FLUKE ®

Metrology Software

o **Installation and Upgrade Guide**

Contact MET/SUPPORT™ if you Need Assistance

See the Appendix for important details about the MET/SUPPORT program. Registered users of Fluke Metrology Software can obtain support by telephone, FAX, or E-Mail.

Before calling, be sure to first check the manual and online help.

Have the Following Information Available:

- 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 to recreate the problem
- Contents of `autoexec.bat` and `config.sys` files if applicable
- Version of *Crystal Reports*

Dial Toll-Free in the USA: 1-800-825-7411
FAX: 1-425-356-5992
E-Mail: metsupport@tc.fluke.com

Refer to the Appendix for international support and additional information.

FLUKE.

Fluke Metrology

Software
Version 6

MET/CAL
5500/CAL
MET/TRACK

Installation and Upgrade Guide

Table of Contents

Chapter 1
Installation Process Overview

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BEGIN READING HERE

The flow diagrams in this manual are intended to provide an overview and to guide the installation process. Do not rely on the flowcharts alone; the chapter texts provide important additional details. Please refer to the text as you install the software, using the flowchart for reference.

I have no Fluke Software

I have MET/TRACK Version 4.x or 5.x MET/CAL 4.x or 5.x Database Mode

I have MET/TRACK Version 3.x (MS-DOS)

I have MET/CAL Version 2.x or 3.x (MS-DOS)

I have MET/CAL Version 4.x or 5.x Legacy Mode

Follow **New Installation** instructions.

Networks: Chapter 2
Standalone: Chapter 3

Follow **Upgrade** instructions.

Networks: Chapter 4
Standalone: Chapter 5

1. Follow **New Installation** instructions.
   Networks: Chapter 2
   Standalone: Chapter 3

2. Follow **Migration** instructions.
   See Chapter 6 of this Guide.

I have both MET/CAL and MET/TRACK

Are both Database Mode **?**

Yes

No

I have MET/TRACK 2.X (MS-DOS)

1. Locate both products on this page.
2. Follow the flowchart for the Database Mode product first, then return to this page and follow the instructions for the other product.

NOTE: If both are DOS versions, it doesn't matter which one you upgrade first.

To complete this upgrade path, you must first upgrade to MET/TRACK Version 3.2., then follow the MET/TRACK 3.x upgrade instructions above.

Details can be found on the CD in the directory named **MT2to3**.

NOTES

References to *Database Mode* mean that you are running MET/TRACK 4.0 or MET/CAL 4.2 or later using the SQL Database Engine (Watcom or Sybase).

5500/CAL Users: References to *MET/CAL* are equivalent to *5500/CAL* on the flowcharts in this manual.

5500A/EP Users: If you are upgrading from MET/CAL Version 4.2 or earlier, see the special instructions in Appendix D after performing the software upgrade.

Introduction

Begin with this manual whether you are installing Fluke Metrology Software for
the first time, or whether you are already running one of the predecessor products,
MET/CAL or MET/TRACK.

About the CDs

Fluke Metrology Software is provided on a set of CDs. If you must install the
software on a system that has no CD-ROM drive, refer to **Appendix B** for
instructions on creating a set of floppy disks by extracting files from the CDs.

Supported Platforms

Fluke Metrology Software runs on a variety of platforms. However, the main text
of this manual describes only installation on machines running Microsoft
Windows 95, Windows 98, or Windows NT.

Note

*Beginning with Version 6, Fluke Metrology Software is a 32-bit
application only. If you have not yet upgraded your system from
Windows 3.1, stop now. The software will not install properly on any
server or workstation that is not running one of the Operating
Systems mentioned above. Upgrade to Windows 95, Windows 98, or
Windows NT before continuing with the instructions in this manual.*

Hardware Requirements

The minimum requirements for a standalone Workstation installation are as
follows:

- IBM PC or compatible with at least a Pentium 133 Mhz microprocessor

- VGA monitor

- 64 megabytes of RAM (128 recommended)

- 80 megabytes available on the hard drive

- Windows 95 or later

Installation Time Requirements

The time it takes to install the Fluke Metrology Software depends on your starting point. If you are upgrading an existing installation of MET/CAL or MET/TRACK, the required time may be slightly lengthened due to the need to back up existing data before upgrading the database. If you are starting from a DOS-based version of MET/CAL or MET/TRACK, additional time is needed to migrate existing data into the new database.

Testing of this package showed that most users complete a new network installation in about two hours.

Terminology

Some of the terms used in this manual may require clarification. Besides the following, be sure to refer to the Glossary in the *Users Manual* Appendix for the definitions of other unfamiliar terms you may come across.

MET/CAL **5500/CAL**	In this manual, the term *MET/CAL* usually includes the 5500/CAL product, which is a subset of MET/CAL. Any mention of MET/CAL includes 5500/CAL.
Client/Server	Fluke Metrology Software uses the Client/Server computing model. If you are not familiar with this model, or with other networking issues, it may be of some use to study the terms in the Appendix of the *Users Manual*. You might also discuss with a local expert how your installation will mesh into the existing network.
	That appendix defines many terms associated with the Client/Server model. Look there if you come across a term with which you are unfamiliar, or whose meaning is not clear from the context.
Database Mode	MET/CAL and 5500/CAL versions prior to 6.0 were able to operate either in *Legacy Mode* or in *Database Mode*. Legacy Mode stored information in a file-oriented Fluke proprietary format database. In Database Mode, the calibration standards information is moved into an industry-standard SQL database.
	Version 6.0 does not provide a Legacy Mode option.

Other Documentation

The printed manuals you received, as well as other documentation, has been provided in the form of PDF files (Portable Document Format) on the CD. PDF is a file format developed by Adobe that provides a page-for-page rendition of a printed document. You use a PDF viewer called *Reader* to access and print PDF files. If you do not have the Acrobat Reader already installed on your computer, Fluke provides a copy in the DOC directory on the CD.

To install the Acrobat Reader on your computer, copy the file named AR32E01.EXE to your Windows/Program Files directory, then run the file to install it. You can run the file either by double-clicking its name in Windows Explorer, or browsing to it using the Start/Run selection from the taskbar.

Installation Process Flowcharts

This chapter begins with a flowchart that graphically depicts an overview of the different types of installations. Depending on your starting point, the chart directs you to a particular chapter to perform the installation steps.

Each chapter begins with a similar, but more detailed, flowchart for each of the types of installations.

This manual is based on process flowcharts that you can use in two ways:

1. Before you begin the installation, use the flowcharts to familiarize yourself in a general way with the process you will be following.

2. During installation, check off each item on the flowchart as you complete it.

As you view Flowchart 1 at the beginning of this chapter, notice that it contains several starting points, depending on your current installation. For example, the first block in the upper left of the page is labeled "I have no Fluke software." If this is your beginning point, you are directed to either Chapter 2 or 3, depending on whether you are doing a Network or Standalone installation.

Similarly, for all the other blocks, locate your starting point, and follow the instructions that direct you to other chapters in the manual.

Preparation for Installation

Before beginning any new software installation, make sure you take the following preparatory steps on the computer:

1. Make backup copies of any existing programs and data that might be replaced during the installation. For example, if you are currently running MET/TRACK, you should backup the database and the folder where the MET/TRACK program files are stored.

2. Run a disk checking program to ensure that the disk has no lost clusters. This normally involves running a program such as SCANDISK or CHKDISK. You may also want to run a disk defragmentation program. Consult the computer documentation or a local support person for directions on how to perform these tasks.

3. Close all running programs except for the operating system itself.

Caution

To avoid locking up your system, make sure all applications are closed during the installation process. This includes the Microsoft Office floating tool bar.

4. Shut down and restart the computer. Doing this ensures that all programs are cleared from memory. Be sure to close any applications that may have started automatically.

Note

All instructions in this manual assume you are installing the software from the MET/BASE CD-ROMs. If you are unable to do this, you can extract a set of disks from the CDs. See Appendix B for complete directions. The appendix includes directions for interpreting the CD-ROM folder names as their equivalent disk identifier and folder name.

The instructions in this manual assume that the "file server" and the "data server" are the same computer system.

Installation on Client workstations requires write permission on the network drive. If you are unsure whether you have such permission, perform this simple test: start up Notepad or Wordpad and create a short text file. Attempt to save it to the network drive. If you are denied permission to write the file, see your network administrator before continuing.

Process Overview

In a networked environment, the installation process goes as follows:

♦ First, install all of the software on the server.

♦ The second step is to install the client software on individual workstations. The installation of a client involves retrieving the needed programs from the server.

♦ The final step in a network installation is to apply the licenses you have purchased. Until licenses are applied, none of the installed software is operational.

A standalone installation involves performing the same basic steps, except that all the software is installed on the single standalone PC.

Note that a standalone metrology workstation may be connected to a computer network, but this type of installation would not permit sharing Fluke Metrology Software programs or files with other computers.

Install Crystal Reports after installing the MET/BASE software and licenses. With the purchase of the Fluke software, you receive ONE license for Crystal Reports. The software cannot be loaded on the server.

Chapter 2
New Installation on a Network

Contents   Page

Network Installation Flowchart

The chapter text provides important additional details.

Installing the **Server** Software

Installing a **Client**

Applying a **License**

Item 1

Install SQL Anywhere

1. On the File Server* computer, Run **Setup** from the METBASE folder located on the METBASE CD.

2. Follow on-screen instructions. If SQL Anywhere needs to be installed, METBASE Setup will lead you through the install and then reboot the computer.

✓ 1

Item 3

Install a Client

1. On a Client workstation, map the METCAL folder on the file server.

2. Run **Setup** from the METCAL\client folder you just mapped**.**

3. Follow the on-screen instructions. Doing so installs *SQL Anywhere* on the client, reboots the computer, and then installs the MET/BASE options you choose for that client.

✓ 3

Item 4

Apply a License

1. Ensure that the Database Engine and the Requestor have been started and are running.

2. On a Client workstation, start the **DB Setup** application, logging in as an Administrator (MT).

3. Select **Security** from the menu bar, then select **Add License** from the dropdown list.

4. Insert the License Disk and follow on-screen instructions.

5. Repeat steps 3 and 4 for all licenses.

✓ 4

Item 2

Install MET/BASE

1. **Setup** will restart.

2. Select **Server Software Installation** from the Installation Options screen.

3. Setup the METCAL folder as a shared folder.

✓ 2

Client installation is complete.

Item 5

Migrate Existing Data

If you are upgrading from MET/TRACK 3.x, or MET/CAL 2, 3, or 4 (Legacy Mode), refer to Chapter 6 of this guide for instructions on how to migrate your data into the new database.

✓ 5

Yes

More Clients **?**

No

Server intallation complete.

Software Installation Complete

MET/CAL or 5500/CAL users: See Chapter 8 for further instructions.

* Windows NT Installations:
This installation may require Administrator permissions on both the Server and Clients.

Introduction

This chapter explains how to perform a new installation on a network. If you are installing the software onto a standalone workstation, the steps are nearly identical, but go to Chapter 3 in this manual for the flowchart and detailed description of the process.

A standalone workstation may actually be connected to a network. However, Fluke Metrology software considers the workstation a standalone if it does not act as a client workstation on a network where the programs and data reside on another machine. If you are unsure what kind of installation to perform, ask your system administrator or other technical support personnel.

Note

1. *All instructions in this manual assume you are installing the software from the MET/BASE CD-ROMs. If you are unable to do this, you can extract a set of disks from the CD. See* ***Appendix B*** *for complete directions. The appendix includes directions for interpreting the CD-ROM folder names as their equivalent disk identifier and folder name.*

2. *The instructions in this manual assume that the "file server" and the "data server" are the same computer system.*

Installation Procedure: Windows Networking Applications

Refer to Flowchart 2 on the previous page. As you perform each step, place a checkmark ✓ in the box provided for that purpose. Detailed installation instructions follow.

Caution

SCREEN ILLUSTRATIONS

The display illustrations in this manual depict a typical Windows NT 4.0 installation. Some of the screens you see on your display may vary slightly from the illustrations.

Note

<u>SHARED FOLDERS ON THE NETWORK</u>

Installing Fluke Metrology Software on a network requires making a folder shareable on the File Server, and mapping that folder to a network drive on the client workstations. If you have never performed these operations, or if you are unfamiliar with these terms, you may want to consult a local network expert before beginning.

Item 1: Install the SQL Anywhere *Database Engine Software*

Caution

CLOSE APPLICATIONS BEFORE SOFTWARE INSTALLATION

To avoid locking up your system, make sure all applications are closed before you begin the installation process. This includes the Microsoft Office floating tool bar.

Note

<u>EXISTING COPIES OF SQL ANYWHERE</u>

Installing this version of SQL Anywhere will automatically update any existing SQL Anywhere program files. During this installation, you will be asked if you wish to update any data sources you may have created with an earlier version. If you intend to continue using a prior version of SQL Anywhere, check to ensure that your applications will continue to work with this version.

Proceed as follows to install the SQL Anywhere database engine software on the Server:

1. At the Server, load the MET/BASE CD-ROM into a CD drive.

2. Browse to the METBASE folder on the CD.

3. Run SETUP.EXE to start installation. You will first see a welcome screen. If SQL Anywhere needs to be installed, the system will prompt you and the following screen appears:

ip201.bmp

4. Next, you are asked to select directories for the software. You should see a screen similar to the following:

ip202.bmp

5. Allow the software to install to the suggested directories unless you have an overriding reason to install to other locations.

6. The SQL Anywhere installation program may display other confirmation screens. In each case, accept the default selection by selecting **OK** or **Next**.

7. You may see a screen asking if you wish to convert any existing data sources, and it may display whether a prior version of SQL Anywhere exists or not.

If you do not have any existing data sources, it doesn't matter which of the selections you check. However, if you DO already have any SQL Anywhere data sources, it is your responsibility to ensure that they will continue to function properly with the new database engine.

8. Continue following the screen prompts. Accept the defaults by selecting **OK** or **Next**. At one point, you will be asked to provide author information. Most people use their company name.

9. When the SQL Anywhere setup program completes, the following screen displays:

zt9a.bmp
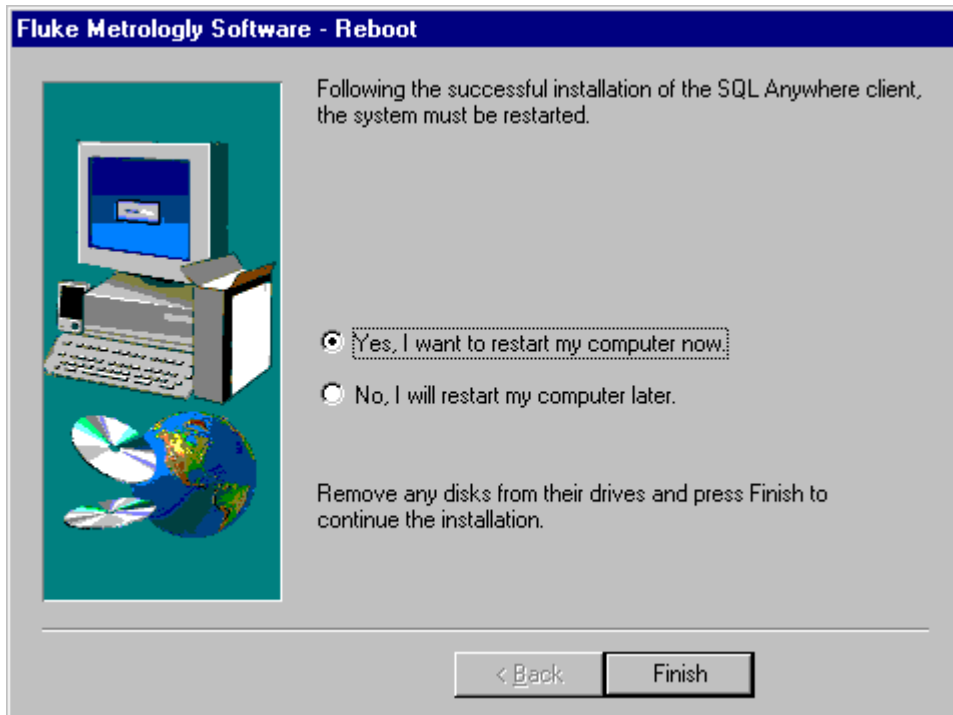
10. The METBASE Setup program offers to shut down and reboot the computer for you. Allow it to do so and complete the installation by selecting **Finish**.

Note

If the SQL Anywhere Program group window is left open before restarting the computer, Windows Explorer will cause an error when the installation completes. However, this error can be safely ignored.

11. You have completed the installation of the *SQL Anywhere* software, so check off *Item ✓1* on the flowchart at the beginning of this chapter.

Item 2: Install the MET/BASE Server Software

1. Leave the MET/BASE CD-ROM in the CD drive. The SETUP program resumes.

zt6a.bmp

2. From the Installation Type screen, select **Server Only**.

   As the installation program proceeds, it presents a number of screens prompting you for folders where you wish to install the software, and to confirm those selections.

   Allow the program to install to the default folders by selecting **OK** or **Next** unless you have an overriding reason for not doing so.

   Note

   If the MET/BASE executables or database already exist on the computer, the installation program will attempt to locate them and install to their directory.

3. At the following screen, give your database a unique name. This will prevent confusion with other databases that exist on your network.
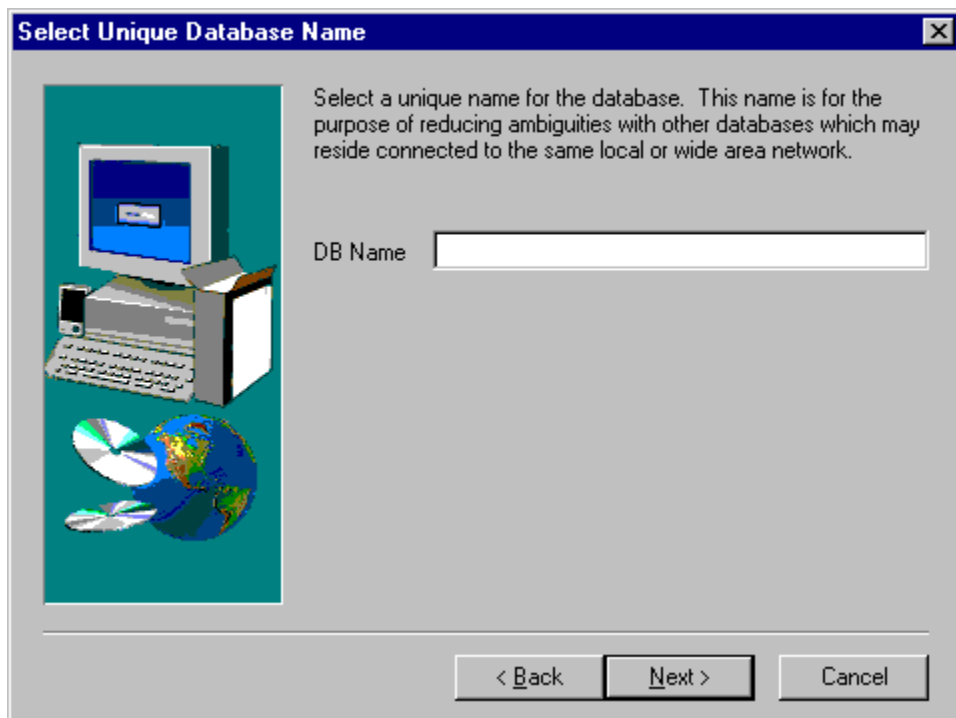
zt16s.bmp

4. When the installation of the Server software has completed, the following screen will display:

Setup Complete

Installation successful.

Click Finish to complete Setup.

