

# MET/CAL 11.2.0 README

This document includes information related to MET/CAL 11.2.0 relative to version 11.1.0. This version of MET/CAL is compatible with MET/TEAM version 3.4.x and MET/CONNECT version 2.2.1.

## WHAT'S NEW IN VERSION 11.2.0?

- Support for the Fluke 5530A Basic Multi-Product Calibrator and new functionality of the 5540A, 5550A, and 5560A.
- VISA, VISA2, and VISASC can now be used to flexibly control DUTs with multiple interfaces
- For a complete list of issues resolved, see the table below

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**Note:** Starting with the 10.6.0 release of MET/CAL, there has been a significant change with the way MET/CAL Prompts are defined and selected when using MET/TEAM. The prompt definitions are now created in MET/TEAM and are stored in the MET/TEAM database. If you are upgrading from a version prior to 10.6.0 and have been using customized pre- and post-prompts in MET/CAL, you will be required to recreate your custom prompts using the new designer in MET/TEAM and change the MET/CAL configuration to reference your newly created prompts. If you are using the default prompts that were distributed with an earlier release of MET/CAL (\*\_mt.txt files), you simply need to change the MET/CAL configuration to reference the new "Default" prompts. If you do not make these changes, the full Work Order screen will be displayed instead of the expected prompts. If you are not using MET/CAL Prompts, no action is necessary.

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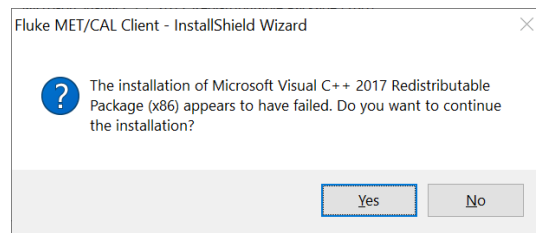
## MET/CAL 11.2.0 DISTRIBUTION AND IMPORTANT NOTES

**Note:** MET/CAL version 11.2.0 is compatible with MET/TEAM version 3.4.x and MET/CONNECT version 2.2.1. Attempting to use it with earlier versions of MET/TEAM or MET/CONNECT will result in an error at login.

The MET/CAL Client version 11.2.0 installer is distributed with MET/TEAM version 3.4.0 and MET/CONNECT version 2.2.1. The installer files are deployed to the server's shared folder (typically found locally on the server at C:\Program Files (x86)\Fluke\METTEAM\Installers\METCAL or at \\<your\_server>\metteam\Installers\METCAL for MET/TEAM and at C:\Program Files (x86)\Fluke\METCONNECT\Installers\METCAL or at \\<your\_server>\metconnect\Installers\METCAL for MET/CONNECT) when the server installer is run so that all MET/CAL workstations have access to it.

The MET/CAL Client installer must be run on all existing MET/CAL workstations to perform an update to version 11.2.0. The installer can also be used to set up new MET/CAL workstations.

**Note:** When running the MET/CAL Client installer, you may receive a warning message regarding the Microsoft Visual C++ 2017 Redistributable Package. This message is an indication that the package has already been installed on the workstation and it may be ignored. Click **Yes** to continue.



As of MET/CAL version 11.0.0, the instrument communication libraries have been updated to use the National Instruments NI-488.2 and NI-VISA packages. The MET/CAL Client installer performs a check to ensure these packages are installed on the workstation. A warning message will appear if either of these packages is not installed. The installation is allowed to proceed but MET/CAL cannot be run until these packages are installed. A similar check and message will be displayed by MET/CAL if these packages are not installed, and MET/CAL will terminate immediately.

The required National Instruments drivers can be installed manually using the NI Package Manager utility, or silently/passively which may be preferable when multiple workstations need to be updated.

### Silent/Passive Installation

To install the National Instruments drivers in a silent/passive manner, download the installer packages using the link provided below, extract the contents of the ZIP archive to a local folder, and run either **InstallNIPackages-Passive.bat** or **InstallNIPackages-Silent.bat** as an administrator. Once the installation is complete, you will need to reboot the workstation. When updating multiple workstations, extract the ZIP archive to a network share so the files are accessible from all workstations.

