

**FLUKE®**

**Calibration**

# MET/CAL® *Plus* Calibration Management Software



The image shows a man in a blue lab coat sitting at a desk, looking at a computer monitor. The monitor displays the MET/CAL software interface, which includes a main window with a list of calibration tasks and a right-hand pane showing details for a selected task. The background is a laboratory setting with various electronic equipment and racks.

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**The complete solution for managing and  
automating your calibration workload**

# The complete solution for calibration automation; now in version 8.0

## MET/CAL® Plus benefits at a glance



Calibration labs have their share of challenges: an increasing and more complex workload; fewer technicians; a growing list of quality standards. Above all, there is constant pressure to reduce costs. MET/CAL® Plus Calibration Management Software helps you to meet those challenges by calibrating and managing your workload more efficiently and consistently.

### MET/CAL Plus includes two applications:

MET/CAL® software, the industry-leader for automated calibration; plus MET/TRACK® software for test and measurement asset management.



## The MET/CAL Plus suite of applications provides you with all the tools you need to:

- Perform automated calibration on all kinds of test and measurement tools and equipment, including dc/lf, RF and microwave instruments.
- Create, edit, test, and document calibration procedures, quickly and easily.
- Configure and report a wider range of measurement uncertainty parameters and include verification data to provide an audit trail and support further analysis.
- Track asset information including calibration and maintenance history and status, traceability, users, customers, and location.
- Analyze and report asset information; produce customized printed certificates and reports.
- Make data available to other corporate systems.
- Import asset and calibration data into MET/CAL Plus software
- Help meet the requirements of quality standards like ISO 9000, ISO/IEC 17025, NRC 10 CFR, ANSI Z540.3, and others.

With all of these capabilities, Fluke Calibration MET/CAL Plus software offers the most comprehensive calibration automation solution available. And we back it up with the MET/SUPPORT<sup>SM</sup> Gold software support program to help keep you as productive as possible.

Join the worldwide community of calibration professionals who have discovered the value of MET/CAL Plus for increasing throughput and managing calibration assets more efficiently.

## What's new in version 8.0?

- New expanded Procedure Editor with flexible user interface and enhanced functionality
- Increased security for accredited procedures
- Ability to automate a wider variety of references
- Compliance to Z540.3 decision rules by guard banding
- Greater flexibility and expanded support of RF power meters and sensors
- New LIB FSC that allows procedure access to external programs
  - Access to National Instruments DLLs, enabling calibration of PXI instruments with MET/CAL software
  - Option to use Excel for customized plotting and calculations
- Broader instrument support
- Linked online help

## What are you missing?

Having the latest version of MET/CAL *Plus* software gives you access to the fullest grouping of new features and functions. While this listing of features by version isn't complete, it will give you an idea of the additional capabilities added with each new update.

## New features in recent MET/CAL *Plus* software versions

Features	Version 7.1	Version 7.2	Version 7.3	Version 8.0
More powerful search functionality	•	•	•	•
Custom screen layouts	•	•	•	•
Support for multiple languages	•	•	•	•
Formatted dates and numeric display configured in the operating system	•	•	•	•
Separate search, browse, and data entry screens	•	•	•	•
Tabbed inventory, calibration, and maintenance screens	•	•	•	•
Enhancements to support guard banding	•	•	•	•
Flexible Standards (lets procedure writers substitute equivalent standards)		•	•	•
Pack/Unpack utility (easier to transport procedure files between MET/CAL systems)		•	•	•
Named variables		•	•	•
Slewing for user-configured instruments		•	•	•
Crystal Reports 2008			•	•
Broader MET/TRACK support for Windows XP, Vista, 7, 2003, 2008			•	•
Updated and simplified MET/TRACK Installer			•	•
New MET/TRACK import tool			•	•
Faster searching for large databases			•	•
More flexible linked validation (reduces data entry errors)			•	•
New Procedure Editor with flexible user interface and enhanced functions				•
Improved procedure security				•
Library FSC to access DLL and COM objects, enabling a wide range of powerful functionalities including PXI calibration and use of Excel				•
Reports for Z540.3 compliance				•
Improved RF power sensor calibration support				•
FSCs for wider instrument support: 9640A-LPNX, 5522A, 5080A options and flexible OCAL FSC for oscilloscope calibrators				•
Linked online help				•

# Automated calibration that supports the way your lab operates

MET/CAL software is structured around the flow of instruments through the calibration process and addresses a wide range of test and measurement instrument calibration needs, from the simple to the complex. It is based on the traditional calibration model as its framework—comparing an instrument to a standard of known uncertainty.

## Add new items to the database.

As instruments come into the lab for calibration, they are added to the database. The technician simply enters basic asset information into an electronic form, selecting from drop-down validation menus to assure consistent and accurate entry.

## Perform automated calibration.

Automated calibration with MET/CAL software is fast, repeatable, and powerful. At first glance, most people see it as a way to perform calibrations faster, and MET/CAL can certainly deliver dramatically improved productivity. However, consistency is another significant benefit. With self-documented procedures, you can ensure that all operators complete all tests and collect appropriate test data the same way every time the procedure is performed. Plain language operator prompts and graphics guide technicians through even the most complex calibrations.

