



Measurement Studio 2015 for Visual Studio 2013 Readme

Measurement Studio is an integrated suite of tools and class libraries designed to help developers create measurement and automation Windows Forms, Windows Presentation Foundation (WPF), and Web Forms applications using Microsoft .NET technologies.

Measurement Studio 2015 includes separate, parallel sets of class libraries, integration features, and support documentation for developing with Visual Studio 2013, Visual Studio 2012, and Visual Studio 2010. This readme documents only Measurement Studio support for Visual Studio 2013. Measurement Studio support for other versions of Visual Studio includes separate readme files; refer to these respective readme files or the [Measurement Studio Release Notes](#) for more information about Measurement Studio support for other versions of Visual Studio.

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For information on the new features and functionality that have been introduced in Measurement Studio since version 2013, refer to the *What's New in Measurement Studio 2015* topic in the installed *NI Measurement Studio Help*.

Installing Measurement Studio 2015

The following sections list the installation requirements, installation instructions, and driver support information for Measurement Studio 2015.

Note Before you install the software, refer to the [Measurement Studio Known Issues](#) Web page for a complete, up-to-date list of known issues in Measurement Studio 2015.

Installation Requirements

To install and run Measurement Studio support for Visual Studio 2013, your computer must have the following:

- Microsoft operating system:
 - Windows 8.1 (32-bit or 64-bit)
 - Windows 8.0 (32-bit or 64-bit)
 - Windows 7, Service Pack 1 (32-bit or 64-bit), including Starter Edition (32-bit)
 - Windows Server 2008 R2 (64-bit)
 - Windows Server 2012 R2 (x64)
- Microsoft Framework 4.5.1
- Visual Studio 2013:
 - Ultimate Edition
 - Premium Edition
 - Professional Edition
 - Express for Web
 - Express for Windows Desktop
- 1.6 GHz or faster processor
- DirectX 9-capable video card running at 1024 x 768 or higher-resolution display
- 1 GB (32-bit) or 2 GB (64-bit) RAM
- 1.2 GB of free hard disk space
- Microsoft-compatible mouse

Installation Notes

- To install and run Measurement Studio Installer Builder, your computer must have the Microsoft .NET Framework 4.0, the Microsoft .NET Framework 4.5, or the Microsoft .NET Framework 4.5.1 installed.
- Measurement Studio does not support:
 - Non-R2 editions of Windows Server
- Microsoft Visual Studio Express Editions do not support Measurement Studio Visual Studio-integrated tools.
- This version of Measurement Studio supports, and was tested with, the latest Visual Studio service pack and the latest operating system service pack that was available at the time this version of Measurement Studio was released. National Instruments strongly recommends using Measurement Studio with the latest Visual Studio service pack and the latest operating system service pack.
- If you want to upgrade your operating system from one major version to another, National Instruments recommends first uninstalling all National Instruments software, including application software and drivers. This is typically not necessary when installing an operating system service pack.
- There are additional considerations for installing the Measurement Studio Help. Refer to the [Installation Notes for Integrated Visual Studio Help](#) section of this document for more information.

Installation Instructions

Complete the following steps to install Measurement Studio. These steps describe a typical installation. Please carefully review all additional licensing and warning dialog boxes.

National Instruments recommends that you exit all programs before running the Measurement Studio installer. Applications that run in the background, such as virus scanning utilities, might cause the installer to take longer than necessary to complete.

1. Log on as Administrator or as a user with administrator privileges.
2. Launch Autorun.exe, either from the installation media or from the location to which you extracted the downloaded disk image. Select **Install Measurement Studio 2015**.
3. In the Select Installation Option window, you can choose to activate Measurement Studio if you have a serial number, or you can choose to evaluate Measurement Studio.

4. Select Measurement Studio 2015 support for the version or versions of Visual Studio you want to install support for.
5. Select Device Drivers to install support for hardware.
6. Follow the instructions that appear on the screen.

Tip You can use a spec file to programmatically control the Measurement Studio installer for a single distribution or for the entire suite. For more information, refer to [KnowledgeBase Article 4CJDP38M: Automating the Installation of a Single Installer on ni.com](#). Alternately, you can generate a spec file for the entire Measurement Studio suite. Refer to [KnowledgeBase Article 4GGGDQH0: Automating the Installation of a Suited Installer on ni.com](#) for instructions on how to generate a spec file for your suite.

Driver Support

To use .NET class libraries that interface to National Instruments device drivers, you must install the underlying device drivers in addition to the .NET class libraries. You can run the underlying device driver installers from the NI Device Drivers media included with Measurement Studio or you can download the device driver from [ni.com](#). Refer to [National Instruments .NET Driver Support](#) for information on what drivers are supported for each version of the .NET Framework and the download location of the installer files.