< Back   Finish
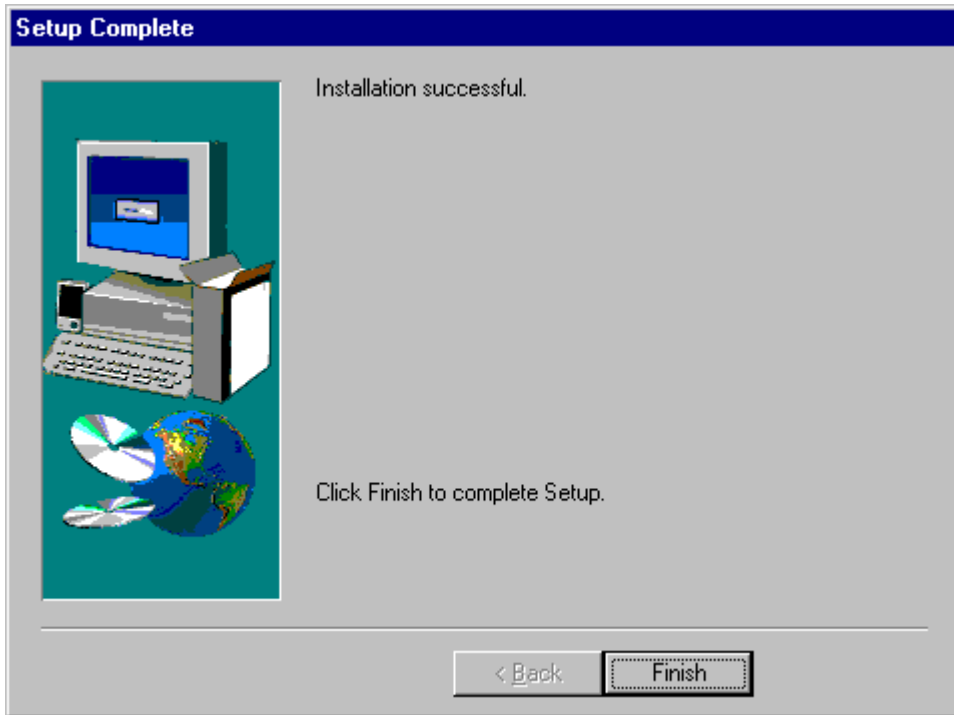
zt9.bmp

5. The installation program has created a new folder called METCAL on the drive you previously specified (C:\METCAL, if you accepted the defaults).

Note the location if you changed the default, because you will need to know it later during the Client installation.

6. Make the METCAL folder shareable. This operation is described in the following paragraphs:

To make a folder shareable in Windows NT or Windows 95/98, proceed as follows:

a. In Windows Explorer, browse to the new METCAL folder (default: C:\METCAL).

b. Right click the folder name.

c. Select **Sharing.** A dialog box similar to the following appears:
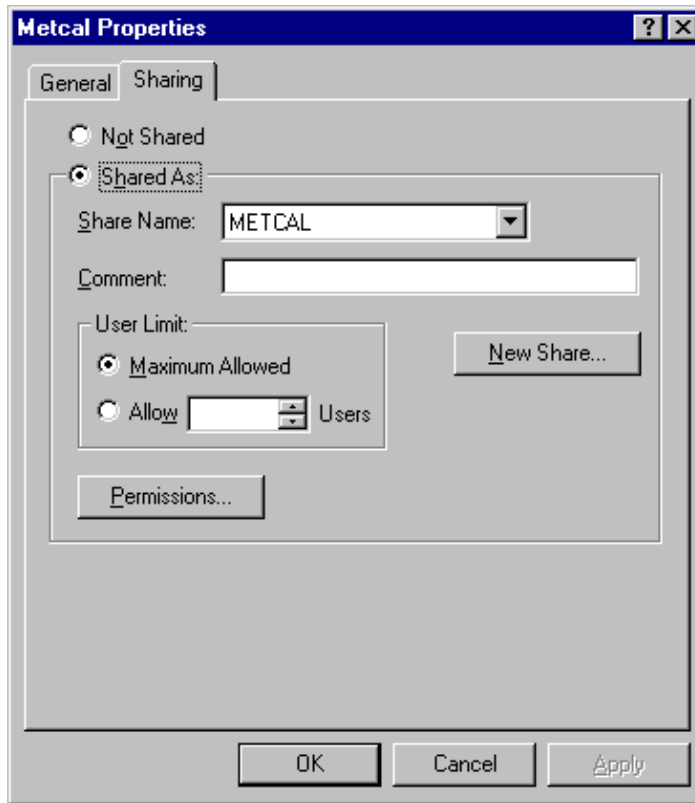
ip207.bmp

d. Choose the selection box **Shared As:** The name of the MET/CAL folder
appears in the block labeled Share Name. This allows the folder to be
shared using the same directory name as the one you right-clicked.

e. Press **Ok** to make the folder shareable and close the dialog box.

7. Start the Calibration Data Engine. From the **Start** menu, open **Programs**, then
Fluke Metrology Software. Select **Calibration Data Engine**.

As the Calibration Data Engine starts up, you will see it added to your
Windows task bar.

8. Remove the MET/BASE CD from the CD-ROM drive and return it to its case.
The CD is not needed again during the MET/BASE installation.

All the software needed for installing clients and licenses has now been
installed on the File Server, and the subsequent steps are performed at the
Client Workstation.

9. You have completed the installation of the MET/BASE Server software, so
check off *Item ✓2* in the flowchart at the beginning of this chapter.

Item 3: Install the MET/BASE Client Software

The Client software is installed at each workstation. You can install it on any number of workstations.

Visit each workstation and perform the following steps:

1. At the Client workstation, map the shared folder as a network drive.

   This means that the directory you made shareable during the installation of the Server software must be mapped to a drive letter on each Client workstation. This allows the files to be shared over the network.

   - Open the Explorer's Tools Menu, and select **Map Network Drive**. Choose an unused drive letter, then pull down the list under the box labeled **Path:** and select the shared folder. If no folders are visible, double-click the name of the server computer from those that are listed.

   - When the path to the shared folder is visible in the **Path:** box, the display should look similar to the following. Click **OK** to map the drive and close the dialog box.
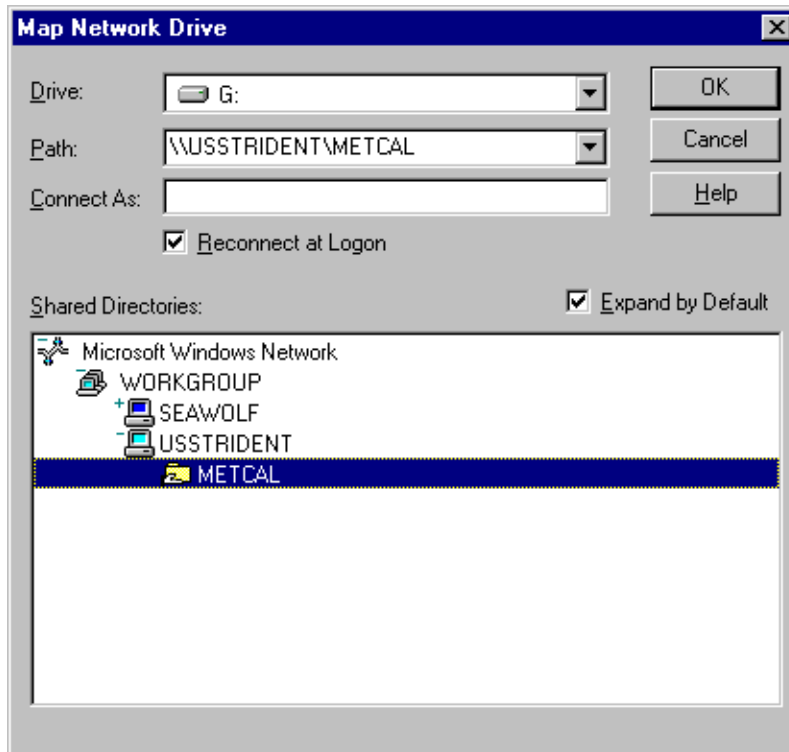
ip210.bmp

Note

<u>*Checking on Drive Mapping*</u>

If you are unsure whether you have properly shared and mapped the folder, proceed as follows:

Open Windows Explorer. The drive letter you selected in the previous step should appear as one of the drives in the listing.

Try opening the drive. The list of files on the server should be visible.

*If the drive letter does not appear, or if no files appear in the listing, the folder is not being shared. **Be sure** the folder has been shared at the file server and that it is mapped at the client before continuing.*

2. Open Windows Explorer, if you haven't already done so, and browse to the shared directory (the one you just mapped).

3. Run **SETUP.EXE** from the Client sub-folder in the MET/BASE share executable folder. You will find it by following the path **metcal\client\setup.exe**.

4. Follow the on-screen instructions. The installation program first installs the *SQL Anywhere* Client software on the client workstation.

5. After the SQL Anywhere files are installed, you will see a screen indicating that certain changes must be done to the system files.

   Accept the defaults by selecting **OK** or **Next** unless you have some reason for not having these changes accomplished automatically.

   The software automatically makes copies of any files before changing them, so you can revert to the prior state if necessary.

6. Next, the software may ask about converting existing data sources, even if you do not have any.

Caution

EXISTING DATA SOURCES

While it installs the new software, the *SQL Anywhere* Setup program may ask about converting existing data sources. If you do not already have another version of *SQL Anywhere* installed, you can make any of the selections without harm.

However, if you have another version of SQL Anywhere installed, you must decide whether to convert those data sources to the new version or not. It is your responsibility to determine whether your existing applications will continue to operate properly with the new Calibration Data Engine.

7. When the installation of SQL Anywhere completes, the following screen displays:

zt9a.bmp

8. The system offers to reboot the computer. Allow it to do so and select **Finish** to complete the installation.

Note

If the SQL Anywhere Program Group window is left open before restarting the computer, Windows Explorer will cause an error when the installation completes. However, this error can be safely ignored.

9. When SETUP resumes, the following options screen presents the available choices:
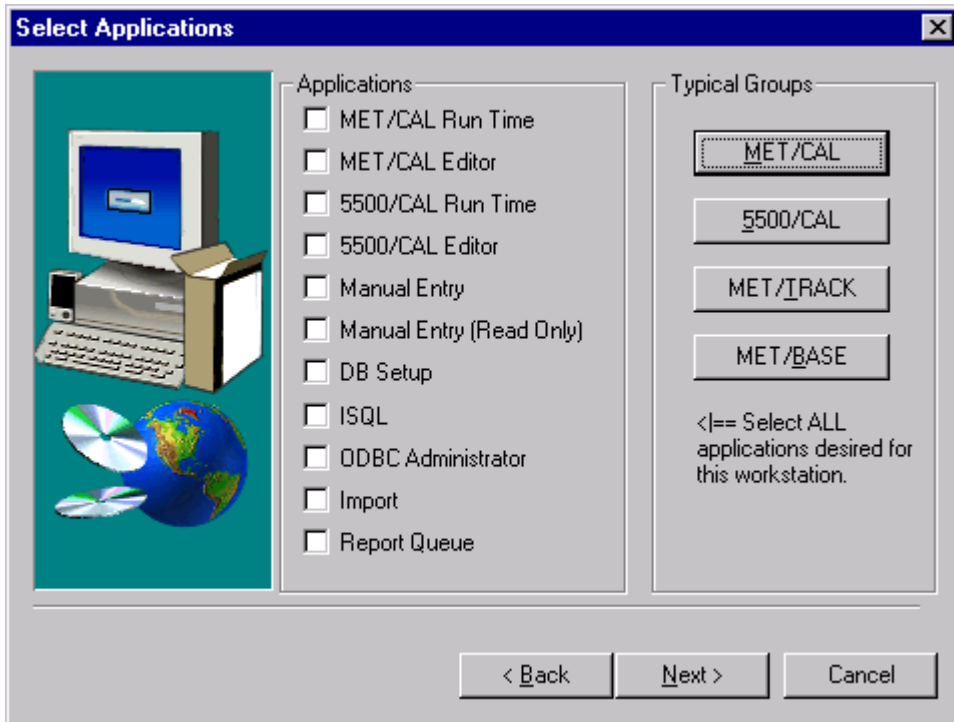
ip214.bmp

10. Select the options you wish to install on this workstation. You can select one of the typical groups in the upper right corner, then add others individually by checking them off on the list on the left.

Note

On each workstation, you can install all of the application icons, or you can install some subset of them. The option selection screen lets you specify which particular applications you want to run on each workstation.

You should only check those boxes that match the licenses you have purchased. While this dialog box permits you to check any or all of the boxes, only those applications for which you apply licenses (Step 4, upcoming) will operate, regardless of which boxes you checked.

Be sure to install the DB Setup application on at least one client. DB Setup is the program that you must run later to apply licenses. This is done after all software is installed.

11. When you have selected all the programs you wish to install on the workstation, press **Next** to close the dialog box and begin installation from the server.

12. Follow the prompts as the installation program displays them on the screen. Allow the software to install to the default folders by selecting **OK** or **Next** unless you have an overriding reason for not doing so.

13. At the language prompt, select the appropriate language.

14. One of the dialog boxes asks you to supply an author name. Most people use their company name.

15. When the installation program completes, it displays a dialog box similar to the following:
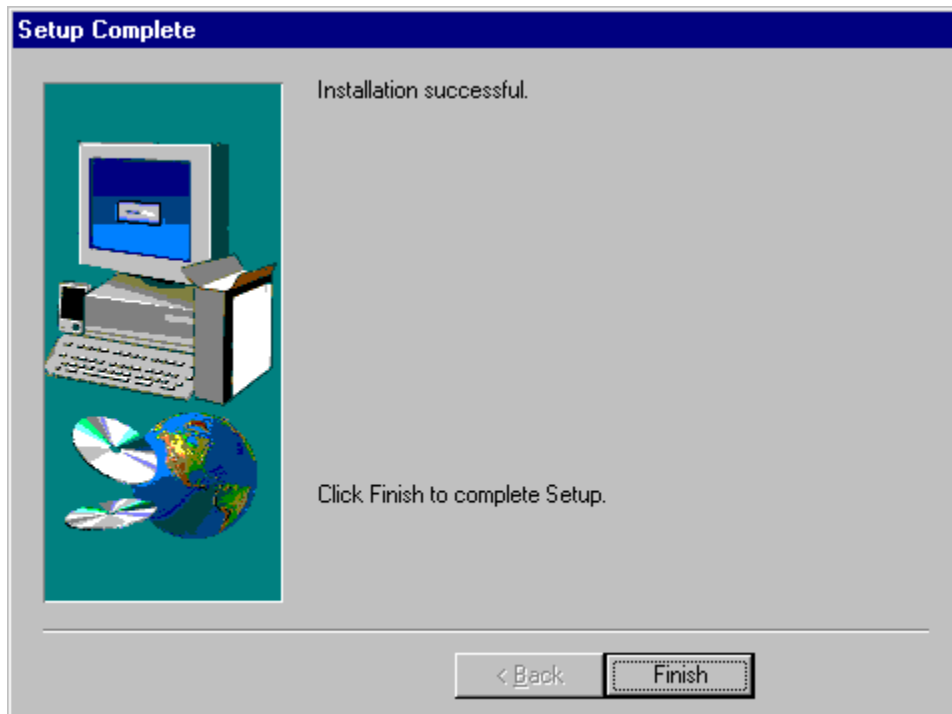
zt11s.bmp

16. This dialog box signifies that you have completed the installation of the MET/BASE Client software on one Client workstation. Click **Finish** to complete the setup.

17. Visit each of the Clients and go through the same Client software installation steps you just completed, again selecting which options you want to be available on that client.

18. After installing the Client software on all the workstations, check off *Item ✓3* in the flowchart at the beginning of this chapter.

Item 4: Apply Licenses

Applying licenses can be performed at any of the Client workstations. The floating licenses are maintained by the data server. They are not tied to a particular workstation, so you can apply all the licenses at one workstation.

Since the database keeps track of which licenses are available, any of the Clients can run the applications, so long as a license is available.

1. Ensure that the Calibration Data Engine has been started and is currently running on the computer where the server software was installed. If the Calibration Data Engine is not running, start it now.

   You can tell if the Calibration Data Engine is started by looking at the screen on the server. You should see either the connection messages window or the MTRACK icon.

2. At any of your new Client workstations, start the Calibration Data Requester program. You will find it in the Fluke Metrology Software program group (Windows NT and Windows 95 users: Locate these programs from the Start menu.)

   After the Requester has started, the window automatically minimizes.

3. Also from the Fluke Metrology Software program group, start the DBSETUP application. Log in as an administrator (Login name "MT", Password "MT").

4. Select **Security** from the menu bar.

5. Select **Add License** from the Security drop-down list.

6. Follow the on-screen instructions. When you are asked to insert the License Disk, insert it and continue to follow the on-screen instructions.

7. A display indicates that you have successfully completed the application of one license.

   To apply other licenses, again open the **Security** menu and select **Add License**.
   As with the first license, follow the on-screen instructions and insert the License Disk when the program requests it.

8. Once you have applied all the licenses, check off *Item ✓4* in the flowchart at the beginning of this chapter.

Item 5: Migrate Existing Data

If this is a brand new installation, skip this step and go directly to the next heading, "What To Do Next."

Item 5 applies only to those sites that have been using an earlier version of Fluke MET/CAL or MET/TRACK, specifically any of the following:

- MET/TRACK Version 3.2
- MET/CAL Version 2 or 3
- MET/CAL Version 4.x or 5.x in Legacy Mode

If you are upgrading from any of these versions, you must now use the migration tool to bring your existing data into the new database.

Migration is covered in Chapter 6 of this manual.

Once your data has been migrated into the database, software installation is complete. Check off *Item* ✓*5* in the flowchart at the beginning of this chapter.

What To Do Next

Completion of all five items on the flowchart at the beginning of this chapter concludes the installation process. At this point, there are several directions you might go, depending on your own objectives and needs.

MET/BASE-J Installations
If you are installing the Japanese version of Fluke Metrology Software, go now to the separate instruction sheet entitled *Converting a New MET/BASE-J to Use Japanese Run Time Reports*. After following the steps described in this instruction sheet, return here to decide how you wish to proceed.

Crystal Reports
The report writing program *Crystal Reports* is provided as part of the MET/BASE package, but requires its own installation. Before continuing, you may want to install *Crystal Reports*.

- ♦ Close any other applications that may be running (such as the Calibration Data Engine), then insert the Crystal Reports CD into the CD-ROM drive.

- ♦ From the **Start** menu, select **Run**, indicate the appropriate language and then **Browse** to the SETUP program on the CD.

- ♦ Follow the screen instructions to complete the installation.

- ♦ Note that Crystal Reports can only be installed on one computer. If additional computers need to run the software, you will need to buy additional licenses from Crystal or from Fluke.

Familiarization
The Fluke Metrology Software database that you have now installed has been pre-loaded with a number of sample assets and with two users. You can add other assets or users, or you can modify those that have been pre-loaded.

- ♦ MET/CAL and 5500/CAL users should go to the *Getting Started Guide* for some practical exercises. The Getting Started Guide helps you learn how the database operates, and guides you through your first calibration using the new system.

♦ MET/TRACK users should begin looking to the Users Guide for assistance in customizing the database and the Manual Entry screen.

Testing

After installing the software, you may want to perform some preliminary testing to see that everything is working properly. Note that, if the licenses were successfully applied during installation, no further client-to-server testing is needed. However, if your installation was abnormal in any way, you may want to do some confidence testing

Chapter 7 contains some simple tests that you can run to ensure that the database is properly installed and that the Clients are able to access the information it contains.

Chapter 7 also contains some basic troubleshooting information in case you should run into any difficulty.

MET/CAL Hardware Installation and Setup

For MET/CAL and 5500/CAL workstations, if the IEEE-488 boards are not yet installed, you may wish to complete the hardware and MET/CAL procedure installation before beginning testing. Instructions for these tasks can be found in the *Getting Started Guide*.

Note Regarding Database Operation:

♦ The database requires a login name and password each time you start a Fluke Metrology Software application. Ordinarily, you must type in a user name and password every time you start one of the applications.

However, all of the Fluke Metrology Software applications include a **Tools** menu that you can use as a quick way to start up a second application. If you do not minimize the first application, just open the Tools menu and select the next program you want to run. You will not be required to provide a login name and password to the second one.

Chapter 3
New Installation of a Standalone System

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New Standalone System Flowchart

The chapter text provides important additional details.

Item 1

Install SQL Anywhere

1. Run **Setup** from the METBASE folder located on the MET/BASE CD.

2. Follow the on-screen instructions.

✓ **1**

Item 2

Install MET/BASE

1. The Setup program restarts. This installs the Server Software, an SQL Client, and a MET/BASE Client. Follow the on-screen instructions.

3. Select **options** to be installed on this system.

✓ **2**

Item 3

Apply the License

1. Start the database engine.

2. Start the **DB Setup** application, logging in as an Administrator (MT).

3. Select **Security** from the menu, then select **Add License** from the dropdown list.

4. Insert the License Disk and follow the on-screen instructions.

5. Repeat Steps 3 and 4 for all licenses.

✓ **3**

Item 4

Migrate Existing Data

If you are upgrading from MET/TRACK 3.x, or MET/CAL 2, 3, or 4 (Legacy Mode), refer to Chapter 6 of this guide for instructions on how to migrate your data into the new database.

✓ **4**

Software Installation Complete

MET/CAL or 5500/CAL users:
See Chapter 8 for further instructions.

Introduction

This chapter explains how to perform a standalone installation. If you are installing the software onto a network, go back to Chapter 2 in this manual for the flowchart and detailed description of the process.

A standalone workstation may actually be connected to a network. Fluke Metrology software considers the workstation a standalone if it does not act as a client workstation on a network where the files and data are on another machine. If you are unsure what kind of installation to perform, ask your system administrator or other technical support personnel.