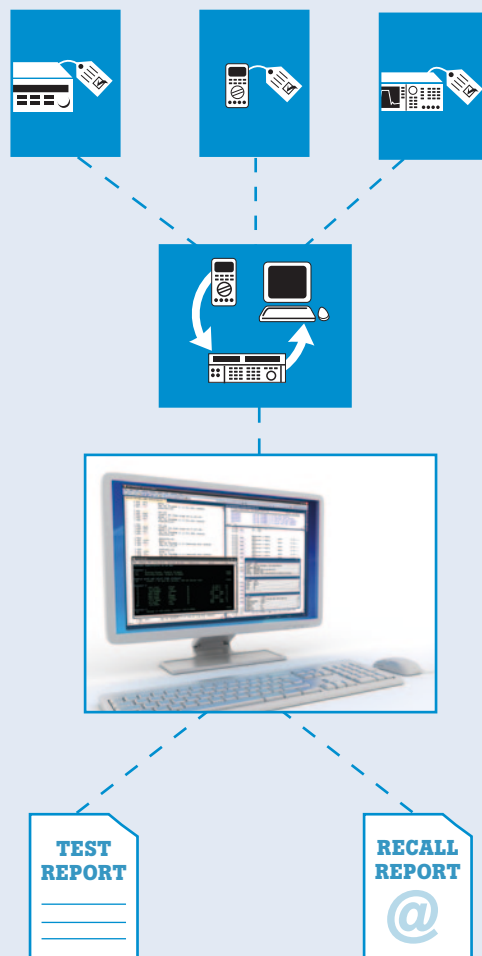
## Capture complete calibration results.

MET/CAL software captures calibration results including traceability data and environmental conditions. When a calibration is finished, MET/CAL saves the information to the database, so that you can review it on screen or print it. Complete results records help you identify out-of-tolerance conditions and satisfy the records requirements of ISO 9000.

## Store results and update status.

MET/CAL software stores all parameters for every test performed in unformatted “raw readings” to ease report creation and to support further analysis. Because each test is fully documented for every procedure that is run and traceability information for each standard is stored in the database, you have complete documentation of calibration status, history, adequacy, and traceability for all the test and measurement instruments you manage.

## MET/CAL software automation workflow diagram



Perform calibration, capture and store results.

## Print test reports.

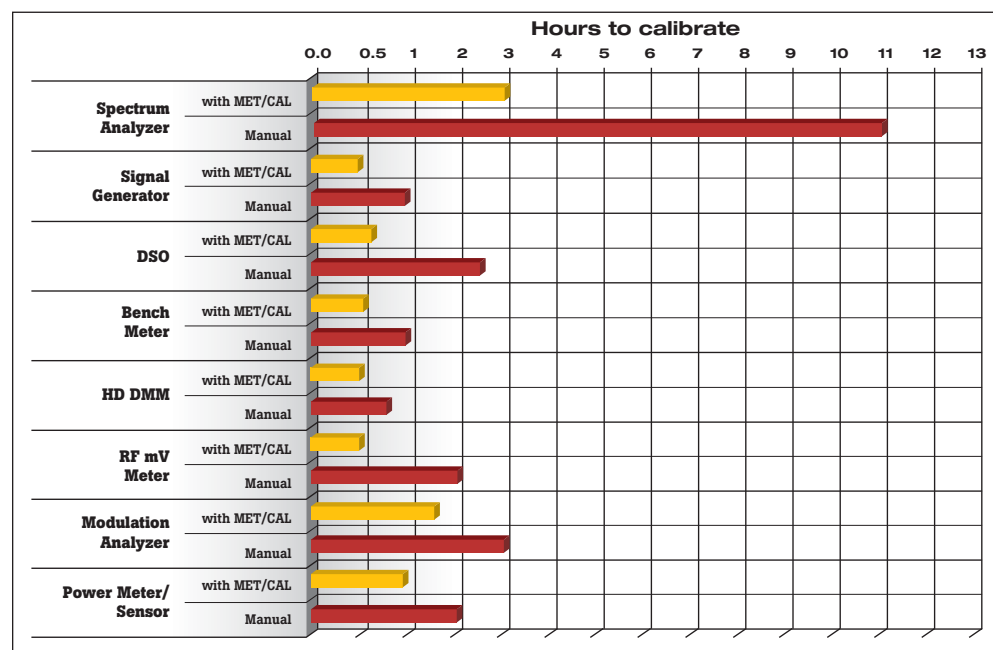
MET/CAL *Plus* software includes a range of reports that can be previewed on screen, then printed. At the end of each calibration event, the technician can choose to print calibration test results or a Certificate of Calibration. All are prepared with Crystal Reports, so they can be modified to meet your needs or used as templates for creating custom reports.

## Generate recall reports.

MET/TRACK asset management software generates recall reports you can send to your customers and to the user's e-mail address and location. These recall reports may include details of the last calibration performed in your lab.



## Productivity improvements that extend beyond dc/I<sub>f</sub> calibration

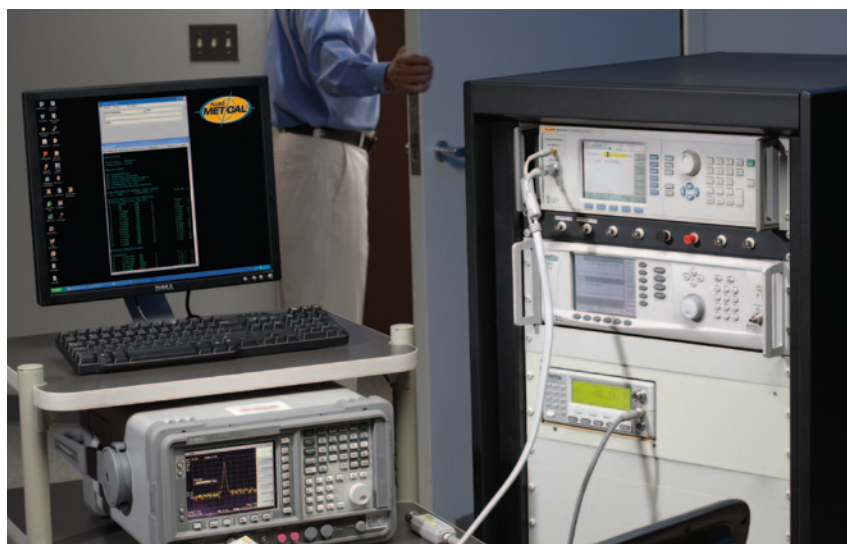


Automating calibration with MET/CAL lets you improve productivity and throughput significantly.

