

# Fluke Calibration Software

MET/TEAM®  
MET/CAL® Runtime  
MET/CAL® Editor

## Installation Guide



# Table of Contents

Title	Page
Introduction .....	1
Safety Information .....	2
How to Contact Fluke Calibration .....	2
Before You Call Technical Support.....	3
System Requirements.....	3
Hardware Requirements .....	5
File Locations .....	6
Legacy Applications .....	7
Fluke Calibration Software Conversions.....	7
Installation and Licensing.....	8
New MET/TEAM Server Installations and Updates.....	10
New MET/TEAM Client Installations and Updates .....	11
New MET/CAL Workstation Installations and Updates .....	12
Stand-Alone Installations and Updates .....	12
Fluke MET/TEAM Server Installer .....	13
Installer Prerequisites .....	13
Installation Process.....	13
Prerequisite Installation .....	13
Setup Wizard .....	14
Fluke MET/TEAM Server Update Installer.....	20
Installer Prerequisites .....	21
Installation Process.....	21
Prerequisite Installation .....	22
Setup Wizard .....	22
Re-Running the MET/TEAM Server Update Installer .....	26
Setup Wizard .....	26
Fluke MET/TEAM Mobile Prerequisites Installer .....	27
Prerequisites .....	27
Installation Process.....	28
Fluke MET/TEAM Customer Portal Installer .....	29
Installer Prerequisites .....	30
Installation Process.....	30
Installing MET/TEAM Customer Portal on a Non-Domain Machine.....	33

Configuring SQL Server for Access from a Non-Domain Machine .....	33
To Create a Login for MET/TEAM Customer Portal: .....	34
To Configure SQL Server to Allow Connections on a Specific Port:.....	34
To Configure Windows Firewall with Advanced Security for Allowing Inbound Connections on a TCP Port: .....	35
Configuring MET/TEAM Customer Portal on a Non-Domain Machine .....	35
To Setup MET/TEAM Customer Portal on a Non-Domain Machine: .....	35
Fluke MET/CAL Client Installer .....	37
Installer Prerequisites .....	37
Installation Packages and Prerequisites.....	37
Installation Process.....	37
MET/CAL Runtime Installation .....	40
MET/CAL Editor Installation.....	42
Setting up a Workstation for Crystal Reports.....	44
Microsoft SQL Server Express Installer .....	44
Prerequisites .....	45
Installation Process.....	45
Configuring SQL Server to Allow Remote Connections .....	49
To Configure SQL Server for Remote Access: .....	49
To Configure Windows Firewall with Advanced Security for Remote Access:.....	50
Configuring MET/TEAM Server for MET/TEAM Mobile .....	51
To Configure MET/TEAM SQL Server Database for use with MET/TEAM Mobile:.....	51
To Configure a Workstation to run MET/TEAM Mobile: .....	54
Configuring Application Pool Recycling Settings .....	54
Converting a Non-Secure MET/TEAM Website to a Secure Website .....	55
Licenses .....	56
License Agreements .....	58

## Introduction

Fluke Calibration Software is a software distribution that bundles these software products:

- MET/TEAM®
- MET/CAL® Runtime
- MET/CAL® Editor (Procedure Editor)

MET/TEAM is a browser-based application that requires no client installation. MET/TEAM has these basic features:

- Multitasking windows
- Compatibility with MET/CAL Runtime and MET/CAL Editor
- Supports *Crystal Reports*
- Flexible, custom UI
- Group-based permissions
- RESTful API for connectivity with other CMMS systems

Use this guide to install and upgrade different software packages included with MET/TEAM. For installations of MET/TEAM only, you can ignore all references to MET/CAL.

## **Safety Information**

Instrument calibration can require the calibration system to generate or measure dangerous voltages. The operator and the procedure writer must be aware of possible hazards.

### **Warning**

To prevent possible electrical shock, fire, or personal injury:

- **Never use a screen saver when using the Runtime or Procedure Editor applications. Screen savers will hide the high voltage safety symbol. The Runtime and Procedure Editor programs control test instruments and can cause them to output dangerous voltage levels. The high voltage safety symbol indicates when dangerous voltage is present.**
- **Use interconnect wiring and adapters rated for the highest voltage and current levels carried.**
- **Never touch exposed conductive portions of signal interconnect wiring, even after instruments have been turned off.**
- **Only touch the insulated portion of a connector. First disconnect the interconnect wiring at the source, then at the measurement side.**
- **Always use insulated adjustment tools.**
- **If the calibration program is abnormally terminated, verify that the front panels of source instruments indicate standby mode.**
- **When writing procedures, make sure that procedures minimize the time during which dangerous voltages are applied.**

## **How to Contact Fluke Calibration**

Fluke Corporation operates worldwide. For local contact information, go to our website: [www.flukecal.com](http://www.flukecal.com).

To view, print, or download the latest manual or manual supplement, go to our website. To register your product, visit <http://flukecal.com/register-product>.

Fluke Corporation  
P.O. Box 9090  
Everett, WA 98206-9090

+1-425-446-5500

[info@flukecal.com](mailto:info@flukecal.com)

Alternatively, you can send an email directly to calibration software experts:

- [softwaresupport@flukecal.com](mailto:softwaresupport@flukecal.com)
- [techsupport@flukecal.com](mailto:techsupport@flukecal.com)

To join the user community of Fluke Calibration software, visit <https://support.flukecal.com>.

## **Before You Call Technical Support**

Sometimes you can find the answer by yourself, so before you call for support:

- Check the online Technical Support Knowledge Base at <https://support.flukecal.com>
- Check the online help

If you find it necessary to call for support, write down the information that helps the support person to resolve the issue more efficiently:

- Product name, applicable licenses, version, and serial numbers
- Manual title, part number, and version
- Operating system and version
- Network information if applicable
- List of steps necessary for the problem to reappear
- Version of *Crystal Reports*

## **System Requirements**

For the system to operate properly, some required frameworks and other software packages must be installed on the server and some client computers. These prerequisite packages are detailed in the sections that follow. The Fluke Calibration Software download and media include all the required prerequisite software packages, **except** for SQL Server. To install correct prerequisite software packages, always use the full installer for new installations and major upgrades.

### *Note*

*Always run Windows Update after you complete the installation process. This action updates your system with the latest security patches.*

The MET/TEAM Server, MET/TEAM Customer Portal, and MET/TEAM Mobile software run only on the following platforms:

- Windows® 8.1 (x64)
- Windows®10 (64-bit)
- Windows® Server 2012 R2 (64-bit)
- Windows® Server 2016 (64-bit)
- Windows® Server 2019 (64-bit)

*Note*

*Attempts to install and run MET/TEAM Server on other operating systems including "Home" editions of Windows are not supported.*

*The MET/TEAM Server database can be hosted by a 64-bit version of Microsoft SQL Server 2012 R2 (or later) database server. For an updated list of SQL Server versions that MET/TEAM has been tested with, visit our web site. The free version of SQL Server Express is usually sufficient for stand-alone or small networked databases. You can download SQL Server Express from the Microsoft website. Fluke Calibration does not provide installers for SQL Server Express in the installation media. For larger databases, Fluke Calibration recommends that you use a full version of SQL Server. MET/TEAM does not support 32-bit versions of SQL Server. The MET/TEAM Server installation configures the MET/TEAM website hosted by Microsoft Internet Information Services (IIS) 7.5 or later.*

The MET/TEAM website can be accessed from computers that are running a compatible web browser. MET/TEAM is compatible with all modern web browsers that support HTML5 such as Microsoft Edge and Google Chrome.

The MET/CAL Runtime and MET/CAL Editor client software run on these platforms:

- Windows® 8.1
- Windows® 10
- Windows® Server 2012 R2
- Windows® Server 2016
- Windows® Server 2019

*Note*

*Prior versions of Windows are no longer supported.*



## **Hardware Requirements**

The minimum recommended PC requirements are:

### **MET/TEAM Server**

- 2.0 GHz quad core processor or equivalent
- 16 GB of RAM
- 20 GB of available hard drive space

### **MET/TEAM Customer Portal Stand-alone Server**

- 2.0 GHz quad core processor or equivalent
- 8 GB of RAM
- 2 GB of available hard drive space

### **MET/TEAM Client**

- GHz processor
- 2 GB of RAM

### **MET/CAL Client**

- 2.0 GHz processor
- 4 GB of RAM
- 6 GB of available hard drive space

On MET/CAL Client workstations, use the optional General Purpose Interface Bus (GPIB) to connect a PC to a programmable instrument. Before installation, make sure that the optional GPIB (IEEE 488) Interface is installed. Fluke Calibration Software only supports GPIB controllers from National Instruments.

You can download hardware drivers from the National Instruments website:

<http://www.ni.com/support/>.

If you plan to use or calibrate National Instruments PXI cards, you must connect the PXI chassis to the workstation computer before the computer is powered on. Also, any time you need to insert or remove cards from the PXI chassis, the workstation computer that the PXI chassis is connected to must be powered off first. For more information, visit the National Instruments website:

<http://www.ni.com/pxi/>.

## File Locations

Table 1 gives the default location for files that are distributed with Fluke Calibration Software. Custom installations can differ.

### Note

*During installation, all paths can be customized except for the path to the **metcal.ini** file.*

**Table 1. File Locations**

<b>MET/TEAM Files</b>	
MET/TEAM Website	%IIS_Root_Folder%\METTEAM
MET/TEAM Customer Portal Website	%IIS_Root_Folder%\CustomerPortal
Installers	%ProgramFiles(x86)%\Fluke\METTEAM\Installers
Database	<determined by Microsoft SQL Server>
MET/TEAM Email Alert Engine Files	%ProgramFiles(x86)%\Fluke\METTEAM Email Alert Engine
Database Update Scripts	%ProgramFiles(x86)%\Fluke\METTEAM\METTEAM Database Scripts
MET/TEAM API Help Files	%ProgramFiles(x86)%\Fluke\METTEAM\Help
MET/TEAM Mobile Check-In/Check-Out Files	%ProgramData%\Fluke\METCAL\shared\Mobile
MET/TEAM Import Files	%ProgramData%\Fluke\METCAL\shared\Import\Files
MET/TEAM Import Data	%ProgramData%\Fluke\METCAL\shared\Import\Data
<b>MET/CAL Shared Files (located on server computer)<sup>[1]</sup></b>	
Root Folder	%ProgramData%\Fluke\METCAL\shared
Reports	%ProgramData%\Fluke\METCAL\shared\reports
Accuracy Files	%ProgramData%\Fluke\METCAL\shared\acc
Procedures	%ProgramData%\Fluke\METCAL\shared\proc
Pictures	%ProgramData%\Fluke\METCAL\shared\pic
Prompt Files	%ProgramData%\Fluke\METCAL\shared\PromptFiles
User Programs	%ProgramData%\Fluke\METCAL\shared\UserPrograms
Client Installer	%ProgramFiles(x86)%\Fluke\METTEAM\Installers
<b>MET/CAL Files (located on client computer)<sup>[2]</sup></b>	
FSC Help	%ProgramData%\Fluke\Help
Executables and DLLs	%ProgramFiles(x86)%\Fluke\METCAL and %ProgramFiles(x86)%\Fluke\METCAL Editor
Manuals	%ProgramData%\Fluke\Help
DATs	%ProgramData%\Fluke
metcal.ini <sup>[3]</sup>	%ProgramData%\Fluke
<p>[1] Shared files are installed by MET/TEAM Server and can be accessed from client computers by mapping \\&lt;servername&gt;\metcal (where &lt;servername&gt; is the name of the server where the files are installed) to a local drive letter</p> <p>[2] Files installed by MET/CAL Runtime and MET/CAL Editor</p> <p>[3] To access the metcal.ini file, use the shortcut to the %ProgramData% folder installed with the MET/CAL client software:</p> <p>%IIS_Root_Folder% typically resolves to C:\inetpub\wwwroot.</p> <p>%ProgramFiles(x86)% typically resolves to C:\Program Files (x86).</p> <p>%ProgramData% typically resolves to C:\ProgramData</p>	

## Legacy Applications

Many applications that support Fluke Calibration Software directly refer to the **metcal.ini** file in the Windows directory. Modify these applications to use the path in Table 1. Then, they can function with MET/CAL Runtime and MET/CAL Editor version 8.0 and later.

In the interim, maintain a copy of the **metcal.ini** file in the Windows directory to allow these applications to work. In this case, the information in the ini file located in the Windows directory does not update with operations within MET/CAL. After you make a related edit, you need to copy the file from the MET/CAL maintained location to the Windows directory. The Fluke Calibration program group gives a shortcut to the %ProgramData% folder.

## Fluke Calibration Software Conversions

Before new Fluke Calibration Software installations or conversions, archive all procedures, accuracy files, correction files, and other support files.

After a conversion, some files and shortcuts created by a previous installation are not deleted. For example, when you convert from Fluke Metrology Software, Sybase remains intact on the server computer, and some other application files will remain intact on client computers. Directories specific to MET/CAL Runtime and MET/CAL Editor can also be left intact. You can delete these directories only after all references to them are removed from the **metcal.ini** configuration file.

You cannot directly convert all previous versions of MET/BASE systems to MET/TEAM. Table 2 summarizes the version upgrade requirements and restrictions.

After the conversion to a MET/TEAM system from a MET/BASE system, you must migrate the data from the MET/BASE Sybase database to the MET/TEAM SQL Server database. For assistance with this process, contact [softwaresupport@flukecal.com](mailto:softwaresupport@flukecal.com).

**Table 2. MET/BASE Conversions**

<b>MET/BASE Version</b>	<b>Conversion Process</b>
8.x	Direct conversion to the current release of MET/TEAM and MET/CAL. No special requirements.
7.3 SP1 Build 38	
7.3 SP1 Build 37	
7.3 SP1	
7.3	<p>Direct conversion is supported in current release of MET/TEAM and MET/CAL. Run DBUpdate to update the database to v7.3 SP1 before you migrate data to MET/TEAM.</p> <p>Existing folders and files specific to the current version are not automatically removed by the installation. Custom application shortcuts must be removed manually.</p> <p>After installation, the Sybase database service must be manually disabled to prevent it from launching when the server PC is rebooted. Refer to Starting and Stopping the Database Engine in the Fluke Metrology Software Installation Guide for more information.</p> <p>MET/BASE and MET/TRACK need to be uninstalled manually.</p> <p>Once the database has been migrated into MET/TEAM, Sybase can be uninstalled.</p>
7.2 SP3	
7.2 SP1	
7.2	
7.1 SP1	<p>After installation, the Sybase database service must be manually disabled to prevent it from launching when the server PC is rebooted. Refer to Starting and Stopping the Database Engine in the Fluke Metrology Software Installation Guide for more information.</p> <p>MET/BASE and MET/TRACK need to be uninstalled manually.</p> <p>Once the database has been migrated into MET/TEAM, Sybase can be uninstalled.</p>
7.10	
7.01	An upgrade to MET/BASE version 7.3 SP1 is required first. Follow the upgrade steps for the selected upgrade version. Then run the MET/TEAM installation.
7.0	
6.11A	Not supported.
6.01 and less	

## **Installation and Licensing**

Fluke Calibration Software allows stand-alone and client/server (networked) installations. In a stand-alone setup, MET/TEAM Server, MET/CAL Runtime, and MET/CAL Editor are installed on the same PC. In a client/server setup, MET/TEAM Server is installed on a server, whereas the MET/CAL Runtime and MET/CAL Editor are installed on individual client PCs. Floating licenses for the clients are stored in MET/TEAM.

The **MET/TEAM Server** installer installs the MET/TEAM websites and optional MET/TEAM API, and Customer Portal websites. The database for MET/TEAM must be hosted by an instance of SQL Server. You can use an existing instance of a supported version of SQL Server, or you can install a new instance. Free versions of SQL Server Express (for stand-alone or small networked databases) are available from the Microsoft website. SQL Server must be installed prior to starting the MET/TEAM Server installation.