Download link: <https://tinyurl.com/2dgoumri>

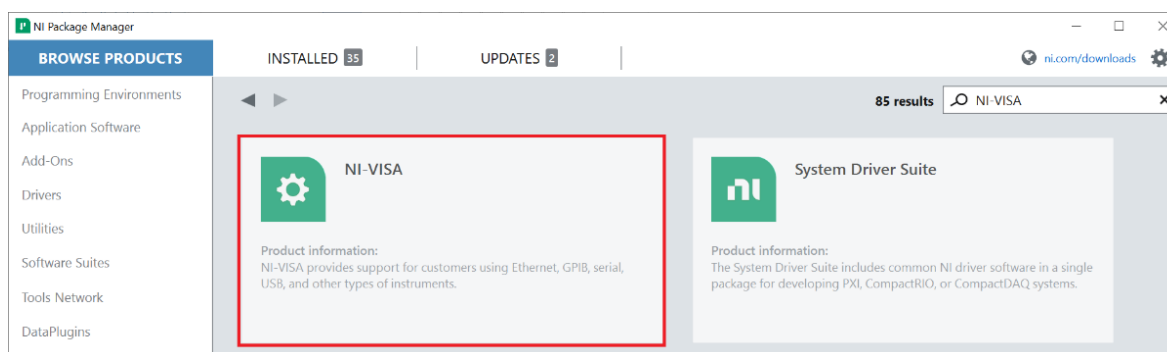
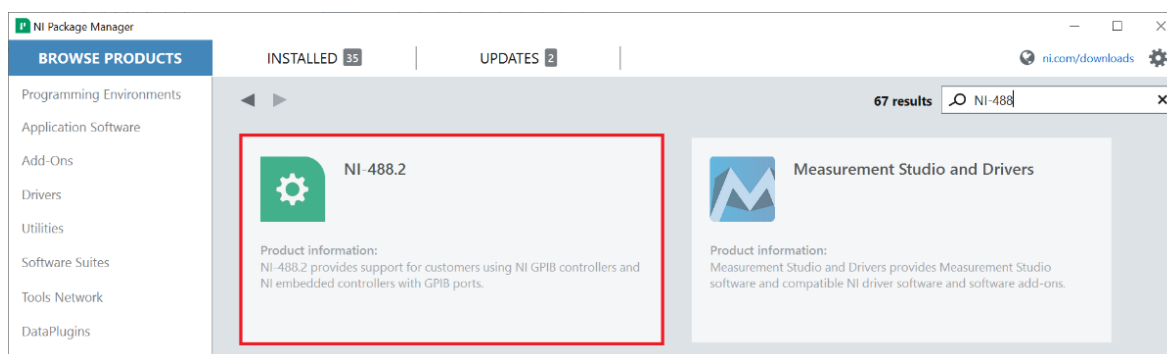
### Manual Installation

To manually install the National Instruments drivers, first download and install the latest NI Package Manager software:

<https://www.ni.com/en/support/downloads/software-products/download.package-manager.html#322516>

Once the NI Package Manager is installed, launch it and select the BROWSE PRODUCTS tab. Locate and select the following items using the Search feature:

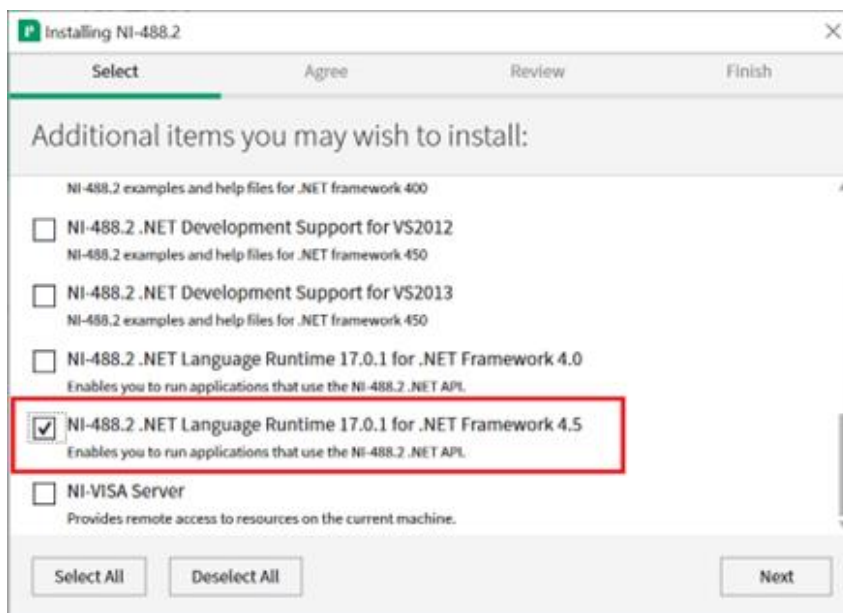
- **NI-VISA** - MET/CAL requires version 17.5 or later
- **NI-488.2** – MET/CAL requires version 17.6 or later



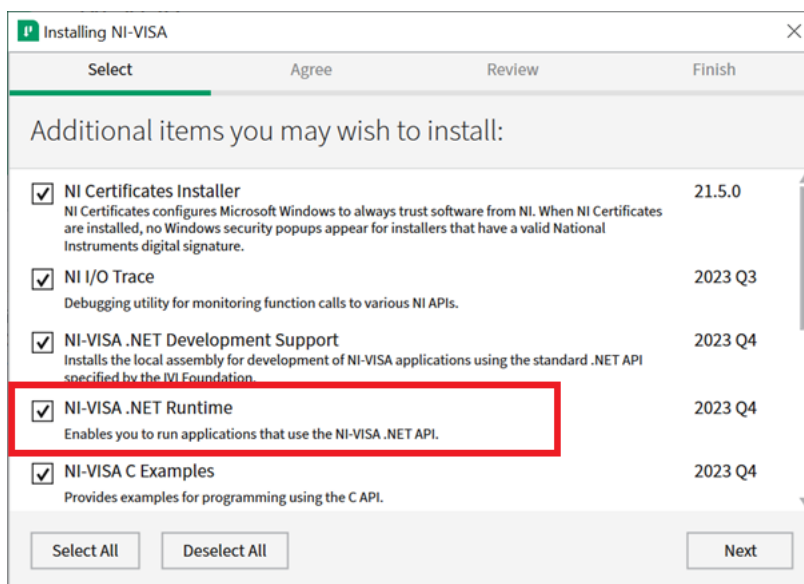
It is recommended to install the latest available version of each driver.

During driver installation, you may use the default component selections, with one exception:

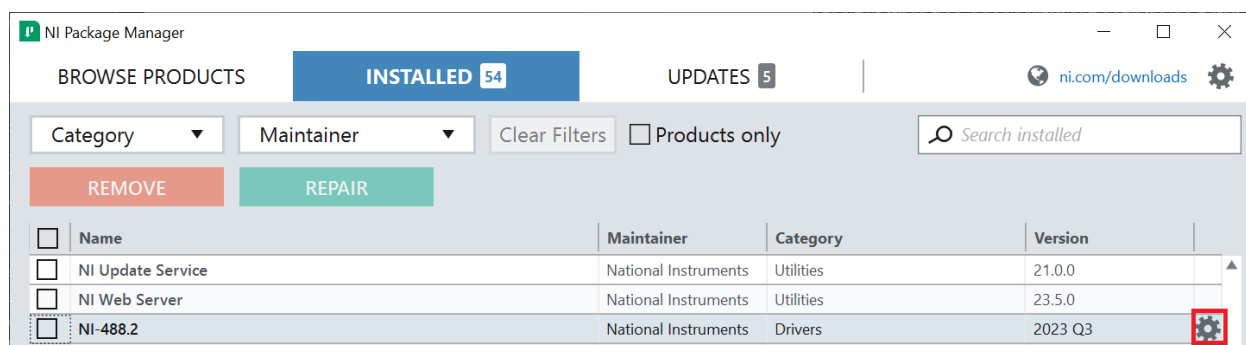
- For the NI-488.2 driver, be sure the “NI-488.2 .NET Language Runtime 17.0.1 for .NET Framework 4.5” component is selected (the name may vary slightly from one driver version to another). This component is automatically selected in the latest version, but it needs to be manually selected on most older versions. Failing to select this component will cause MET/CAL to not detect the installation of the driver, resulting in the warning message on startup. In this case, either upgrade to a newer version of the driver, or uninstall the current driver and re-install it, selecting the required component during installation.