MET/CAL software is a well known solution for automating dc/I<sub>f</sub> electrical calibration. But MET/CAL is also an ideal solution for some RF calibrations, including spectrum analyzer calibration. MET/CAL can be used as a cornerstone for RF calibration along with the 9640A RF Reference Source, which is ideally suited for calibration of spectrum analyzers. MET/CAL software and the 9640A enable RF calibration professionals to realize substantial productivity gains.

MET/CAL software covers a wide range of RF workload, including spectrum analyzers, signal generators and more. MET/SUPPORT Gold procedures are available for signal generators and many spectrum analyzers. Supported references include not only the 9640A, but also a range of power meters, counters, and generators. Version 8.0 includes a new Agilent EPM Series power meter Function Select Code (FSC) that enables MET/CAL to control RF power meters and applicable sensors, as well as calculate uncertainty. The MET/CAL Flexible Standards feature enables operators to easily interchange many reference instruments of the same functional class (for example, a range of signal generators), expanding the range of supported instruments even further.

With MET/CAL software and a 9640A, calibrating a spectrum analyzer can take less than 20 minutes, including data results and measurement uncertainty analysis. Automating with MET/CAL enables significant “walk away” time so operators can attend to other tasks as well, therefore enabling more efficient usage of highly skilled staff.



Use MET/CAL software for full automation and optimized “walk away” time.

Using MET/CAL software for automating electrical and RF calibrations allows you to reduce the cost of your initial software investment, as well as ownership costs such as training and maintenance. Labs performing different types of calibration with other Fluke Calibration software applications—including pressure and flow calibration with COMPASS® software and temperature calibration with MET/TEMP II software—can realize efficiency gains by using a shared MET/TRACK® database for reporting calibration data and managing assets.

# Use our extensive procedure library or write your own

## Enjoy the benefits of the new Procedure Editor in version 8.0

- Modern, flexible user interface
- Linked online help
- Edit multiple procedures at once
- Undo, redo, tool-tip help, intellisense, syntax highlighting
- Organize procedures to fit your business rules
- Broader instrument support, including National Instruments PXI
- Support for 9640A-LPNX RF Reference Source, 5522A Multi-Product Calibrator, 5080A Megohm Meter and Oscilloscope Calibration options
- Accredited procedures can be compiled into procedure executable files that cannot be changed by users, providing procedure security

## Choose from thousands of warranted procedures

MET/CAL software comes with sample procedures that can be used as is or can be modified to meet your specific requirements. These procedures are also valuable as examples to guide you through creating your own.

By subscribing to the MET/SUPPORT Gold software support program, you can have continuous access to a wide range of warranted procedures at no additional cost. View the current list of available procedures online at [www.flukecal.com/procedures](http://www.flukecal.com/procedures).

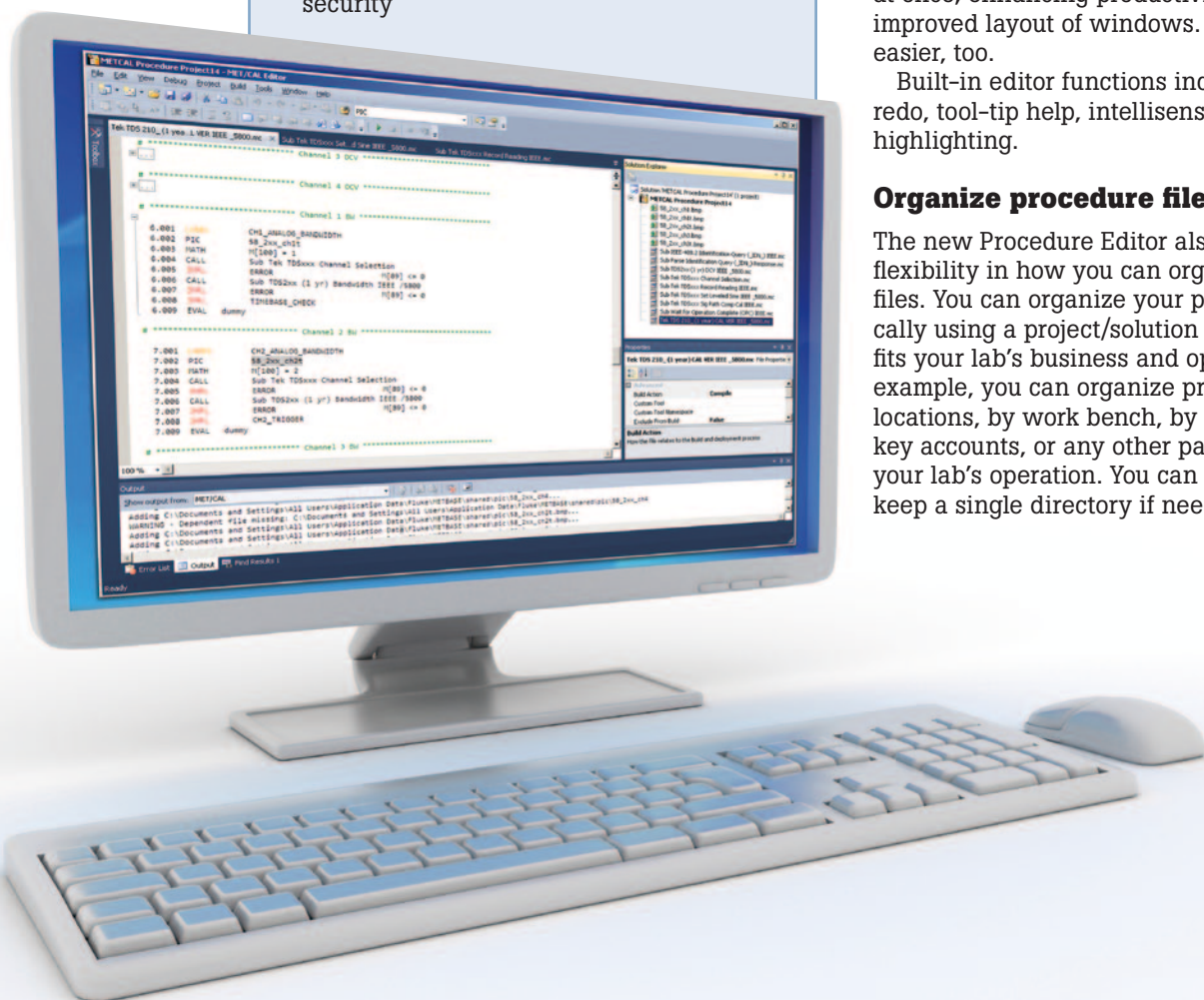
## Use the new Procedure Editor to write and edit your own procedures