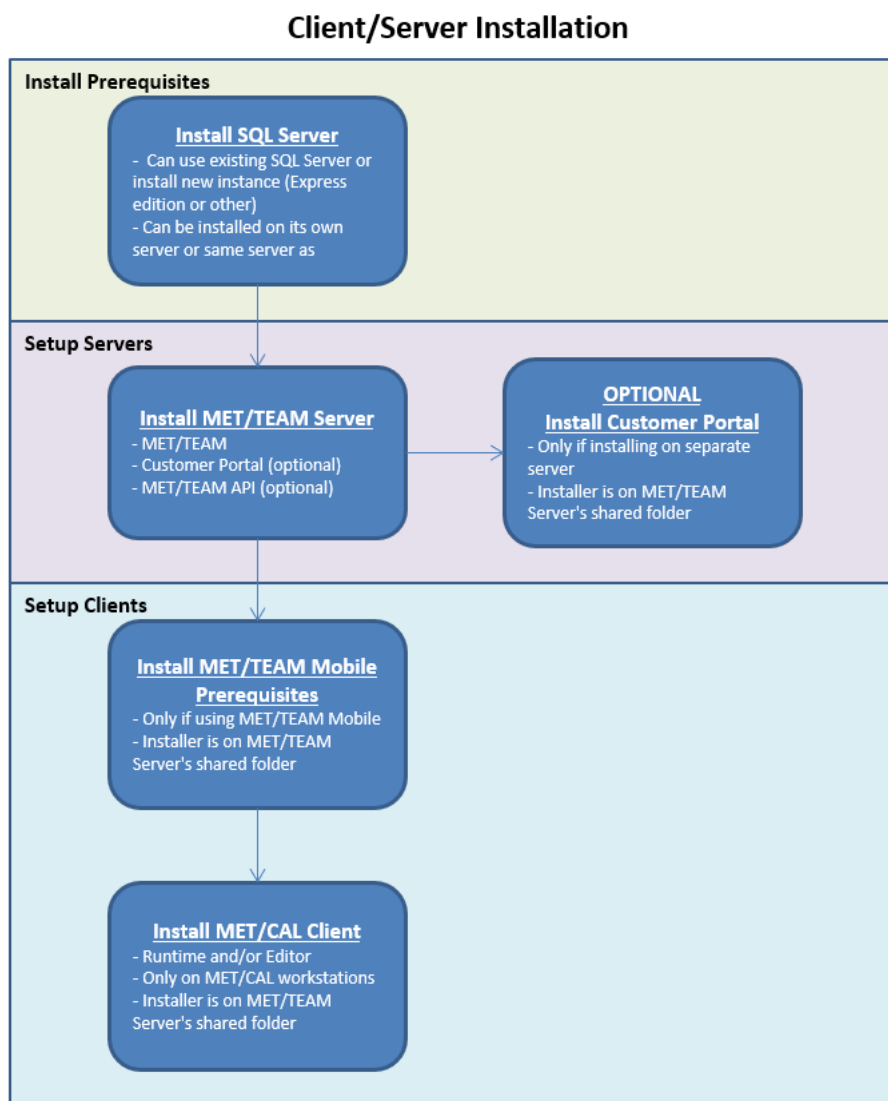
The **MET/TEAM Server** installer also copies these installers to a shared folder on the server computer:

- **MET/TEAM Mobile Prerequisites** installer – Run this installer on any computer expected to be used with the Mobile feature of MET/TEAM.

- **MET/TEAM Customer Portal** installer – Run this installer to setup a Customer Portal website on a separate machine from the MET/TEAM website, such as a machine in a DMZ.
- **MET/CAL Client** installer, including MET/CAL Runtime and MET/CAL Editor – Run this installer on any machine that is used to develop or execute MET/CAL procedures on a MET/TEAM system.

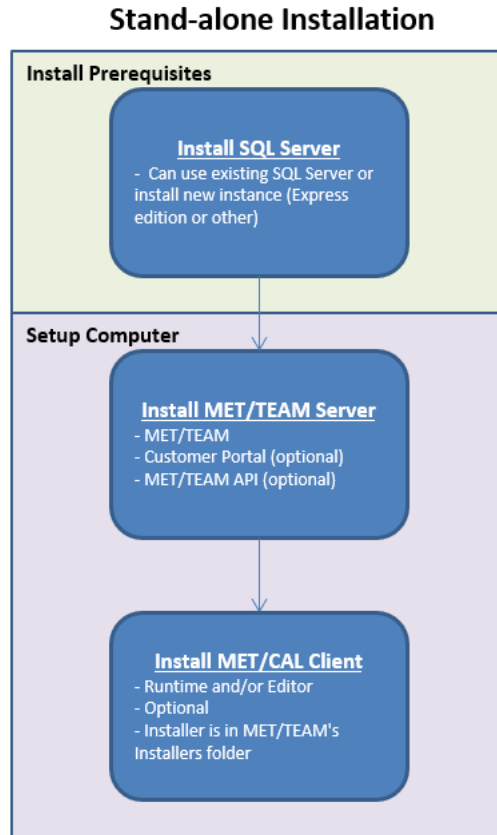
When you need to use these installers, access them from client computers over the network. Refer to the installer sections for more details.

See the flowcharts of MET/TEAM and MET/CAL installation in a client/server setup (Figure 1) and stand-alone setup (Figure 2).



**Figure 1. Client/Server Installation**

Client-server-installation-diagram.png



Stand-alone-installation-diagram.png

**Figure 2. Stand-alone Installation**

### **New MET/TEAM Server Installations and Updates**

To set up a new system, or when converting from a MET/BASE system, follow the steps in the [Fluke MET/TEAM Server Installer](#) section.

To update an existing installation of MET/TEAM, follow the steps in the [Fluke MET/TEAM Server Update Installer](#) section.

MET/TEAM requires a connection to an instance of Microsoft SQL Server, either on the server where MET/TEAM is being installed, or on another server on the network. You can either use an existing instance of SQL Server or setup a new instance. SQL Server must be installed and accessible prior to running the MET/TEAM Server installation. When SQL Server is on a different server than MET/TEAM, the operating system on both servers must use the same language (such as, English, or Spanish, or Chinese), otherwise the installation process might not be able to configure the database properly.

- For a new server installation, select **Server Installation** on the Configuration Options dialog.
- To use all default settings, select **Typical Install using Default Settings** on the Setup Type dialog.

- For a customized installation, including MET/TEAM API and/or MET/TEAM Customer Portal, select the **Choose Features and Customize Settings** option on the Setup Type dialog. Subsequent dialogs will prompt for custom settings.

If you are converting your system from MET/BASE, you must migrate the MET/BASE database to MET/TEAM. Contact [softwaresupport@flukecal.com](mailto:softwaresupport@flukecal.com) for information and assistance on migrating the database. If you are updating an existing MET/TEAM system, the update installer can run all necessary database update scripts. If you choose otherwise, be sure to use Microsoft SQL Server Management Studio to run all required database update scripts before you log on to the MET/TEAM website following the update.

Once the MET/TEAM Server is successfully installed, access MET/TEAM on the server by double-clicking the shortcut on the desktop. Alternatively, navigate to `http://<servername>:35853` (typical) or `https://<servername>` or `https://<hostname>` (if MET/TEAM was installed as a secure site) from other machines on a client/server installation. To log on to MET/TEAM initially, use the built-in administrator account:

- User name: admin
- Password: admin

Fluke Calibration highly recommends that you change the password on this built-in administrator account immediately and create individual user accounts for all users of the system.

After you have logged on, request and apply your licenses. Refer to the [Licenses](#) section for details. Updating from some versions of MET/TEAM also requires re-requesting existing licenses. Make sure you have your Gold number or your original master code/product codes when you do the update. The installer shows a message prior to the update process when this is the case.

To install the MET/CAL client applications on workstation computers: connect to the MET/TEAM shared folder on the server (for a client/server installation) or from the local folder indicated in the File Locations table (for stand-alone installations) and run the **MET/CAL Client** installer.

### **New MET/TEAM Client Installations and Updates**

Because the MET/TEAM application is browser-based, no client installation is required. You can make a shortcut to the website or add the MET/TEAM website to your Favorites folder in your web browser on each client.

If you have purchased and plan to use the MET/TEAM Mobile feature, first install MET/TEAM as a client/server system, and then run the MET/TEAM Mobile Prerequisites installer on each mobile workstation. This installer is copied to the server in the MET/TEAM shared folder during MET/TEAM Server installation. Refer to the [Fluke MET/TEAM Mobile Prerequisite Installer](#) section for details. Additionally, you must install an instance of the same version of SQL Server on the mobile workstation as is being used by MET/TEAM. In most instances, the free SQL Server Express edition is sufficient for the mobile computer. When updating from a previous version of MET/TEAM, be sure to run the latest MET/TEAM Mobile Prerequisites Installer on each mobile workstation to be sure all the prerequisites are up to date.

If you have purchased and plan to use the MET/TEAM Customer Portal feature,

and the Customer Portal website needs to be hosted on a different server than the MET/TEAM website, you must run the MET/TEAM Customer Portal installer on the other server. The MET/TEAM Customer Portal installer is copied to the server in the MET/TEAM shared folder during MET/TEAM Server installation. Refer to the [Fluke MET/TEAM Customer Portal Installer](#) section for details. When updating a MET/TEAM Customer Portal system hosted on a different server, be sure to back up the web.config file and note any special application pool and website settings in IIS as well as any special file/folder permissions before starting the update process. These settings will need to be re-applied after the update.

### **New MET/CAL Workstation Installations and Updates**

To do a new MET/CAL client workstation installation or an update, follow the steps outlined in the [Fluke MET/CAL Client Installer](#) section.

Before you install the software on a new workstation, make sure the server is properly set up and the MET/CAL shared folder is mapped to a drive letter on the workstation computer. Since the installer must run with administrative permissions, you must map the shared folder to a drive letter for the user account that runs the installation in addition to the user account that runs the application after installation. The MET/CAL Client installer now facilitates the drive mapping for the administrator account during the installation process. Drive mappings in Windows are user specific.

Using MET/CAL with MET/TEAM requires PDF viewer software installed on the workstation to view reports. Use a standard PDF file viewer, such as Adobe Acrobat Reader. For updates, the MET/CAL Client installer launches the appropriate feature installers based on the features that are currently installed on the computer.

### **Stand-Alone Installations and Updates**

To set up a new stand-alone system, follow the steps outlined in the [Fluke MET/TEAM Server Installer](#) section.

To update an existing stand-alone installation of MET/TEAM, follow the steps outlined in the [Fluke MET/TEAM Server Update Installer](#) section.

MET/TEAM requires a connection to an instance of Microsoft SQL Server, either on the computer where MET/TEAM is being installed or on another computer on the network. You can either use an existing instance of SQL Server or setup a new instance. SQL Server must be installed and accessible prior to running the MET/TEAM Server installation. When SQL Server is on a different server than MET/TEAM, the operating system on both servers must use the same language (such as, English, or Spanish, or Chinese), otherwise the installation process might not be able to configure the database properly.

- For new stand-alone installations, select **Stand-alone Installation** on the Configuration Options dialog.
- To use all default settings, select **Typical Install using Default Settings** on the Setup Type dialog.
- For a customized installation, including installing MET/TEAM API, select **Choose Features and Customize Settings** on the Setup Type dialog. Subsequent dialogs will prompt for custom settings.



## Fluke MET/TEAM Server Installer

The Fluke MET/TEAM Server installer launches from the AutoRun program. Typically, the program opens automatically when you insert the MET/TEAM distribution media into the host PC or when you mount the ISO image file.

This installer only installs new MET/TEAM system installations in a client/server or stand-alone configuration. The MET/TEAM Server installer automatically installs prerequisites, except for SQL Server.

To update an existing installation of MET/TEAM, follow the steps outlined in the [Fluke MET/TEAM Server Update Installer](#) section.

### Installer Prerequisites

For the MET/TEAM Server installer to complete successfully, some prerequisites must be installed. The installer automatically installs most of these prerequisites as necessary. The prerequisites include (but are not limited to):

- Microsoft .NET Framework
- Microsoft Visual C++ Redistributable package (x64)
- Microsoft OLE DB Driver for SQL Server (x64)
- SAP Crystal Reports Runtime
- Microsoft Windows Process Activation Service (WAS)
- Microsoft Internet Information Services (IIS)

#### Note

*When you uninstall the software, none of the prerequisites are uninstalled automatically. To uninstall prerequisites, use the Windows Control Panel Programs and Features option.*

*Always reboot the computer when prompted to ensure the successful installation of all prerequisites.*

### Installation Process

#### Note

*If you download MET/TEAM Server installer and plan to run the installation from a local hard drive, you must keep the path to the root folder of the installer files to a minimal length. For example, use **C:\Temp** or **C:\Temp\metteam**. Attempting to run the installation from a folder that has a long path can result in "Error 1308 - Source file not found" errors and fail to install all files properly.*

### Prerequisite Installation

To install from the distribution media:

1. Make sure that the PC meets the minimum requirements. See the [System Requirements](#) section.

#### Note

*You must run the installation as a user that has Administrative permissions on the machine. Make sure that you have access to a login for SQL Server that has sysadmin rights.*

2. Insert the distribution media or mount the ISO image.

- a. When AutoRun is enabled on the host PC, the AutoRun splash screen will launch.  
If AutoRun is not enabled, use File Explorer to navigate to the root folder of the installation media, and double-click the **AutoRun.exe** file to launch the AutoRun splash screen.
- b. If prompted, enter proper Administrator credentials.
3. Click the **Fluke MET/TEAM Server** item to launch the installer.  
The language selection dialog is shown.
4. Select the language to use for the installation and click **OK**.
5. If any prerequisites need to be installed, click **Install** to install the prerequisites.

*Note*

- *Always reboot the computer when prompted to ensure the successful installation of all prerequisites.*
- *The Microsoft WAS and IIS prerequisite always appears even if WAS and IIS are already configured on the computer. This ensures that all of the necessary modules are installed.*
- *The installation of all prerequisites can take a significant amount of time, especially Microsoft .NET Framework.*

**Setup Wizard**

If a previous version of MET/TEAM Server is found on the machine, a prompt indicates that the MET/TEAM Server Update Installer must be run instead of this installer and the installation process is aborted. Follow the steps outlined in the [Fluke MET/TEAM Server Update Installer](#) section.

MET/TEAM requires the TLS 1.2 security protocol. The installer checks the current TLS 1.2 setting on the computer. If a change is required, the system prompts to change to this setting. Click **No** to abort the installation or click **Yes** to allow the installer to make the necessary change. A message shows indicating the computer must be rebooted following the installation for this change to take effect. Click **OK** to proceed with the installation.

The Welcome dialog shows.

To install:

1. Click **Next**.

The License Agreement dialog shows.

2. Select the **I accept...** option.
3. Click **Next**.

The Configuration Options dialog shows.

4. Select an option and click **Next**.
  - a. To install MET/TEAM for use on this computer only, select **Stand-alone Installation**.

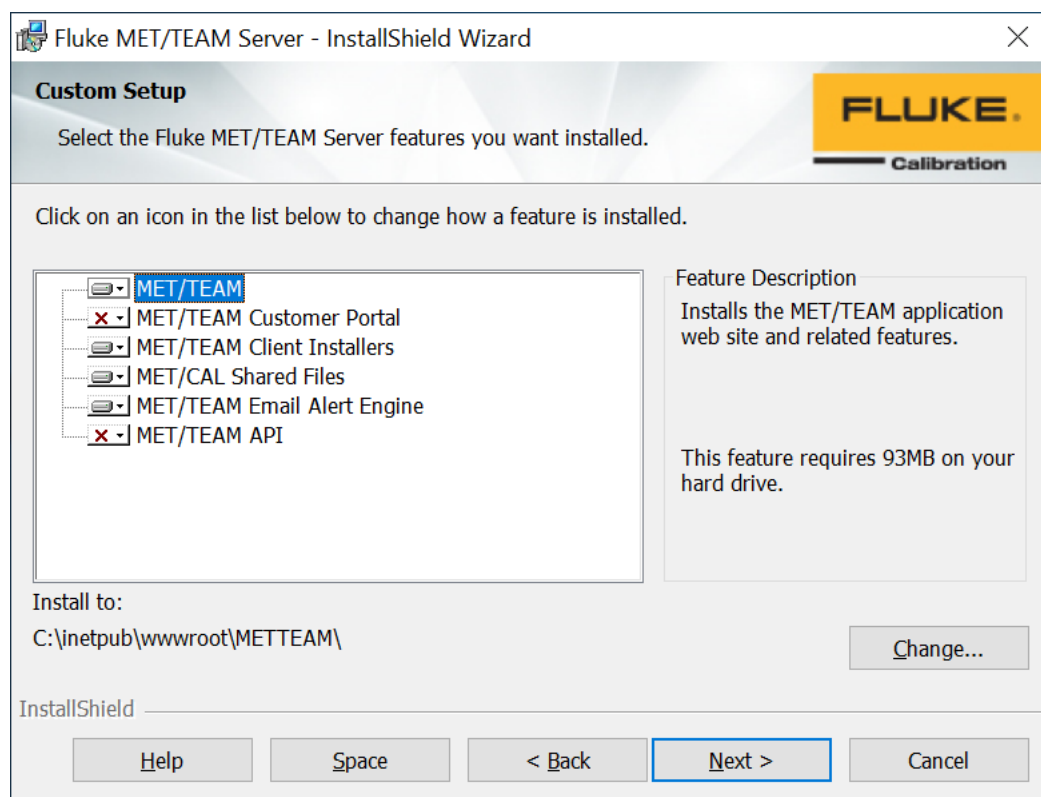
b. Otherwise, select **Server Installation**.

The Setup Type dialog shows.

5. Select an option for installing features on this computer and click **Next**.

The options are:

- **Typical Install using Default Settings:** installs typical features that use the default settings. Select this option for the simplest installation process.
  - **Choose Features and Customize Settings:** allows you to select individual features for installation and to select installation paths and other customizable settings. You must select this option if you want to install MET/TEAM API and/or MET/TEAM Customer Portal. You can select this option if you have specific requirements, such as for file locations.
6. If the **Choose Features and Customize Settings** option was selected, the following customization dialogs are displayed:



MT-CustomSetup.png

a. Custom Setup dialog: Select the features that you want to install on this computer.