Note

*All instructions in this manual assume you are installing the software from the MET/BASE CD-ROM. If you are unable to do this, you can extract a set of disks from the CD. See **Appendix B** for complete directions. The appendix includes directions for interpreting the CD-ROM folder names as their equivalent disk identifier and folder name.*

Item 1: Install the SQL Anywhere *Database Engine Software*

Refer to the flowchart on the previous page. As you perform each step, place a checkmark ✓ in the box provided for that purpose. Detailed installation instructions follow.

Caution

CLOSE APPLICATIONS BEFORE SOFTWARE INSTALLATION

To avoid locking up your system, make sure all applications are closed before beginning the installation process. This includes the Microsoft Office floating tool bar.

Note

EXISTING COPIES OF SQL ANYWHERE

Installing this version of SQL Anywhere automatically updates any existing SQL Anywhere program files. If you intend to continue using a previously installed version of SQL Anywhere, back up all directories and files before proceeding with this installation.

During this installation, you may be asked if you wish to update any data sources you may have created with an earlier version.

Proceed as follows to install the SQL Anywhere Data Engine software on the workstation:

1. Load the MET/BASE CD-ROM into a CD drive.

Note for Windows NT Users

The software installation process described in this chapter may require you to have administrator privileges on the workstation. Ask your system administrator if you are unsure whether you require such permissions.

2. Browse to the METBASE folder on the CD.

3. Run SETUP.EXE.

4. You will first see a welcome screen. If SQL Anywhere needs to be installed, the system will prompt you and the following screen appears:

ip201.bmp

5. Next, you are asked to select directories for the software. You should see a screen similar to the following:
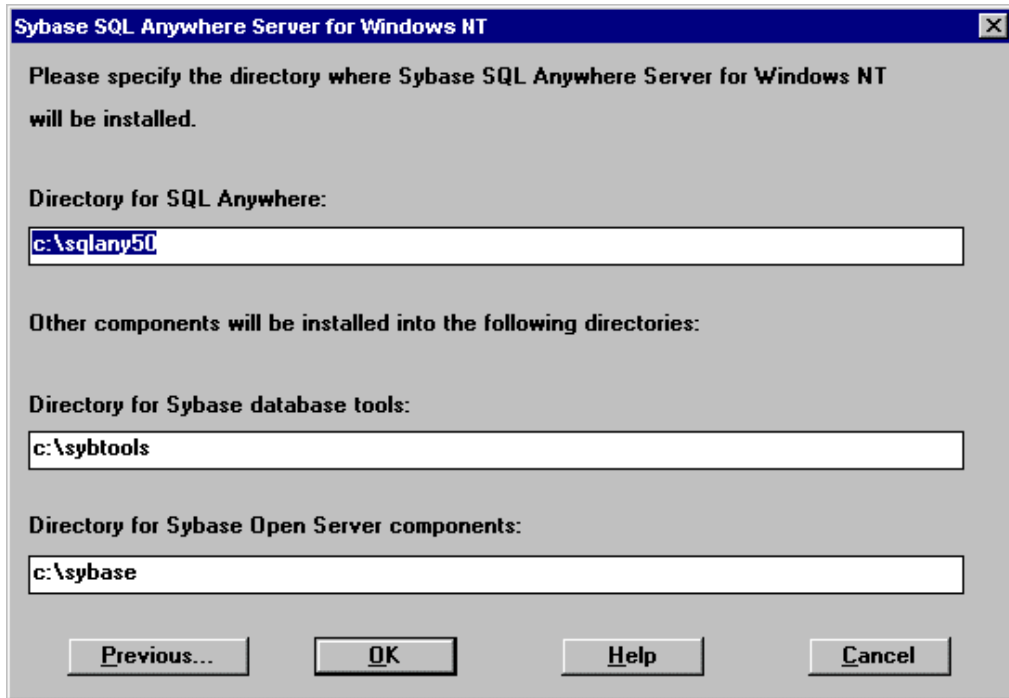
ip202.bmp

6. Allow the software to install to the suggested directories unless you have an overriding reason to install to other locations.

7. The SQL Anywhere installation program may display other confirmation screens. In each case, accept the default selection by choosing **OK** or **Next**.

   For example, depending on the Operating System, the program needs to update the CONFIG.SYS and AUTOEXEC.BAT files, or the Registry. A display asks if you want the installation program to make the changes, or if you wish to make the modifications yourself. Normally, the best approach is to allow the SETUP program to make these changes.

8. Next, you may see a screen asking if you wish to convert any existing data sources. It may also display whether a prior version of SQL Anywhere exists or not.

   If you do not have any existing data sources, it doesn't matter which of the selections you check. However, if you DO already have any SQL Anywhere data sources, it is your responsibility to determine if your existing applications will continue to function properly with the new data engine.

9. Continue following the screen prompts. Accept the defaults by selecting **OK** or **Next**. At one point, you will be asked to provide licensing information. Type in your company name and the name of the person to whom the license is to be registered.

10. When the SQL Anywhere SETUP program completes, the following screen displays. Complete the installation and restart the computer by clicking **Finish**.
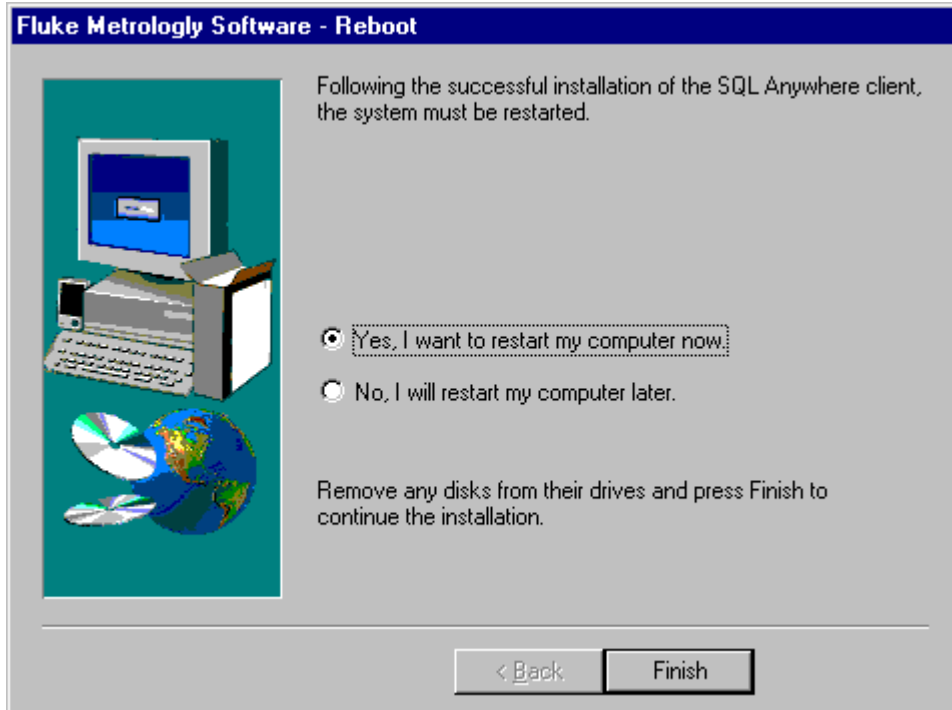
zt10s.bmp

11. You have completed the installation of the *SQL Anywhere* software. Check off *Item* ✓ *1* on the flowchart at the beginning of this chapter.

Item 2: Install the MET/BASE Software

1. Setup restarts the computer and the MET/BAST SETUP program resumes.

2. From the Installation Type screen, select **Stand Alone**. The installation program installs both server and client software on the workstation.
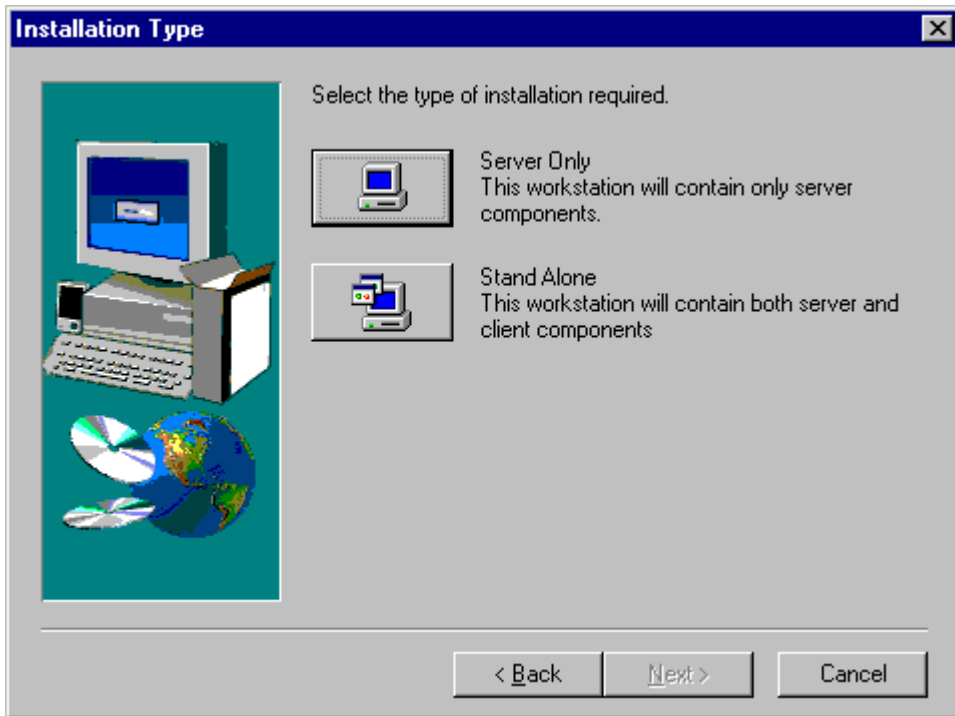
zt6a.bmp

3. Follow the on-screen instructions.

4. At the following screen, give your database a unique name. This will prevent confusion with other databases that exist on your network.

Select Unique Database Name ✕

Select a unique name for the database. This name is for the purpose of reducing ambiguities with other databases which may reside connected to the same local or wide area network.

DB Name [   ]

< Back   Next >   Cancel
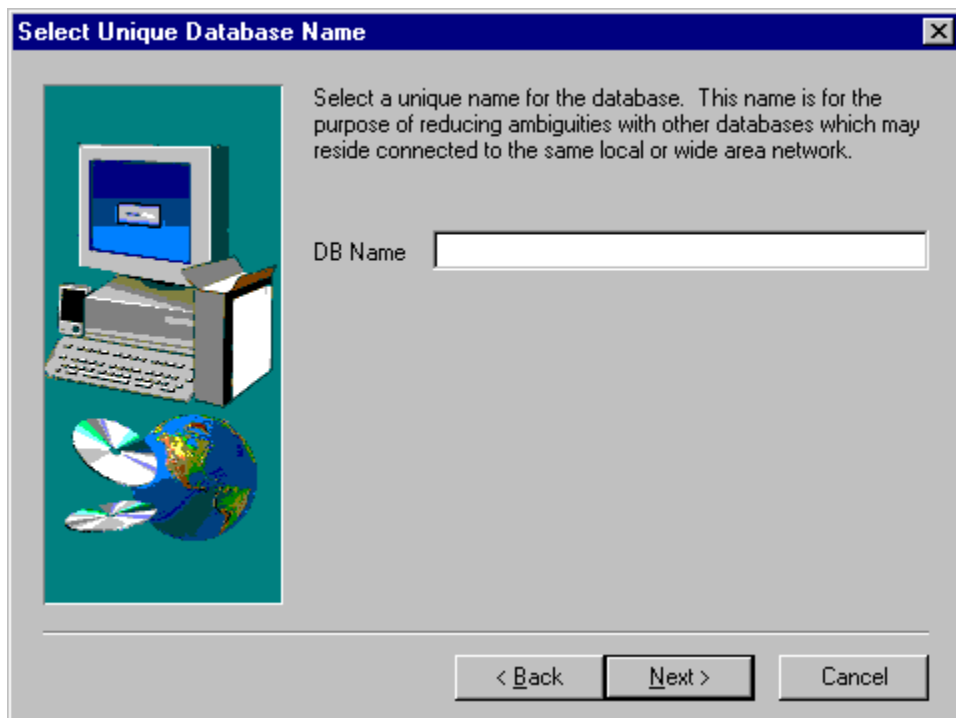
zt16s.bmp

5. Next, the program installs the MET/BASE options you choose. The following options screen presents the choices available to you:
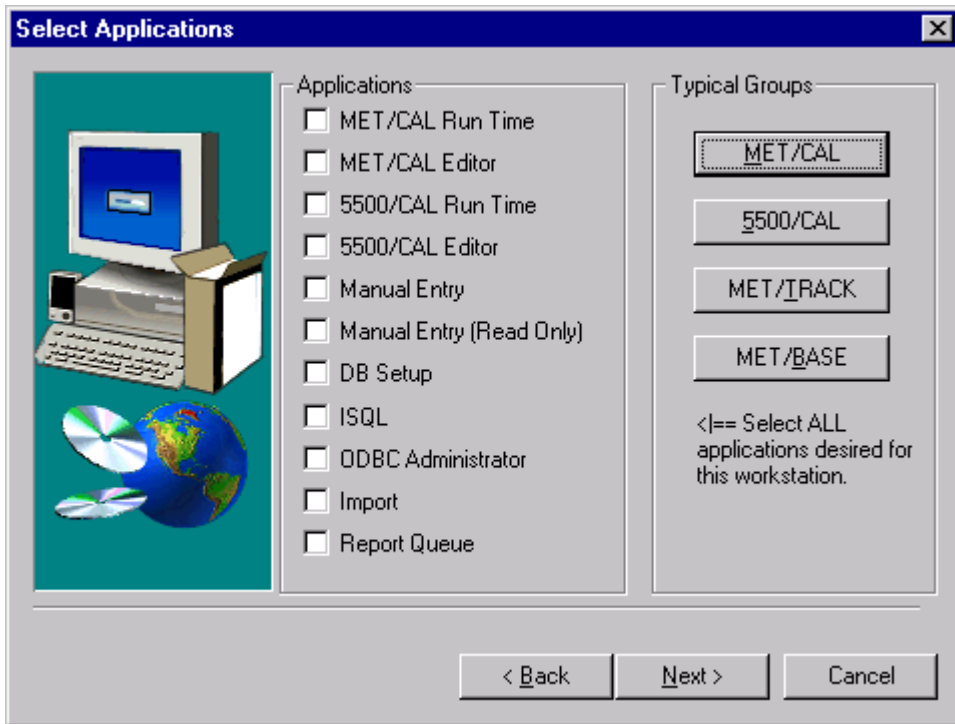
zt8a.bmp

6. Select the options you wish to install on this workstation. You can select one of the typical groups in the upper right corner, then add others individually by checking them off on the list on the left.

Note

You can install all of the application icons, or you can install some subset of them. An option selection screen lets you specify which particular applications you want to run on the workstation.

You should only check those boxes that match the licenses you have purchased. While this dialog box permits you to check any or all of the boxes, only those applications for which you apply licenses will operate, regardless of which boxes you checked.

Be sure to install the DB Setup application. DB Setup is the program that you must run later to apply licenses. This is done after all software is installed.

7. When you have selected all the programs you wish to install on the workstation, press **Next** to close the dialog box and begin installation from the server.

8. Follow the prompts as the installation program displays them on the screen. Allow the software to install to the default folders unless you have an overriding reason for not doing so.

9. At the language prompt, select the appropriate language.

10. When prompted to enter a procedure author, most companies use their company name.

11. When the installation program completes, it displays a dialog box similar to the following:
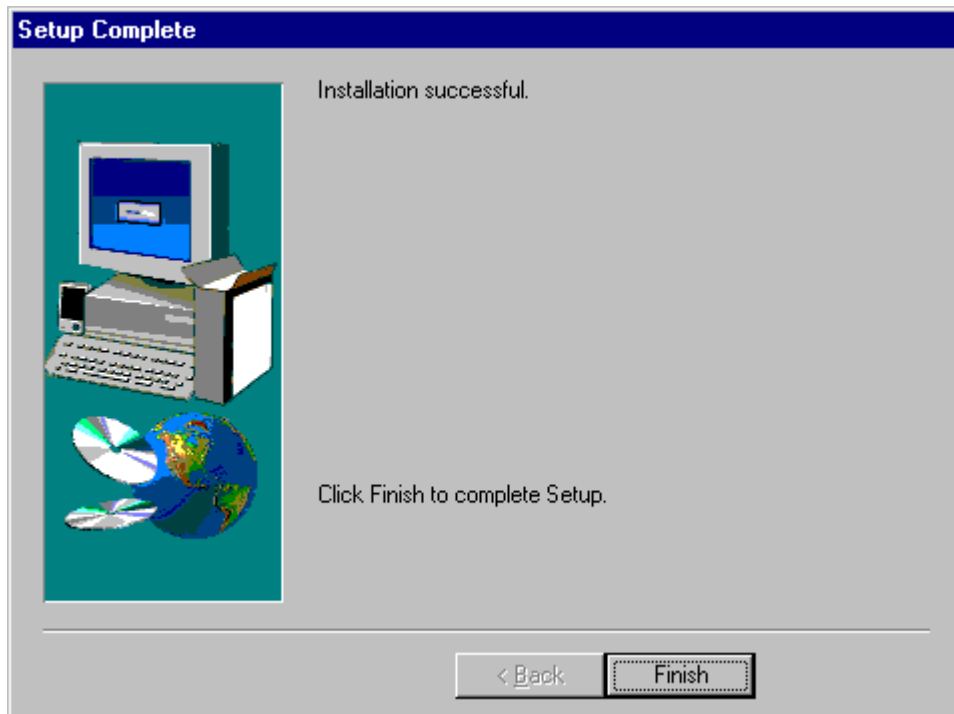
zt9a.bmp

This dialog box signifies that you have completed the installation of the MET/BASE software on the workstation. Select **Finish** to complete the setup.

12. After installing the software on the workstation, check off *Item* ✓ *2* in the flowchart at the beginning of this chapter.

Item 3: Apply Licenses

In Item 2, you selected the options you wanted to install. For a standalone workstation, including DBSETUP is necessary because that is the program that applies the licenses. For Windows 95, Windows 98 and Windows NT, DBSETUP is on the Start Menu.

1. Start the Calibration Data Engine. This can be done by selecting it from the Fluke Metrology Software group in the Start Menu. Select **Start**, **Programs**, **Fluke Metrology Software**, **Data Calibration Engine**.

   As the Calibration Data Engine starts up, you will see it added to your Windows task bar.

2. Go once more to the Fluke Metrology Software menu, and start the DBSETUP application. Log in as an administrator (Login name "MT", Password "MT").

3. Select **Security** from the menu bar.

4. Select **Add License** from the Security dropdown list.

5. Follow the on-screen instructions. When you are asked to insert the License Disk, insert the MET/BASE License Disk and continue to follow the on-screen instructions.

6. You have completed the application of one license. To apply other licenses, again open the Security menu and click Add License. As you did with the first license, follow the on-screen instructions and insert the License Disk when the program requests it.

7. Close the DB Setup application, but leave the Calibration Data Engine running. This must be running any time you wish to run any of the Fluke Metrology Software applications. If you stop it now, you will only have to restart it later when you begin testing, configuration, and other setup activities.

   Note

   The installation program automatically adds the Calibration Data Engine to the Startup group on your computer. Each time you reboot (restart) the computer, the Calibration Data Engine will start automatically.

8. Remove the License Disk and the MET/BASE CD if they are still in the drives.

9. This completes the application of licenses. Check off *Item 3* ✓ in the flowchart at the beginning of this chapter.

Item 4: Migrate Existing Data

Skip this step and go directly to the next heading, "What To Do Next" if this is a brand new installation.

Item 4 applies only to those sites that have been using an earlier version of Fluke MET/CAL or MET/TRACK., specifically any of the following:

- MET/TRACK Version 3.2

- MET/CAL Version 2 or 3
- MET/CAL Version 4.x or 5.x in Legacy Mode

If you are upgrading from any of these versions, you must now use the migration tool to bring your existing data into the new database.

Migration is covered in Chapter 6 of this manual. Once your data has been migrated into the database, software installation is complete. Check off *Item ✓ 4* in the flowchart at the beginning of this chapter.

What To Do Next

Completion of all four items on the flowchart at the beginning of this chapter signifies the conclusion of the installation process. At this point, there are several directions you might go, depending on your own objectives and needs.

MET/BASE-J Installations

If you are installing the Japanese version of Fluke Metrology Software, go now to the separate instruction sheet entitled *Converting a New MET/BASE-J to Use Japanese Run Time Reports.* After following the steps described in this instruction sheet, return here to decide how you wish to proceed.