Note The DAQ Assistant is installed from the NI Device Drivers DVD. You must install the NI Device Drivers DVD to use the assistant.

Activating Measurement Studio Licenses

If you did not activate Measurement Studio during installation, you can use the NI Activation Wizard to activate the software after installation. To activate Measurement Studio, you need the serial number printed on the Certificate of Ownership included in your software kit. Refer to the *Licensing, Evaluation, and Activation* topic in the *NI Measurement Studio Help* for more information about how to activate Measurement Studio.

National Instruments offers a variety of Measurement Studio licenses, with certain licensed features available for each license type: Standard Edition, Professional Edition, and Enterprise Edition. Refer to the *Measurement Studio Editions* topic in the installed *NI Measurement Studio Help* for more information on Measurement Studio editions, and the *Licensing Measurement Studio* topic in the installed *NI Measurement Studio Help* for more information about licensing Measurement Studio.

Tip To move to a different Measurement Studio edition, you can activate the new edition by using NI License Manager. Launch NI License Manager from the National Instruments folder in the Start menu or from NI Launcher in Windows 8.0/8.1.

For general license activation information, refer to [ni.com/activate](#). Refer to [ni.com/mstudio](#) to purchase a Measurement Studio license. Contact a local National Instruments representative at [ni.com/contact](#) for more information or for questions about specific licensing needs.

Note NI LabWindows™/CVI™ is no longer included in the Measurement Studio Enterprise Edition. For more information, please contact customer service at 1-866-519-6285.

Concurrent Licensing

Measurement Studio supports concurrent licensing as part of a volume license agreement. If your software is a part of a Volume License Agreement (VLA), contact your VLA administrator for installation and activation instructions.

Installation Notes for Integrated Visual Studio Help

You can view the NI Measurement Studio Help from within Microsoft's Help Viewer by:

- Launching the Help Viewer from the Measurement Studio folder within the NI Launcher in Windows 8.0/8.1,
- Selecting **NI Measurement Studio Help** from the Measurement Studio menu within Visual Studio, or
- Selecting **Help»View Help** from the Visual Studio menu.

You can use the **Manage Content** tab within the Help Viewer to uninstall or reinstall the Measurement Studio 2015 help. The help manifest files (.msha files) for the Measurement Studio 2015 help are located in the `<National Instruments>\MeasurementStudio<version>\Help` directory, where `<National Instruments>` refers to the directory where you installed Measurement Studio.

Tip Select **Set Help Preference»Launch in Help Viewer** from within the Help menu in Visual Studio to view the integrated Measurement Studio help. If you have **Launch in Browser** selected, the Measurement Studio help does not appear.

Installing the Current Version of Measurement Studio over Previous Versions of Measurement Studio

You can have only one version of Measurement Studio installed on a system for each version of Visual Studio or the .NET Framework installed on the system. For example, you can have Measurement Studio 2013 for Visual Studio 2012 installed on the same system as Measurement Studio 2015 for Visual Studio 2013, but you cannot have Measurement Studio 2015 for Visual Studio 2010 installed on the same system as Measurement Studio 2013 for Visual Studio 2010.

If you install a newer version of Measurement Studio on a machine that has a prior version of Measurement Studio installed, the newer version installer replaces the prior version functionality, including class libraries. However, the prior version assemblies remain in the global assembly cache (GAC); therefore, applications that reference the prior version continue to use the prior version .NET assemblies.

Note `NationalInstruments.Common.dll` uses a publisher policy file to redirect applications to always use the newest version of `NationalInstruments.Common.dll` installed on the system, for each version of the .NET Framework. However, prior versions of `NationalInstruments.Common.dll` remain in the GAC after you install a newer version of Measurement Studio. National Instruments exerts extra effort to ensure that `NationalInstruments.Common.dll` is backward-compatible so that applications built against prior versions of Measurement Studio continue to work as expected.

Deployment Requirements

To deploy an application built using Measurement Studio .NET class libraries, refer to the following table to determine the operating system and .NET Framework version required by the target machine.

Measurement Studio Support Used to Build Application	Target Machine	
	Operating System	.NET Framework Version
Measurement Studio support for Visual Studio 2013	Windows 8.1/8/7/Server 2008 and 2012 (R2 editions)	4.0, 4.5, or 4.5.1
Measurement Studio support for Visual Studio 2012	Windows 8.1/8/7/Server 2008 and 2012 (R2 editions)	4.0 or 4.5
Measurement Studio support for Visual Studio 2010	Windows 8.1/8/7/XP SP3/Server 2003, 2008, and 2012 (R2 editions)	4.0

Note Measurement Studio support for Visual Studio 2013, Visual Studio 2012, and Visual Studio 2010 uses the same `NationalInstruments.Common.dll` assembly, which is built against the .NET Framework version 4.0.