The features include:

- **MET/TEAM** – (Required) This is the main MET/TEAM website. You can select this feature and click Change to change the location of the website files.
- **MET/TEAM API** – This feature installs the MET/TEAM API. Use the MET/TEAM API to interface with third-party CMMS software. By default, this feature is not installed. This feature requires purchase of

additional licenses. To install, click the drop-down to the left of the feature name and select **This feature will be installed on local hard drive**. You can select this feature and click **Change** to change the location of the MET/TEAM API files.

- **MET/TEAM Customer Portal** – This is the Customer Portal website that should be configured to be accessed by customers. By default, this feature is not installed. This feature requires purchase of additional licenses. As an option, the Customer Portal website can be hosted on a separate server to improve security for external access. If you choose to do this, do not install this feature. An installer for setting up a stand-alone Customer Portal server will be deployed and can be used to setup the Customer Portal server. You can choose to install this website on this server by enabling this feature. You can select this feature and click **Change** to change the location of the website files.
  - **MET/CAL Shared Files** – (Required) This feature includes all shared accuracy, correction, report, and sample procedure files for MET/CAL. You must install this feature to successfully install MET/CAL client applications on workstation computers later. You can select this feature and click **Change** to change the location of the shared files.
  - **MET/TEAM Client Installers** – (Required) This feature includes the MET/TEAM Mobile Prerequisites installer (for setting up a workstation to use MET/TEAM Mobile, MET/TEAM Customer Portal installer (for setting up Customer Portal on a separate server), and MET/CAL Client installer (for setting up a workstation to run MET/CAL). This feature also includes installers and additional files that are needed for setting up a workstation to create and/or edit reports using Crystal Reports, including database drivers, fonts, and other necessary files. It is useful when you set up mobile clients or install the Customer Portal website on a different server. You can select this feature and click **Change** to change the location of the installer files.
  - **MET/TEAM Email Alert Engine** – (Required) This feature includes the executable file that processes and sends email alerts. This executable is setup to run as a service on the machine. You can select this feature and click **Change** to change the location of the executable file.
- b. MET/TEAM Application Pool Identity dialog: specify the account that the MET/TEAM application pool in Internet Information Services will use. This is the account used by MET/TEAM to connect to SQL Server. Select the account to use, and optionally enter the user name and password in the boxes provided. Click **Next**.

The options are:

- **LocalSystem** – This is the default option. Selecting this option requires the built-in account NT AUTHORITY\SYSTEM (if SQL Server is on the same machine) or the machine account [DOMAIN]\[MACHINE\_NAME]\$ (if SQL Server is on another machine) to be configured as a login in SQL Server and setup as db\_owner for the MET/TEAM database.
- **LocalService** – Selecting this option requires that the built-in account NT AUTHORITY\LOCAL SERVICE (if SQL Server is on the same machine) or the built-in account NT AUTHORITY\ANONYMOUS (if SQL Server is on another machine) to be configured as a login in SQL Server and setup as db\_owner for the MET/TEAM database.
- **NetworkService** – Selecting this option requires that the built-in account NT AUTHORITY\Network Service (if SQL Server is on the same machine) or the machine account [DOMAIN]\[MACHINE\_NAME]\$ (if SQL Server is on another machine) to be configured as a login in SQL Server and setup as db\_owner for the MET/TEAM database.
- **ApplicationPoolIdentity** – Selecting this option requires that the built-in account IIS APPPOOL\[APP\_POOL\_NAME] (if SQL Server is on the same machine) or the built-in account NT AUTHORITY\ANONYMOUS (if SQL Server is on another machine) to be configured as a login in SQL Server and setup as db\_owner for the MET/TEAM database.
- **SpecificUser** – Selecting this option requires domain account credentials to be entered on the dialog. This domain account must be configured as a login in SQL Server and setup as db\_owner for the MET/TEAM database regardless of whether SQL Server is on the same machine or on another machine. When selecting this option, be sure to add the domain account to the built-in IIS\_IUSRS security group. The installation attempts to validate the account.

Occasionally, this validation fails, and a warning message shows. You can continue with the installation but make sure the account gets configured in SQL Server once in the installation is complete.

Regardless of the selected option, the installer automatically creates the login in SQL Server and configures it as a db\_owner for the MET/TEAM database. When SQL Server is on a different server than MET/TEAM, the operating system on both servers must use the same language (such as, English, or Spanish, or Chinese), otherwise the installation process might not be able to configure the database properly.

- c. Customer Portal Application Pool Identity dialog: lets you specify the account that the Customer Portal application pool in Internet Information Services uses. This account is used by Customer Portal to connect to SQL Server. This dialog only shows if Customer Portal is being installed. Select the account to use, and enter the user name and password in the boxes provided (optional). Click **Next**. See the previous item for details of the options available.

- d. MET/TEAM API Application Pool Identity dialog: lets you specify the account that the MET/TEAM API application pool in Internet Information Services will use. This is the account used by the MET/TEAM API to connect to SQL Server. Select the account to use, and optionally enter the user name and password in the boxes provided. Click **Next**. See the previous item for details of the options available.
- e. Custom Settings dialog: lets you enter the port of each individual website based on the feature selections and choose whether to install MET/TEAM as a secure website (requires a valid SSL certificate). If the **Secure (HTTPS)** checkbox is checked, the port will change to 443 (which can be changed if necessary) and enables the **Host name** field. If you enter a value in the **Host name** field, it must match the SSL certificate used for the website. For server installations, you can also choose whether rules are created for the Windows firewall to allow access to the selected ports. Click **Next**.

Fluke MET/TEAM Server - InstallShield Wizard

**Custom Settings**  
Select the custom settings for Fluke MET/TEAM Server.

FLUKE Calibration

Port to use for MET/TEAM web site: (default 35853)  
443 ☒ Secure (HTTPS) Host name (optional)  
metteam.company.com

☒ Create a Windows Firewall rule to allow inbound connections on this port

Port to use for Customer Portal web site: (default 35855)  
35855 ☒ Create a Windows Firewall rule to allow inbound connections on this port

Port to use for MET/TEAM API: (default 35854)  
35854 ☒ Create a Windows Firewall rule to allow inbound connections on this port

**The port number(s) entered must be unique and not currently in use!**

InstallShield

< Back Next > Cancel

MT-CustomSettings.png

- f. If the **Secure (HTTPS)** checkbox was checked, the Configure SSL for IIS dialog shows. (Currently the installer only supports selecting certificates that are already in the certificate store.) Click **Select Installed Certificate**. The SSL Certificate dialog shows. All non-expired certificates that are found in the Personal and Web Hosting stores on the computer are listed. Select the certificate to use and click **OK** to close the dialog. Click **Next**.
- g. MET/TEAM Client Installers Share Name dialog: lets you enter the name of the network share for the MET/TEAM client installers. The default name for this network share is **metteam**. Click **Next**.

- h. MET/CAL Share Name dialog lets you enter the name of the network share for the MET/CAL shared files. The default name for this network share is **metcal**. Click **Next**.

The Database Server dialog is shown.

7. Enter or click **Browse...** to select the SQL Server instance where the MET/TEAM database is located or should be created and choose the authentication method to connect to SQL Server. When SQL Server is on a different server than MET/TEAM, the operating system on both servers must use the same language (such as, English, or Spanish, or Chinese), otherwise the installation process might not be able to configure the database properly.

Fluke MET/TEAM Server - InstallShield Wizard

**Database Server**

Select the database options for the MET/TEAM database installation.

Select the SQL Server instance to use for the MET/TEAM database:

(local) Browse...

Connect using:

☒ Windows authentication credentials of current user

☐ Server authentication using the Login ID and password below

Login ID: sa

Password:

Enter a database name or select an existing database for MET/TEAM:

metteam Browse...

InstallShield

< Back Next > Cancel

MT-DatabasServer.png

- **Windows authentication credentials of current user** – Select this option to use the credentials of the domain user account that was used to launch the installer (typically the user account that is logged into Windows). This is the default option. Selecting this option requires the user account to have sysadmin rights in SQL Server.
  - **Server authentication using the Login ID and password below** – Select this option to enter SQL Server credentials to use. Selecting this option requires credentials that have sysadmin rights in SQL Server to be entered.
8. Enter the name to use for the database and click **Next**.

*Note*

*If you change the default database name, do not use the dash “-” character in the database name.*

The Ready to Install the Program dialog is shown.

9. Click **Install** to start the installation.

The installer installs the files for each selected feature. An installation progress dialog is shown during the installation. When the installation is complete, the Setup Complete dialog is shown.

10. Click **Finish** to close the dialog.

Shortcuts are created on the desktop for you to access the websites of the installed application on the local computer. If you chose to install MET/TEAM API, the installation places a text file on the desktop that contains the serial number that must be used with each call to the API. Refer to the MET/TEAM API documentation for more information.

If you chose the Server Installation option, and if the options to create rules in the Windows firewall (to allow access to the websites from other computers) were checked, you can access the MET/TEAM application websites from other computers on your network by typing the following address in your web browser:

**http://<servername>:<port>/** or **https://<hostname>/**

Where **<servername>** is the name of the server computer where the MET/TEAM Server installation was done.

**<hostname>** is the name entered in the Host name field on the MET/TEAM Server Custom Settings dialog for a secure MET/TEAM website.

**<port>** is the port number typed on the MET/TEAM Server Custom Settings dialog for the website you want to access. For example, if the computer where MET/TEAM Server was installed is named **SERVER01** and the MET/TEAM website was installed using the default port **35853**, you can access the MET/TEAM website from any computer on your network by typing this address in your web browser:

**http://SERVER01:35853/**

## **Fluke MET/TEAM Server Update Installer**

The Fluke MET/TEAM Server Update installer launches from the AutoRun program. Typically, this program opens automatically when you insert the MET/TEAM distribution media into the host PC or when you mount the ISO image file.

Updating a MET/TEAM system can require multiple steps, including re-requesting licenses, depending on the changes that were made to the latest version of MET/TEAM. For the specific details of updating to the latest version of MET/TEAM, refer to the ReadMe file for that version. ReadMe files are on the distribution media or in the root folder of the installer if it was downloaded.

Use this installer to update existing MET/TEAM Server systems only. The installer preserves all customized website, application pool, and file system security settings applied after the original MET/TEAM Server installation. It will also preserve customized reports and shared files.

To setup a new MET/TEAM system, follow the steps in the [Fluke MET/TEAM Server Installer](#) section.



## **Installer Prerequisites**

The MET/TEAM Server Update installer ensures that all necessary prerequisites for the latest version of MET/TEAM are installed on the server.

Prior to updating an existing MET/TEAM system:

- Backup the MET/TEAM database.
- During the update process, the installer prompts if you want to apply all database update scripts automatically, if applicable. If you select No, you must manually apply all database update scripts in the proper order after the update using Microsoft SQL Server Management Studio.
- If you have customized the MET/TEAM database in any way, you must contact Technical Support for assistance as running the update scripts may leave your database in an unusable state.
- Updating MET/TEAM from a previous version may require you to re-request all of your licenses via email once the upgrade is complete. The update installer notifies you if that is the case prior to performing the update. You need to have your original product codes, master code or Gold number to re-request licenses.
- If MET/CAL Runtime and/or Editor is installed on any workstations, be sure to run the latest MET/CAL Client installer on all MET/CAL workstations to update them to the latest version.
- Make sure there are no MET/CAL workstations logged in before you start the update process.
- If you have installed Customer Portal on a separate server, be sure to run the Customer Portal installer on that server to update the Customer Portal website to the latest version.
- If MET/TEAM Mobile is used, be sure to run the MET/TEAM Mobile Prerequisites installer on each mobile workstation to ensure all prerequisites are up to date.
- All MET/TEAM Mobile workstations **MUST** be checked in prior to the update process. Once MET/TEAM is updated to the latest version, mobile workstations that were checked out with a previous version of MET/TEAM will be unable to check in.

## **Installation Process**

### *Note*

*If you download MET/TEAM Server Update installer and plan to run the installation from a local hard drive, you must keep the path to the root folder of the installer files to a minimal length. For example, use C:\Temp or C:\Temp\metteam. Attempting to run the installation from a folder that has a long path can result in Error 1308 - Source file not found errors and fail to install all files properly.*

### **Prerequisite Installation**

To install from the distribution media:

#### *Note*

*You must run the installation as a user that has Administrative permissions on the machine. Make sure you have access to a login for SQL Server that has sysadmin rights.*

1. Insert the distribution media or mount the ISO image.
  - When AutoRun is enabled on the host PC, the AutoRun splash screen launches.
  - If AutoRun is not enabled, use File Explorer to navigate to the root folder of the installation media, and double-click **AutoRun.exe** to launch the AutoRun splash screen.
  - If prompted, enter proper Administrator credentials.
2. Click **Fluke MET/TEAM Server Update** to launch the update installer.

If necessary, click **Install** to install the prerequisites.

### **Setup Wizard**

#### *Note*

*Be sure to carefully read any messages shown at the start of the installation process before the update process is continued. Once the update installer is finished, additional tasks may be necessary before MET/TEAM can be used.*

MET/TEAM requires the TLS 1.2 security protocol. The installer checks the current TLS 1.2 setting on the computer. If a change is required, the system prompts to change to this setting. Click **No** to abort the installation or click **Yes** to allow the installer to make the necessary change. A message shows indicating the computer must be rebooted following the installation for this change to take effect. Click **OK** to proceed with the installation.

The Welcome dialog shows.

To install:

1. Click **Next** to proceed.

The License Agreement dialog shows.

2. Select the **I accept...** option.
3. Click **Next**.

The Update Type dialog shows.

4. Select the update type that most closely matches your system and click **Next**.

The options are:

- **Use all default settings:** Select this option if MET/TEAM Server was originally installed with default settings. This option automatically applies all necessary database update scripts to the MET/TEAM database. This option will not install any available new features.
- **Use custom settings:** Select this option if the MET/TEAM Server

installation was customized or if you manually moved files and folders deployed by the installer after the initial installation was complete. Select this option to choose custom settings for the update process and/or to install any new features.

5. If the **Use custom settings** option was selected, these dialogs are shown:
  - a. **Current Settings dialog:** This dialog indicates the currently installed version of MET/TEAM and the version that the update installer will deploy. The MET/TEAM and Customer Portal website names and application pool names are also indicated, as well the Email Alerts service name. These settings are automatically populated based on the original installation of MET/TEAM Server. If any of these settings were changed after the original installation, enter the new values. All settings are validated when you click the **Next** button.
  - b. **Installation Folders dialog:** This dialog indicates the folders where the MET/TEAM, MET/TEAM API, and Customer Portal website files, Email Alert Engine files, and MET/TEAM and MET/CAL shared files were installed. If MET/TEAM API and/or MET/TEAM Customer Portal are not installed, those fields are disabled. These settings are automatically populated based on the original installation of MET/TEAM Server. If any of these folders were relocated after the original installation, enter the new folders. All settings are validated when the **Next** button is clicked.

MET/TEAM Server Update - InstallShield Wizard

**Installation Folders**

Review the folders where MET/TEAM features were found. Change the folders as necessary.

