MET/CAL 11.0.0 README

This document includes information related to MET/CAL 11.0.0 relative to version 10.6.2. This version of MET/CAL is compatible with MET/TEAM version 3.3.0. This release is not compatible with MET/CONNECT.

WHAT'S NEW IN VERSION 11.0.0?

- Added support for expanded specifications and the Oscilloscope Calibrator options of the Fluke 5560A, 5550A, 5540A.
- Added support for the Keithley DMM7510 with a new FSC.
- Updated instrument communications to support VISA communication for references (USBTMC currently supported, LAN coming in a future release).
- Multiple improvements to all mechanisms for instrument communication thanks to new libraries. **See important information in the MET/CAL 11.0.0 Distribution section below!**
- New communication settings windows to better control how MET/CAL uses configured instruments and allow testing before running procedures.
- Minor Bug Fixes
- 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 previous version 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.

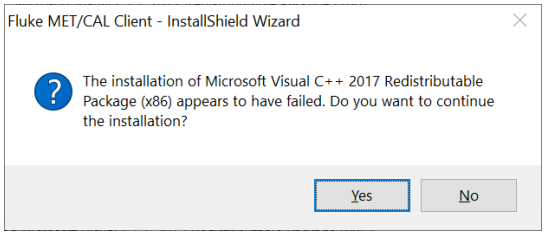
MET/CAL 11.0.0 DISTRIBUTION

Note: MET/CAL version 11.0.0 is compatible with MET/TEAM version 3.3.0. This release is not compatible with MET/CONNECT. Attempting to use it with earlier versions of MET/TEAM or any version of MET/CONNECT will result in an error at attempted login.

The MET/CAL Client version 11.0.0 installer for MET/TEAM is distributed with MET/TEAM version 3.3.0. The installer files are deployed to the MET/TEAM 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) when the MET/TEAM Server installer or MET/TEAM Server Update installer is run so that all MET/CAL workstations have access to it.

The MET/CAL Client installer must be run on all MET/CAL workstations to perform an update to version 11.0.0. 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.



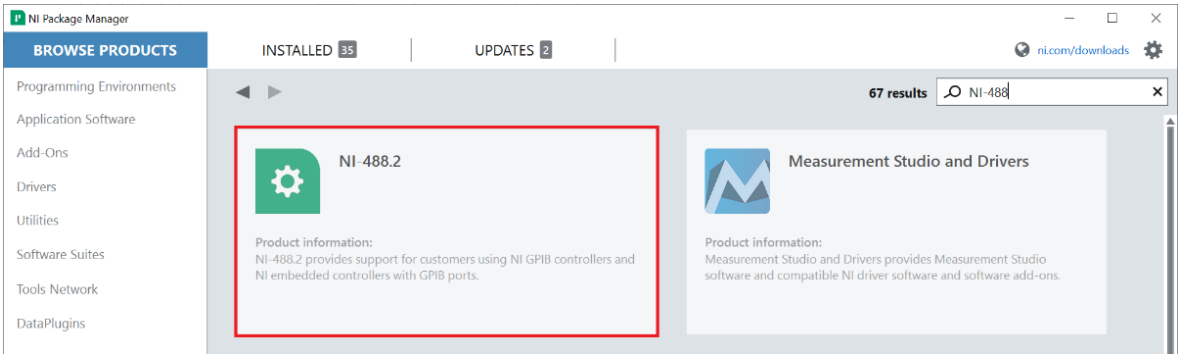
The instrument communication libraries in MET/CAL version 11.0.0 have been updated to use the National Instruments NI-488.2 and NI-VISA packages. The MET/CAL Client installer performs a check to ensure these packages are installed on the workstation. A warning message will appear either of these packages 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.