- For the NI-VISA driver, be sure the "NI-VISA .NET Runtime" component is selected. This component should be selected by default. Failing to select this component will cause MET/CAL to not detect the installation of the driver, resulting in the warning message on startup. In this case, either upgrade to a newer version of the driver, or uninstall the current driver and re-install it, selecting the required component during installation, or add it from the NI Package Manager by clicking the gear icon on the NI-VISA item in the Installed list.



If the required components were not selected during the initial driver installation, select the INSTALLED tab and click the gear icon that appears in the right-most column when hovering over the appropriate row in the grid. This will launch the installer for that driver and allow components to be selected/deselected.



## MET/CAL 11.2.0 CHANGES

Key	Type	Description
MC-13997	ADDED	<p>The VISA, VISA2, and VISASC FSCs can now be used in a procedure to communicate with configured instruments that are using Serial (VISA FSC only) or GPIB interfaces.</p> <p>Also resolved some issues with the VISA/VISA2/VISASC FSCs that prevented successful communications with both DUTs and configured instruments in the same procedure and excluded RS-232 (Serial) from the list of interface options for the DUT when using the VISA FSC if a VISA2 or VISASC statement was previously executed.</p> <p>Additionally, resource IDs for configured instruments that are using Serial (VISA FSC only) or GPIB interfaces are now selectable as the DUT.</p>
MC-15244	ADDED	Added the ability to perform a configured instrument configuration check
MC-15734	ADDED	Added an enhancement to the MET/CAL Editor allowing users to optionally clear the Trace Output Window when starting a procedure in the MET/CAL Editor.
MC-15937	ADDED	Added the ability to set timeout values on instrument configuration dialogs. Instrument FSCs now utilize these configured values.
MC-16177	ADDED	When starting a procedure run, MET/CAL now writes the Asset Number (Barcode) and Work Order Number to the variable.dat file as ASSET\$ and WO\$ respectively.

Key	Type	Description
MC-16843 MC-16873 MC-16883 MC-17195	ADDED	Added the 5530A FSC to support the Fluke 5530A Basic Multi-Product Calibrator.
MC-17087	ADDED	When using MET/TEAM, and the selected Work Order has a signature, and the System Defaults are configured to clear signatures, prompt the user that signatures will be cleared when starting a calibration and allow the procedure run to be terminated.
MC-15023	CHANGED	Removed the requirement to define the Output Impedance of a DC Output when using the 9500B FSC.
MC-16414	CHANGED	The 5000A RH/T feature of the MET/CAL Runtime installation has been removed and the associated MCRHT.exe application has been deprecated.
MC-16719	CHANGED	Made an improvement to the procedure compiling process to reduce the number of calls to the database related to licenses in MET/CONNECT.
MC-14017	FIXED	Resolved an issue that caused 2000 and 34401 FSC statements that measure period to generate an accuracy lookup error during compile.
MC-14107	FIXED	Resolved an issue when using MET/CONNECT that would cause MET/CAL to enter a "not responding" state for a short period of time after aborting a procedure run before actual procedure execution begins.
MC-14308	FIXED	Resolved an issue with the DMM7510 FSC compile checks for Current.
MC-14902	FIXED	Resolved an issue that prevented the Continue Line (F6) feature in MET/CAL Editor from working with FSCs that are strictly numeric, such as 4180, 5100, 5520, etc.
MC-15684	FIXED	Resolved an issue that prevented MET/CAL from remembering and restoring window size and position information in specific cases.