**FLUKE**  
Calibration

MET/TEAM website root folder  
C:\inetpub\wwwroot\METTEAM\

MET/TEAM API website root folder  
C:\inetpub\wwwroot\METTEAMAPI\

MET/TEAM Customer Portal website root folder  
C:\inetpub\wwwroot\CustomerPortal\

MET/TEAM Email Alert Engine root folder  
C:\Program Files (x86)\Fluke\METTEAM Email Alert Engine\

MET/TEAM shared files root folder  
C:\Program Files (x86)\Fluke\METTEAM\

MET/CAL shared files root folder  
C:\ProgramData\Fluke\METCAL\shared\

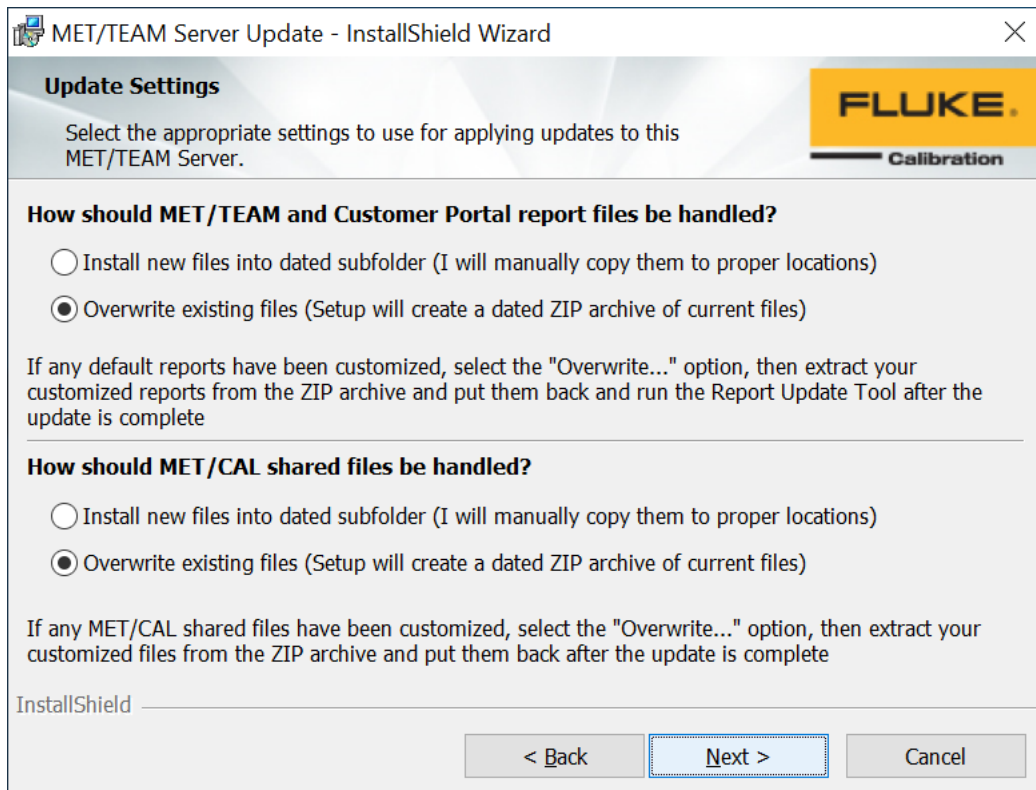
InstallShield

< Back   **Next >**   Cancel

up-installationfolders.png

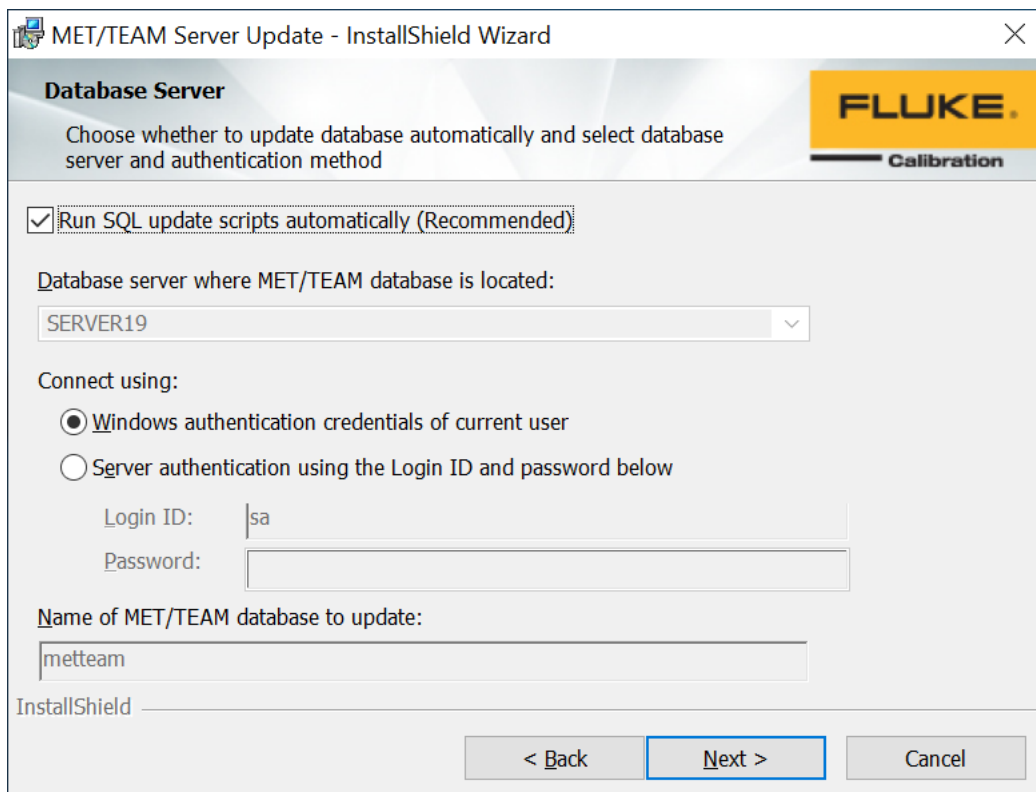
- c. Update Settings dialog: Use this dialog to determine how report files and MET/CAL shared files should be handled. Selecting the Install new files into dated subfolder option leaves existing files untouched and copies all new files into a subfolder that is named with today's date. Once the update process completes, you must manually copy the new files into the proper locations. Depending on the changes for this update, existing report files may not work until they have been updated. Changes made to updated MET/CAL shared files will also not be recognized until you manually copy the new files into the proper locations.

When the **Overwrite existing files** option is selected, the installer creates a ZIP archive of the current files, then copies the new files for this release into the proper locations. The ZIP archive is given the name "Archive\_YYYYMMddHHmmss.zip" with today's date. Once the update is complete, you can restore any customized file that was overwritten with a new file by extracting it from the ZIP archive and copying it to the proper location.



up-updatesettings.png

6. Database Server dialog: Use this dialog to determine whether all necessary database update scripts should be applied to the database automatically. If the **Run SQL update scripts automatically (Recommended)** option is disabled, there are no update scripts included with this update. The database server and database name are populated automatically and cannot be changed. Select the authentication method to use to connect to SQL Server and enter appropriate credentials if necessary. If you uncheck the **Run SQL update scripts automatically (Recommended)** option, you must run all necessary database update scripts manually using Microsoft SQL Server Management Studio when the update installation process is complete.



UP-databaseserver.png

The Ready to Update the Program dialog shows.

6. Click **Install** to start the update.

An installation progress dialog shows. When the installation is complete, a log file shows the status of the update. Review the log file for potential failures and/or other information on additional steps that may need to be taken. The Setup Complete dialog shows.

7. Click **Finish** to close the dialog.

#### Note

*Although the MET/TEAM Server Update can be uninstalled using Programs and Features in Control Panel, the files that are deployed by the update are not removed from the system. The update cannot be reversed or removed.*

### **Re-Running the MET/TEAM Server Update Installer**

You can re-run the MET/TEAM Server Update installer. Re-run the installer if an attempt to update MET/TEAM fails, or if you did not install a new feature that is available in the new release.

To re-run the installer, launch **Setup.exe** again.

### **Setup Wizard**

To re-run:

1. Insert the distribution media or mount the ISO image.
  - If **AutoRun** is enabled on the host PC, the AutoRun splash screen launches.
  - If **AutoRun** is not enabled, use File Explorer to navigate to the root folder of the installation media, and double-click **AutoRun.exe** to launch the AutoRun splash screen.
  - If prompted, enter proper Administration credentials.
2. Click **Fluke MET/TEAM Server Update** to launch the update installer.

The Welcome dialog shows.
3. Click **Next** to proceed.

The Program Maintenance dialog shows.
4. On the Program Maintenance dialog, select an option. The options are:
  - **Modify** - Select this option to navigate the installer's dialogs as if this was the first run. This option allows new features available in this release to be installed if not previously selected.
  - **Repair** - Select this option to bypass all installer dialogs and repeat the update installation using the same settings as the first time you ran it.
  - **Remove** - Select this option to uninstall the MET/TEAM Server Update. The update to the MET/TEAM and Customer Portal web sites and the database are irreversible, however, you can use this option to remove any new features that were installed by the update installer.
5. Click **Next**.
  - If the **Repair** option was selected, the Ready to Repair the Program dialog shows. Click **Install** to proceed.
  - If the **Remove** option was selected, the Remove the Program dialog shows. Click **Remove** to proceed.
  - If the **Modify** option was selected, the Update Type dialog shows.
6. On the Update Type dialog, choose the **Use custom settings** option, which allows you to navigate the remainder of the setup dialogs. Refer to the previous section for more details.
7. After making selections on the remainder of the dialogs, the Ready to Update the Program dialog shows.
8. Click **Install** to proceed.

## Fluke MET/TEAM Mobile Prerequisites Installer

MET/TEAM Mobile is a feature that allows you to “check out” MET/TEAM to a mobile workstation and disconnect it from the network to do some work. Once the work is complete, you can connect the mobile workstation to the network again and “check in” the updates. To use this feature, first run the Fluke MET/TEAM Mobile Prerequisites Installer on the mobile workstation to configure it for mobile use. This installer was deployed to the MET/TEAM Client Installers shared folder on the server where the MET/TEAM Server installation was done. For stand-alone installations, this installer was deployed to the folder indicated in Table 1 for the Installers item of the MET/TEAM Files section.

### Note

*When you install SQL Server on the MET/TEAM Mobile workstation, some settings must be configured differently from the MET/TEAM Server installation of SQL Server. These settings are identified in the [Microsoft SQL Server Express Installer](#) section. **Failure to configure these settings properly will prevent MET/TEAM Mobile from operating.***

### Note

*MET/TEAM Mobile requires the same version of SQL Server on the Mobile workstation as on the server.*

Before setting up any workstations for MET/TEAM Mobile, see the [Configuring MET/TEAM Server for MET/TEAM Mobile](#) section.

When updating to a later version of MET/TEAM, be sure to run the Fluke MET/TEAM Mobile Prerequisites installer on all Mobile workstations to ensure that all the prerequisites are up to date.

## Prerequisites

The MET/TEAM Mobile feature requires the same prerequisites as the MET/TEAM Server installer. This installer will automatically install all of the prerequisites.

### Note

- *Always reboot the computer when prompted to ensure the successful installation of all prerequisites.*
- *When you uninstall the software, none of the prerequisites will be uninstalled automatically. To uninstall prerequisites, use the Windows® Control Panel Programs and Features option.*



## Installation Process

To install the Fluke MET/TEAM Mobile Prerequisites from the MET/TEAM server computer:

1. Make sure that the minimum PC requirements are met for a MET/TEAM client. Ensure there is plenty of hard drive space for the database. See the [System Requirements](#) section for more information.

### Note

*You must run the installation as a user that has Administrative permissions on the machine.*

2. If you already have an instance of SQL Server installed on the Mobile workstation, skip to the next step. Otherwise, install SQL Server on the Mobile workstation. You MUST install the same version of SQL Server on the Mobile workstation as you are using on the MET/TEAM server (for example, SQL Server 2016 or SQL Server 2019). In most instances, the free SQL Server Express edition is sufficient for the mobile workstation. Installers for SQL Server Express can be downloaded from the Microsoft website. Follow the instructions given in [Microsoft SQL Server Express Installer](#) to complete the installation.

### Note

*When you install SQL Server on the MET/TEAM Mobile workstation, some settings need to be configured differently from the installation of SQL Server on the MET/TEAM Server. These settings are identified in the [Microsoft SQL Server Express Installer](#) section.*

***Failure to configure these settings properly will prevent MET/TEAM Mobile from operating.***

3. Run File Explorer on the mobile workstation. In the address bar, enter **\\<servername>\<sharename>** and push **ENTER**.

Where **<servername>** is the name of the server where MET/TEAM Server was installed, and **<sharename>** is the network share name entered on the MET/TEAM Client Installers Share Name dialog. The default name of this network share is **metteam**.

For example, if the computer where MET/TEAM Server is installed is named **SERVER01** and the MET/TEAM network share name is **metteam**, type **\\SERVER01\metteam** into the File Explorer address bar and push **ENTER**.

4. In File Explorer, double-click the **Mobile** folder to navigate to the MET/TEAM Mobile Prerequisites installer files.
5. Double-click the **Setup.exe** file to launch the MET/TEAM Mobile Prerequisites installer.

The language selection dialog shows.

6. Select the language to use for the installation and click **OK**.

MET/TEAM requires the TLS 1.2 security protocol. The installer checks the current TLS 1.2 setting on the computer. If a change is required, the system prompts to change to this setting. Click **No** to abort the installation or click **Yes** to allow the installer to make the necessary change. A message shows indicating the computer must be rebooted following the installation for this change to take effect. Click **OK** to proceed with the installation.



The Welcome dialog shows.

7. Click **Next**.

The License Agreement dialog shows.

8. Read the terms of the license agreement. If you accept these terms, select the **I accept...** option and click **Next**.

The Ready to Install the Program dialog shows.

9. Click **Install** to begin the installation process.

*Note*

*The installer installs each of the prerequisites for MET/TEAM Mobile. Always reboot the computer when prompted to ensure the successful installation of all prerequisites. The installation should start up automatically after each reboot, if necessary.*

*The installation of all prerequisites can take a significant amount of time, especially Microsoft .NET Framework.*

An installation progress dialog shows during the installation. When the installation is complete, the Setup Complete dialog shows.

10. Click **Finish** to close the dialog.

## **Fluke MET/TEAM Customer Portal Installer**

The MET/TEAM Customer Portal is a feature that allows your customers to log into your system to view the status of their orders. This feature can be installed on the same server as the MET/TEAM website during the MET/TEAM Server installation. However, sometimes it is preferable to set up external-facing websites on a separate server.

*Note*

*This installer only installs the MET/TEAM Customer Portal feature on a server that is part of the same domain as the MET/TEAM Server. If you need to install MET/TEAM Customer Portal on a non-domain machine (for example in a DMZ), follow the instructions in the [Installing MET/TEAM Customer Portal on a Non-Domain Machine](#) section below.*

To install the MET/TEAM Customer Portal on a separate server on the same domain, first install the MET/TEAM Server and configure SQL Server to allow remote connections. Then you must run the Fluke MET/TEAM Customer Portal installer on the server to host the Customer Portal website. This installer was deployed to the MET/TEAM Client Installers shared folder on the server where the MET/TEAM Server installation was run. For stand-alone installations, this installer was deployed to the folder indicated in Table 1 for the Installers item of the MET/TEAM Files section. See the [Configuring SQL Server to Allow Remote Connections](#) section for details.

### **Installer Prerequisites**

The MET/TEAM Customer Portal installer includes the same prerequisites as the MET/TEAM Server installer.

#### *Note*

*When uninstalling the software, none of the prerequisites are uninstalled automatically. To uninstall prerequisites, use the Windows® Control Panel Programs and Features option.*

*Always reboot the computer when prompted to ensure the successful installation of all prerequisites.*

### **Installation Process**

To install the MET/TEAM Customer Portal from the MET/TEAM server computer:

1. Make sure that the minimum PC requirements are met. See the [System Requirements](#) section for more information.

#### *Note*

*You must run the installation as a user that has Administrative permissions on the machine. Make sure that you have access to a login for SQL Server that has sysadmin rights.*

2. Run File Explorer on the server to host the Customer Portal website. In the address bar, type \\<servername>\<sharename> and push **ENTER**.

Where <servername> is the name of the server where MET/TEAM Server was installed, and <sharename> is the network share name entered on the MET/TEAM Client Installers Share Name dialog. The default name of this network share is **metteam**.

For example, if the computer where MET/TEAM Server is installed is named **SERVER01** and the MET/TEAM network share name is **metteam**, enter **\\SERVER01\metteam** into the File Explorer address bar and push **ENTER**.

3. In File Explorer, double-click the **CustomerPortal** folder to navigate to the MET/TEAM Customer Portal installer files.
4. Double-click the **Setup.exe** file to launch the MET/TEAM Customer Portal installer.

The language selection dialog shows.

5. Select the language to use for the installation and click **OK**.

The prerequisite installation dialog shows.

6. Click **Install** to install all the prerequisites.

#### *Note*

*Always reboot the computer when prompted to ensure the successful installation of all prerequisites.*

*The installation of all prerequisites can take a significant amount of time, especially Microsoft .NET Framework.*

Once the prerequisites are successfully installed, the Welcome dialog shows.

7. Click **Next**.

MET/TEAM requires the TLS 1.2 security protocol. The installer checks the current TLS 1.2 setting on the computer. If a change is required, the system prompts to change to this setting. Click **No** to abort the installation or click **Yes** to allow the installer to make the necessary change. A message shows indicating the computer must be rebooted following the installation for this change to take effect. Click **OK** to proceed with the installation.

If the install finds a previous version of MET/TEAM Customer Portal on the machine, a prompt shows that MET/TEAM Customer Portal will be upgraded. The installer detects all settings used for the installation of the previous version, uninstalls the previous version, and then installs the current version with minimal user interaction. The License Agreement dialog shows.

*Note*

*When updating a previous installation of MET/TEAM Customer Portal, the current website is completely uninstalled, which can remove any customized settings and/or file system permissions. These settings must be manually re-applied after the update is complete. Before proceeding with the update, make a note of all custom settings and make a backup copy of the web.config file so that the new web.config file can be updated with the necessary settings after the installation is complete.*

8. Read the terms of the license agreement. If you accept these terms, select the **I accept...** option and click **Next**.

If upgrading from a previous version, the Database Server dialog is shown. Otherwise, the Setup Type dialog is shown.

9. Select the option for feature installation on this computer and click **Next**.

The options are:

- **Typical Install Using Default Settings:** installs typical features by using the default settings. Select this option for the simplest installation process.
- **Choose Custom Settings:** allows the user to select the installation path and other customizable settings. Select this option when you have specific requirements such as for file locations.

If Choose Custom Settings was selected, the following custom dialogs are shown:

- **Custom Setup:** The MET/TEAM Customer Portal installer only includes one feature, MET/TEAM Customer Portal. This feature is always installed and cannot be disabled. You can select this feature and click Change to change the location of the Customer Portal website files.
- **Customer Portal Application Pool Identity:** This dialog lets the user select the account that the Customer Portal website uses to connect to the SQL Server database. The options are the same as for the [MET/TEAM Server installer](#). Refer to that section for more details on each option.

