prompt confirming with <ENTER> after each command (note the spaces between REGSVR32 and /S and between /S and %1) and assuming the (default) installation location of Windows and MassLynx being the C:\ drive.

*cd c:\*

*cd c:\MassLynx*

*FOR %1 IN (*.DLL) DO C:\Windows\SysWoW64\REGSVR32 /S %1*

*cd c:\program files (X86)\waters instruments*

*FOR %1 IN (*.DLL) DO C:\Windows\SysWoW64\REGSVR32 /S %1*

*cd c:\Program Files (x86)\Waters Instruments\Bin*

*FOR %1 IN (*.DLL) DO C:\Windows\SysWoW64\REGSVR32 /S %1*

*cd c:\Masslynx\pdacalib*

*FOR %1 IN (*.DLL) DO C:\Windows\SysWoW64\REGSVR32 /S %1*

Next reboot the PC and (hopefully) start Masslynx. Above listed commands can be easily combined in a batch file for automated processing of the files.

Upon completion of this reinstallation, you should be able to run MassLynx under a Windows 10 OS environment. This allows you to comply with regulations typically implemented by IT departments due to security concerns.

If you have concerns or would need prefer to get this reinstallation being done by our experienced service engineers, please contact us at msvision.com or send us an email to info@msvision.com! When your systems are accessible remotely, we can even provide support with a remote setup.

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