MET/CAL version 8.0 features a new Procedure Editor, based on the MS Visual Studio integrated development environment. The new Editor's modern, flexible user interface makes it a powerful development tool. A linked online help system provides examples to help you along. Users can edit multiple procedures at once, enhancing productivity, thanks to improved layout of windows. Debugging is easier, too.

Built-in editor functions include undo, redo, tool-tip help, intellisense, and syntax highlighting.

## Organize procedure files logically

The new Procedure Editor also includes more flexibility in how you can organize procedure files. You can organize your procedures logically using a project/solution structure that best fits your lab's business and operation rules. For example, you can organize procedures by lab locations, by work bench, by manufacturer, by key accounts, or any other parameter that fits your lab's operation. You can also choose to keep a single directory if needed.





MET/CAL version 8.0 supports a wide variety of standards, including National Instruments PXI instruments.

### Create new procedures efficiently

MET/CAL software's powerful procedure language uses a calibration-oriented building block approach. Function Select Codes (FSCs) represent various standards and functions used during a test. MET/CAL software's procedure language FSCs support a wide range of standards and calibrators. For instruments not directly supported, the Run-Time module in MET/CAL can send IEEE or port commands to implement an automated procedure.

To the programmer, FSCs are a form of sub-procedure that can be called from a single programming line. For instance, an FSC can allow a whole test point to be defined in a single line of code. The FSC will set up the standard and the UUT; trigger the measurement; take the reading; assign and combine relevant uncertainties; and reset instruments to a safe condition—all from that single line of code.

### New FSCs provide wider instrument support and help increase productivity

The Library FSC enables procedure access to any DLL or COM object, letting procedure writers automate calibration with a wider variety of standards, including National Instruments PXI instruments. The Library FSC also enables procedure access to Microsoft Excel, allowing plotting and customized calculations, as well as better linkage to modern external applications.

The new OCAL FSC supports all Fluke Calibration oscilloscope calibrators, in 16 different combinations, providing significant savings in procedure development time—up to 90 %.

Version 8.0 also includes support for new Fluke Calibration instruments, including the 9640A-LPNX RF Reference Source, 5522A Multi-Product Calibrator, and 5080A Megohm Meter and Oscilloscope Calibration options.

### Evaluate measurement uncertainty

MET/CAL software enables you to establish minimum test uncertainty ratios (TURs) to assure that tests performed by the calibrator are sufficiently accurate for the instrument being calibrated.

MET/CAL software also includes support for guard banding that gives metrologists the option to tailor the algorithm to automatically tighten the pass limits associated with a UUT's calibration specifications. The primary purpose of guard banding is to account for the uncertainty of the measuring equipment in the calibration process and thereby to avoid accepting units that are close to their specification limits, but may in fact be out of tolerance.

### Test run

You can execute a procedure directly from within the Procedure Editor in test-run mode to make short work of tracking down errors. MET/CAL software even keeps track of test uncertainty ratios, instrument specifications and capabilities, and traceability information to make sure procedures meet your quality standards for adequacy and validity. Version 8 provides significant time savings in test run with a new debugging feature that lets you insert break points to switch between step mode and full speed run mode, allowing fast-forward portions of test run for maximum efficiency.

### Release the procedure

Once you're satisfied with the procedure, release it to production where your technicians can replicate all tests consistently on your workload.

### Should your procedures be editable? Now you can choose.

When you develop new procedures, you may want to be able to edit them later. Or you may want to "lock" them so that they can't be changed by others. Version 8.0 lets you compile procedures into executable files so they cannot be edited unless the source file is made available. By compiling non-editable procedures, you can guarantee accredited procedures from changing over time between calibrations, limit access to procedures depending on level of user rights, and enable better control between versions.

Conversely, you can compile editable procedures if you wish. Version 8.0 lets you choose how to compile the procedures you create.

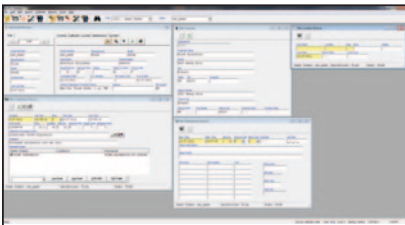


# MET/TRACK® software: a dedicated system for test and measurement property management

MET/TRACK software is a powerful database management system for test and measurement that provides back-end asset management for MET/CAL Plus software. MET/TRACK software gives you flexibility, power, and security not available in generic asset management applications. It enables you to track the information you need to maintain quality calibrations. And it supports the traceability and record-keeping requirements of modern quality and accreditation standards, including ISO/IEC 17025, ISO 9000, QS 9000, EN 45000, ANSI Z540.3, and MIL STD 45662A, without having to write your own programs, set up your own databases or test and document the system.

MET/TRACK software, like MET/CAL software, works the way your calibration lab works. It manages and stores data the way that works best for you so that you can easily access it to track calibration/maintenance schedules and for audits and reporting.