Regardless of the selected option, the installer automatically creates the login in SQL Server and configures it as a db\_owner for the MET/TEAM database. When SQL Server is on a different server than MET/TEAM, the operating system on both servers must use the same language (such as, English or Spanish or Chinese), otherwise the installation process might not be able to configure the database properly.

10. Select an option from this dialog and click **Next**.

- **Custom Settings:** This dialog allows the user to enter the port of the website and to set whether a rule is created for the Windows firewall to allow access to the selected port.

11. Click **Next**.

The Database Server dialog shows.

12. Click **Browse...** (next to the database server box) to select the SQL Server instance where the MET/TEAM database is located and choose the authentication method to use to connect to SQL Server.

- **Windows authentication credentials of current user** – Select this option to use the credentials of the domain user account that was used to launch the installer (typically the user account that is logged into Windows). This is the default option. This option requires the user account to have sysadmin rights in SQL Server.
- **Server authentication using the Login ID and password below** – Select this option to enter SQL Server credentials to use. This option requires credentials that have sysadmin rights in SQL Server to be entered.

13. Click **Browse...** (next to the database catalog box) select the database that MET/TEAM uses, and click **Next**.

The Ready to Install the Program dialog shows.

14. Click **Install** to run the installation process.

The installer installs the files for the Customer Portal website. An installation progress dialog shows during the installation. When updating an existing system, if the identity for the Customer Portal application pool was previously configured to use the SpecificUser option, the system prompts for the password for the user account that was selected. Enter the password for the account indicated and click **OK**.

When the installation is complete, the Setup Complete dialog shows.

15. Click **Finish** to close the dialog.

A shortcut is created on the desktop to access the installed website on the local computer.

Additional steps are required to expose the MET/TEAM Customer Portal website to external customers. Consult your IT department for assistance on this setup.

### **Installing MET/TEAM Customer Portal on a Non-Domain Machine**

Setting up the MET/TEAM Customer Portal feature on a machine that is not a member of the same domain as MET/TEAM Server (such as a server in a DMZ) requires a different installation process than when setting it up on a machine that is a member of the same domain. The provided MET/TEAM Customer Portal installer cannot complete this type of installation on its own.

This setup process requires manual steps on both the server that hosts the SQL Server database, as well as the machine to host the MET/TEAM Customer Portal website. Because every machine configuration can be different, a general process for setting up MET/TEAM Customer Portal is outlined in this section. The instructions provided below may not be exact for your system but should guide you in the right direction to successfully get MET/TEAM Customer Portal up and running.

Security steps above and beyond what is documented here may need to be taken to completely secure your website and servers. Always refer to your company's IT policies and practices when configuring machines and systems for external access.

### **Configuring SQL Server for Access from a Non-Domain Machine**

When setting up the MET/TEAM Customer Portal feature on a non-domain machine, SQL Server must be configured to allow logins using a SQL Server authentication login account. This is most easily accomplished by selecting Mixed Mode authentication when SQL Server is first installed. However, if SQL Server was originally installed using Windows Authentication only, you can change it to use Mixed Mode authentication using the SQL Server Management Studio application. Microsoft has documented this process here:

<https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/change-server-authentication-mode>

Next, you need to create a SQL Server authentication login account that the MET/TEAM Customer Portal can use to connect to SQL Server. The Customer Portal installer automatically creates a login in SQL Server. To create the login manually, follow the process outlined below.

*To Create a Login for MET/TEAM Customer Portal:*

1. Open SQL Server Management Studio and log in to the server.
2. In the left pane, expand the **Security** node.
3. Right-click the **Logins** node and select **New Login** to show the Login – New dialog.
4. On the **General** page, enter a login name to use for the MET/TEAM Customer Portal in the **Login name** box.
5. Select the **SQL Server authentication** option and enter a password for this login.
6. Uncheck the **Enforce password expiration** and **User must change password at next login** options.
7. On the **User Mapping** page, check the box to the left of the MET/TEAM database, and check the **public** and **db\_owner** boxes in the roles list.
8. Click **OK** to create the login.

SQL Server must be configured to allow TCP/IP connections on a specific port.

*To Configure SQL Server to Allow Connections on a Specific Port:*

1. Open the SQL Server Configuration Manager utility.
2. In the left pane under SQL Server Configuration Manager, select **SQL Server Network Configuration > Protocols for [InstanceName]**.
3. Double-click the **TCP/IP** item to open the TCP/IP Properties dialog.
4. On the **Protocol** tab, set the **Enabled** property to **Yes**.
5. On the **IP Addresses** tab, locate the **IP4** section and set the **Enabled** property to **Yes**.
6. On the **IP Addresses** tab, locate the **IPAll** section and set the **TCP Port** property to **1433**.
7. Click **OK** to close the TCP/IP Properties dialog.

Restart the SQL Server service to allow these changes to take effect. To restart the service using SQL Server Configuration Manager, select the **SQL Server Services** node in the left pane, right-click the **SQL Server ([InstanceName])** item and select **Restart** from the popup menu.

Now that SQL Server is configured, the firewall on the server that SQL Server is running on must be configured to allow inbound connections on port 1433. The instructions below indicate how to do this on a Windows firewall. If you are using different firewall software, refer to your firewall's documentation.

*To Configure Windows Firewall with Advanced Security for Allowing Inbound Connections on a TCP Port:*

1. Open the Windows Firewall with Advanced Security utility.
2. In the left pane of the Windows Firewall with Advanced Security window, select the **Inbound Rules** item.
3. In the far-right pane, click **New Rule...**
4. On the New Inbound Rule Wizard dialog, select **Port** on the **Rule Type** step, and click **Next**.
5. Select the **TCP** and the **Specific local ports** options on the **Protocol and Ports** step and enter **1433** in the box provided and click **Next**.
6. Select the **Allow the connection** option on the **Action** step and click **Next**.
7. Select the desired options on the **Profile** step and click **Next**.
8. Enter a name and description for this rule on the **Name** step and click **Finish** to complete the process.

The last step of this process is to determine the IP address of the machine that SQL Server is running on as well as the SQL Server instance name. You can get the IP address using the **ipconfig** command-line utility. Make a note of the IP address. You can get the instance name of SQL Server using SQL Server Management Studio or SQL Server Configuration Manager. These items are used in the following section.

*Configuring MET/TEAM Customer Portal on a Non-Domain Machine*

Once SQL Server is configured for access, proceed to install and configure MET/TEAM Customer Portal on the non-domain machine. This process uses the MET/TEAM Customer Portal installer to facilitate the installation of prerequisites for the website, but also requires many things to be done manually. Follow the process outlined below to successfully setup the MET/TEAM Customer Portal feature.

*To Setup MET/TEAM Customer Portal on a Non-Domain Machine:*

1. Copy the MET/TEAM Customer Portal installer files from the machine where MET/TEAM Server is installed to removable media.

This installer is typically located in the **%programfiles(x86)%\Fluke\METTEAM\Installers\CustomerPortal** folder. If the non-domain machine has access to shared folders on the domain, you can access this installer using **\\[servername]\metteam\Installers\CustomerPortal** (where [servername] is the name or IP address of the server where the MET/TEAM website is installed).

2. On the machine where MET/TEAM Customer Portal is to be installed, run **Setup.exe** to begin the MET/TEAM Customer Portal installation.
3. Allow all the prerequisites to be installed on the machine.
4. Once all prerequisites have been installed, install Customer Portal as described in the [Fluke MET/TEAM Customer Portal Installer](#) section using these guidelines:

- On the Customer Portal Application Pool Identity dialog, select the **ApplicationPoolIdentity** setting. (This creates a login for NT AUTHORITY\ANONYMOUS in SQL Server. It can be removed later if it is not needed for any other reason).
- On the Database Server dialog, select **Server authentication using the Login ID and password below** and enter the credentials for the login to use.

After the installation process is complete, use File Explorer to navigate to the **C:\inetpub\wwwroot\CustomerPortal** folder and open the **web.config** file in a text editor. Make these changes:

1. Locate the <connectionStrings> section near the top. Comment out the first entry in this section by enclosing the entire line in a XML comment tag:  
`<!-- <add name="MetTrack_Dev" connectionString="..." /> -->`
2. Delete the commented lines of text both above and below the next entry in this section, leaving the entry itself in the file:  
`<add name="MetTrack_Dev" connectionString="..." />`
3. Replace %SERVER\_IP\_ADDRESS% in the connection string with the IP address of the machine where SQL Server is located and the port used by SQL Server separated by a comma (for example, 129.196.123.214,1433).
4. Replace %INSTANCE\_NAME% in the remaining connection string with the instance name of SQL Server. This can be copied from the first connection string.
5. Replace %DATABASE\_NAME% with the name of the MET/TEAM database (typically metteam). This can be copied from the first connection string.
6. Replace %USER\_ID% and %PASSWORD% with the SQL Server authentication login user name and password that were used on the Database Server dialog during installation.

The finished <connectionStrings> section of the web.config file should look similar to this:

```
<connectionStrings>

    <!-- <add name="MetTrack_Dev" connectionString="Data
    Source=MYSERVER\SQLEXPRESS;Database =metteam;Integrated
    Security=SSPI" providerName="System.Data.SqlClient" /> -->

    <add name="MetTrack_Dev" connectionString="Data
    Source=10.0.2.56,1433\SQLEXPRESS;Network
    Library=DBMSSOCN;Initial Catalog=metteam; User
    ID=cplogin;Password=cploginpwd" />

</connectionStrings>
```

7. Save and close the **web.config** file.

The MET/TEAM Customer Portal website should now be available using the IP address of the machine it is installed on and the website port number (for example, http://[ip\_address]:[port]).



## Fluke MET/CAL Client Installer

The Fluke MET/CAL Client Installer streamlines the client workstation installation process for the MET/CAL applications. This installer launches from the **metteam** network share on the server computer. For stand-alone installations, launch this installer from the folder indicated in Table 1 for the Installers item of the MET/TEAM Shared Files section.

Use this installer for new installations and upgrade installations. Alternatively, you can use the individual feature installers. The individual installers require that you manually install all prerequisites, whereas the Fluke MET/CAL Client installer does this automatically.

### Installer Prerequisites

For the MET/CAL Client installer to complete successfully, some prerequisites must be installed. The installer automatically installs most of these prerequisites as necessary.

The prerequisites include:

- Microsoft .NET Framework
- Microsoft Visual C++ Redistributable Package (x86)
- Microsoft Visual Studio 2015 Shell (Isolated)
- Microsoft Visual Studio 2015 - Update 3.

### Installation Packages and Prerequisites

The installation packages used by the Fluke MET/CAL Client installer are in the shared **metteam** folder on the server. MET/CAL Runtime and MET/CAL Editor are both distributed as Windows Installer installation packages, also known as MSI files. Each MSI file has a version suffix (major, minor, revision). These packages are:

- Fluke MET/CAL Runtime applications (Fluke-METCAL-x.x.x.msi)
- Fluke MET/CAL Editor applications (Fluke-METCAL-EDITOR-x.x.x.msi)

Using MET/CAL with MET/TEAM requires PDF viewer software installed on the workstation to view reports. A PDF viewer is not automatically installed with the MET/CAL Client installer.

#### Note

*When you uninstall the software, none of the prerequisites are uninstalled automatically. To uninstall prerequisites, use the Windows® Control Panel Programs and Features option.*

### Installation Process

To install the Fluke MET/CAL Client from the MET/TEAM server computer:

1. Make sure that the minimum PC requirements are met. See the [System Requirements](#) section for more information.
2. Before an upgrade, verify that none of the MET/CAL applications are running.

#### Note

*You must run the installation as a user that has Administrative permissions on the machine.*

3. Run File Explorer on the workstation computer. In the address bar, type **\\<servername>\<sharename>** and push **ENTER**.

Where **<servername>** is the name of the server where MET/TEAM Server was installed, and **<sharename>** is the network share name entered on the MET/TEAM Client Installer Share Name dialog. The default name of this network share is **metteam**.

For example, if the computer where MET/TEAM Server was installed is named **SERVER01** and the MET/TEAM Client Installer network share name is **metteam**, type the following into the File Explorer address bar and push **ENTER**:

**\\SERVER01\metteam**

4. In File Explorer, double-click the **METCAL** folder to navigate to the MET/CAL Client installer files.
5. Double-click the **Setup.exe** file to launch the MET/CAL Client installer.  
The language selection dialog shows.
6. Select the language to use for the installation and click **OK**.  
If any prerequisites are not already installed on the PC, the prerequisite installation dialog shows.
7. Click **Install** to install the prerequisites.

*Note*

*Always reboot the computer when prompted to ensure the successful installation of all prerequisites.*

MET/TEAM requires the TLS 1.2 security protocol. The installer checks the current TLS 1.2 setting on the computer. If a change is required, the system prompts to change to this setting. Click **No** to abort the installation or click **Yes** to allow the installer to make the necessary change. A message shows indicating the computer must be rebooted following the installation for this change to take effect. Click **OK** to proceed with the installation.

The Welcome dialog shows.

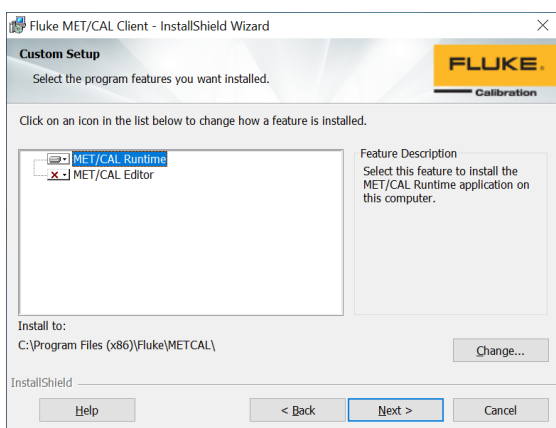
8. Click **Next** to proceed.  
If setup detects a previous version of MET/CAL is currently installed on the computer, the Ready to Install the Program dialog is shown. Otherwise, the License Agreement dialog is shown.
9. Read the terms of the license agreement. If you accept these terms, select the **I accept...** option and click **Next**.  
The Select Language dialog shows.
10. Select the language for MET/CAL applications and click **Next**.  
The Custom Setup dialog shows.

11. Select the features that you want to install on this computer. The features include:

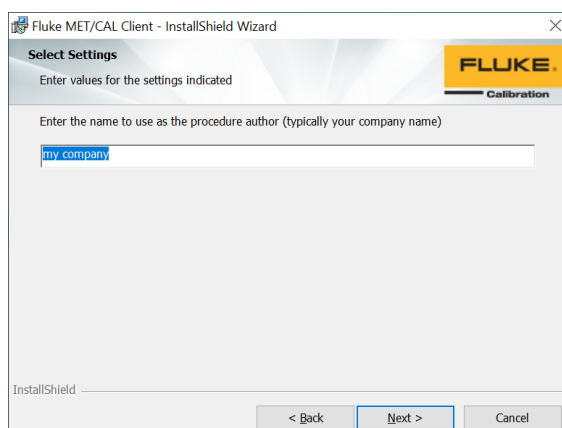
- **MET/CAL Runtime:** installs the MET/CAL Runtime application on the computer. This feature is always installed and cannot be disabled. You can select this feature and click **Change** to change the location of the Runtime application files.
- **MET/CAL Editor:** installs the MET/CAL Editor application on the computer. This feature is optional and is not selected by default. You can select this feature and click **Change** to change the location of the Editor application files.

The Select Settings dialog shows.

12. Enter the name to use as the procedure author and click **Next**.



MC-CustomSetup.png



MC-SelectSettings.png

The Shared Files dialog shows.

- a. If you are installing MET/CAL on a client workstation, the MET/CAL network share that was created during the MET/TEAM Server installation needs to be mapped to a drive letter on the local computer. This drive must be selected.

#### *Note*

*If a mapped drive letter does not appear on the dialog when you click the **Change** button, you may need to map the drive as the user that the installer is running as. To do this, click **Map Drive Letter...** to open a command window as that user. Use the **NET USE** command to create the drive mapping. For example, **NET USE M: \\server\share** will map \\server\share to the M: drive. When finished, close the command window.*

- b. If you are installing a stand-alone system, select the root folder on this computer for the MET/CAL shared files. By default, the selected folder should be the local folder. Refer to Table 1. This folder might be hidden. If so, enter the path manually.

- c. Click **Next**.

The Ready to Install the Program dialog shows.

13. Click **Install** to begin the installation process.

Installation progress dialogs for the selected features show during the installation process.

The Setup Complete dialog shows.

14. Click **Finish** to close the dialog.

### **MET/CAL Runtime Installation**

This section outlines the process of installing the MET/CAL Runtime as a stand-alone installer outside of the MET/CAL Client installer.

Before you begin, make sure that MET/TEAM Server is installed either on the same PC (stand-alone installation) or that the MET/CAL shared folder in a networked instance of MET/TEAM is mapped to a logical drive on the PC. The mapped drive is required to complete the installation process for networked installations.