Crystal Reports

The report writing program *Crystal Reports* is provided as part of the MET/BASE package, but requires its own installation. Before continuing, you may want to install *Crystal Reports*.

- ♦ Close any other applications that may be running (such as the Calibration Data Engine), then insert the Crystal Reports CD into the CD-ROM drive.

- ♦ From the **Start** menu, select **Run**, and then **Browse** to the SETUP program on the CD.

- ♦ Follow the screen instructions to complete the installation.

- ♦ Note that Crystal Reports can only be installed on one computer. If additional computers need to run the software, you will need to buy additional licenses from Crystal or from Fluke.

Familiarization

The Fluke Metrology Software database that you have now installed has been pre-loaded with a number of sample assets, and with two users. You can add other assets or users, or you can modify those that have been preloaded.

- ♦ MET/CAL and 5500/CAL users should go to the *Getting Started Guide* for some practical exercises. The Getting Started Guide helps you learn how the database operates, and guides you through your first calibration using the new system.

- ♦ MET/TRACK users should begin looking to the Users Guide for assistance in customizing the database and the Manual Entry screen.

Testing

After installing the software, you may want to perform some preliminary testing to see that everything is working properly. Note that, if the licenses were successfully applied during installation, no further client-to-server testing is needed. However, if your installation was abnormal in any way, you may want to do some confidence testing.

Chapter 7 contains some simple tests you can run to ensure that the database is properly installed and that the Clients are able to access the information it contains.

Chapter 7 also contains some basic troubleshooting information in case you run into any difficulty.

MET/CAL Hardware Installation and Setup

For MET/CAL and 5500/CAL workstations, if the IEEE-488 boards are not yet installed, you may wish to complete the hardware and MET/CAL procedure installation before beginning testing. Instructions for these tasks can be found in the *Getting Started Guide*.

Note Regarding Database Operation:

The database requires a login name and password each time you start a Fluke Metrology Software application. Ordinarily, you must type in a user name and password every time you start one of the applications.

However, all of the Fluke Metrology Software applications include a **Tools** menu that you can use as a quick way to start up a second application. If you do not minimize the first application, just open the Tools menu and select the next program you want to run. You will not be required to provide a login name and password to the second one.

Chapter 4
Upgrading a Networked Site

Contents   **Page**

Network Upgrade Flowchart

FLOWCHART 4 UPGRADING A NETWORKED DATABASE MODE
MET/CAL 4.2, MET/TRACK 4.x OR MET/BASE 5.x
The chapter text provides important additional details.

Upgrading MET/CAL or MET/TRACK Database Mode

Item 1
Prepare for the Upgrade

1. On the Server, backup the **\metcal** and **\metdata** folders.

2. Delete the Watcom folder and icons. ✓1

Item 2
Install *SQL Anywhere*

1. On the Server*, run **Setup** from the METBASE directory on the MET/BASE CD.

2. If SQL Anywhere needs to be installed, METBASE Setup will prompt you. Follow the on-screen instructions. METBASE Setup then reboots the computer. ✓2

Item 3
Install MET/BASE

1. Setup restarts the Installation Options screen. ✓3

Item 4
Restore Custom Procedures (If Necessary)

Copy the entire backed up PROC directory to the new METCAL directory, overwriting all files that have just been installed. ✓4

Item 5
Install a Client

1. Delete the Watcom folder.

2. Delete the MET/CAL and/or MET/TRACK Data Engine icon and Requester icon.

3. From a Client workstation, run **Setup** from the mapped METCAL\client directory.

4. Following the on-screen instructions installs *SQL Anywhere* on the client, reboots the computer, and then installs the MET/BASE options you choose for that client. ✓5

First Workstation? No / Yes

Item 6
Update the Database

1. Make sure the database engine and the Requestor have been started and are running.

2. On the Client workstation, run **metcal\dbupdate.exe** from the mapped server folder. Doing so converts your database to SQL Anywhere format.

3. Stop the Requestor, then stop and restart the data engine. Restart the Requestor.

4. Run **metcal\dbupdate.exe** again. Select the **update** option to add Database updates.

5. Stop the Requestor, then stop and restart the data engine. Restart the Requestor. ✓6

More Workstations? Yes / No

Item 7
Apply Licenses

1. From a Client workstation, start the **DB Setup** application, logging in as Administrator (MT).

2. Select **Security** from the menu bar, then select **Add License** from the dropdown list.

3. Insert the License Disk and follow the on-screen instructions.

4. Repeat steps 2 and 3 for all licenses. ✓7

Item 8
Upgrade Any Reports That Have Been Customized for Your Site

1. Install new version of *Crystal Reports*.

2. Open *Crystal Reports*.

3. Open each report in the backup reports folder (on the server).

4. Pull down the Database Menu and select **Verify Database**. This upgrades the report so it will operate with the new database.

5. Save the report to the backup folder.

6. After upgrading all reports, copy them into the shared METCAL folder on the server. ✓8

UPGRADE COMPLETE

* NOTES

* Windows NT Installations:
This installation may require Administrator permissions on both the Server and Clients.

Introduction

This chapter describes how to upgrade an existing networked installation of MET/CAL or MET/TRACK. If you are running both of these programs, you must upgrade the one running in Database Mode first. If both are running in Database Mode, it is only necessary to perform the upgrade one time.

MET/CAL Users

The instructions in this chapter describe how to upgrade from Version 4.2 or later in Database Mode to Version 6.0 Database Mode. If you are running MET/CAL in Legacy Mode, leave this chapter, and go forward in this Guide to Chapter 6 to upgrade to Database Mode. After that, you can return here to perform the upgrade.

Installation Procedure: Windows Networking Applications

Refer to Flowchart 4 on the previous page. As you perform each step, place a checkmark ✓ in the box provided for that purpose. Detailed installation instructions follow.

Caution

To avoid locking up your system, make sure all applications are closed during the installation process. This includes the Microsoft Office floating tool bar.

Note

1. *All instructions in this manual assume you are installing the software from the MET/BASE CD-ROM. If you are unable to do this, you can extract a set of disks from the CD. See Appendix B for complete directions. The appendix includes directions for interpreting the CD-ROM folder names as their equivalent disk identifier and folder name.*

2. *Also, the instructions in this manual assume that the "file server" and the "data server" are the same computer system.*

Item 1: Prepare for the Upgrade

Prior to performing the upgrade, complete the following preparatory steps at the File Server:

A: Shut Down the Database Engine

The database engine must not be running during the installation. The program files are to be deleted and replaced, and this cannot be done if the Calibration Data Engine is running. In fact, it is usually a good idea to stop ***all*** running applications before installing new software.

Note

*If a Windows NT Service Manager is in use for the **mtrack** database, remove it using the Watcom Service Manager tools.*

B: Disable File Sharing (if it had been enabled)

If your MET/CAL or MET/TRACK installation had been making use of file sharing, it must be disabled prior to continuing with the installation. This is necessary before you are able to make the backup copies, the next preparatory step.

In the Explorer, right-click the folder name.
From the popup menu, select **Sharing**, then choose the **Not Shared** option.

C: Back up Current Data

Make backup copies of the \METCAL and \METDATA folders.

By making backup copies of these files, you ensure that you can easily revert to your prior operational status in case anything goes wrong during the upgrade process.

Backing up the folders is simple. In Windows 95, Windows 98 or Windows NT Explorer, create a new folder. Copy all the files from the shared \METCAL and \METDATA folders into the new folders.

D: Back up Customized Reports

If you have customized any reports that are in other folders than those you just backed up, make a copy of them into a backup reports folder. By so doing, you make sure that any customized reports can be recovered if something should go wrong during upgrading.

To upgrade the reports, you must first install the new version of *Crystal Reports*.

E: Delete WATCOM, MET/TRACK and MET/CAL Icons and Shortcuts

Version 6.0 includes a new database engine (Sybase *SQL Anywhere*). This program replaces the older Watcom engine used in MET/BASE 4.x. By deleting the older database engine, you prepare the way to install the new program.

Windows 95/98 and Windows NT

- Use the Control Panel's **Add/Remove Program** selection to see if the database engine is registered. If it is listed, use the **Remove Program** selection to delete it. In this way, you delete the program files and Registry entries.

- If the database engine was **not** registered, go to the Explorer and delete the folder (typically at C:\WSQL40).

- Empty the Recycle Bin to make sure that the programs are completely removed from the system.

For all operating systems, the following steps complete the removal:

1. Delete all the icons, shortcuts, and Program Groups (if applicable) associated with your current installation. This includes the Watcom, MET/CAL, and MET/TRACK groups. Do not delete the MET/CAL directory. The information there is still needed until it is brought into the new database.

2. Look in the Startup Group and see if the Data Requester icon is there. If it is, delete it.

When you have finished these steps, you have completed the Preparation for the Upgrade, so check off *Item ✓ 1* on the flowchart at the beginning of this chapter.

Item 2: Install the **SQL Anywhere** *Database Engine Software*

The second main step in upgrading an existing installation is to install the *SQL Anywhere* software. This installation is done at the File Server.

Caution

SCREEN ILLUSTRATIONS

All the display illustrations in this manual depict a Windows NT installation. Some of the actual screens you see on your display may vary slightly from the illustrations.

Note

EXISTING COPIES OF SQL ANYWHERE

Installing this version of SQL Anywhere will automatically update any existing SQL Anywhere program files. If you intend to continue using a prior, previously installed version of SQL Anywhere, back up all directories and files before proceeding with this installation.

During this installation, you will be asked if you wish to update any data sources you may have created with an earlier version.

1. At the Server, load the MET/BASE CD-ROM into a CD drive.

Note for Windows NT Users

*The software installation process described in this chapter may
require you to have administrator privileges on the Server as well as
on any Client workstations. Ask your network administrator if you
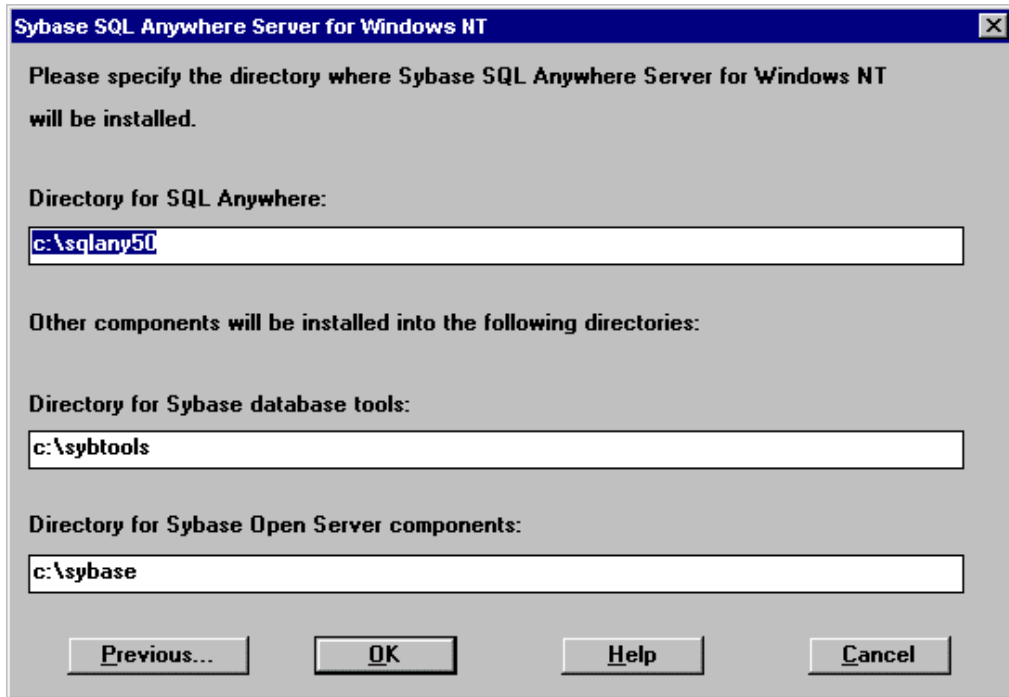are unsure whether you require such permissions.*

2. Browse to the METBASE folder on the CD.

3. Run SETUP.EXE to start installation. You will first see a welcome screen. If
   SQL Anywhere needs to be installed, the system will prompt you, and the
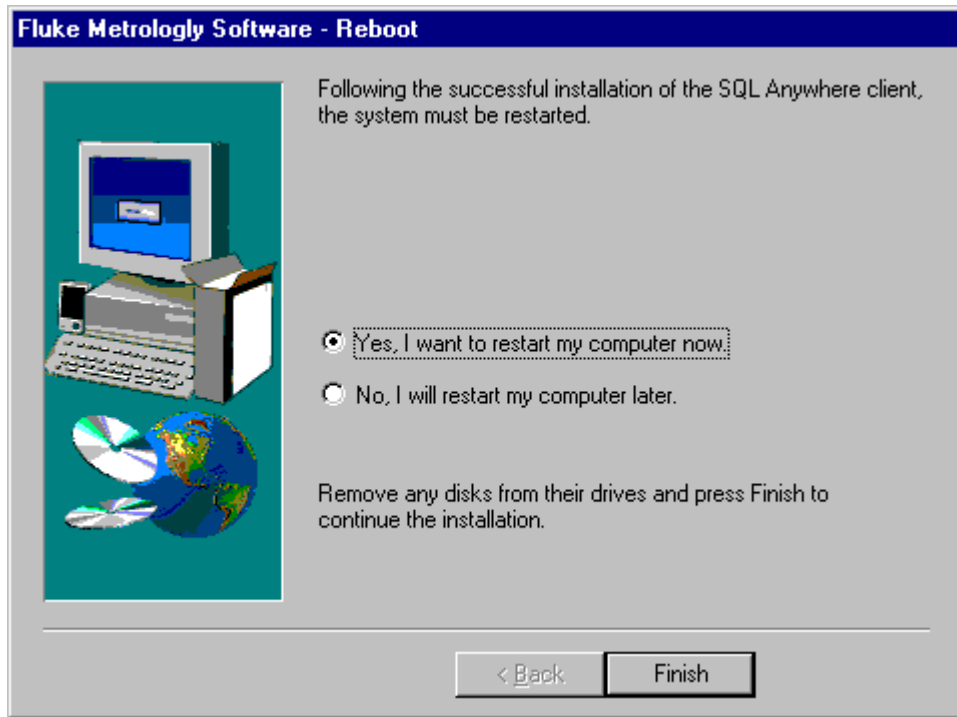   following screen appears:

ip201.bmp

4. Next, you are asked to select directories for the software. You should see a
   screen similar to the following:

Sybase SQL Anywhere Server for Windows NT

Please specify the directory where Sybase SQL Anywhere Server for Windows NT
will be installed.

Directory for SQL Anywhere:

c:\sqlany50

Other components will be installed into the following directories:

Directory for Sybase database tools:

c:\sybtools

Directory for Sybase Open Server components:

c:\sybase

Previous...   OK   Help   Cancel

ip202.bmp

5. Allow the software to install to the suggested directories unless you have an
    overriding reason to install to other locations.

6. The SQL Anywhere installation program may display other confirmation
    screens. In each case, accept the default selection by selecting **OK** or **Next**.

7. You may see a screen asking if you wish to convert any existing data sources,
    and it may display whether a prior version of SQL Anywhere exists or not.

    If you do not have any existing data sources, it doesn't matter which of the
    selections you check. However, if you DO already have any SQL Anywhere
    data sources, it is your responsibility to ensure that your applications will
    continue to function properly with the new Calibration Data Engine.

8. Continue following the screen prompts. Accept the defaults by selecting **OK**
    or **Next**. At one point, you will be asked to provide author information. Most
    people use their company name.

9. When the SQL Anywhere SETUP program completes, the following screen
    displays:

zt9a.bmp

10. The METBASE Setup program will then offer to shut down and reboot the computer for you. Allow it to do so and complete the installation by selecting **Finish**.

Note

If the SQL Anywhere Program Group window is left open before restarting the computer, Windows Explorer will cause an error when the installation completes. However, this error can be safely ignored.

11. You have completed the installation of the *SQL Anywhere* software, so check off *Item* ✓*2* on the flowchart at the beginning of this chapter.

Item 3: Install the MET/BASE Server Software

1. Leave the MET/BASE CD-ROM in the CD drive. The SETUP program resumes.
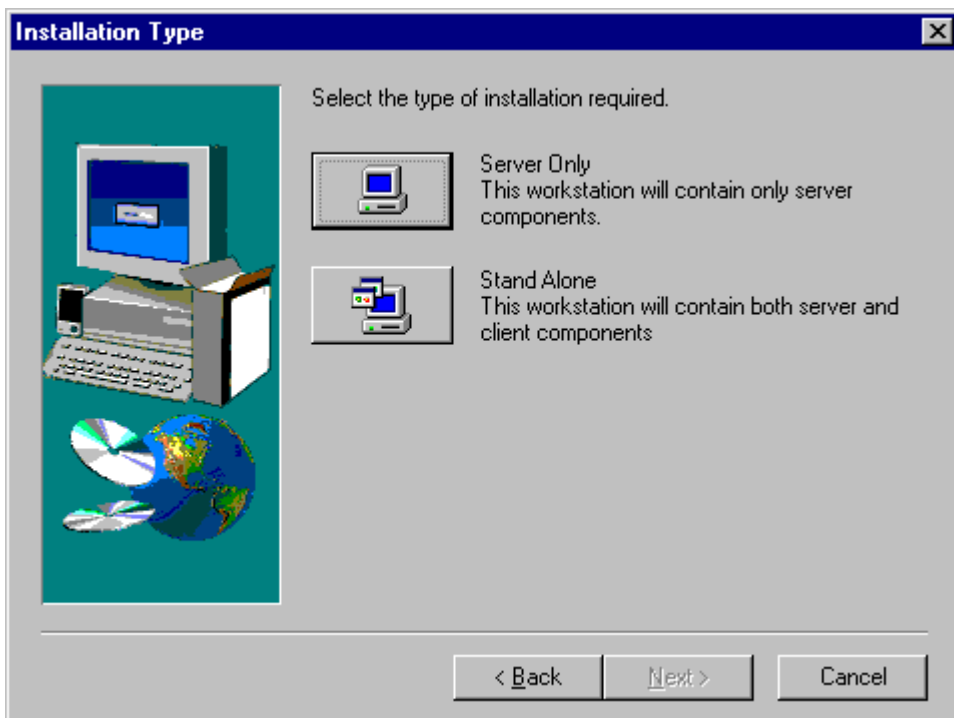
ip205.bmp

2. From the Installation Type screen, select **Server Only**.

3. The installation will prompt you to give your database a unique name at the following screen. If a name is filled in, accept the database name offered as default.
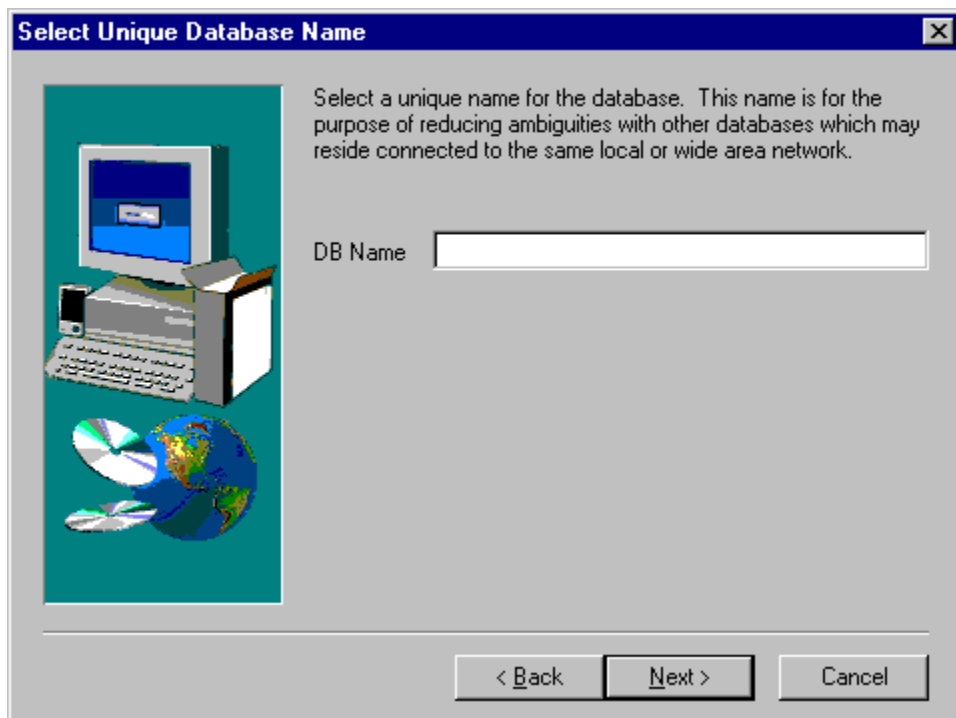
zt16s.bmp

4. As the installation program proceeds, it presents a number of screens prompting you for folders where you wish to install the software, and to confirm those selections.