## Manage asset and customer data



The main data entry/management screen: capture information

All calibration records as well as maintenance and location records are stored in MET/TRACK software using a specific asset number which is established when the initial asset information is added to the database.

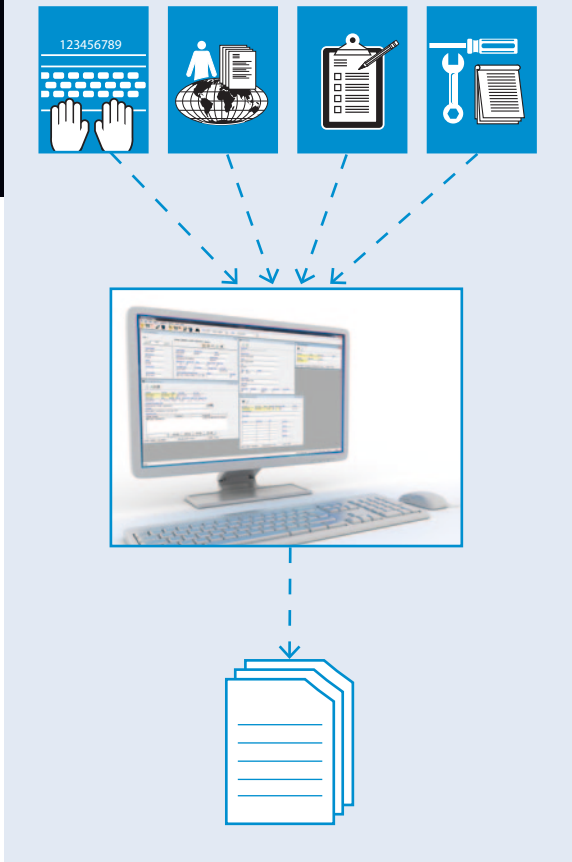
In addition to simple location information, MET/TRACK software allows you to store complete customer information for every asset in the system. This lets you contact customers to schedule periodic calibration and maintenance.

## Manage calibration data from multiple calibration applications

Summary calibration event histories as well as complete calibration test results are stored in MET/TRACK automatically for every MET/CAL calibration event. For assets calibrated manually or on different systems, both summary and detailed test results can be added manually to MET/TRACK software, giving you one place for all of your metrology asset tracking needs.

Users of other Fluke Calibration software, including COMPASS for Pressure, Manual MET/CAL, and MET/TEMP II temperature software, can manage their inventory, calibration location, maintenance and customers with MET/TRACK software, enabling you to manage assets from multiple laboratories in a single database.

## MET/TRACK software asset management workflow diagram



Manage asset data, customer information, calibration records, maintenance history, and more.

Calibration Due by Loc. By Status Through 30 Nov 2011						
Assets ready due for calibration through 30 Nov 2011						
Asset Number	Wgt.	Model	Description	Dept.	User Name	Techn. Next Cal Due
Location Analysis						
1473		Atking Device	LTS1020	LTS Console	Perkins, D	25 Sep 04
1387	43	Wattmeter		100-2	Gregory, P	15 Jul 04
1388		Std	MV100	Calibrator	Agilent, M	1 Sep 04
743-1		Fluke	742A-1	Standard Resistor	Agilent, M	20 Sep 03
1327		Fluke	77	Multimeter	Agilent, M	18 Sep 04
1381		Handrail Packer	2221A	Generator	Perkins, D	20 Sep 04
1468		Handrail Packer	2457A	Multimeter	100-2	7 Aug 04
1340		Handrail Packer	6024A	Probe High Frequency	Agilent, M	5 Aug 04
1385		Handrail Packer	8809	Generator	Gregory, P	28 Jul 04
1261		Handrail	179A	Multimeter	Perkins, D	18 Nov 04
1386		Handrail	2091	Multimeter	Agilent, M	18 Aug 04
1183		Stampt	25-111	Thickness Gauge	Gregory, P	25 Sep 04
1384		Tektronix	2215A	Oscilloscope	100-2	20 Aug 04
1140		Tektronix	7354	Oscilloscope	Perkins, D	9 Nov 04
1052		Tektronix	7422	Amplifier	Gregory, P	27 Sep 03
1233		Tektronix	7428	Amplifier	Agilent, M	18 Nov 04
1080		Tektronix	7850	Timebase	Gregory, P	12 Nov 04
1080		Tektronix	7853A	Timebase	Agilent, M	11 Jan 04

MET/TRACK supports the record-keeping requirements of modern quality and accreditation standards.

## Track repairs and schedule maintenance

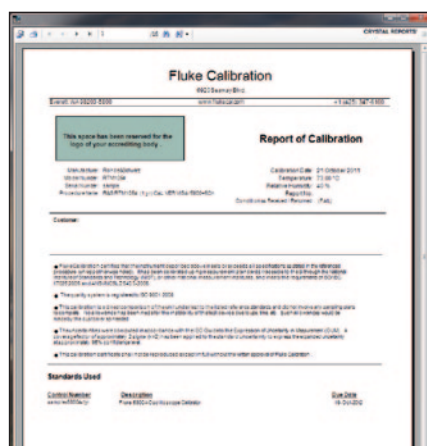
As each repair or preventative maintenance activity is completed, details of that event, including labor and parts costs, can be entered. You can also schedule periodic maintenance events. In addition, maintenance histories are included to give you a complete cost of ownership for all tracked assets.



## Generate reports to meet a wide range of requirements.

MET/TRACK software includes the Quick Report Builder, which enables you to create ad hoc reports quickly.

MET/CAL *Plus* software also offers a variety of standard reports prepared with Crystal Reports Professional. These report formats cover a wide range of information to help you meet a variety of documentation requirements, including those for ISO 9000 and similar quality standards. Version 8.0 includes report formats for the various methods of obtaining Z540.3 compliance.