#### *Note*

*You must run the installation as a user that has Administrative permissions on the machine. Also, the MET/CAL shared folder must be mapped to a drive letter for the user that the installer is running as. To do this, open a command window using the same credentials that the installer will be run as and use the NET USE command to create the drive mapping.*

1. Make sure all prerequisites have been installed first.
2. Launch the MET/CAL Runtime installer (msi) file.

The Welcome dialog shows.

3. Click **Next**.

The License Agreement dialog shows.

4. Select **I accept...** and click **Next**.

The Select MET/CAL Language dialog shows.

5. Select the language to use and click **Next**.

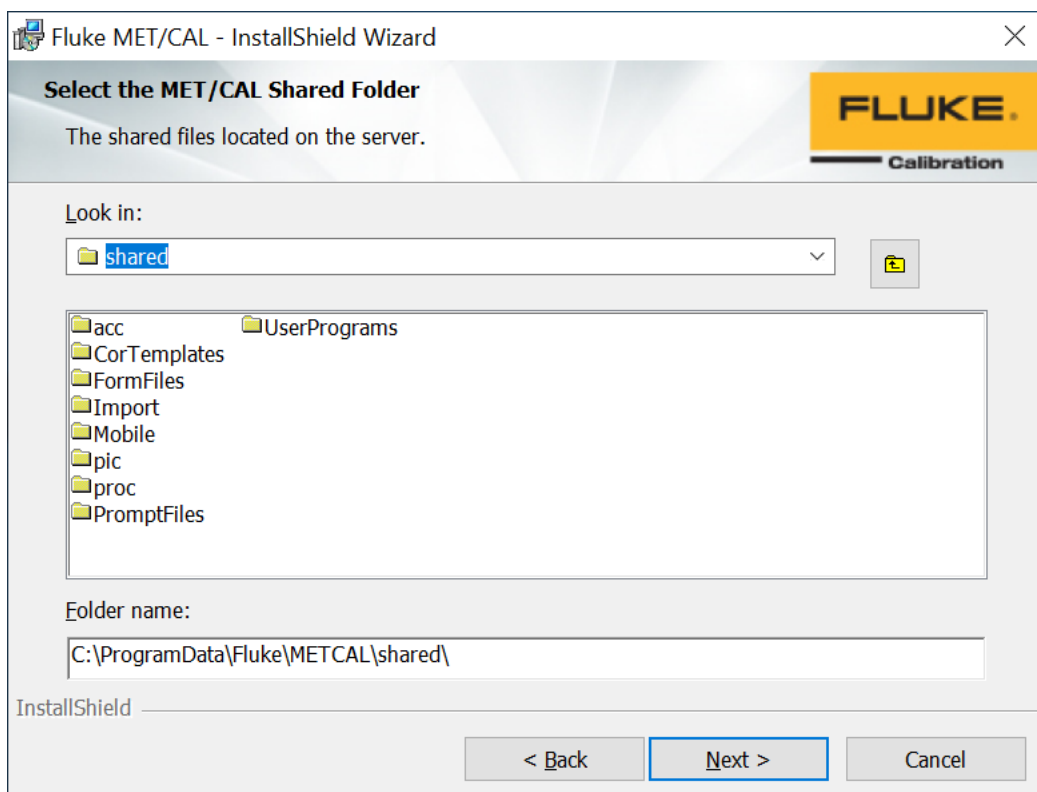
#### *Note*

*The language selection defines the default language selection for the MET/CAL Runtime and MET/CAL Editor only.*

The Company Name dialog shows.

6. Enter your company name and click **Next**.

The Select the MET/CAL Shared Folder dialog shows.



MCR-SharedFolder.png

7. Select the path to the MET/CAL shared folder and click **Next**.
  - a. If you are installing MET/CAL on a client workstation, the MET/CAL shared folder that was created during the MET/TEAM Server installation must be mapped to a drive letter on the local computer. Select the drive on this dialog.
  - b. If you are installing a stand-alone system, select the root folder for the MET/CAL shared files on this dialog. Refer to Table 1.

The Choose Setup Type dialog shows.

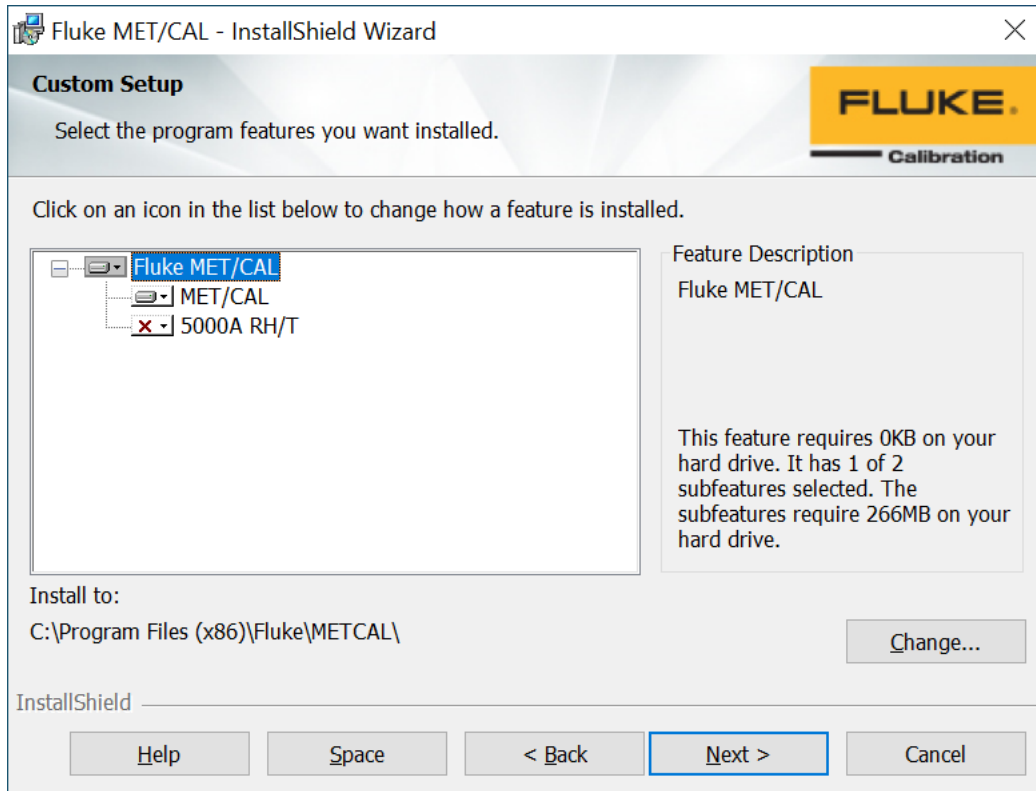
8. Choose the setup type.

The options are:

- **Typical**: installs the typical installation files using the default installation settings. There are no options to alter the file and folder paths.
- **Custom**: all installation folders and paths are customizable. The default options are pre-selected.
- **Complete**: automatically installs all available applications by using the default installation settings. There are no options to alter the file and folder paths.

Fluke Calibration recommends **Custom** for all upgrades.

9. If the **Custom** setup type was selected, select the specific applications that you want to install and choose the option to install it on the local hard drive.
- You can change the folder where the MET/CAL applications are installed. To do so, select the **Fluke MET/CAL** item and click **Change**.



MCR-CustomSetup.png

10. Click **Next**.
11. On the Ready to Install dialog, click **Install** to begin the installation process.  
The MET/CAL Runtime files are installed on the PC.
- After the MET/CAL Runtime files have been installed on the PC, the Installation Complete dialog is shown.
12. Click **Finish** to complete the MET/CAL Runtime installation process.

### **MET/CAL Editor Installation**

This section outlines the process of installing the MET/CAL Editor as a stand-alone installer outside of the MET/CAL Client installer.

Before you begin, make sure one of the following requirements is met:

- MET/TEAM Server is installed on the same PC (stand-alone installation).
- The MET/CAL shared folder in a networked instance of MET/TEAM is mapped to a logical drive on the PC.

#### **Note**

*You must run the installation as a user that has Administrative permissions on the machine.*

1. Make sure all prerequisites have been installed first.
2. Launch the MET/CAL Editor installer (msi) file.

The Welcome dialog shows.

3. Click **Next**.
4. Select **I accept...** and click **Next**.
5. Choose the setup type and click **Next**.

The options are:

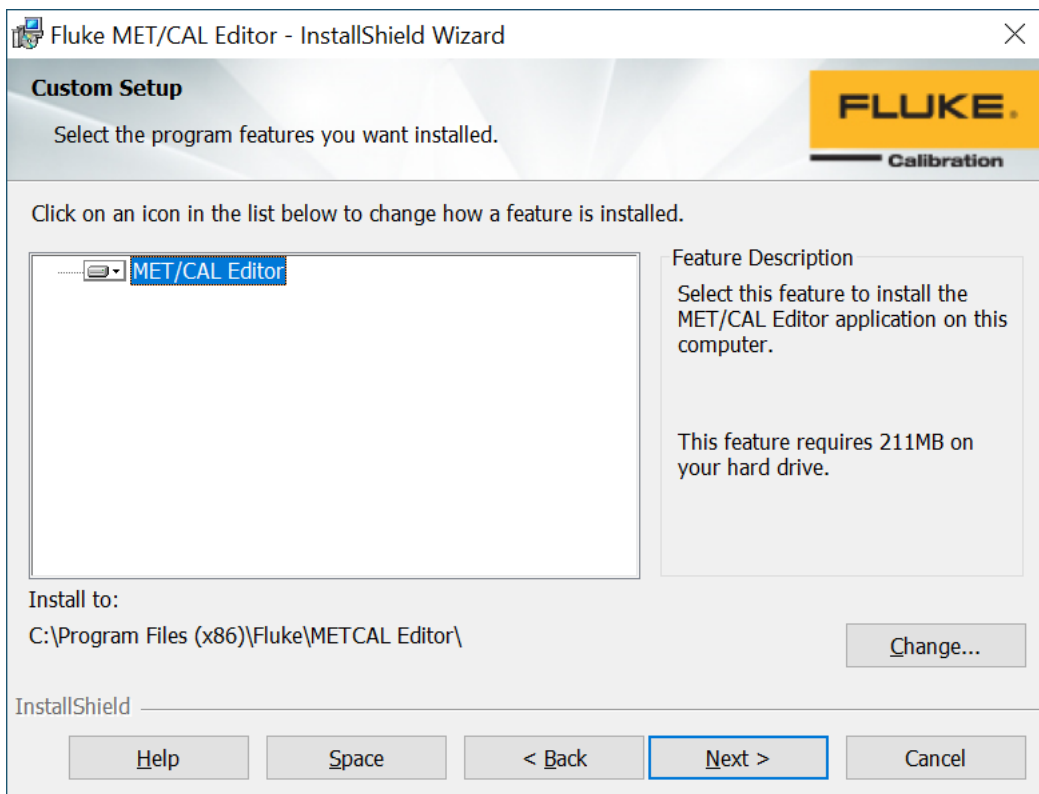
- **Complete:** installs all available applications by using the default installation settings. There are no options to alter the file and folder paths.
- **Custom:** all installation folders and paths are customizable. The default options are pre-selected.

The **Custom** option is recommended for all upgrades.

6. If the Custom setup type was selected, select the specific applications and choose the option to install it on the local hard drive.

You can change the folder where the MET/CAL Editor application is installed. To do so, select the **MET/CAL Editor** item and click **Change**.

7. Click **Next**.



MCE-CustomSetup.png

8. On the Ready to Install dialog, click **Install** to begin the installation process.  
After the MET/CAL Editor files have been installed on the PC, the Installation Complete dialog shows.
9. Click **Finish** to complete the MET/CAL Editor installation process.

## **Setting up a Workstation for Crystal Reports**

MET/TEAM reports are designed using Crystal Reports. To facilitate setting up a workstation for creating and/or editing reports using Crystal Reports, a folder has been created in the MET/TEAM shared directory's \Installers folder named \CrystalReportsSupport. This folder contains a ReadMe file that gives specific instructions for installing fonts and other files necessary for using Crystal Reports on a workstation.

## **Microsoft SQL Server Express Installer**

SQL Server is required to host the database for MET/TEAM. The SQL Server database can either be installed on the same computer that hosts the MET/TEAM website or on another computer that is accessible over a network.

Whether you choose to install SQL Server on the same computer or a different computer, the MET/TEAM Server installer must be able to connect to a valid instance of SQL Server before you can install MET/TEAM Server. In most instances, the free SQL Server Express edition is sufficient for stand-alone or small networked databases. Installers for SQL Server Express can be downloaded from the Microsoft website. Fluke Calibration does not provide SQL Server Express installers on the distribution media. Fluke Calibration recommends to download and install Microsoft SQL Server Management Studio (SSMS) if it is not included with the SQL Server installer.

When SQL Server is on a different server than MET/TEAM, the operating system on both servers must use the same language (such as, English or Spanish or Chinese), otherwise the installation process might not be able to configure the database properly.

### *Note*

*MET/TEAM requires Microsoft SQL Server 2012 or later. The MET/TEAM Server installer prevents the selection of a database server prior to this version. For the most up-to-date information on supported versions of SQL Server, see our website.*

SQL Server also must be installed on all MET/TEAM Mobile workstations. MET/TEAM Server and MET/TEAM Mobile are required to use the same version of SQL Server. If different versions of SQL Server are used, the mobile Check In or Check Out process may fail.

### *Note*

*When you install SQL Server on the MET/TEAM Mobile workstation, some settings need to be configured differently from MET/TEAM Server's installation of SQL Server. Pay special attention to the information provided in the Installation Process section for installing SQL Server on MET/TEAM Mobile workstation computers. **Failure to configure these settings properly will prevent MET/TEAM Mobile from operating.***



To manage SQL Server, download and install SQL Server Management Studio (SSMS) from Microsoft's web site. Recent versions of SQL Server do not include SSMS.

### Prerequisites

The SQL Server installer thoroughly analyzes the computer prior to installation. If the computer does not meet all criteria of the installer, you must correct the issues found before continuing.

For the SQL Server installer to complete successfully, one or more of prerequisites may need to be installed. The SQL Server installer attempts to install the necessary prerequisites, or prompt you to install them manually as needed.

### Installation Process

This section outlines a basic installation of Microsoft SQL Server 2019 Express.

#### Note

*Installation dialogs for other versions of SQL Server may differ, but the same settings apply. Also, prior to installing MET/TEAM, make sure the account used to setup the database during MET/TEAM Server installation has been granted the 'sysadmin' server role. Failure to do this may result in an error message near the end of the installation process indicating the database is out of sync, and the MET/TEAM website may fail to run properly. If this is the case, simply make the change indicated above post-installation (reinstallation is not required).*

1. Download a version of SQL Server.
2. Launch the installer.

To install SQL Server:

1. Click **New SQL Server stand-alone installation or add features to an existing installation** on the SQL Server Installation Center dialog.

The License Terms dialog is shown.

2. Select **I accept...** to accept the license terms, and click **Next**.

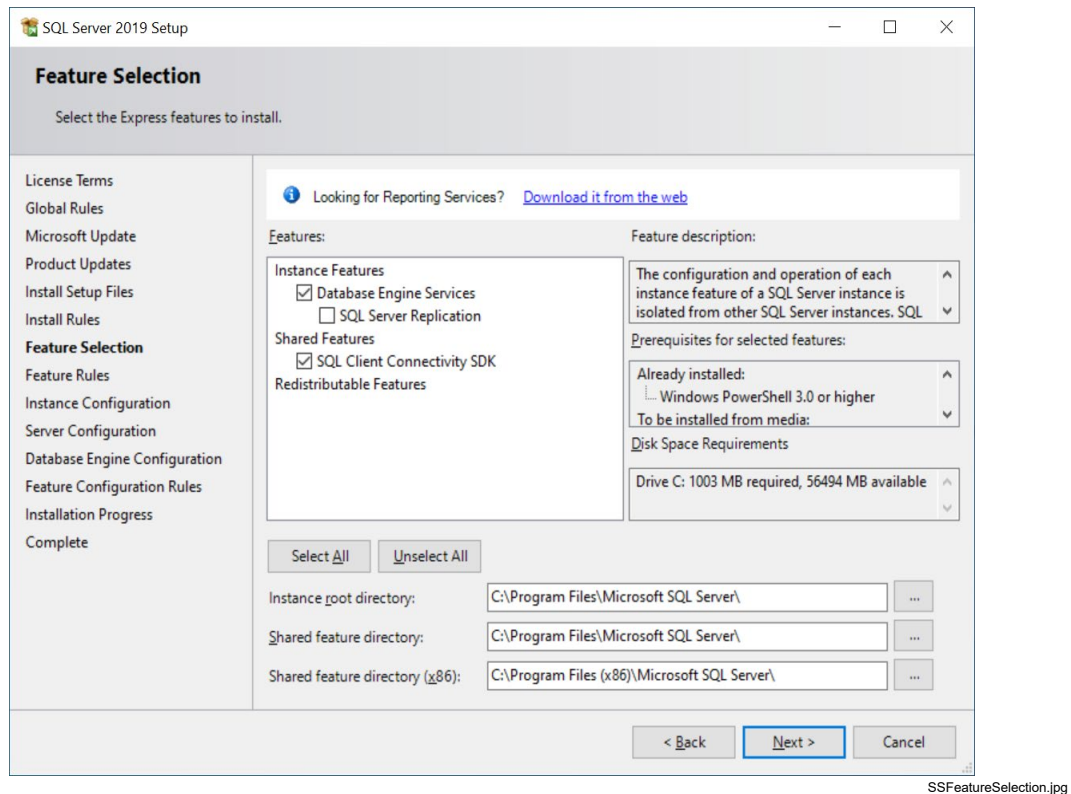
The Global Rules progress dialog shows while the installer prepares for installation. The Microsoft Update dialog shows.