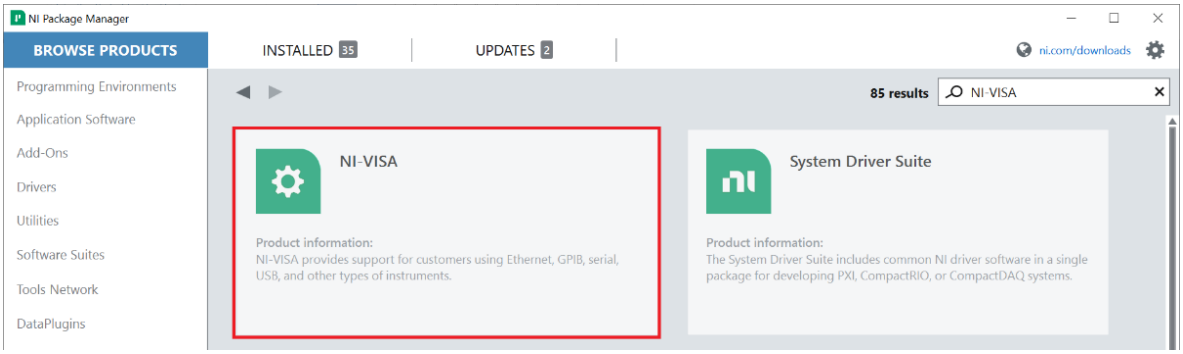
To manage the installation of the National Instruments drivers, download and install the latest NI Package Manager software:

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

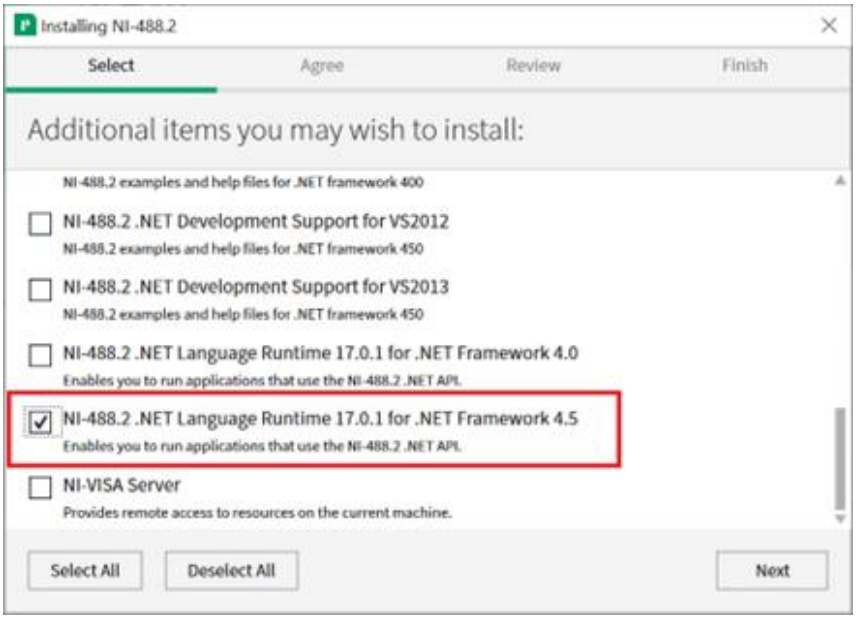




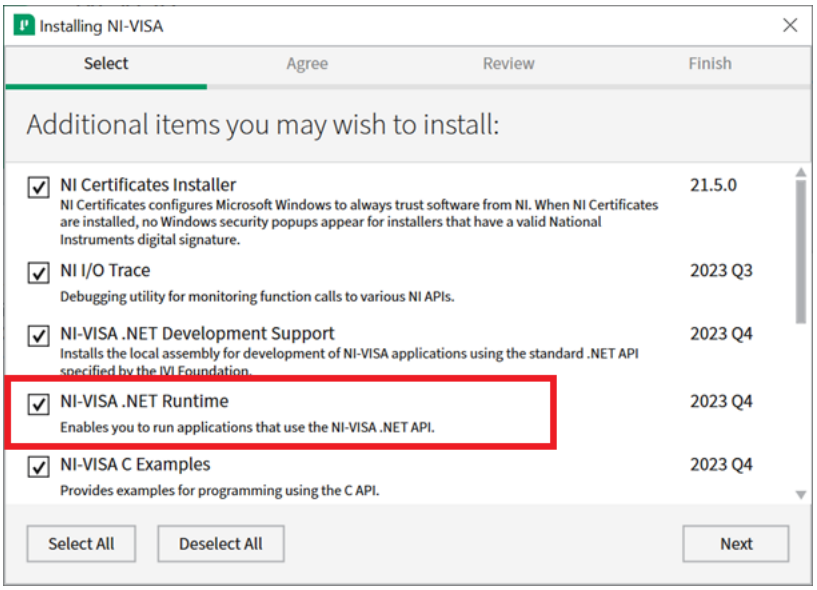
It is recommended to install the latest available version of each driver.