   Allow the program to install to the default folders by selecting **OK** or **Next** unless you have an overriding reason for not doing so.

   Note

   If the MET/BASE executables or database already exist on the computer, the installation program will attempt to locate them and install to their directory.

5. At the language prompt, double-click the appropriate language.

6. When the installation of the Server software has completed, the following screen will display:

Setup Complete

Setup has finished installing Fluke Metrology Software - Client on your computer.

Setup can launch the Read Me file and Fluke Metrology Software - Client. Choose the options you want below.

Click Finish to complete Setup.

< Back | Finish

ip206.bmp

7. The installation program has created a new folder called METCAL on the drive you previously specified (C:\METCAL, if you accepted the defaults).

   Note the location if you changed the default, because you will need to know it later during the Client installation.

8. Make the METCAL folder shareable. This is described in the following paragraphs for Windows NT/95/98:

   To make a folder shareable in Windows NT or Windows 95/98, proceed as follows:

   a. In Windows Explorer, browse to the new METCAL folder (default: C:\METCAL).

   b. Right click. the folder name.

   c. Select **Sharing.** A dialog box similar to the following appears:
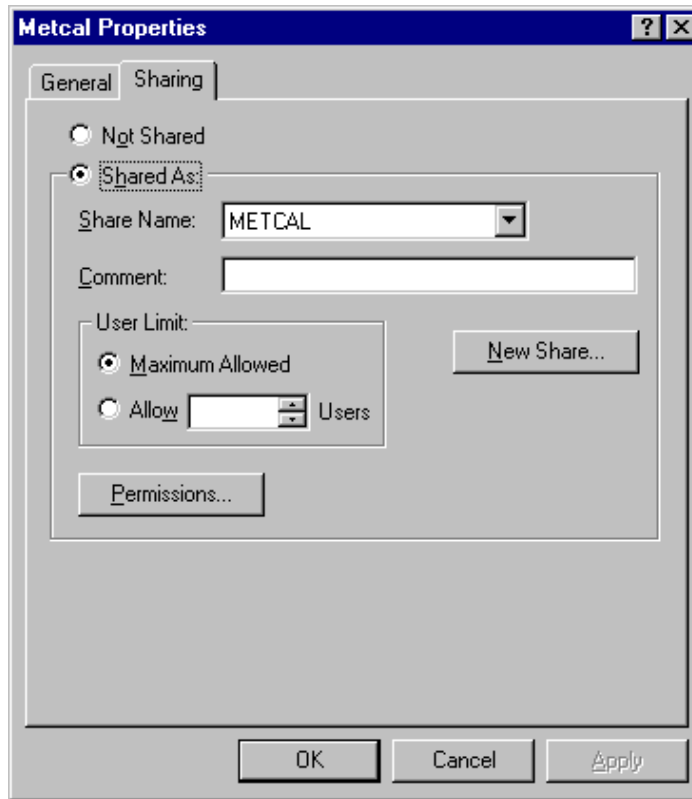
ip207.bmp

d. Choose the selection box **Shared As:** The name of the MET/CAL folder appears in the block labeled Share Name. This allows the folder to be shared using the same directory name as the one you right-clicked.

e. Press **Ok** to make the folder shareable and close the dialog box.

9. Start the Calibration Data Engine. From the **Start** menu, open **Programs**, then **Fluke Metrology Software**. Select **Calibration Data Engine**.

As the Calibration Data Engine starts, you will see it added to your Windows task bar.

10. Remove the MET/BASE CD from the CD-ROM drive and return it to its case. The CD is not needed again during the MET/BASE installation.

All the software needed for installing clients and licenses has now been installed on the File Server, and the subsequent steps are performed at the Client Workstation.

11. You have completed the installation of the MET/BASE Server software, so check off *Item ✓3* in the flowchart at the beginning of this chapter.

Item 4: Restore Custom Procedures if Necessary

1. Now, recover your custom procedures if you have any. In Item 1, you backed up the entire \metcal and \metdata directories. The *proc* subdirectory contains all the procedures in use at your site. Copy that directory from the backup location to the new METCAL directory, overwriting the files that have just been installed.

2. When you have re-created your former Procedure directory, check off *Item ✓ 4* in the flowchart at the beginning of this chapter.

Item 5: Install the MET/BASE Client Software

The Client software is installed at each workstation, and you can install it on any number of workstations.

Visit each workstation and perform the following steps:

1. At the Client workstation, map the shared folder as a network drive.

    This means that the directory you made "shareable" during the installation of the Server software must be "mapped" to a drive letter on each Client workstation so that the files can be shared over the network.

    a. In Windows Explorer, open the Tools Menu, and select **Map Network Drive**. Choose an unused drive letter, then pull down the list under the box labeled **Path:** and select the shared folder. If no folders are visible, double-click the name of the server computer from those that are listed.

    b. When the path to the shared folder is visible in the Path: box, the display should look similar to the following. Click **Ok** to map the drive and close the dialog box.
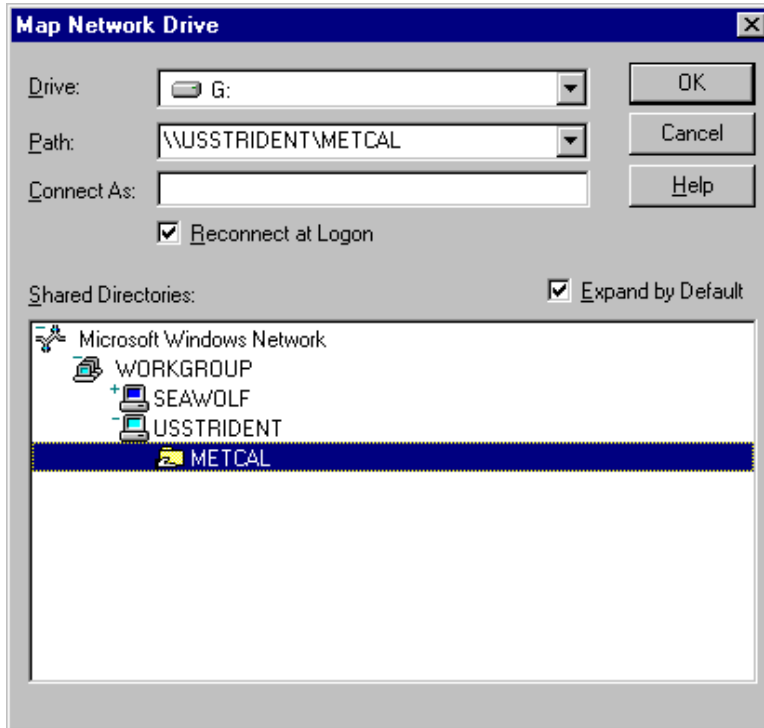
ip210s.bmp

Note

Checking on Drive Mapping

If you are unsure whether you have properly shared and mapped the folder, proceed as follows:

Open Windows Explorer. The drive letter you selected in the previous step should appear as one of the drives in the listing.

Try opening the drive. The list of files on the server should be visible.

If the drive letter does not appear, or if no files appear in the listing, the folder is not being shared. ***Be sure*** *the folder has been shared at the file server and that it is mapped at the client before continuing.*

2. Open Explorer if you haven't already done so, and browse to the shared directory (the one you just mapped).

3. Run **SETUP.EXE** from the Client sub-folder in the MET/BASE share executable folder. You will find it by following the path **metcal\client\setup.exe.**

4. Follow the on-screen instructions. The installation program first installs the *SQL Anywhere* Client software on the client workstation.

5. After the SQL Anywhere files are installed, you will see a screen indicating that certain changes must be done to the system files.

   Accept the defaults by selecting **OK** or **Next** unless you have some reason for not having these changes accomplished automatically.

   The software automatically makes copies of any files before changing them, so you can revert to the prior state if necessary.

6. Next, the software may ask about converting existing data sources, even if you do not have any.

<div align="center">

Caution

</div>

EXISTING DATA SOURCES

While it installs the new software, the *SQL Anywhere* Setup program may ask about converting existing data sources. If you do not already have another version of *SQL Anywhere* installed, you can make any of the selections without harm.

If you have another version of SQL Anywhere installed however, it is your responsibility to determine whether your existing applications will continue to function properly with the new Calibration Data Engine.

7. When the installation of SQL Anywhere completes, the following screen displays:
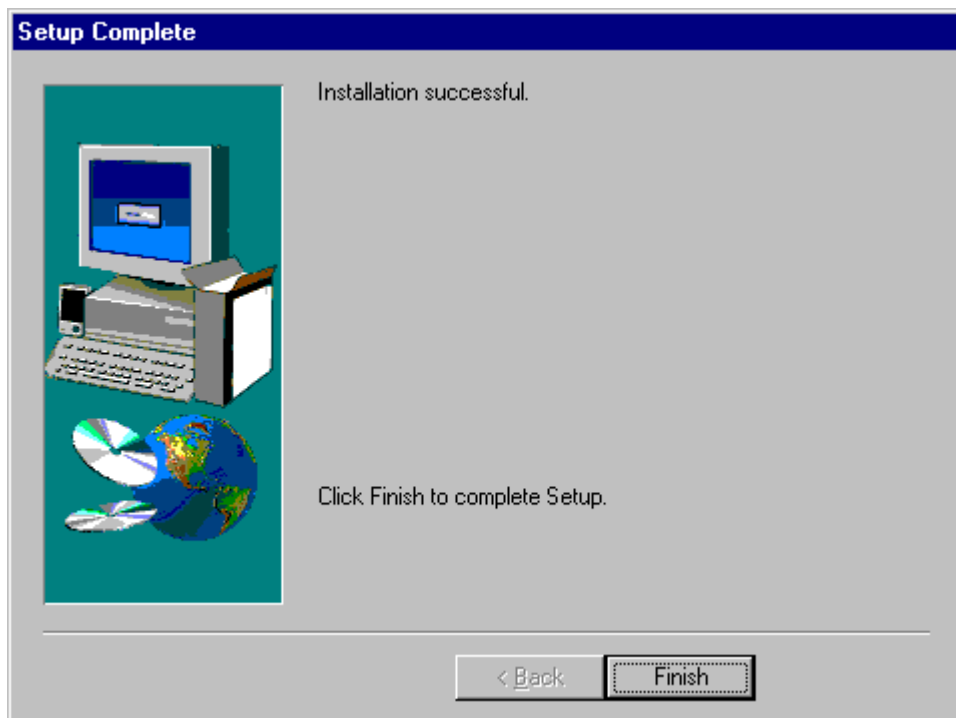
zt9a.bmp

8. Select Finish to complete the installation and restart the computer.

Note

If the SQL Anywhere Program Group window is left open before restarting the computer, Windows Explorer will cause an error when the installation completes. However, this error can be safely ignored.

9. When SETUP resumes, the following options screen presents the available choices:
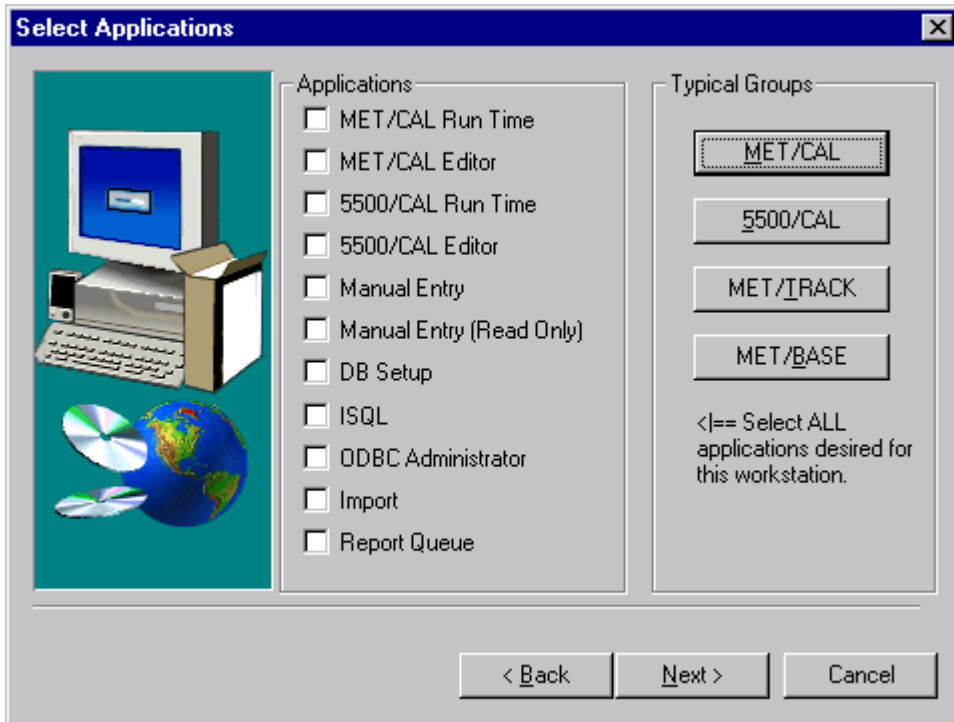
zt8a.bmps

10. Select the options you wish to install on this workstation. You can select one of the typical groups in the upper right corner, then add others individually by checking them off on the list on the left.

Note

On each workstation, you can install all of the application icons, or you can install some subset of them. The option selection screen lets you specify which particular applications you want to run on each workstation.

You should only check those boxes that match the licenses you have purchased. While this dialog box permits you to check any or all of the boxes, only those applications for which you apply licenses (Step 4, upcoming) will operate, regardless of which boxes you checked.

Be sure to install the DB Setup application on at least one client. DB Setup is the program that you must run later to apply licenses. This is done after all software is installed.

11. When you have selected all the programs you wish to install on the workstation, press **Next** to close the dialog box and begin installation from the server.

12. Follow the prompts as the installation program displays them on the screen. Allow the software to install to the default folders by selecting **OK** or **Next** unless you have an overriding reason for not doing so.

13. At the language prompt, double-click the appropriate language.

14. When the installation program completes, it displays a dialog box similar to the following:

zt4a.bmp

15. This dialog box signifies that you have completed the installation of the MET/BASE Client software on one Client workstation. Click **Finish** to complete the setup.

    Visit each of the Clients and go through the same Client software installation steps you just completed, again selecting which options you want to be available on that client.

16. After installing the Client software on all the workstations, check off *Item* ✓ *5* in the flowchart at the beginning of this chapter.

Item 6: Update the Database

Updating the database is done only **once**, but it must be done from one of the Client workstations. Note that the block for Item 6 immediately follows a decision

block asking if this is the first workstation. If it is not (i.e., you updated the database at the first workstation), bypass the Update the Database block.

Note

Updating the database requires you to alternately visit the File Server and the Client Workstation, stopping and re-starting the database engine. If the File Server is any appreciable distance away, it might be helpful to have an assistant ready at the other location, and use the phone to communicate when to stop and restart the database engine.

To update the database, proceed as follows:

1. Ensure that the Calibration Data Engine has been started and is currently running on the computer where the server software was installed. If the Calibration Data Engine is not running, start it.

   You can tell if the Calibration Data Engine is started by looking at the screen on the server. You should see either the connection messages window or the MTRACK icon.

2. Ensure that the Data Requester has been started and is running on the Client workstation. If the Data Requester is not running, start it.

   Look for the Requester icon to determine if it is running on the client.

3. At the Client workstation, check that the shared network drive is mapped.

   Open the Explorer's Tools Menu, and select **Map Network Drive**.

4. In the Explorer, browse to the shared METCAL folder on the File Server. This is the folder where you installed the MET/BASE software in a previous item. Depending on how the folder is mounted from the client, it may appear simply as a drive letter; the name METCAL may not appear.

5. Locate and run the program DBUPDATE.EXE.

6. Login is as the MT user, with the password MT, or with your password if you are upgrading an existing system.

7. Follow the on-screen instructions as they appear.

WARNING

You MUST stop the Calibration Data Engine when you are prompted by the system. Failure to stop the Calibration Data Engine when you are prompted to do so completely interrupts the updating of the database, with unpredictable results and possible loss of data.

8. If there are more workstations to update, return to "Item 5: Install a Client" to continue.

9. If this is the last (or only) workstation you are upgrading, check off *Item ✓6* on the flowchart at the beginning of this chapter, and continue to the next item to apply the licenses.

Item 7: Apply Licenses

Applying licenses can be performed at any of the Client workstations. The floating licenses are maintained by the data server. They are not tied to a particular workstation, so you can apply all the licenses at one workstation.

Since the database keeps track of which licenses are available, any of the Clients can run the applications, so long as a license is available.

1. Ensure that the Calibration Data Engine has been started and is currently running on the computer where the server software was installed. If the Calibration Data Engine is not running, start it now.

    You can tell if the Calibration Data Engine is started by looking at the screen on the server. You should see either the connection messages window or the MTRACK icon.

2. At any of your new Client workstations, start the Calibration Data Requester program. You will find it in the Fluke Metrology Software program group (Windows NT and Windows 95 users: Locate these programs from the Start menu.)

    After the Requester has started, the window automatically minimizes.

3. Also, from the Fluke Metrology Software program group, start the DBSETUP application. Log in as an administrator (Login name "MT", Password "MT").

4. When DBSETUP starts, elect **Security** from the menu bar.

5. Select **Add License** from the Security dropdown list.

6. Follow the on-screen instructions. When you are asked to insert the License Disk, insert it and continue to follow the on-screen instructions.

    A display indicates that you have successfully completed the application of one license.

7. To apply other licenses, again open the **Security** menu and select **Add License**.

8. As with the first license, follow the on-screen instructions and insert the License Disk when the program requests it. Once you have applied all the licenses, check off *Item ✓7* in the flowchart at the beginning of this chapter.

Item 8: Upgrade Customized Reports (If Necessary)

The last step in the upgrade process involves upgrading any customized reports, so that they can take advantage of the new database fields that have been added when you upgraded the Calibration Data Engine. The upgrading can be done on any Workstation where you have installed the new version of *Crystal Reports*.

1. On one of the Client Workstations, install the new version of *Crystal Reports*.

   - If you **have not** customized any reports, skip the remainder of the steps in this Item.

   - If you **have** customized any reports, start up *Crystal Reports* at any Client workstation where it is available.

2. Under the **File** menu, select **Open**, then browse to the backup reports folder that you created in Item 1 (Prepare for the Upgrade). You will need to open each of the reports that you have customized.

3. Pull down the **Database** menu and select **Verify Database**. *Crystal Reports* checks the report against the database and makes any needed changes to the report.

   When the Verify Database operation completes, *Crystal Reports* displays a message reading, "The Database is up to date."

4. Save the report back out to the backup folder and close the report.

5. Repeat this process, opening each report in your backup folder, and verifying it.

6. After you have upgraded all the reports, copy them from the backup folder into the shared METCAL folder on the server.

7. This completes the upgrading of your reports, so check off *Item ✓8* on the flowchart at the beginning of this chapter.

What To Do Next

Completion of all seven items on the flowchart at the beginning of this chapter signifies the conclusion of the upgrading process. At this point, there are several directions you might go, depending on your own objectives and needs.

Data Migration

If you were also running one of the following, your next step should be to migrate that data into the database:

- ♦ DOS version of MET/TRACK (Version 3.x)

- ♦ MET/CAL (Version 2.x or 3.x)

- ♦ MET/CAL Version 4.x or 5.x in Legacy Mode.

Refer to Chapter 6 (*Migration*) further on in this manual for detailed instructions.

Familiarization
The Fluke Metrology Software database that you have now installed has been pre-loaded with a number of sample assets, and with two users. You can add other assets or users, or you can modify those that have been pre-loaded.

♦   MET/CAL and 5500/CAL users should go to the *Getting Started Guide* for some practical exercises. *Getting Started* helps you learn how the database operates, and guides you through your first calibration using the new system.

♦   MET/TRACK users should begin looking to the Users Guide for assistance in customizing the database and the Manual Entry screen.

Testing
After installing the software, you may want to perform some testing to see that everything is working properly. Note that if the licenses were successfully applied during installation, no further client-to-server testing is needed; however, if your installation was abnormal in any way, you may want to do some confidence tests.

Chapter 7 contains some simple tests that you can run to ensure that the database is properly installed and that the Clients are able to access it. Chapter 7 also contains some basic troubleshooting information in case you should run into any difficulty.

MET/CAL Hardware Installation and Setup
For MET/CAL and 5500/CAL workstations, if the IEEE-488 boards are not yet installed, you may wish to complete the hardware and MET/CAL procedure installation before beginning testing. Instructions for these tasks can be found in the *Getting Started Guide*.