MET/CAL *Plus* software offers enhanced measurement uncertainty reporting to provide increased compliance with the requirements of ISO/IEC 17025. In addition to standard reports, Crystal Reports makes it easy to

create custom reports, lists, and labels. Its graphical user interface makes it easy to build reports, and its powerful query tools quickly draw values from a variety of data tables, allowing you to easily manipulate data.

## Data integrity and security you can count on

### Data validation

To ensure that the information is entered correctly every time, MET/TRACK software includes two types of data validation. Use Required Validation where the entry must be in a validation list for the technician to enter it. Or use non-required Choice List Validation where, if the entry is on the validation list, the text box will fill in automatically as you type. This ensures correct and efficient data entry and makes it easier to search for information. The data validation feature in MET/TRACK assures that you identify an instrument—or manufacturer or department name or other term—by the same name every time.

To make data entry even faster and more accurate, you can link key fields on MET/TRACK forms so that selecting one item causes other fields on the form to be completed automatically. For example, entering “34401A” could be set up to make “DMM” appear in the description field and “Agilent” appear in the manufacturer field.

### User permissions

Five levels of security, from “read only” to “system manager,” ensure that only authorized users gain access to inventory data, so your data remains secure. Because the security is managed by the server, all users—even those accessing data from other applications—must be authorized.

## Customize MET/TRACK software to meet your requirements

MET/TRACK allows you to manage your equipment the way that works best for you. Desktop customization features enable you to personalize the way data appears on the screen. You can create multiple desktops to display the same information in different formats for multiple users and multiple workstations. Edit field names to match your organization’s terminology. Suppress or enable fields. Control the type and format of information entered into key fields. Virtually any kind of measurement asset in your organization—electrical, RF, temperature, pressure, mechanical or dimensional—can be managed with MET/TRACK software. And whether the calibration interval is measured in days, weeks, months, even use cycles, you can count on MET/TRACK software to keep you up to date.

### Build your own tables

MET/TRACK software offers features to enable you to store more custom information about your calibration assets.

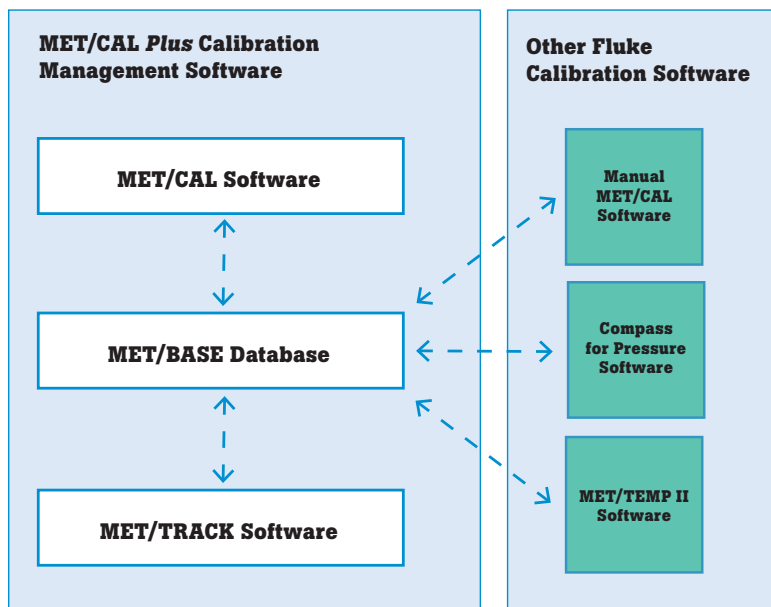
### Merge tables

Merge tables allow you to expand on the data held by particular fields in MET/TRACK tables. For example, it may be necessary to know more about the manufacturer or an instrument. The normal manufacturer field can hold values like Fluke, Agilent or Tek, but if you need to hold specific content information about these manufacturers, a “Merge Table” can provide the storage space you need. You only need to enter the data once, and the Merge Table will be linked to specific values of manufacturer, no matter how many times that value occurs in the table.

### User auxiliary tables

If you need more than the standard data fields and the field expansion capability of Merge Tables to hold your required data, you can create your own tables within the MET/TRACK database and link the records to any asset.

# Flexibility to fit your needs—from single workstations to company-wide networks



MET/CAL *Plus* software is designed for a wide range of automation needs. Its modular architecture means you can buy precisely the capability you need, and add to or expand it as your requirements change. Its client/server architecture and database ensure scalability.

You can set your system up on a single personal computer or take advantage of its client/server design to operate multiple MET/CAL and MET/TRACK workstations over your network. The key to MET/CAL *Plus* versatility is its flexible configuration. You can mix and match the capabilities you need.

## How MET/CAL *Plus* software is organized

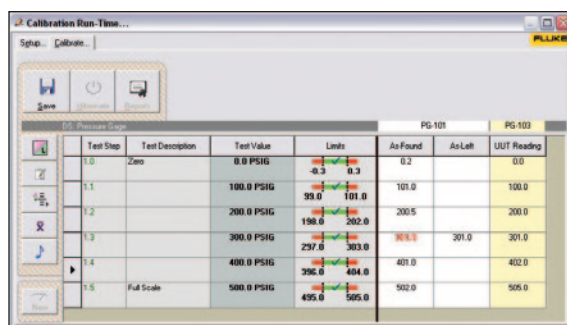
**MET/BASE** is the “engine” of your system, whether you’re using MET/CAL or MET/TRACK software. It includes Crystal Reports Professional. Generally you need only one MET/BASE package per installation. All of the basic MET/CAL *Plus* programs are included in the MET/BASE package. Applying the appropriate license unlocks the associated programs so you can use them.

**MET/CAL** provides a concurrent license for all MET/CAL automation and MET/TRACK asset management capabilities. Concurrent licenses allow software to be installed on any number of machines but is only allowed to run on a specific number of those machines at any given time. Start with one or more licenses, depending on the number of workstations you require and add licenses as your needs change.