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

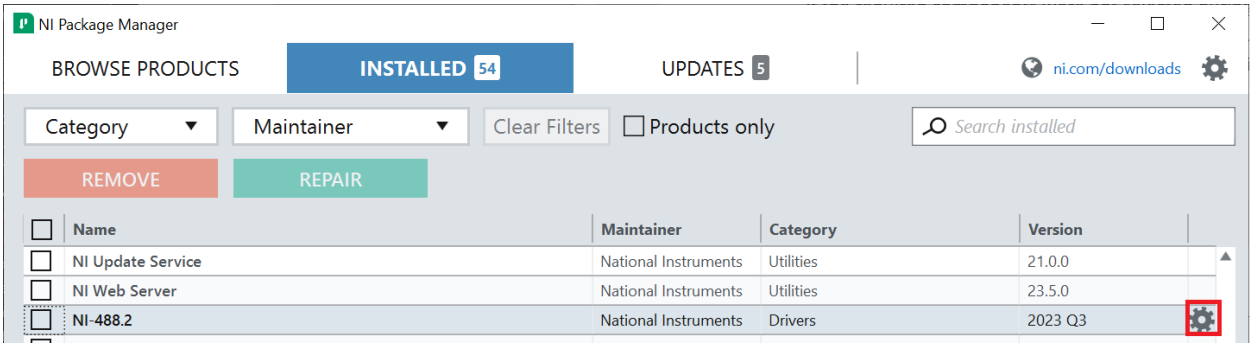
- For the NI-488.2 driver, be sure the “NI-488.2 .NET Language Runtime 17.0.1 for .NET Framework 4.5” component is selected (the name may vary slightly from one driver version to another). This component is automatically selected in the latest version, but it needs to be manually selected on most older 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 11.0.0 CHANGES

Key	Type	Description
MC-10026	ADDED	New ability added to the Configured Instruments configuration to be able to filter the instruments shown based on the Name, Barcode(Asset #), or Alias.

MC-10066	ADDED	A new Runtime Configuration setting has been added to control the ability to show a Save As dialog when downloading files from MET/TEAM
MC-10096	ADDED	Replaced the instrument communications code with a new library and implemented support for using NI VISA for system instruments.
MC-10158	ADDED	Updated the functionality of the 5560A FSC to support expanded VxHz limits added in new firmware.
MC-10280	ADDED	Made significant updates to the instrument communication functionality of MET/CAL, replaced many existing libraries, expanded the functionality to allow user-configured instruments using USBTMC, and allowed for other improvements in the future.
MC-11059	ADDED	Implemented a new feature to automatically attempt to re-establish communications with an instrument when using USBTMC when the instrument's power is cycled or USB cable is unplugged temporarily during procedure execution.
MC-7563	ADDED	Added the Keithley DMM7510 to the DMM Flexible Standards in user_config_instr.ini
MC-7583	ADDED	Added support for the Keithley DMM7510 7½-Digit Graphical Sampling Multimeter
MC-8411	ADDED	The MET/CAL Runtime now has the ability to filter or highlight the results when clicking on the point result counts.
MC-8836	ADDED	The notification beep sounds for prompts have been upgraded to allow the grouping of beep sounds
MC-10189	CHANGED	Required Instrument dialog now denotes child instruments/Options indented under the main instrument
MC-10948	CHANGED	Made updates for MET/CAL when using a secure MET/TEAM website.