3. If desired, select **Use Microsoft Update...**, and click **Next**.

The Install Setup Files dialog shows while files are being installed.

The Install Rules dialog shows. If any rules do not pass, the installation cannot proceed until the issues are resolved. If there are no issues, click **Next**.

The Feature Selection dialog shows.



4. Click **Select All** to make sure all features are selected then uncheck the SQL Server Replication item and click **Next**.

The Instance Configuration dialog shows.

5. You can use either the **Default instance** option or the **Named instance** option for MET/TEAM Server and MET/TEAM Mobile installations. Click **Next**.

The Server Configuration dialog shows.

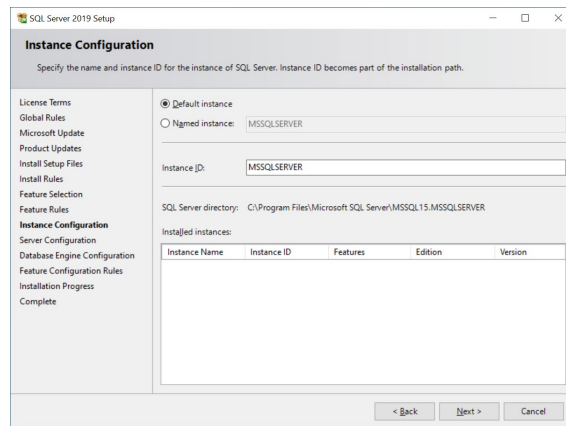
6. On the **Service Accounts** tab, use the default selections for the Account Name for each item.

When installing SQL Server on MET/TEAM Mobile computer, leave SQL Server Browser service Startup Type as Disabled.

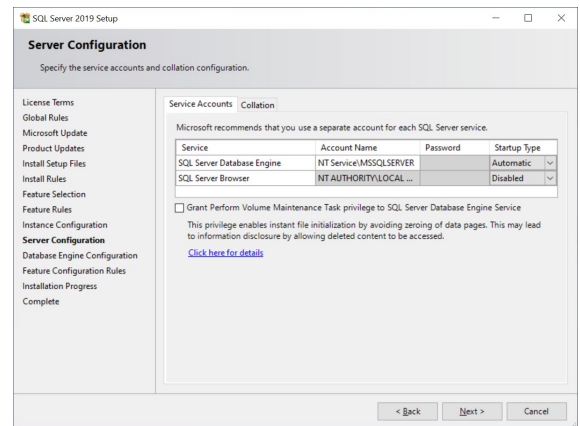
When installing SQL Server on MET/TEAM Server, set Startup Type as Automatic if any of the following conditions are met:

- The MET/TEAM website is being installed on a separate computer.
- The Customer Portal website is being installed on a separate computer.
- You plan to use MET/TEAM Mobile.

7. On the **Collation** tab, set collation to **SQL\_Latin1\_General\_CP1\_CI\_AS**, and click **Next**.



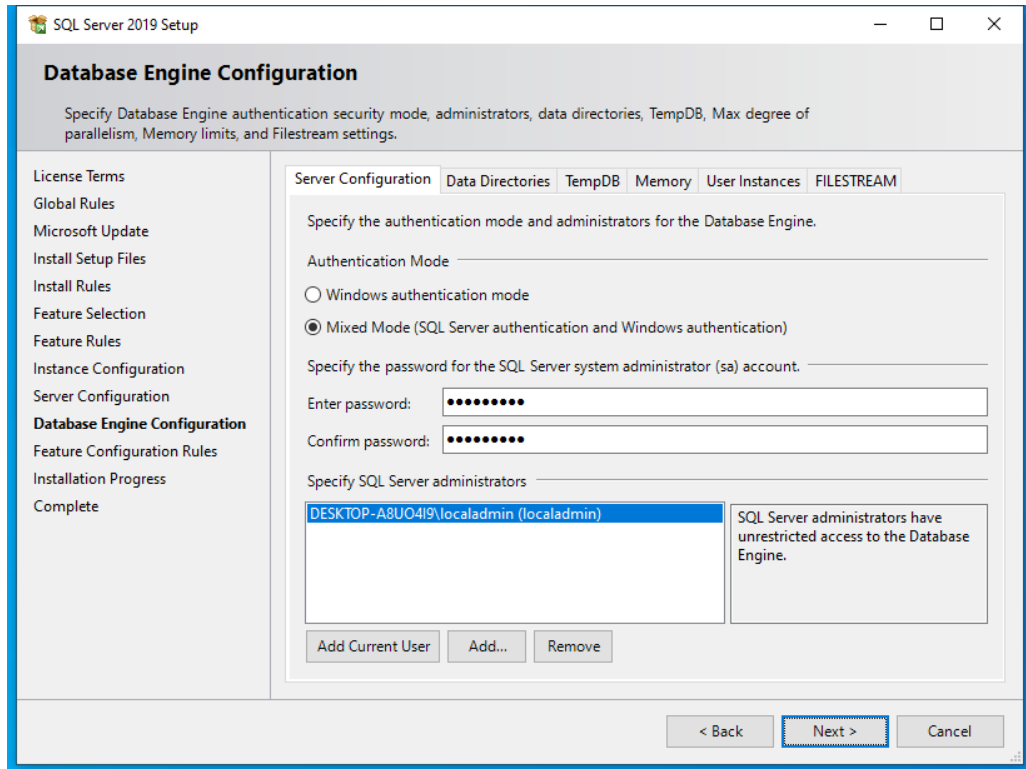
SSInstanceConfiguration.png



SSServerConfiguration.png

8. On the Database Engine Configuration dialog, configure these items and click **Next**.
  - a. On the **Server Configuration** tab, select **Windows authentication mode** or **Mixed Mode**. However, if you plan to install the MET/TEAM Customer Portal website on a machine that does not belong to the same domain as the MET/TEAM server (for example, in a DMZ) you must select **Mixed Mode** when setting up the MET/TEAM server database and specify a password for the built-in system administrator (sa) account.

Add any necessary domain accounts or security groups based on how the MET/TEAM and Customer Portal websites are going to connect to the database. Refer to the **Application Pool Identity** setting in the MET/TEAM Server and Customer Portal installation sections. These accounts or security groups can be added later using SQL Server Management Studio.



SSDatabaseEngineConfiguration.png

- b. If you are installing SQL Server on the MET/TEAM server computer and you plan to use MET/TEAM Mobile, or if you are installing SQL Server on a MET/TEAM Mobile workstation, add the security group for MET/TEAM Mobile users to the **Specify SQL Server Administrators** list with the **Add** button.
- c. All other settings on this dialog can be left at their default settings.

*Note*

*The installation of SQL Server takes a significant amount of time.*

An installation progress dialog shows during the installation process. When the installation process is complete, the Setup Complete dialog shows.

9. Click **Finish** to close the dialog.
10. Close the SQL Server Installation Center dialog.

## Configuring SQL Server to Allow Remote Connections

SQL Server must be configured to allow remote connections when you:

- Set up the MET/TEAM Customer Portal website on a separate server from the MET/TEAM server, whether the server is on the same domain or not (for example, in a DMZ)
- Use MET/TEAM Mobile
- Install MET/TEAM Server on a machine that is not hosting the SQL Server database

By default, SQL Server is configured to only be accessed from the local PC.

### Note

*Path references in the following sections may be slightly different for other versions of SQL Server.*

### To Configure SQL Server for Remote Access:

1. Open **SQL Server Configuration Manager**.
2. In the left pane of SQL Server Configuration Manager, select **SQL Server Services**.
3. If the SQL Server Browser service was not configured to start up automatically during the installation of SQL Server:
  - a. Right-click **SQL Server Browser** in the right pane and select **Properties** from the popup menu.
  - b. On the SQL Server Browser Properties dialog, select the **Service** tab.
  - c. Select **Start Mode > Automatic**.
  - d. Click **Apply**.
  - e. Select the **Log On** tab and click **Start** to start the service.
  - f. Click **OK** to close the SQL Server Browser Properties dialog.
4. In the left pane of SQL Server Configuration Manager, expand the **SQL Server Network Configuration** item, and select **Protocols for SQLEXPRESS**.
5. In the right pane, locate the **TCP/IP** item. If it is disabled, right-click **TCP/IP** and select **Enable** from the popup menu.
6. If you get a message indicating the service must be restarted for changes to take effect, click **OK**.
7. In the left pane of SQL Server Configuration Manager, select **SQL Server Services**.
8. In the right pane, right-click the **SQL Server (SQLEXPRESS)** item, and select **Restart** from the popup menu to restart the service.
9. Close SQL Server Configuration Manager.

**To Configure Windows Firewall with Advanced Security for Remote Access:**

1. Open the Windows Firewall with Advanced Security utility.
2. In the left pane of the Windows Firewall with Advanced Security window, select the **Inbound Rules** item.
3. In the far-right pane, click **New Rule...**
4. On the New Inbound Rule Wizard dialog, select the **Program** option on the **Rule Type** step, and click **Next**.
5. Select **This program path** on the Program step and click **Browse**.
6. Locate the **sqlbrowser.exe** file, which is typically located in the %ProgramFiles(x86)%\Microsoft SQL Server\90\Shared folder.
7. Select this file, click **Open**, and click **Next**.
8. Select the **Allow the connection** option on the **Action** step and click **Next**.
9. Select the desired options on the **Profile** step and click **Next**.
10. Enter a name and description for this rule on the **Name** step and click **Finish** to complete the process.
11. Repeat steps 3 through 8 for the **sqlservr.exe** file, which is typically located in the %ProgramFiles%\Microsoft SQL Server\MSSQL<ver>.\<InstanceName>\MSSQL\Binn folder.

If the MET/TEAM Customer Portal website is being installed on a non-domain machine, you also need to setup an exception in the Windows Firewall for the TCP port that SQL Server uses. This process is outlined in the Installing MET/TEAM Customer Portal on a Non-Domain Machine section.

If MET/TEAM Customer Portal is being installed on a non-domain machine, you must create a SQL Server Authentication login for the Customer Portal website to use. This process is outlined in the [Installing MET/TEAM Customer Portal on a Non-Domain Machine](#) section.

## **Configuring MET/TEAM Server for MET/TEAM Mobile**

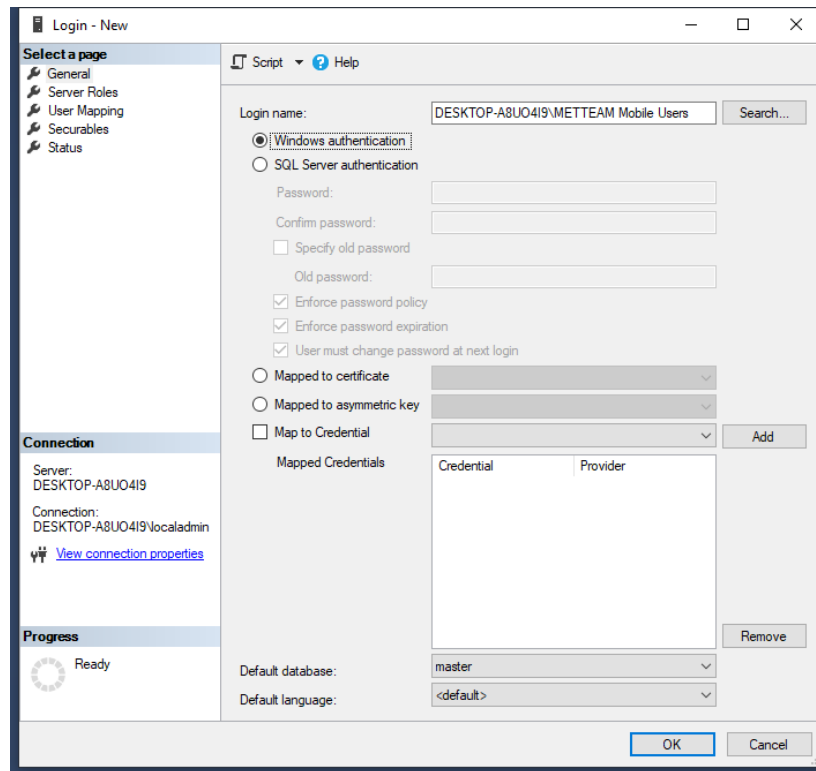
The MET/TEAM Mobile feature allows you to use MET/TEAM while your computer is disconnected from the network. To use MET/TEAM Mobile, run the MET/TEAM Mobile Prerequisites installer on each mobile workstation and make some changes to the MET/TEAM Server SQL Server configuration. This section steps you through the process of configuring SQL Server on the MET/TEAM Server.

To use MET/TEAM Mobile, you must have a Windows user account that has Administrative permissions on the mobile workstation. Use this account when running the MET/TEAM Mobile Prerequisites installer and when running the Mobile Check Out/Check In application.

### **To Configure MET/TEAM SQL Server Database for use with MET/TEAM Mobile:**

1. Follow the instructions in the [Configuring SQL Server to Allow Remote Connections](#) section.
2. Fluke Calibration recommends you create a security group using Active Directory on your domain for MET/TEAM Mobile users, then add the user account for each MET/TEAM Mobile user to this group. Consult your IT department for details about a security group on the domain.
3. Open SQL Server Management Studio.
4. Log into the database server where the MET/TEAM database is hosted.
5. In the left pane, expand the **Security** node. Right-click the **Logins** node and select **New Login** to display the Login – New dialog.
6. On the **General** page, enter the MET/TEAM Mobile security group name or a user account for a MET/TEAM Mobile user in the **Login name** box.

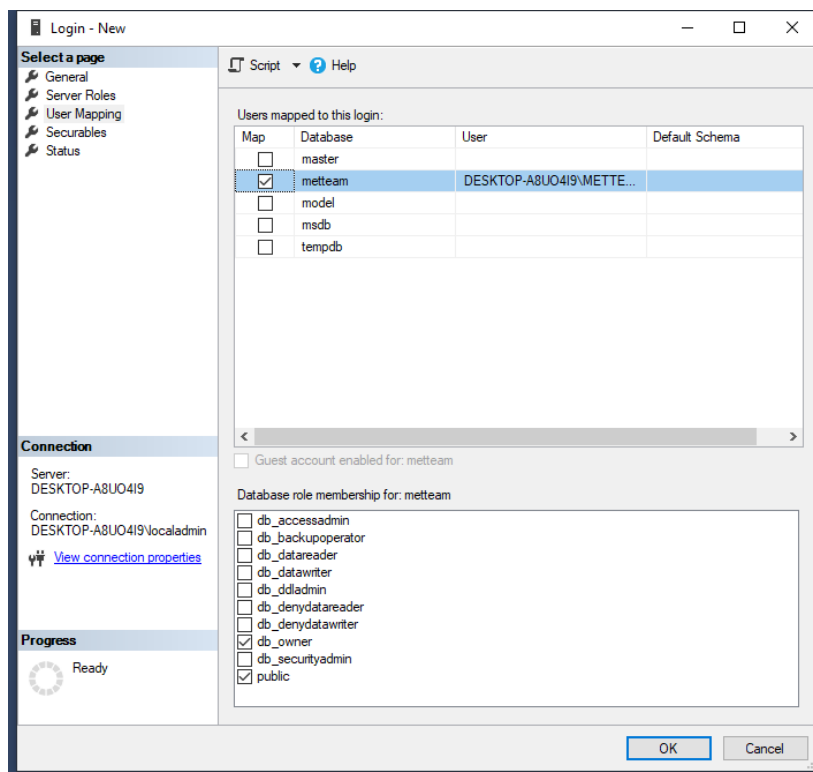
7. Select the **Windows authentication** option.



SSMS-NewLogin.png



8. On the **User Mapping** page, check the box to the left of the MET/TEAM database, and check the **public** and **db\_owner** boxes in the roles list.



SSMS-UserMapping.png

9. Click OK to create the login.

Make sure that the account (Identity) used by the MET/TEAM application pool in IIS is configured with the sysadmin role. By default, this is the NT AUTHORITY\SYSTEM account when SQL Server is installed on the same machine as the MET/TEAM web site, or the machine account when SQL Server is installed on a separate machine.

The MET/TEAM Mobile "Check Out" and "Check In" processes use the "metcal" share on the server, regardless of whether the MET/CAL application is being used. For this reason, make sure the "metcal" share is configured so that the mobile user account (or group) has full read/write permissions on the "metcal" share.