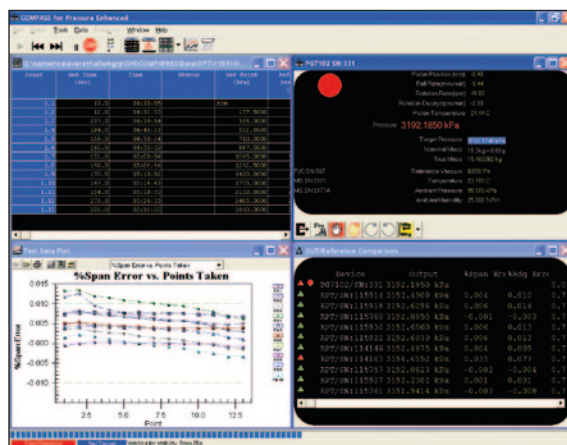
**MET/TRACK** provides a concurrent license for the test and measurement asset management capabilities of MET/CAL *Plus*. Choose it when you need additional asset management work stations or if your application calls only for asset management.

# Companion applications

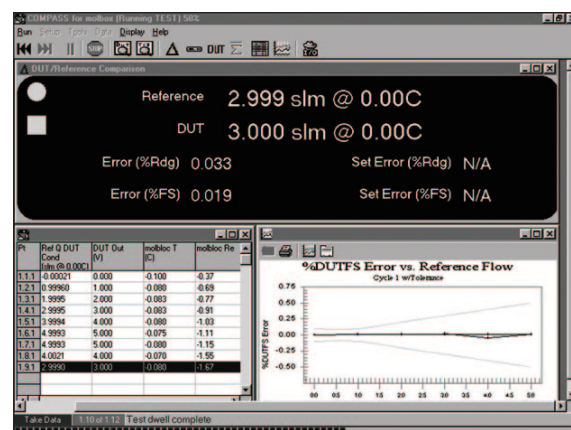
Other software is available from Fluke Calibration for a wide range of calibration parameters.



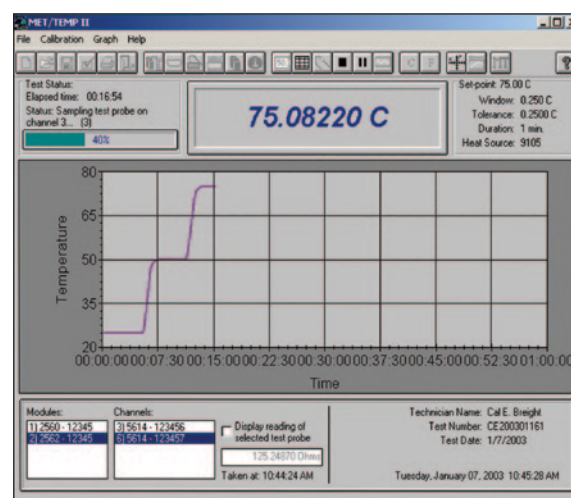
**Manual MET/CAL® software** is an application for calibration professionals who calibrate much of their workload manually, or who need to collect and manage calibration data that cannot be automated via IEEE connection, such as dimensional instruments. Manual MET/CAL is compatible with MET/TRACK software, so you can manage all of your calibration assets in a single database.



**COMPASS® for Pressure** software is a universal platform for automated pressure calibration. The Basic version helps you perform basic calibration and testing on pressure instruments. The Enhanced version supports complex tests and automated support of third party transfer standards, as well as many advanced features. Both versions of COMPASS for Pressure software enable users to export test data directly to the MET/BASE database, and manage assets through MET/TRACK software.



**COMPASS® for Flow** is a mass flow calibration software package based on COMPASS for Pressure software. Use COMPASS for Flow software with the Fluke Calibration molbox/molbloc gas flow calibration system as well as with non Fluke Calibration flow references.



**9938 MET/TEMP II** automates temperature calibration with Fluke Calibration thermometer readouts and heat sources. MET/TEMP II can interface with the 1620A "DewK" Thermo-Hygrometer to record ambient temperature and humidity conditions during a test. MET/TEMP II can optionally interface with MET/BASE database to record calibration and maintenance history, traceability information, and even the location of your thermometer readouts and heat sources.



# The support you need, when you need it

## **MET/SUPPORT<sup>SM</sup> Gold**

MET/SUPPORT Gold is an annual membership program offering premium support as well as free and discounted services to help you stay as productive as possible.

### **Free software upgrades**

MET/SUPPORT Gold members receive free upgrades for MET/CAL *Plus* software. Fluke Calibration typically releases at least one software upgrade per year, plus smaller updates. Savings can be substantial, especially if you have multiple software licenses. Use only a few of the Gold services and you can easily recover more than the cost of your membership fee in just a few months.

### **Free continuous access to the Fluke Calibration procedure library**

The Fluke Calibration procedure library includes more than 4,000 procedures. Hundreds of procedures are released each year, for a wide variety of popular UUTs. MET/SUPPORT Gold subscribers have free access to all procedures during their subscription term. Otherwise these procedures must be purchased.

### **Free MET/SUPPORT Gold web seminars**

Fluke Calibration sponsors a series of bi-monthly web seminars for MET/SUPPORT Gold subscribers. Presenters answer frequently-asked questions, provide training on new software features, and offer "tips and tricks" for getting the most out of MET/CAL *Plus* software.

### **Discounts on training**

MET/SUPPORT Gold members receive a 20 % discount on calibration software training. This feature can help you get staff up and running quickly and economically, or help them develop procedure writing expertise.