Note Regarding Database Operation:
The database requires a login name and password each time you start a Fluke Metrology Software application. Ordinarily, you must type in a user name and password every time you start one of the applications.

However, all the applications include a **Tools** menu that you can use as a quick way to start up a second application. Just open the Tools menu and select the next program you want to run. You will not be required to provide a login name and password to the second one.
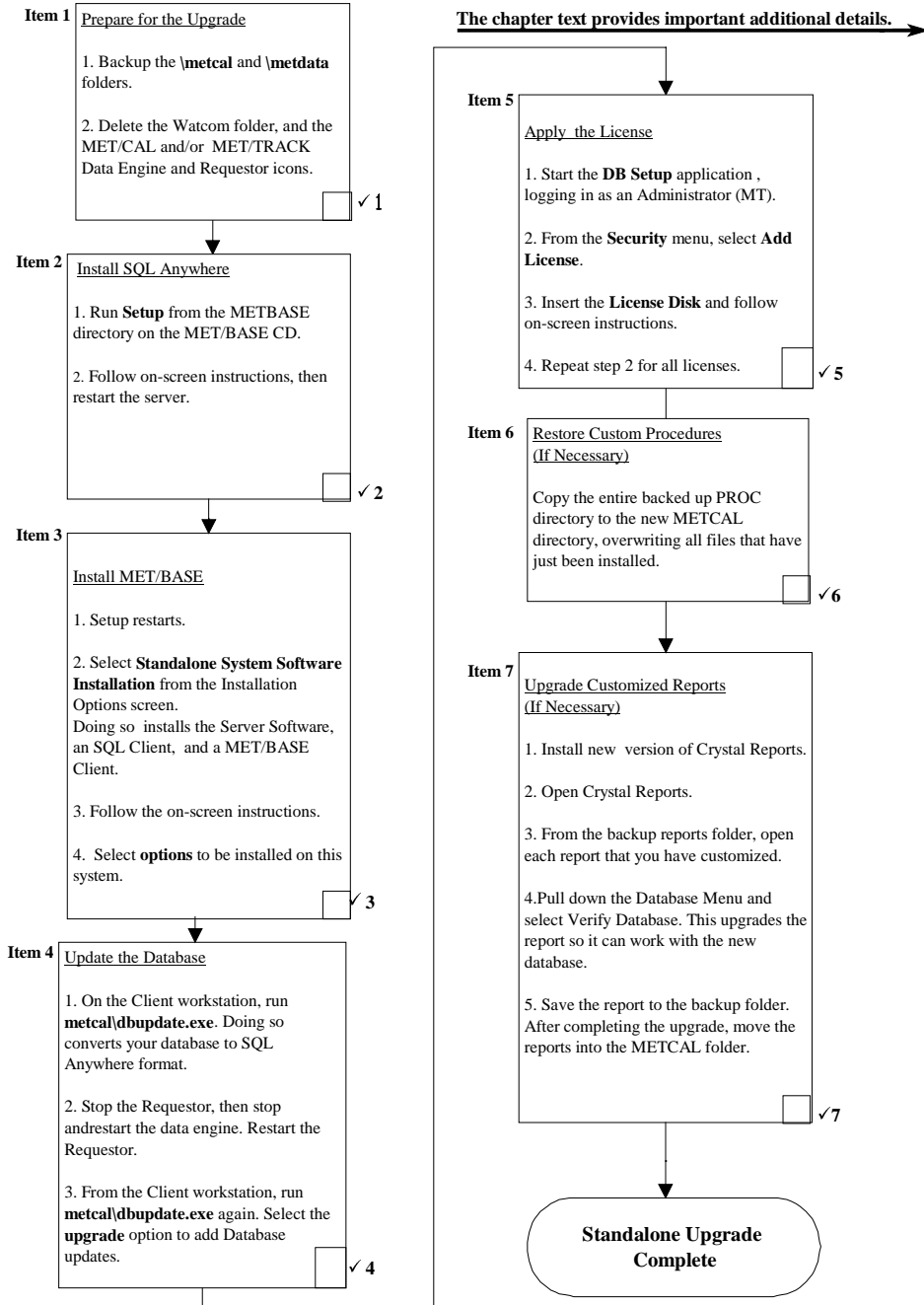
Upgrading a Standalone Workstation

Contents   **Page**

Standalone Database Mode Upgrade Flowchart

Item 1

Prepare for the Upgrade

1. Backup the **\metcal** and **\metdata** folders.

2. Delete the Watcom folder, and the MET/CAL and/or MET/TRACK Data Engine and Requestor icons.

☐ ✓ 1

Item 2

Install SQL Anywhere

1. Run **Setup** from the METBASE directory on the MET/BASE CD.

2. Follow on-screen instructions, then restart the server.

☐ ✓ 2

Item 3

Install MET/BASE

1. Setup restarts.

2. Select **Standalone System Software Installation** from the Installation Options screen.
Doing so installs the Server Software, an SQL Client, and a MET/BASE Client.

3. Follow the on-screen instructions.

4. Select **options** to be installed on this system.

☐ ✓ 3

Item 4

Update the Database

1. On the Client workstation, run **metcal\dbupdate.exe**. Doing so converts your database to SQL Anywhere format.

2. Stop the Requestor, then stop andrestart the data engine. Restart the Requestor.

3. From the Client workstation, run **metcal\dbupdate.exe** again. Select the **upgrade** option to add Database updates.

☐ ✓ 4

The chapter text provides important additional details. →

Item 5

Apply the License

1. Start the **DB Setup** application , logging in as an Administrator (MT).

2. From the **Security** menu, select **Add License**.

3. Insert the **License Disk** and follow on-screen instructions.

4. Repeat step 2 for all licenses.

☐ ✓ 5

Item 6

Restore Custom Procedures (If Necessary)

Copy the entire backed up PROC directory to the new METCAL directory, overwriting all files that have just been installed.

☐ ✓6

Item 7

Upgrade Customized Reports (If Necessary)

1. Install new version of Crystal Reports.

2. Open Crystal Reports.

3. From the backup reports folder, open each report that you have customized.

4. Pull down the Database Menu and select Verify Database. This upgrades the report so it can work with the new database.

5. Save the report to the backup folder. After completing the upgrade, move the reports into the METCAL folder.

☐ ✓7

Standalone Upgrade Complete

Introduction

This chapter describes how to upgrade a standalone installation of MET/CAL or MET/TRACK. If you are running both of these programs, you must upgrade the one running in Database Mode first. If both are running in Database Mode, it doesn't matter which you upgrade first.

MET/CAL Users

The instructions in this chapter describe how to upgrade from Version 4.2 or 5.x Database Mode to Version 6.0 Database Mode. If you are running MET/CAL in Legacy Mode, leave this chapter, and go to Chapter 6 for instructions on how to upgrade to Database Mode. After that, you can return here to upgrade from Version 4.2 or 5.x Database Mode to Version 6.0 Database Mode.

Installation Procedure: Windows Standalone Applications

Refer to Flowchart 5 on the previous page. As you perform each step, place a checkmark ✓ in the box provided for that purpose. Detailed installation instructions follow.

Note

All instructions in this manual assume you are installing the software from the MET/BASE CD-ROM. If you are unable to do this, you can extract a set of disks from the CD. See Appendix B for complete directions. The appendix includes directions for interpreting the CD-ROM folder names as their equivalent disk identifier and folder name.

Item 1: Prepare for the Upgrade

Prior to performing the upgrade, complete the following preparatory steps:

A: Shut down the Calibration Data Engine and Data Requester

The Calibration Data Engine must not be running during the installation. The program files are to be deleted and replaced, and this cannot be done if the Calibration Data Engine is running. In fact, it is usually a good idea to stop ***all*** running applications before installing new software.

B: Back up Current Data

Make backup copies of the \METCAL and \METDATA folders.

By making backup copies of these files, you ensure that you can easily revert to your prior operational status in case anything goes wrong during the upgrade process.

Backing up the folders is simple. In Windows 95, 98, or Windows NT Explorer, create a new folder. Copy all the files from the \METCAL and \METDATA folders into the new folder.

C: Back up Customized Reports

If you have customized any reports that are in other folders than those you just backed up, make a copy of them into a backup reports folder. By so doing, you make sure that any customized reports can be recovered if something should go wrong during upgrading.

To upgrade the reports, you must first install the new version of *Crystal Reports*.

D: Delete WATCOM Folder and MET/TRACK or MET/CAL Icons and Shortcuts

Version 6.0 includes a new database engine (Sybase *SQL Anywhere*). This program replaces the older Watcom engine used in MET/BASE 4.x. By deleting the older satabase engine, you prepare the way to install the new program.

- Use the Control Panel's **Add/Remove Program** selection to see if the database engine is registered. If it is listed, use the **Remove Program** selection to delete it. In this way, you delete the program files and Registry entries.

- If the database engine was **not** registered, go to the Explorer and delete the folder (typically at C:\WSQL40).

- Empty the Recycle Bin to make sure that the programs are completely removed from the system

The following steps complete the removal:

1. Delete all the Program Groups and icons associated with your current installation. This includes the Watcom, MET/CAL and MET/TRACK Groups. Do not delete your existing MET/CAL or METRACK files or their folders!

2. Look in the Startup Group and see if the Data Requester icon is there. If it is, delete it.

When you have finished these steps, you have completed the Preparation for the Upgrade, so check off *Item 1*✓ on the flowchart at the beginning of this chapter.

Item 2: Install SQL Anywhere

The second main step in upgrading an existing installation is to install the SQL Anywhere software.

Caution

SCREEN ILLUSTRATIONS

All the display illustrations in this manual depict a Windows NT installation. Some of the actual screens you see on your display may vary slightly from the illustrations.

Note

EXISTING COPIES OF SQL ANYWHERE

Installing this version of SQL Anywhere will automatically update any existing SQL Anywhere program files. If you intend to continue using a prior, previously installed version of SQL Anywhere, back up all directories and files before proceeding with this installation.

During this installation, you will be asked if you wish to update any data sources you may have created with an earlier version.
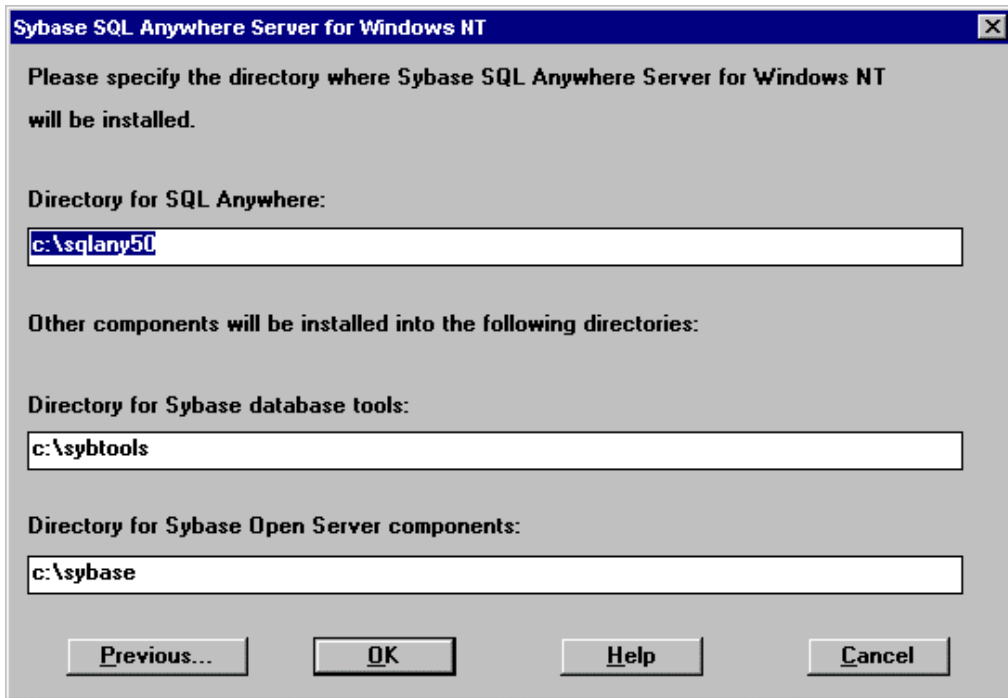
1. At the File Server, load the MET/BASE CD-ROM into a CD drive.

2. Browse to the METBASE folder on the CD.

3. Run SETUP.EXE.

   You will first see a welcome screen. If SQL Anywhere needs to be installed, the system will prompt youand the following screen appears:

ip201.bmp

4. Next, you are asked to select directories for the software. You should see a screen similar to the following:

Sybase SQL Anywhere Server for Windows NT

Please specify the directory where Sybase SQL Anywhere Server for Windows NT
will be installed.

Directory for SQL Anywhere:

`c:\sqlany50`

Other components will be installed into the following directories:

Directory for Sybase database tools:

`c:\sybtools`

Directory for Sybase Open Server components:

`c:\sybase`

| Previous... | OK | Help | Cancel |

ip202.bmp

5. Allow the software to install to the suggested directories unless you have an overriding reason to install to other locations.

6. The SQL Anywhere installation program may display other confirmation screens. In each case, accept the default selection by selecting **OK** or **Next**.

7. You may see a screen asking if you wish to convert any existing data sources, and it may display whether a prior version of SQL Anywhere exists or not.

   If you do not have any existing data sources, it doesn't matter which of the selections you check. However, if you DO already have any SQL Anywhere data sources, it is your responsibility to ensure that your applications will continue to function properly with the new Calibration Data Engine.

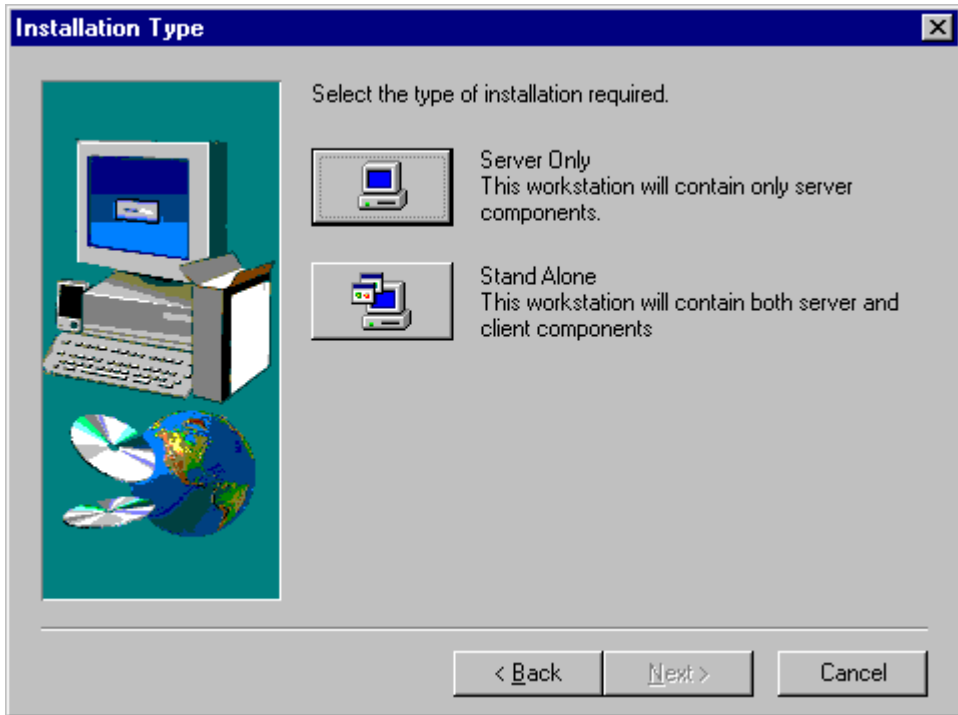8. Continue following the screen prompts. Accept the default selections.

Note

If the SQL Anywhere Program Group window is left open before restarting the computer, Windows Explorer will cause an error when the installation completes. However, this error can be safely ignored.

9. You have completed the installation of the *SQL Anywhere* software, so check off *Item 2*✓ on the flowchart at the beginning of this chapter.

Item 3: Install the MET/BASE Software

1. The SETUP program resumes. From the Installation Type screen, select **Stand Alone**.

zt6a.bmp

2. Follow the prompts. Allow the software to install to the default folders by selecting **OK** or **Next** unless you have an overriding reason for not doing so.

3. The installation will prompt you to give your database a unique name at the following screen. If a name is filled in, accept the database name offered as default.
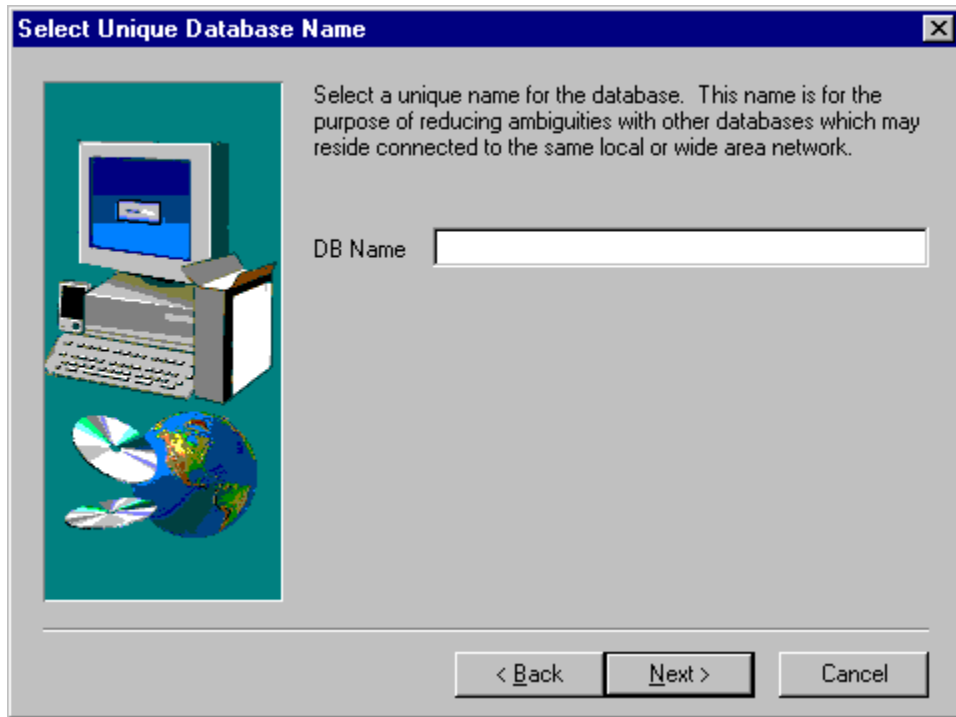
zt16s.bmp

4. The installation program first installs the *SQL Anywhere* Client software on the workstation. Next, the program installs the MET/BASE options you choose.

Note

On each workstation, you can install all of the application icons, or you can install some subset of them. The option selection screen lets you specify which particular applications you want to run on each workstation.

You should only check those boxes that match the licenses you have purchased. While this dialog box permits you to check any or all of the boxes, only those applications for which you apply licenses will operate, regardless of which boxes you checked.

Be sure to install the DB Setup application, because in a later step after all the software is installed, you will run DB Setup to apply licenses.
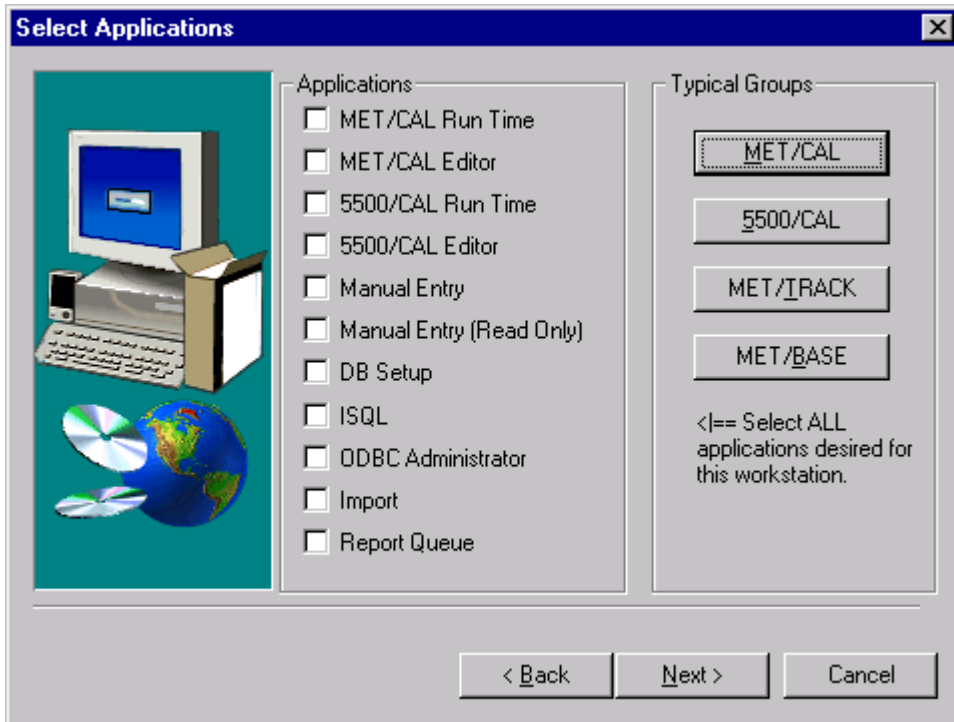
zt8a.bmp

5. Select the options you wish to install on this workstation. You can select one of the typical groups in the upper right corner, then add others individually by checking them off on the list on the left.