To configure the "metcal" share:

1. On the MET/TEAM server machine, use File Explorer to navigate to the "metcal" shared folder (%ProgramData%\Fluke\metcal\shared by default).
2. Right-click the folder and select **Properties** from the popup menu.
3. On the **Security** tab, click **Edit** below the Group or user names list.
  - a. On the Permissions dialog, click **Add**.
  - b. On the Select Users... dialog, enter the Mobile user name (or group) and click **OK** to add it to the Group or user names list.
  - c. Make sure the user name (or group) is selected, and check the **Full Control** checkbox in the **Allow** column in the Permissions list.

- d. Click **OK**.
4. On the **Sharing** tab, click the **Share** button.
  - a. Add the Mobile user account (or group) to the list and set the Permission Level to **Read/Write**.
  - b. Click **Share**.

**To Configure a Workstation to run MET/TEAM Mobile:**

1. Log into the workstation using a user account with Administrative privileges on the local computer.

Preferably, log in using the same account that you are going to use when performing the Check Out and Check In processes. This user account should be a member of the security group created in the process outlined above.
2. On the workstation, connect to the MET/TEAM shared folder on the server and navigate to the \Installers\Mobile folder.
3. Run **Setup.exe** and follow the instructions to install the MET/TEAM Mobile prerequisites on the workstation.
4. Install SQL Server on the workstation. The version of SQL Server MUST match the version installed on the MET/TEAM server.

Refer to the [Fluke MET/TEAM Mobile Prerequisites Installer](#) section and the [Microsoft SQL Server Express Installer](#) section for more details on completing the installation process successfully. Pay special attention to the settings that need to be used when installing SQL Server on MET/TEAM Mobile workstations.

## **Configuring Application Pool Recycling Settings**

Microsoft Internet Information Systems (IIS) websites have a feature that helps manage and recover valuable system resources. This feature is Application Pool Recycling. When an application pool is recycled, memory and other resources that were allocated for the website(s) in that application pool are released. This recycling process, however, causes all users that were logged in to the website(s) to automatically lose their connections. This can be problematic, especially when running a MET/CAL procedure that takes many hours.

By default, the MET/TEAM application pools are set to recycle every 29 hours, which means the recycle process may occur at 8:00 AM one day, 1:00 PM the next day, and 6:00 PM the following day. This can cause undesirable and seemingly random session expirations and automatic log offs.

The recycling settings can be changed to use more suitable settings for your environment and system. The process outlined below indicates how to change the recycling settings for an application pool using Microsoft Internet Information Systems (IIS) Manager.

To change the application pool recycling settings in IIS:

1. Open Internet Information Services (IIS) Manager.
2. Select the application pool node for the website to change in the left pane. On the far right, click the **Recycling...** link.
3. On the Edit Application Pool Recycling Settings dialog, choose the option that best suits the needs of your system based on your usage patterns. Select a

time or interval to recycle when the least number of users may be connected or when the least impact of this process would be realized. Click **Next**.

4. Choose the types of recycling events to log and click **Finish**.
5. Repeat this process for other application pools.

## **Converting a Non-Secure MET/TEAM Website to a Secure Website**

The MET/TEAM Server installer provides a feature that will deploy the MET/TEAM website as a secure website. Using this feature during initial installation is the preferable way to set up MET/TEAM as a secure website. However, if MET/TEAM was initially installed as a non-secure website, it can be converted to a secure website manually.

### *Note*

*This section outlines the basic process to set up a secure MET/TEAM website. This procedure is not the only way to accomplish a secure site and provides only the basic information for what needs to be done. Always consult your IT department when making security related changes.*

To convert a non-secure MET/TEAM website to a secure website:

1. Obtain a valid SSL certificate from an issuing authority.
2. Open Internet Information Services (IIS) Manager.
  - a. Stop the MET/TEAM website.
  - b. Select the root node on the left.
  - c. Double-click **Server Certificates**.
  - d. Click the **Import** link on the right.
  - e. Select the SSL certificate \*.pfx file.
  - f. Enter the password used to create the certificate.
  - g. Click **OK**.
  - h. Select the website node on the left.
  - i. Click the Bindings link on the right.
  - j. Click **Add** to create a new binding.
  - k. Select https as the Type, enter a port number (or use the default port number 443) and select the certificate to use.
  - l. Optionally, enter the host name (must match SSL certificate).
  - m. Click **OK**.
  - n. Select the http binding in the list.
  - o. Click **Remove**.
  - p. Click **Close**.
  - q. Double-click the **SSL Settings** icon.
  - r. Check the **Require SSL** checkbox.

- s. Select the **Ignore client certificates** option.
- t. Click the **Apply** link on the right.
3. Rename the current web.config file in the MET/TEAM website root folder.
4. On the MET/TEAM distribution media, copy the web.config file from the \IISRootFolder\METTEAM\Secure folder to the MET/TEAM website root folder.
5. Open both the original web.config file (step 3) and the secure web.config file (step 4) in a text editor.
  - a. In the <connectionStrings> section, copy the <add name="MetTrack\_Dev"... line from the original file to the secure file, replacing the existing line.
  - b. In the <connectionStrings> section, copy the <add name="ADConnection"... line from the original file to the secure file, replacing the existing line.
  - c. Copy the entire <appSettings> section from the original file to the secure file, replacing the entire section.
  - d. Save and close the secure web.config file.
  - e. Close the original web.config file.
6. Open a command window as an Administrator and execute the following command:  

```
%windir%\system32\inetsrv\appcmd.exe unlock config -  
section:system.webServer/serverRuntime
```
7. Start the web site.

## **Licenses**

When Fluke Calibration Software is installed, a 60-day free trial license is installed automatically. This license enables all functionality of the software.

Before the end of the 60-day trial period, you must request a valid license by following the process outlined below.

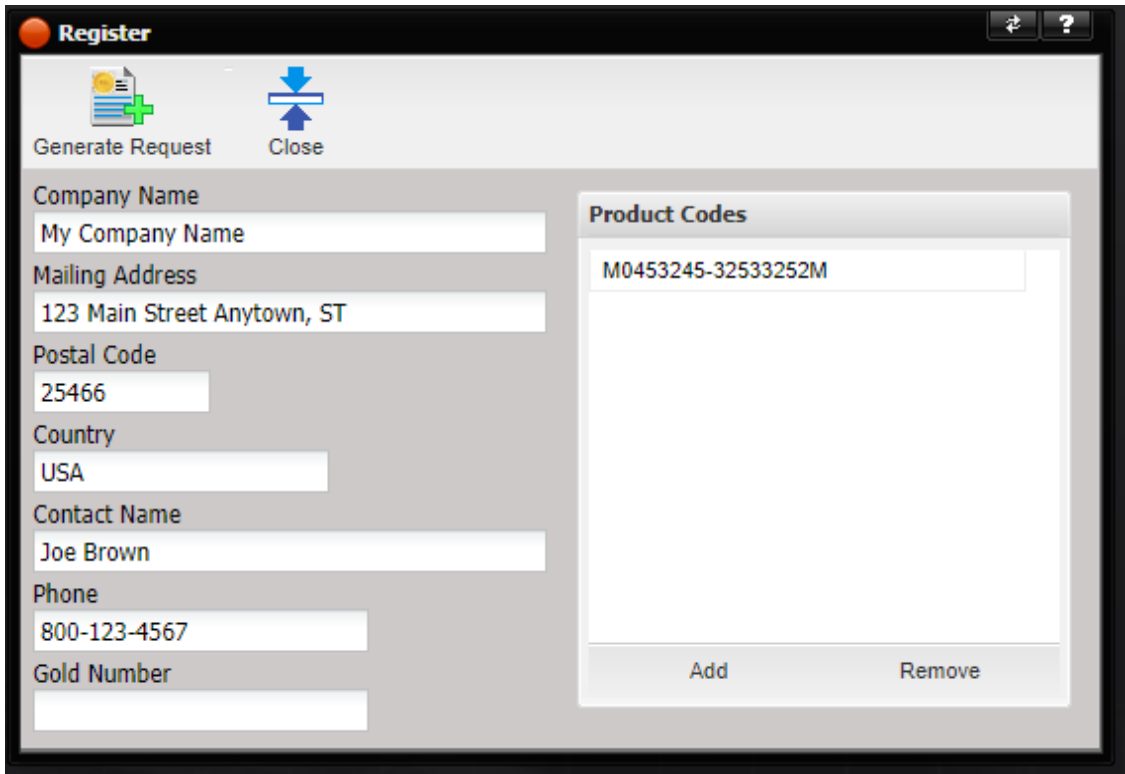
### *Note*

*The application of new licenses forces all current connections to terminate. Be sure to notify all users before you proceed to apply new licenses.*

To request a license:

1. Open MET/TEAM in a web browser and log in.
2. Select **Help > About**.
3. Click **Register** on the toolbar of the About MET/TEAM dialog.
4. Enter your contact information on the Register dialog and the Gold Number or product code(s) to submit. Product codes are found on a report that accompanies your order.

- Click **Generate Request** on the toolbar to generate the license request.



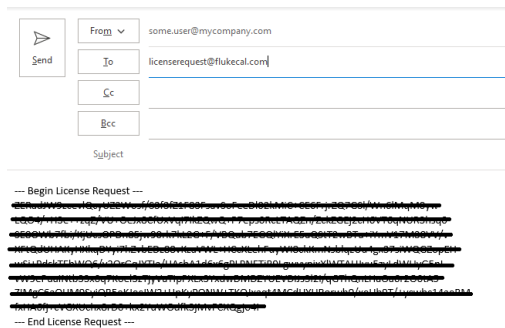
The Register dialog box contains the following fields:

- Company Name:** My Company Name
- Mailing Address:** 123 Main Street Anytown, ST
- Postal Code:** 25466
- Country:** USA
- Contact Name:** Joe Brown
- Phone:** 800-123-4567
- Gold Number:** (empty field)
- Product Codes:** M0453245-32533252M

Buttons: Generate Request, Close, Add, Remove.

Register.png

- Copy the entire contents of the box containing the license request information (include the "--- Begin License Request ---" and "--- End License Request ---" tags) from the Register dialog and paste it into the body of a new email message.



The email composition window shows the following fields:

- From:** some.user@mycompany.com
- To:** licenserequest@flukecal.com
- Subject:** (empty field)

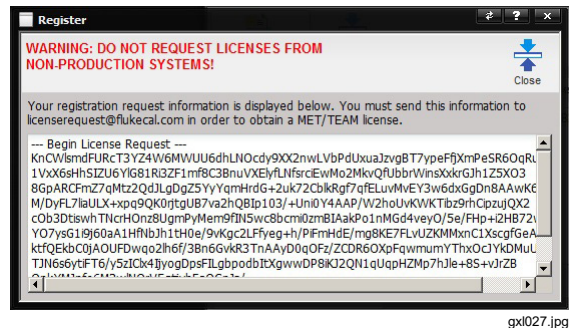
The body of the email contains the following text:

```

--- Begin License Request ---
KncWlsmdFURCT3YZ4W6MWUU6dhLNOcdy9XX2nwLvPdUxuaJzvg8T7ypeFfjXmPeSR6QqRi
1Vxx6shSIZU6YIG81R3ZF1mf8C38nuVXElyfLnfrscEwMo2MkvQfUbbvWinsXdkrG3h1Z5XO3
8GpARCFmZ7qMtZ2QdJLgDgZ5YyYqmHrdG+2uk72CblRg77qfELuvMvEY3w6dxGgDn8AAwK6
M/DyFL7laULX+xpq9QK0jtgU87va2hQBp103/+Uni0Y4AAP/W2hoUvKWKTbz9rhCpzuJQX2
cOb3DtiswhTncrHonz8UgmPyMem9fIn5wc8bcmI0zmBIAakPo1nMGd4veyO/5e/FHp+i2HB72i
Y07ysG1t960aA1HfNbJh1tH0e/9vKgc2LFFyeg+h/PfMhde/mg8KE7FLvUZKMMxnC1XscfGeA
ktfQEkbcOjAOUDFwqo2h6f/38n6GvkR3TnAAyD0qOfz/ZCDR6OXpFawmumYThOcJYkDMuL
TJN6s6yTFt6/y5zICx4JlyogDpsFLgbpodbItXgwwDP8IKJ2QN1qUqpHZMp7hJle+8S+vJr2B
--- End License Request ---

```

LicenseRequestEmailExample.png



The Register dialog box displays a warning message:

**WARNING: DO NOT REQUEST LICENSES FROM NON-PRODUCTION SYSTEMS!**

Your registration request information is displayed below. You must send this information to licenserequest@flukecal.com in order to obtain a MET/TEAM license.

The body of the email contains the following text:

```

--- Begin License Request ---
KncWlsmdFURCT3YZ4W6MWUU6dhLNOcdy9XX2nwLvPdUxuaJzvg8T7ypeFfjXmPeSR6QqRi
1Vxx6shSIZU6YIG81R3ZF1mf8C38nuVXElyfLnfrscEwMo2MkvQfUbbvWinsXdkrG3h1Z5XO3
8GpARCFmZ7qMtZ2QdJLgDgZ5YyYqmHrdG+2uk72CblRg77qfELuvMvEY3w6dxGgDn8AAwK6
M/DyFL7laULX+xpq9QK0jtgU87va2hQBp103/+Uni0Y4AAP/W2hoUvKWKTbz9rhCpzuJQX2
cOb3DtiswhTncrHonz8UgmPyMem9fIn5wc8bcmI0zmBIAakPo1nMGd4veyO/5e/FHp+i2HB72i
Y07ysG1t960aA1HfNbJh1tH0e/9vKgc2LFFyeg+h/PfMhde/mg8KE7FLvUZKMMxnC1XscfGeA
ktfQEkbcOjAOUDFwqo2h6f/38n6GvkR3TnAAyD0qOfz/ZCDR6OXpFawmumYThOcJYkDMuL
TJN6s6yTFt6/y5zICx4JlyogDpsFLgbpodbItXgwwDP8IKJ2QN1qUqpHZMp7hJle+8S+vJr2B
--- End License Request ---

```

gx1027.jpg

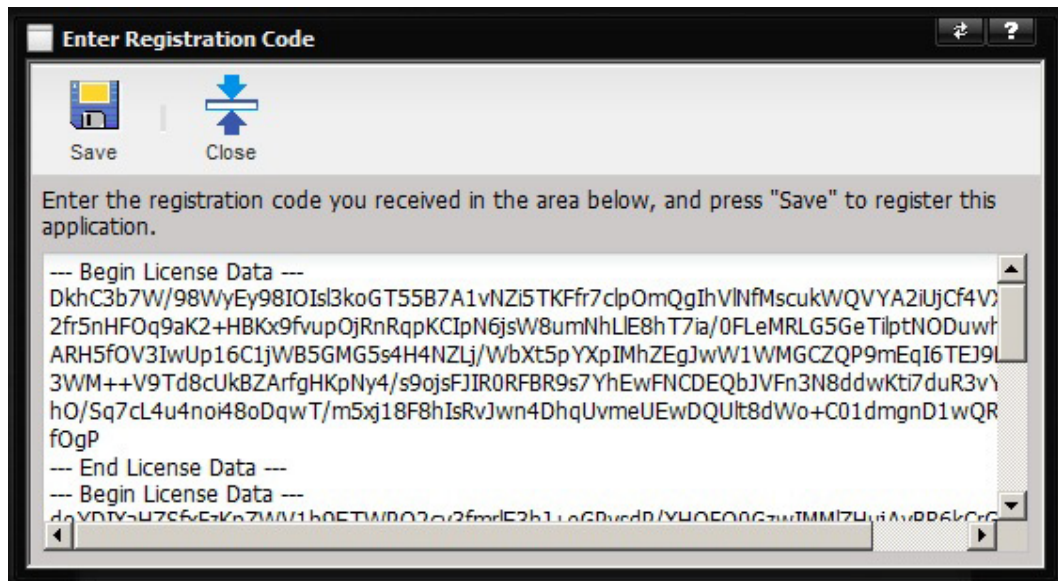
### Note

*Do not add additional information to the license registration request. License requests are processed automatically.*

- Send the email to the address indicated on the Register dialog. Click **Close** on the Register dialog.

Shortly you will receive a response that includes an attachment that contains license information. This license information is generated from the information you provided on the Register dialog and the items you have purchased.

8. Copy the license information from the email attachment (starts with and includes the first "--- Begin License Data ---" tag; ends with and includes the last "---End License Data ---" tag).
9. Click **Enter Registration Code** on the toolbar of the About MET/TEAM dialog.
10. Paste the license information into the box on the Enter Registration Code dialog and click **Save** on the toolbar to save the license.



gxl028.jpg

11. Click **Close** to close the Enter Registration Code dialog.

The About MET/TEAM dialog shows the details of your new license.

*Note*

*Application of new licenses forces all current connections to terminate. You will be required to log in again.*

*After applying a new license, you will have full access to the features of the software that you purchased. Features that were not purchased will continue to function until the 60-day trial period elapses.*

## **License Agreements**

Components of Fluke Calibration Software use open sources libraries that fall under different license agreements. All such libraries and their corresponding license agreements are copied to the computer during installation.

The full license agreement for MET/TEAM, MET/CAL Runtime, and MET/CAL Editor is shown during installation. Print the agreement or make a PDF to have a copy of the license. The license agreement is also included as a PDF in the root directory of the distribution media.