### **Discounts on custom procedure development**

MET/SUPPORT Gold members receive a 20 % discount on custom procedure development. If you don't see what you need on our procedures list at [www.flukecal.com/procedures](http://www.flukecal.com/procedures), you can commission Fluke Calibration to develop a custom procedure for you. Just send an email to [metsupport@fluke.com](mailto:metsupport@fluke.com) to describe what you need and request a price quote.

### **Database services**

Password recovery and repair of damaged database services are offered as part of the annual Gold plan.







## MET/CAL software training

New MET/CAL users can get up to speed quickly by attending training. Classroom, online, and CD-ROM based training is available to meet a wide variety of learning preferences and budgets. You can learn more about using the MET/CAL database; creating reports; writing procedures; and more. Visit the training center at [www.flukecal.com](http://www.flukecal.com) for a current list of classes and schedules.

## Software user groups

Fluke Calibration typically hosts user group meetings throughout the year. These meetings give users of MET/CAL and other Fluke Calibration software applications the chance to get together, hear about new software features and share tips with other software users. User group meetings are listed on the Fluke Calibration website at [www.flukecal.com/user-group-meetings](http://www.flukecal.com/user-group-meetings).

## Compliance with quality standards

MET/CAL software helps enable compliance with a wide variety of quality standards, including ISO 9001, ISO/IEC 17025, Z540.3, and others.

MET/CAL software includes many features that aid in complying with quality standards. It lets users:

- Maintain complete records about the adequacy of each calibrator and standard
- Document dates, equipment used, and results of each calibration, as well as traceability to recognized standards
- Document calibration procedures
- Preserve calibration records
- Maintain calibration history records for each item in inventory
- Flag out-of-tolerance points
- Log environmental conditions
- Document conditions under which calibrations are performed
- Provide multi-level security to protect validity of calibrations
- Collect results information and report it in any format required. MET/CAL *Plus* version 8.0 is the only commercially available calibration application that supports compliance with the ANSI/NCSLI Z540.3 quality standard. It includes all of the standard reports that are required by the different methods of Z540.3 compliance.

# System requirements and ordering/upgrade information

## Minimum system requirements

### MET/BASE Server

- 1.5 GHz Pentium 4 processor or equivalent
- 2 GB of RAM
- 3 GB of available hard drive space on the server

### MET/CAL or MET/TRACK Client

- 1 GHz Pentium 4 processor or equivalent
- 1 GB of RAM
- 1 GB of available hard drive space

### Operating system

- Windows® XP SP3
- Windows Server 2003
- Windows Vista
- Windows 7 (32 and 64-bit)
- Windows 2008 (32 and 64-bit)

### Supported network protocols: TCP/IP

**Backup device:** Strongly recommended

**Monitor:** 1024 x 768 or larger recommended

## Ordering information

### Models

**MET/BASE-8** Calibration Software Database System. One or more MET/CAL and/or MET/TRACK license disks required for use.

**MET/CAL-L** License for MET/CAL, Includes capabilities of MET/TRACK. MET/BASE-8 or earlier version required.

**MET/TRACK-L** License for MET/TRACK Metrology Property Management Software. MET/BASE-8 or earlier version required.

### Upgrades

**MET/BASE-8U** MET/BASE upgrade. Upgrades MET/BASE from version 7 or later to current version. Upgrade licenses are also required for systems running MET/BASE older than version 8.0.

**MET/CAL-LX** License disk upgrade. MET/BASE-8 and license report for prior version (7.1 or newer) of MET/CAL required.

**MET/TRACK-LX** License disk upgrade. MET/BASE-8 and license report for prior version (7.1 or newer) of MET/TRACK required.

**MET/CAL-LU** License disk upgrade. MET/BASE-8 and license report for prior version (7 to 7.0.1) of MET/CAL required.

**MET/TRACK-LU** License disk upgrade. MET/BASE-8 and license report for prior version (7 to 7.0.1) of MET/TRACK required.

### MET/CAL support

**MET/SUPPORT Gold** Priority support agreement for MET/CAL *Plus* software

### Additional products from the Fluke Calibration software suite

**COMPASS for Pressure** Pressure Calibration Software

**MET/TEMP II** Temperature Calibration Software

**Manual MET/CAL** Calibration Management Software

**COMPASS for Flow** Flow Calibration Management Software

### Scheduled training

Various courses available

## How to upgrade from previous versions of MET/CAL software

**From version 7.1 or newer.** If you are already using MET/CAL *Plus* 7.1 or above, you can upgrade to version 8.0 by purchasing a MET/BASE upgrade and the LX license upgrades. License report for your existing software is required.

**From version 7 to 7.0.1.** Purchase a MET/BASE upgrade, then acquire the LU license upgrades you need. You will be asked to provide the license report for your existing software licenses.

**From pre-version 7.** Customers using older versions of the software will need to acquire a new, complete MET/CAL *Plus* application, including a new MET/BASE and the appropriate new MET/CAL or MET/TRACK licenses.

Remember, MET/SUPPORT Gold members receive free upgrades and updates during their subscription period. Fluke Calibration typically releases at least one update or version per year; this benefit plus free warranted procedures can make a MET/SUPPORT membership pay for itself within the first few months.



# Total solutions in calibration

Fluke Calibration provides the broadest range of calibrators and standards, software, service, support and training in electrical, temperature, pressure, RF and flow calibration.

Visit [www.flukecal.com](http://www.flukecal.com) for more information about Fluke Calibration solutions.

## Pressure and flow calibration

- High performance pressure and gas flow standards
- Accredited pressure and gas flow calibration services
- Calibration software
- Services and training



## Temperature calibration

- Contact and non-contact temperature calibrators and standards
- Temperature calibration software
- Services and training



## Electrical calibration

- DC/LF electrical calibrators and standards
- Power calibrators and standards
- RF calibrators
- Timer/counters and frequency standards
- Calibration software
- Services and training



**Fluke Calibration.** *Precision, performance, confidence.™*

Electrical	RF	Temperature	Pressure	Flow	Software
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