Key	Type	Description
MC-15724	FIXED	Resolved an issue with the display of the Last Login date for a user and added the time.
MC-15835	FIXED	Resolved an issue where sometimes the status bar in MET/CAL Editor does not get cleared and thus does not match the "Status" message in the Test Run Status window.
MC-16039	FIXED	Resolved an issue with WIF/RIF commands that could potentially cause MET/CAL to crash.
MC-16071	FIXED	Resolved an issue with 9500, 9500B and 9500C FSCs that was causing the output relay to toggle more than expected when in impedance measurement mode.
MC-16081	FIXED	Resolved an issue with the 96270A when using an external frequency reference device that could cause MET/CAL to crash.
MC-16111	FIXED	Resolved an issue that would generate an error in MET/CAL Runtime when attempting to format numbers with more than 15 digits of resolution.
MC-16208	FIXED	Resolved an issue where the Required Instruments dialog showed invalid empty lines when in non-English UI.
MC-16228	FIXED	Resolved an issue with the MATH CRND function when used with increments that are not powers of 10.
MC-16295	FIXED	Resolved an issue with the 9500C FSC F1 help key where the help location did not display the 9500C help correctly.
MC-16394	FIXED	Resolved error in 8506 FSC preventing communication with the device.
MC-16424	FIXED	Resolved an issue that caused the initial timeout value for RS-232 ports that are not associated with a configured instrument to not be set to 0 (infinite).

Key	Type	Description
MC-16469	FIXED	Resolved an issue that allowed the HP 33120A to be configured with invalid serial ports.
MC-16504	FIXED	Resolved an issue where the HP 3325B was not sending the Frequency component of the signal correctly.
MC-16554	FIXED	Resolved an issue where the Run trace information was not displayed in some trace modes in MET/CAL Editor.
MC-16630	FIXED	Resolved an issue where the MATH FSC DFILE() function was removing the last character of the file name.
MC-16652	FIXED	Resolved an issue for 5540A, 5550A, and 5560A when using the O_CAL FSC and slewing in real and simulation mode.
MC-16662	FIXED	Resolved an issue that caused the right most digit on the Slew dialog to be partially obscured.
MC-16672	FIXED	Resolved an issue that caused slowness when compiling a procedure when using MET/CONNECT.
MC-16702	FIXED	Resolved an issue in the 5560A and 5550A FSCs causing a timeout to occur when current parameters are used.
MC-16729	FIXED	Resolved an issue when slewing a 5540A, 5550A, or 5560A device in simulation mode that was preventing the correct evaluation quantity from being placed in the MEM numeric register.
MC-16739	FIXED	Resolved an issue that caused T.U.R. Report generation to be much slower when using MET/CONNECT than when using MET/TEAM. Also improved performance of T.U.R. Report generation by approximately 700%.
MC-16749	FIXED	Resolved an issue with the MATH FSC INI() function, which now returns the string representation of various settings as shown in the configuration screens rather than the numeric representations now used in the metcal.ini file.



Key	Type	Description
MC-16780	FIXED	Resolved an issue that was causing the 96270A FSC to not work correctly when ModulationWaveform = External was used.
MC-16810	FIXED	Resolved an issue that prevented MET/CAL Editor from successfully converting all .pro file procedures in an existing proc.dir to PXE projects.
MC-16934	FIXED	Resolved an issue where a command intended to be sent to the 9500C only was being sent to the 9500 and 9500B as well.
MC-17139 MC-17154	FIXED	Resolved an issue that could cause MET/CAL to crash when reading data from a file to be sent to an instrument.
MC-17175	FIXED	Resolved an issue that could cause MET/CAL to crash when sending binary data to an instrument using RS-232 or VISA.
MC-8786	FIXED	Resolved an issue where the fundamental frequency was used in place of the harmonic frequency when calculating system accuracy using the 6105A FSC.
MC-14760	FIXED	Resolved an issue when using MET/CONNECT where only one instance of MET/CAL Runtime or MET/CAL Editor could log in on a workstation once the number of workstations logged in reached the total license count.