MC-11079	CHANGED	Updated the focus indication on various buttons to make it more apparent.
MC-7553	CHANGED	Resolved consistency issues with the MATH FSC functions RND(), CRND() and FRND(). These functions now all round floating point numbers using the "To Even" midpoint rounding method.
MC-7605	CHANGED	Resolved multiple potential areas in the code that could have resulted in character conversion issues.
MC-8714	CHANGED	MET/CAL users can now scroll the results when the Post Test Summary dialog or Pre/Post Prompts are being displayed.
MC-8806	CHANGED	Improved the handling of MET/CAL configuration settings, including added a banner to the bottom of the configuration page/dialog to indicate when there are unsaved changes.
MC-8826 MC-8902	CHANGED	Updated Chromium Embedded Browser
MC-9905	CHANGED	Added the name of the parent device to the error displayed when an auxiliary device is not configured, thus making it easier to know which primary device to adjust.
MC-12227	FIXED	Resolved an issue that prevented the Fluke 9500B/600 from being recognized by MET/CAL when configured.
MC-12215	FIXED	Resolved assorted security findings
MC-10046	FIXED	Resolved an issue that prevented Fluke 96xxA and 96xxxA devices from being reset correctly in MET/CAL procedures.
MC-10239	FIXED	Resolved an issue when importing PXE files into MET/TEAM that generated an error and prevented the conflict resolution dialog from being displayed when there were ambiguities matching PXEs to procedures in the MET/TEAM database.

MC-10492	FIXED	Changed the default setting of Tolerance Reference to System Actual, as intended, instead of Nominal, which it was set to for recent releases.
MC-10522	FIXED	Resolved issues with power meter configuration that relate to these power sensors: Agilent E9304A, E9304A-H18, E9304A-H19, E9300A, E9300A-H24, E9300A-H25
MC-10532	FIXED	Resolved an issue that prevented the 8588A FSC Ratio function from working as expected.
MC-10542	FIXED	Resolved an issue related to the rounding and formatting of the Tolerance, TolerancePositive and ToleranceNegative fields.
MC-10735	FIXED	Resolved an issue where the list of power sensors available for some HP/Agilent models were not updating correctly when configuring an instrument.
MC-10817	FIXED	Resolved an issue related to the FMT FSC that would occasionally cause the MET/CAL runtime application to crash.
MC-10902	FIXED	Resolved an issue where duplicate barcodes/Asset numbers on auxiliary devices were not being prevented like primary instruments.
MC-7432	FIXED	Unlimited beep sounds have been fixed and all procedure run dialogs have beeping available.
MC-7912	FIXED	All dropdown choices in the configuration screen are translated into local languages.
MC-8016	FIXED	Standards defined in a procedure using the STD FSC now get linked to the stored results where the standard is used.
MC-8171	FIXED	Resolved an issue where the Workstation field was not getting updated after clicking the Apply button on the configure tab.
MC-8331	FIXED	The Administrator Security Group has revised default security permissions.

MC-8482	FIXED	Resolved an issue where invalid characters were allowed to be saved in an alias.
MC-8504	FIXED	Resolved and issue causing a "duplicate device" error with some instruments with 700 pressure modules.
MC-8564	FIXED	Resolved an issue where MET/CAL would not run if a prompt file was moved or renamed outside of MET/CAL.
MC-8673	FIXED	Resolved an issue where a confusing error message was displayed when creating a duplicate configured instrument.
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-9055	FIXED	Resolved an issue that prevented the Imitate Workstation feature from downloading the selected configuration files to the workstation when the System Default "Download config files from database on startup" was not active.
MC-9784	FIXED	Resolved an issue that prevented extended ASCII characters from being correctly written to the cPointDescription field from the TSET TDESC function.
MC-9845	FIXED	Resolved an issue with some command line arguments and removed all unsupported command line arguments.
MC-9895	FIXED	Resolved an issue with the VSET/TSET FSCs not properly storing Unicode characters.
MC-9956	FIXED	Resolved an issue where the CallSheets.tMaintDate and CallSheets.tMaintNextDate, on the Pass or Fail Prompt, would get overwritten with the default logic in for setting these dates in MET/CAL.
MC-9996	FIXED	Resolved an issue that prevented system accuracy from being correctly calculated when using current coils with Fluke Calibrator FSCs.