6. As you follow the prompts, allow the software to install to the default folders unless you have an overriding reason for not doing so. If you choose other folders, be sure to document your choices for later reference.

7. At the language prompt, select the appropriate language.

8. When the installation program completes, it displays a dialog box similar to the following:

Setup Complete — Installation successful. Click Finish to complete Setup.
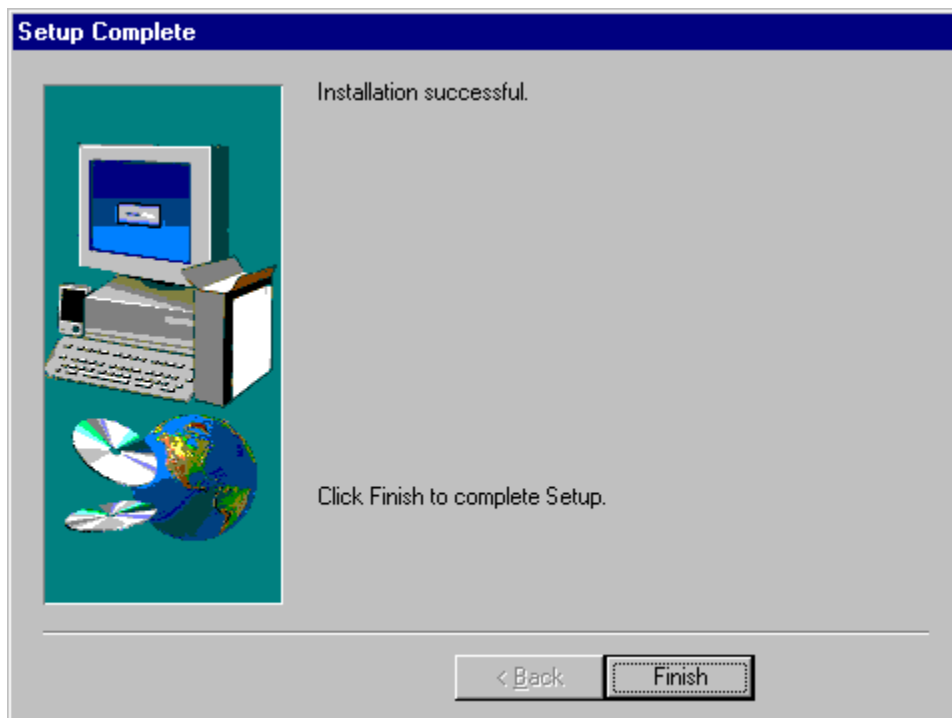
ip215.bmp

9. Click Finish to complete your installation and reboot your computer. Remove the METBASE CD from the CD-ROM drive. All the software needed to continue the upgrade has now been installed.

10. You have completed the installation of the MET/BASE software, so check off *Item 3*✓ in the flowchart at the beginning of this chapter.

Item 4: Update the Database

To update the database, proceed as follows:

1. Ensure that the Calibration Data Engine has been started and is currently running on the computer where the server software was installed. If the Calibration Data Engine is not running, start it.

   You can tell if the Calibration Data Engine is started by looking at the screen on the server. You should see either the connection messages window or the MTRACK icon.

2. In the Explorer, browse to the shared METCAL folder on the File Server. This is the folder where you installed the MET/BASE software in a previous item. Depending on how the folder is mounted from the client, it may appear simply as a drive letter; the name METCAL may not appear.

3. Locate and run the program DBUPDATE.EXE.

4. Login is as the MT user, with the password MT, or with your password if you are upgrading an existing system.

5. Login is as the MT user, with the password MT, or with your password if you are upgrading an existing system.

6. Follow the on-screen instructions as they appear.

WARNING

You MUST stop the Calibration Data Engine when you are prompted by the system. Failure to stop the Calibration Data Engine when you are prompted to do so completely interrupts the updating of the database, with unpredictable results and possible loss of data.

7. Check off *Item ✓6* on the flowchart at the beginning of this chapter, and continue to the next item to apply the licenses.

Item 5: Apply Licenses

Proceed as follows to install the licenses you have purchased:

1. Ensure that the Calibration Data Engine has been started and is running. If not, start it now.

2. From the Fluke Metrology Software group, start the DBSETUP application.

    Login as administrator (use MT as the user name, and MT as the password).

3. When DB Setup starts, select **Security** from the menu bar, then select **Add License** from the Security dropdown list.

4. Insert the license disk and follow the on-screen directions.

5. If you have several licenses to install, leave DB Setup running, but pull down the **Security** menu again, and choose **Add License** again.

6. When you have installed all the licenses you purchased, check off *Item ✓5* on the flowchart at the beginning of this chapter.

Item 6: Restore Custom Procedures (if Necessary)

1. Next, recover your custom procedures if you have any. In Item 1, you backed up the entire *\metcal* and *\metdata* directories. The *proc* subdirectory contains all the procedures in use at your site. Copy that directory from the backup location to the new METCAL directory, overwriting the files that have just been installed.

2. When you have re-created your former Procedure directory, check off *Item* ✓*6* in the flowchart at the beginning of this chapter.

Item 7: Upgrade Customized Reports (if Necessary)

The last step in the upgrade process involves upgrading any customized reports, so that they can take advantage of the new database fields that have been added when you upgraded from the Watcom database engine to *SQL Anywhere*. You must have *Crystal Reports* installed in order to do the report upgrading.

1. Install the new version of *Crystal Reports*.

2. Start up *Crystal Reports*.

3. Under the **File** menu, select **Open**, then browse to the backup reports folder that you created in Item 1 (Prepare for the Upgrade). You will need to open each of the reports that you have customized.

4. Pull down the **Database** menu and select **Verify Database**. *Crystal Report*s checks the report against the database and asks you to approve any needed changes to the report.

5. The system will prompt you to enter a Data Source, Server Name, User ID and Password. As shipped, the user name is "FLUKE" and the password is "FLUKE." These may be changed when you are familiar enough with the software to perform those tasks.

6. When the Verify Database operation completes, *Crystal Reports* returns to the edit screen. After all the needed changes have been identified and acted upon, run Verify Database one more time. If the report is now in synchronization with the database, *Crystal* displays a message reading, "The Database is up to date."

7. Save the report back out to the backup folder and close the report.

8. Repeat this process, opening each report in your backup folder, and verifying it.

9. After you have upgraded all the reports, copy them from the backup folder into the METCAL folder.

10. This completes the upgrading of your reports, so check off *Item* ✓7 on the flowchart at the beginning of this chapter.

What To Do Next

Completion of all the items on the flowchart at the beginning of this chapter signifies the conclusion of the upgrading process. At this point, there are several directions you might go, depending on your own objectives and needs.

Familiarization

The Fluke Metrology Software database that you have now installed has been pre-loaded with a number of sample assets, and with two users. You can add other assets or users, or you can modify those that have been preloaded.

♦ MET/CAL and 5500/CAL users should go to the *Getting Started Guide* for some practical exercises. The Getting Started Guide helps you learn how the database operates, and guides you through your first calibration using the new system.

♦ MET/TRACK users should begin looking to the Users Guide for assistance in customizing the database and the Manual Entry screen.

Testing

After installing the software, you may want to perform some preliminary testing to see that everything is working properly. Note that if the licenses were successfully applied during installation, no further client-to-server testing is needed; however, if your installation was abnormal in any way, you may want to do some confidence testing

Chapter 7 contains some simple tests that you can run to ensure that the database is properly installed and that the Clients are able to access the information it contains.
Chapter 7 also contains some basic troubleshooting information in case you should run into any difficulty.

MET/CAL Hardware Installation and Setup

For MET/CAL and 5500/CAL workstations, if the IEEE-488 boards are not yet installed, you may wish to complete the hardware and MET/CAL procedure installation before beginning testing. Instructions for these tasks can be found in the *Getting Started Guide*.

Note

Regarding Database Operation:

The database requires a login name and password each time you start a Fluke Metrology Software application. Ordinarily, you must type in a user name and password every time you start one of the applications.

*However, all of the Fluke Metrology Software applications include a **Tools** menu that you can use as a quick way to start up a second application. If you do not minimize the first application, just open the Tools menu and select the next program you want to run. You will not be required to provide a login name and password to the second one.*
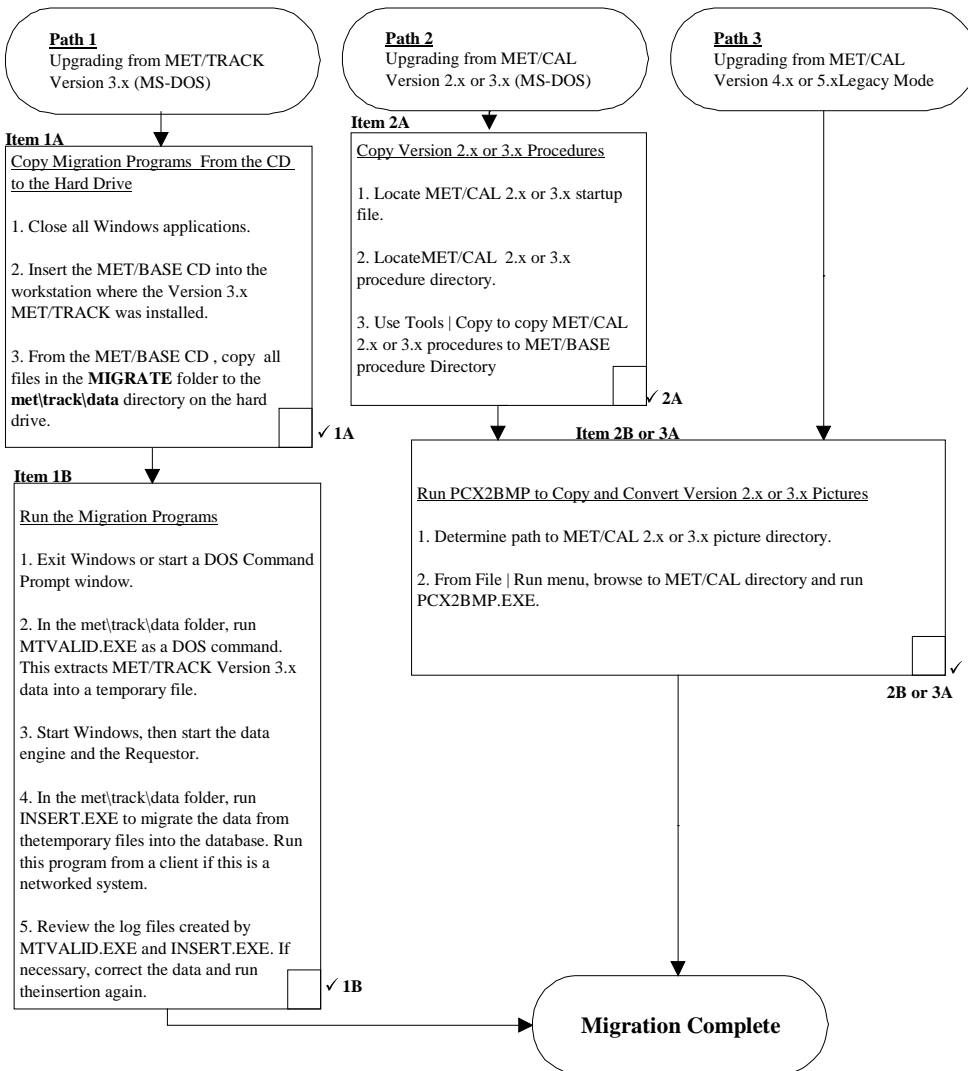
Contents   **Page**

Migration Flowchart

The chapter text provides important additional details.

STOP

Migration is only required if you have existing data from a prior Fluke Metrology Software product. Upgrade these products before beginning the migration, because you must have a new database in place for the data to be inserted.

Refer to the flowchart at the beginning of Chapter 1 for an overview of the process you must follow.

Path 1
Upgrading from MET/TRACK Version 3.x (MS-DOS)

Path 2
Upgrading from MET/CAL Version 2.x or 3.x (MS-DOS)

Path 3
Upgrading from MET/CAL Version 4.x or 5.xLegacy Mode

Item 1A

Copy Migration Programs From the CD to the Hard Drive

1. Close all Windows applications.

2. Insert the MET/BASE CD into the workstation where the Version 3.x MET/TRACK was installed.

3. From the MET/BASE CD , copy all files in the **MIGRATE** folder to the **met\track\data** directory on the hard drive.

✓ 1A

Item 2A

Copy Version 2.x or 3.x Procedures

1. Locate MET/CAL 2.x or 3.x startup file.

2. LocateMET/CAL 2.x or 3.x procedure directory.

3. Use Tools | Copy to copy MET/CAL 2.x or 3.x procedures to MET/BASE procedure Directory

✓ 2A

Item 1B

Run the Migration Programs

1. Exit Windows or start a DOS Command Prompt window.

2. In the met\track\data folder, run MTVALID.EXE as a DOS command. This extracts MET/TRACK Version 3.x data into a temporary file.

3. Start Windows, then start the data engine and the Requestor.

4. In the met\track\data folder, run INSERT.EXE to migrate the data from thetemporary files into the database. Run this program from a client if this is a networked system.

5. Review the log files created by MTVALID.EXE and INSERT.EXE. If necessary, correct the data and run theinsertion again.

✓ 1B

Item 2B or 3A

Run PCX2BMP to Copy and Convert Version 2.x or 3.x Pictures

1. Determine path to MET/CAL 2.x or 3.x picture directory.

2. From File | Run menu, browse to MET/CAL directory and run PCX2BMP.EXE.

✓ 2B or 3A

Migration Complete

Introduction

This chapter describes how to perform a migration of existing data into the database. This data must be from an earlier version of MET/CAL or MET/TRACK.

Note

You must have the latest version of the software installed and working before performing a migration. This means you need to complete a New Installation or an Upgrade before beginning the steps outlined in the flowchart and described in this chapter.

Migration Time and Memory Requirements

The time it takes to migrate a database depends on its size and the type of computer you are using. For example, one database of 20 Megabytes on Pentium running at 133 Mhz, took less than half an hour.

If your database has been in place for a year or more, you probably have a large amount of data to convert. Be sure to allow sufficient time, or be prepared to let the conversion run overnight.

You should also be forewarned that the migration process creates a number of interim files that will temporarily need extra disk space. As a rule of thumb, you should have available about three times the amount of space consumed by your existing data files.

Stop! Do Not Proceed Until You Determine Your Precise Starting Point

Notice that the flowchart depicts three similar parallel paths. The very first block is labeled STOP to remind you to not proceed before determining your exact starting point.

Read the STOP block.

If you are also running another Fluke Metrology Software product and if you also have a database product running, you must upgrade that software as described in Chapter 4 or 5 before migrating the data. The reason is that the migration process brings your existing data into the database, and you must have the current version of the database running.

Example

For example, look at the first path, showing the steps to follow if you are starting with MET/TRACK Version 3.x, MS-DOS. If you also have MET/CAL Version 4.2 or later running in Database Mode, you must first upgrade the database product. In that case, you would return to Chapter 4 if you are upgrading a networked version, or Chapter 5 if you upgrading a Standalone Workstation.

If you do *not* also have a database product, proceed with a new installation as described in Chapter 2 or 3, again depending on whether you are performing a network or standalone installation. The new installation does not overwrite your existing data, but will install new executable files and a new, blank database. After you have the new database, return to this chapter to complete the migration of your DOS data into the database.

Selecting the Correct Path

Locate your correct starting point before going on to the instructions.

Path 1 Use the first path if your starting point is an MS-DOS version of MET/TRACK. This would include any MET/TRACK software in the Version 3.x series.

Path 2 The second path is provided for those whose starting point is an MS-DOS version of MET/CAL, which includes any Version 2 or 3 series product.

Path 3 Follow the last path if you have any MET/CAL Version 4 or later product running in Legacy Mode.

Migration Procedure

Once you have located your path, the following instructions describe the steps to follow. If you are following path 2 or 3, go forward in this chapter to that heading.

Path 1: MET/TRACK Version 3.x (MS-DOS)

The first path describes how to migrate DOS data from MET/TRACK Version 3 into the new database. Before beginning the migration, it is first necessary to have the MET/BASE database installed to hold the data.

NOTE

1. Before beginning, determine if you are also running MET/CAL in Database Mode.

   a. If you **are** also running a prior version of MET/CAL in Database Mode, return to Chapter 4 or 5 to upgrade the Database Mode product first. Chapter 4 covers upgrading a network installation, and Chapter 5 covers the Standalone Workstation case.

   b. If you are **not** also running a prior version of MET/CAL in Database Mode, return to Chapter 2 or 3 to complete a new software installation. A new installation is needed in order to install a database on your system into which you can migrate your existing DOS data. Chapter 2 covers a new network installation, and Chapter 3 covers the Standalone Workstation case.

2. Return to the instructions in this chapter only after you have upgraded or performed the new installation.

3. If you have been using the Validation or Merge features, you must copy the files from their DOS directories to the new Windows directory. Typically, these would be located in C:\MET\TRACK, and should be copied into C:\METCAL. For more information, look in the file **APPSREAD.ME** on the CD.

Item 1A: Copy Migration Programs

In performing the first item, you retrieve the migration programs from the CD, copying them onto the local hard drive. This item is done at the workstation where the MET/TRACK Version 3 was installed.

1. Go to the workstation where MET/TRACK Version 3.0 was installed. Make a backup copy of your existing data (the files in the *\metdata* directory).

2. If you did not run CHKDSK or SCANDISK when you installed or upgraded the software, do so now. Correct any problems before continuing.

3. Close any Windows applications that may be running.

4. Insert the MET/BASE CD into the CD-ROM drive.

5. Go to the MIGRATE directory on the CD and copy all the files from there to MET\TRACK\DATA on the workstation's hard drive.

6. This completes the copying of the migration programs, so check off Item ✓ *1A* on the flowchart at the beginning of this chapter.

Item 1B: Run Migration Programs

The final step when you are upgrading a DOS version of MET/TRACK is to run the migration programs that you just copied to your hard drive. There are two programs: MTVALID.EXE, which is run as a DOS command, and INSERT.EXE, which is run within Windows. Run both programs on the workstation where the MET/TRACK Version 3 had been installed.

Note

The exact steps required for your migration may become complicated, because the former database did not use the same strict validation mechanisms that are enforced for data entering the database. You may have data that is valid for a Version 3 system, but is rejected for the database. If the validation or insertion programs detect such data, messages will display explaining your options.

1. Stop any Windows applications that may be running.

2. Exit Windows or start a DOS Prompt Window.

3. Change to the MET\TRACK\DATA directory, and run the MTVALID.EXE program as a DOS command.

   As it runs, MTVALID extracts the MET/TRACK 3.x data into several temporary files with the file extension ".TSV". It also generates a log file called VALIDATE.TXT. This file contains 10% of the assets, and is used after you import the data to the database to verify that the imported data has been properly imported.

4. You will be asked a series of questions, as follows:

   Have you made a complete backup copy of your database?
   You must answer *Yes*, otherwise the program will stop. If you have not yet made a backup, answer *No*, then backup the *\metdata* directory. Only when you answer *Yes* to this question will the program proceed to the next question.

   Has CHKDISK.EXE or equivalent reported no errors?
   Again, you must answer *Yes* before the program will proceed. If CHKDISK or SCANDISK have reported any errors on your hard drive, it is risky to continue until the errors are corrected. If you have not yet run the disk checking program, answer *No*, and do so. If the disk checking program

reported any errors, again, answer *No* and correct the errors to reduce the likelihood of problem during the migration process. Only proceed with the migration when you can answer *Yes* to this question.

Force blank Cal-Dates to be 01/01/70?
If your current data contains any calibration records with blank calibration dates, your traceability chain will not be complete. This can be corrected in one of two ways, and your answer to this questions determines what the software will do with such records.

Answer *Yes* if you want these records in your database, but with an assigned date of January 1, 1970.

Answering *No* will simply cause such records to be discarded and not included in the database.