How to Use NI Software with Microsoft Windows 8.x

When you install National Instruments software on Microsoft Windows 8.x, you will notice a few additional tiles in the Apps view, including shortcuts to NI application software products such as NI LabVIEW, Measurement & Automation Explorer (MAX), and the new NI Launcher.

Using NI Launcher

NI Launcher helps you find and launch installed NI products. It provides you with a method of finding NI products similar to the Start menu in previous versions of Microsoft Windows. To use NI Launcher, click the NI Launcher tile in the Apps view. NI Launcher launches the desktop and opens a menu containing a list of NI products. Click any NI product to launch it.

Note MAX does not appear as a desktop shortcut when installed on Windows 8.x. You can launch MAX either from the Apps view or from within NI Launcher.

Pinning Frequently Used Applications

For convenience, you can pin your most-used NI applications, such as MAX, to either the Start screen or the Taskbar on the desktop, as necessary:

Current Application	Icon Location	Pin to Action
Windows 8.x Desktop	Desktop Taskbar	Right-click application and select Pin this program to taskbar
Windows 8.x Desktop	Start screen	Right-click application and select Pin to Start
Windows 8.x Start screen	Desktop Taskbar	Right-click application and select Pin to taskbar from the menu bar on the bottom of the screen

Finding All Programs

If you want to find a particular application or related files, such as documentation files, from the Start screen, you can access all installed files from the Apps view. To get to the Apps view, right-click anywhere on the Start screen and select **All apps** (Windows 8.0) or click the down arrow on the bottom left of the screen (Windows 8.1).

For more information about NI support for Windows 8.x, visit ni.com/windows8.

Measurement Studio Drops Support for Microsoft Windows Vista, Windows XP, and Windows Server 2003 in 2016

Product	Info Code
LabVIEW	lifecycle
LabWindows™/CVI™	cvi_lifecycle
Measurement Studio	mstudiolifecycle
TestStand	tslcp
DIAdem	ddlcp
SignalExpress	selcp
VeriStand	nivslifecycle

Getting Started with Measurement Studio 2015

For assistance in getting started with Measurement Studio 2015, refer to the *Measurement Studio Overview* and the *Getting Started with the Measurement Studio Class Libraries* topics in the installed *NI Measurement Studio Help* or refer to the [Measurement Studio Release Notes](#) and [Getting Started with Measurement Studio](#) manual.

Within Visual Studio, you can launch the *NI Measurement Studio Help* by selecting **Measurement Studio»NI Measurement Studio Help**.

Bug Fixes in Measurement Studio 2015

You can access the list of bugs fixed in Measurement Studio 2015 online. Refer to the [Measurement Studio Bug Fix Information](#) Web page for a complete listing of the bugs fixed in Measurement Studio 2015.

Known Issues in Measurement Studio 2015

You can access the known issues for Measurement Studio 2015 online. Refer to the [Measurement Studio Known Issues](#) Web page for a complete, up-to-date listing of known issues in Measurement Studio 2015.

Measurement Studio 2015 Incompatibilities with Previous Versions of Measurement Studio

For a complete list of incompatibilities in Measurement Studio with previous versions of Measurement Studio and otherwise supported features, including a list of obsoleted members and members that have been changed to sealed override or non-virtual, refer to the *Measurement Studio Incompatibilities* topic in the *NI Measurement Studio Help*.

Legacy Languages and Frameworks

The Measurement Studio life cycle support policy states a commitment to support the three most recent versions of Microsoft Visual Studio. As a result, Measurement Studio 2015 does not provide feature support for Visual Studio 2008, Visual Studio 2005, Visual Studio 2003, Visual Studio 6.0, and Visual C++ MFC. Support for these versions of Visual Studio is obtained by requesting legacy versions of Measurement Studio.

To qualify to receive these products, you must meet one of the following criteria:

- You must maintain an active Measurement Studio Standard Service Program (SSP) contract; or
- You must have purchased the most recent version of Measurement Studio.

Refer to ni.com/mstudio/legacysupport for additional information about Measurement Studio legacy support, including installation and configuration information, or contact a Technical Sales Representative at ni.com/contact.

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You can find end-user license agreements (EULAs) and third-party legal notices in the following locations after installation:

- Notices are located in the <National Instruments>_Legal Information and <National Instruments> directories.
- EULAs are located in the <National Instruments>\Shared\MDF\Legal\license directory.
- Review <National Instruments>_Legal Information.txt for information on including legal information in installers built with NI products.

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