Migrate All or Current Cal, Loc, and Repair Records?

- Answering *All* migrates your entire history into the new database.
- Answering *Current* migrates only the most recent records.

Give some thought to your answer to this question. If you have a large inventory with a long history, the migration of all your data may take a considerable length of time. In this case, you may want to answer *Current*, and take the opportunity to clean up your data and start fresh. However, if you frequently need to access historical information, this may not be the best choice. If you choose to discard historical data at this point, you should have a plan in case some of that information is needed at a later date.

Are all of these answers correct?
Your answers to the first four questions are displayed, permitting you to go back and change one or more of them before the migration process begins. When you answer Yes, the program begins processing your records and creating the files that will be used in the next step to insert the data into the new database.

Note

Length of Time for Migration

The length of time required for migration varies depending on the hardware being used and the number of records to be processed. One example database was migrated using a 133 Mhz Pentium computer. The database contained 6,000 assets, covered by 25,000 calibration records, 2,000 location records, and 46,000 standards. This migration took approximately 25 minutes to complete.

5. Once the MTVALID program has completed, start Windows.

6. Start the Calibration Data Engine.

7. Run the program called INSERT.EXE. The Insertion program is also located in the MET\TRACK\DATA directory.

   This program has three phases that run in sequence. The three phases are as follows:

   Phase 1 previews the data to be inserted to anticipate potential problems that may conflict with the SQL commands used in later phases.

   Phase 2 translates any special DOS characters to their nearest Windows counterpart.

   Phase 3 migrates the data from the temporary TSV files into the SQL database.

8. Follow the screen prompts to complete the process.

9. During the preview phase, the "Auto Correct" mode is advised. (Other preview modes are provided primarily for the use of MET/TRACK installation experts or for use with the help of MET/Support technicians.)

   If problems are found that the application cannot fix automatically, you are notified and the program will terminate after the entire file has been previewed.

10. The preview phase generates a log file called PREVIEW.LOG. This file documents any problems found and any automatic repair actions that the program takes during the preview.

    Use Notepad or a similar text editor to view the log file.

    - If any errors are shown, go forward in this chapter to the heading "Analyzing Log Files" for instructions on how to proceed.

    - Do not proceed past the preview phase until all preview errors have been corrected.

11. When you are satisfied that the preview has been completed, and database errors have been corrected, follow the screen prompts to complete the translation and insertion phases.

12. The insertion phase generates a log file called INSERT.LOG.

    After completing the insertion, use Notepad or a similar text editor to view the log file.

13. If any errors are shown, go forward in this chapter to the heading "Analyzing Log Files" for instructions on how to proceed.

14. Once any problems in the insertion have been corrected, the MET/TRACK Version 3 data has been transferred into the database, so check off *Item 1B* ✓ on the flowchart at the beginning of this chapter.

15. When you have completed the migration of data into the new database, you can proceed with testing the new software. Refer to Chapter 7 for instructions on how to perform some elementary confidence tests.

Path 2: MET/CAL Version 2.x or 3.x (MS-DOS)

The second path describes how to migrate DOS data from MET/CAL Version 2 or 3 into the new database. Before beginning the migration, it is first necessary to have the MET/BASE database installed to hold the data.

NOTE

First determine if you are also running MET/TRACK Version 4.x.

a. If you **are** also running MET/TRACK Version 4.x, return to Chapter 4 or 5 to upgrade the Database Mode product first. Chapter 4 covers upgrading a network installation, and Chapter 5 covers the Standalone Workstation case.

If you have been using the Validation or Merge features, you must copy the files from their DOS directories to the new Windows directory. Typically, these would be located in C:\MET\TRACK, and should be copied into C:\METCAL. For more information, look in the file **APPSREAD.ME** on the CD.

b. If you are **not** also running MET/TRACK Version 4.x, return to Chapter 2 or 3 to complete a new software installation. A new installation is needed in order to install a database on your system into which you can migrate your existing DOS data. Chapter 2 covers a new network installation, and Chapter 3 covers the Standalone Workstation case.

Item 2A: Copy MET/CAL 2.x or 3.x Procedures to MET/BASE

You can use the MET/CAL 6.0 Editor to copy your MET/CAL 2.x or 3.x procedures to your MET/BASE procedure directory.

1. Locate your MET/CAL 2.x or 3.x **Startup** file. The default location is **C:\MET\CAL** on your MET/CAL 2.x or 3.x installation.

2. Determine the path to your MET/CAL 2.x or 3.x procedure directory. The procedure directory path is designated by the **procdir** parameter in your MET/CAL 2.x or 3.x startup file. The default path is **C:\MET\CAL\PROC**.

3. Locate your MET/CAL 2.x or 3.x procedure directory file. The procedure directory file name and location are designated by the **pdf** parameter in your MET/CAL 2.x or 3.x startup file. The default name and location is **C:\MET\CAL\PROC\PROC.DIR**. If the procedure directory file is not **PROC.DIR,** or is not located in your MET/CAL 2.x or 3.x procedure directory, or both, you must copy it to the procedure directory and rename it **PROC.DIR**.

4. If your MET/CAL 2.x or 3.x procedure directory is not accessible from the MET/CAL 6.0 Editor, you must copy all the files in your MET/CAL 2.x or 3.x procedure directory to a directory that is. Alternatively, you can copy the files to a removable storage media that can be read by the MET/CAL 6.0 Editor.

5. From within the MET/CAL 6.0 Editor, select **Tools** | **Copy Procedures** to copy your MET/CAL 2.x or 3.x procedures to your MET/BASE procedure directory.

6. Check off Item √2A on the flowchart at the beginning of this chapter.

Item 2B: Run PCX2BMP to Convert MET/CAL 2.x or 3.x Pictures for MET/BASE

You can skip this step if you did not use **.PCX** files with your MET/CAL 2.x or MET/CAL 3.x procedures.

1. Determine the path to your MET/CAL 2.x or 3.x picture directory. The picture directory path is designated by the **picdir** parameter in your MET/CAL 2.x or 3.x startup file. The default path is **C:\MET\CAL\PIC**.

2. From the **File** | **Run** menu, browse to the MET/CAL directory and run PCX2BMP.EXE.

3. Follow the on-screen prompts. Once the operation is complete,your **.PCX** files have been copied to the MET/BASE picture directory and converted to **.BMP** files. Check off Item √2B on the flowchart at the beginning of this chapter.

Path 3: MET/CAL Version 4.x or 5.x Legacy Mode

The third possible path in performing a migration adds MET/CAL Version 4 Legacy data into the new database. Note that if you have been running MET/CAL Version 4 in Database Mode, this migration step is unnecessary.

Sites that had been running Version 4.x pr 5.x of both MET/TRACK and MET/CAL in Database Mode only need to update the database as described in Chapter 4 or 5 (depending on whether you were running a networked or standalone system.) That process results in an upgrade of the database into the new database format, and only needs to be performed one time.

Note

If you were running a networked version of one Version 4 or 5 program and a standalone version of the other, there is no provision for merging the two databases. In that case, contact MET/SUPPORT for directions on how to proceed.

Note

*First determine if you are also running MET/TRACK Version 4.x or
5.x.*

a. *If you **are** also running MET/TRACK Version 4.x or 5.x, return
to Chapter 4 or 5 to upgrade the Database Mode product first.
Chapter 4 covers upgrading a network installation, and
Chapter 5 covers the Standalone Workstation case.*

b. *If you are **not** also running MET/TRACK Version 4.x or 5.x,
return to Chapter 2 or 3 to complete a new software
installation. A new installation is needed in order to install a
database on your system into which you can migrate your
existing DOS data. Chapter 2 covers a new network
installation, and Chapter 3 covers the Standalone Workstation
case.*

Item 3A: Run the MC_TO_DB Program

The program called MC_TO_DB enters the MET/CAL Legacy Mode traceability
data into the database. Unless you were sharing the traceability file TRACE.DAT,
this step must be done at every workstation where you previously had been
running MET/CAL.

1. Start the Calibration Data Engine if it is not already running.

2. Visit each Client workstation and proceed as follows:

    a. Start Windows if it is not already running.

    b. Start the Calibration Data Requester if it is not already running

3. Using the File | Run menu, browse to the MET CAL directory and run
    MC_TO_DB.EXE. This adds the traceability information to the database.

4. Follow the on-screen prompts.

    Once the operation is complete, you have finished migrating the MET/CAL
    Legacy Mode traceability data into the database, so check off Item 3A on the
    flowchart at the beginning of this chapter.

Analyzing the Log Files

During the migration process, the programs that you run create log files to
document any errors or automatically converted data. Carefully review the log
files before continuing, regardless of which path you used in the migration. It may
be that one of the files points to some problem in your data that you can more
easily resolve in the DOS files than in the database. In that case, the best way to

proceed would be to make the required change in the DOS files, and re-import the data.

The remainder of this chapter describes the log file formats and suggests appropriate fixes for the different kinds of migration problems you might experience. By examining your log files in light of this information, you can assure yourself that all your old data has been properly brought into the new database.

The following table describes the log files created by each of the migration programs:

Log File Name	Created By	Description
VALIDATE.TXT	MTVALID.EXE	Created during the first step, validation. Used after insertion to verify proper importation to the database.
PREVIEW.LOG	INSERT.EXE Preview Phase	Brief, self-explanatory messages of problem records. Only present if auto-correction is not enabled.
-NO LOG FILE-	INSERT.EXE Translation Phase	On-screen error messages indicate any translation errors.
INSERT.LOG	INSERT.EXE Insert Phase	Insertion phase problems usually abort the insertion of the table. Each message indicates the asset number or a data string (an SQL command).

The Preview File, PREVIEW.LOG

When errors are found during the preview phase that cannot be corrected by the auto-correct mechanism (or if disabled auto-correction), the INSERT.EXE program will terminate with a message stating that the errors should be corrected before proceeding. The errors identified will be listed in the PREVIEW.LOG file that the insertion program creates. PREVIEW.LOG will be in the same directory as the INSERT.EXE file.

Example Messages

The PREVIEW.LOG file is written to be brief with simple self-explanatory messages. Following are typical of the messages found there after you run the Preview Phase with auto-correction disabled:

```
Inventory Record 15  Asset: flk002001 has a leading white
space,
It is not accessible from DOS MET/TRACK;
It will be ignored during insertion.

Inventory Record 15 has a blank asset number;
It will be ignored during insertion.
```

```
Inventory Record 15 is a duplicate asset number.
One of the records with Asset Number flk002001 should be
deleted.
```

If the insertion phase will ignore the error, the message will so state. No further action is needed for these problems.

If the error must be corrected before continuing with the insertion, the recommended approach is to delete the temporary data files (TSV files), enter DOS MET/TRACK to fix as many errors there as possible, then start the migration process from the beginning.

If errors exist that cannot be fixed in DOS MET/TRACK, you may need to request help from MET/Support.

Editing TSV Files

The preferred method of correcting insertion errors is to repair the data in DOS MET/TRACK and start the migration again from the beginning. However, it may be possible to (though somewhat difficult) to edit the TSV files with a text editor and manipulate the temporary data directly. The TSV files are character delimited data files. Most PREVIEW.LOG messages list the TSV file line number that contains the error.

For instance, in the above examples, "Inventory Record 15" indicates line 15 of the data file INV.TSV. Note that if the editor you use employs "Word Wrap" the line numbers will be incorrect. Once the offending line is identified, you may be able to correct the problem directly.

Note

Deleting an asset in the Inventory has a cascading effect on the rest of the data. For example, if the Asset Number flk002001 is deleted, any calibration, location or repair events for that instrument will fail on insert as well. In addition, any standards whose traceability links depend on the asset may be broken. Therefore, it is best not to attempt to delete an active asset in the database unless you are certain it is unused or duplicated.

Translation Phase Errors

During the Translation phase, no log file is generated. In the event of an error, a message box displays describing the problem. Although errors during this phase are uncommon, the following error messages have fairly simple solutions.

Example 1

```
dlgTranslate::TranslateSingle( )
Unable to rename original file to conduct translation.
```

During the translation of files from the DOS character set to the ANSI character set, the insertion program creates files having the same name as the ***.TSV** files, but with the extension **.__K**. This file name may be in use, or the user may not have write permission to the directory.

The solution is to ensure the user has write permission to the directory, and to remove any files with the extension **__K** from the directory.

Example 2

```
dlgTranslate::TranslateSingle( )
Unable to open input file.  Aborting.
```

One of the expected TSV files could not be opened for reading. Verify the *.TSV files are in the same directory as INSERT.EXE and can be read by the user.

The Insert Log File, INSERT.LOG

INSERT.LOG is generated during the Insert phase. After the Insert phase is completed, this file should be reviewed to check for any errors that may have been encountered during the Insert. The following are error messages that might be generated by the insert operation.

Location date blank. Abort location insertion.

This error is accompanied by an asset number. Check the LOC.TSV file. Search for lines with the asset number and check for a location event that does not have enough date information and correct the entry.

`Location record Asset not found. Abort location insertion.`

This error is accompanied by an asset number. The asset specified was not found in the SQL database. It may have failed to insert during a previous operation, or it may not be present in the current insert.

`Location record Asset ambiguous. Abort location insertion.`

This error is accompanied by an asset number. More than one asset was found in the SQL database that matches the location asset.

`Calibration date blank. Abort calibration insertion.`

This error is accompanied by an asset number. Check the CAL.TSV file. Search for lines with the asset number and check for a calibration event that does not have enough date information and correct the entry.

`Calibration record Asset not found. Abort calibration insertion.`

This error is accompanied by an asset number. The asset specified was not found in the database. It may have failed to insert during a previous operation, or it may not be present in the current insert.

`Calibration record Asset ambiguous. Abort calibration insertion.`

This error is accompanied by an asset number. More than one asset found that matches the asset.

`Repair date blank. Abort repair insertion.`

This error is accompanied by an asset number. Check the REP.TSV file. Search for lines with the asset number and check for a maintenance event that does not have enough date information and correct the entry.

`Repair record Asset not found. Abort repair insertion.`

This error is accompanied by an asset number. The asset specified was not found in the database. It may have failed to insert during a previous operation, or it may not be present in the current insert.

`Repair record Asset ambiguous. Abort repair insertion.`

This error is accompanied by an asset number. More than one asset found that matches the asset.

`Standards date blank. Abort standards insertion.`

This error is accompanied by an asset number. Check the STD.TSV file. Search for lines with the asset number and check for a standards event that does not have enough date information and correct the entry.

Standards record Asset not found. Abort Standards insertion.

This error is accompanied by an asset number. The asset specified was not found in the database. It may have failed to insert during a previous operation, or it may not be present in the current insert.

Standards record Asset ambiguous. Abort Standards insertion.

This error is accompanied by an asset number. More than one asset found that matches the asset.

Standards record CTAG not found. Abort Standards insertion.

This error is accompanied by a data string (an SQL command). The Standards Used event identified specifies a Calibration event that does not exist in the SQL database. Contact MET/Support.

Standards record CTAG ambiguous. Abort Standards insertion.

Duplicate CTAG events exist in the database. Contact MET/Support for assistance.

VENDOR Asset insert attempt not successful. Asset may already exist.

Verify that the VENDOR asset does exist. If the asset does exist, no further action is necessary. If not, it may be necessary to manually enter the VENDOR asset on a new database and perform the insertion again.

Failure updating system configuration.
Must make update manually using the DBSetup application.

It is very unlikely that this error will occur. If it does, the configuration customization must be made using the DBSetup application.

DBCONFIG does not contain exactly ONE record.

It is very unlikely that this error will occur. If it does, the configuration customization must be made using the DBSetup application.

Unable to update CONFIG table.

The configuration table could not be imported. Configuration customization must be made using the DBSetup application.

Duplicate user codename not inserted.

This message is usually accompanied by a data string (an SQL command). The user identified by the data has specified a code name that is already in use in the database.

Codename includes single quote.

This message is usually accompanied by a data string (an SQL command). The user identified by the data has specified a codename containing a single quote character ('), which is restricted.

Password includes single quote.

This message is usually accompanied by a data string (an SQL command). The user identified by the data has specified a password containing a single quote character ('), which is restricted.

Long name includes single quote.

This message is usually accompanied by a data string (an SQL command). The user identified by the data specifies a long name containing a single quote character ('), which is restricted.

Codename starts with a number.

This message is usually accompanied by a data string (an SQL command). The user identified by the data specifies a codename that starts with a number, which is restricted.

Codename includes an imbedded space.

This message is usually accompanied by a data string (an SQL command). The user identified by the data specifies a codename that includes a space, which is restricted.

Codename is blank.

This message is usually accompanied by a data string (an SQL command). The user identified by the data specifies no codename.

Fullname is blank.

This message is usually accompanied by a data string (an SQL command). The user identified by the data string does not provide a long name that is required for the insertion.

Correcting Insertion Log Errors

If any of these errors occur, the first action should be to enter the SQL database using the new Fluke Metrology applications to determine if the report is accurate. For example, if a codename has an embedded space, it may be for a user record that is not used or is duplicated elsewhere correctly.

Another example might be if the VENDOR asset already exists in the database from a MET/CAL installation. The record will still generate an error message when the duplicate insertion fails. This problem is common where more than one MET/TRACK Version 3 database is being merged into one SQL database.

If a small number of these errors are identified, attempt to correct the data using the new Fluke Metrology software applications. If the number of errors is too great for individual correction, the problem may need to be corrected at the DOS MET/TRACK level and the migration performed again.

The Validation Log File, VALIDATE.TXT

Recall that when you ran VALIDATE.EXE, a log file was created that you use after importing the data into the database. This file, VALIDATE.TXT, contains 10% of the imported assets. VALIDATE.TXT is created to help you verify that the database was converted correctly. If everything verifies properly, you have completed the migration and can begin using the new system right away.

Use the Manual Entry application to verify that the data has been properly imported to the new database.

Use the following procedure to verify that the data was converted successfully.

1. First, print out **VALIDATE.TXT**. A sample portion of a VALIDATE.TXT file is illustrated later. It includes a discussion of the meaning of the entries, and how to verify that you have successfully migrated the information to the new database.

2. Compare the printout to the information that the Manual Entry application provides for that asset. The approach you must take is to use the Manual Entry application's Find feature to look at each asset you wish to verify. See the *Fluke Metrology Software Users Guide* for complete instructions on the use of the Manual Entry application.

3. Once you are convinced that you have successfully brought the data in, perform another backup, using exactly the same selections as previously. When you are asked if you wish to overwrite the backup files, answer Yes.

Refer to the *Users Guide* for instructions on how to set up a scheduled backup plan for the database.

On the next page is a sample validation log file entry for one asset, number 4397. The entire calibration history of this asset is shown. The following list explains the entries:

C=\<date\>	Indicates the calibration history of this asset. The dates shown are those that were in the MET/TRACK 3 database as the dates of Calibration events.
L=\<date\>	Indicates the dates that a Location record was created.
R=\<date\>	Signifies the dates in the database on which a Repair event was recorded.
S=\<asset#\>	Indicates the asset numbers of Standards used in the associated calibration event.

```
MET/TRACK Validation Log File Entry

     Asset=4397
     C=10/21/1997
          S=VENDOR
     C=07/09/1996
          S=VENDOR
     C=05/26/1995
          S=1022
          S=6026
     C=05/20/1994
          S=1022
          S=5964
          S=5789
     C=05/17/1993
     C=05/17/1993
          S=1022
          S=5964
          S=5789
          S=6026
     C=04/17/1992
          S=1022
          S=5789
          S=6026
     L=10/21/1997
     L=01/09/1996
     L=01/11/1995
     L=12/05/1994
     R=05/17/1993
```

**Sample MET/TRACK Validation Log
File Entry Printout**

Seven calibration events are indicated for asset number 4397. The most recent one was done on October 21, 1997 and the earliest on April 18, 1992. One of the calibrations failed initially, the one that was performed in 1989. This is shown by the two calibration entries on that date, and a Repair record on the same date (the last line in the example is a Repair History record).

Following each calibration date is a list showing the asset number of standards used in that calibration. the notation S= is followed by the asset number of one standard. Note that for the two most recent calibrations, in August 1995 and July 1993, the asset was sent out to another location (VENDOR as the standard) for calibration.

The Location records are listed in a group just before the Repair record. This list shows that the asset was moved to a different location on each of the dates shown after the notation "L=" The last line indicates that the unit was repaired one time, on May 16, 1989, presumably while it was in the shop for calibration.

What To Do Next

When you have competed migration and verification that the existing DOS or Legacy Mode data has been properly imported into the new database, there are several directions you might go, depending on your own objectives and needs.

Familiarization

The Fluke Metrology Software database that you have now installed has been pre-loaded with a number of sample assets, and with two users. You can add other assets or users, or you can modify those that have been pre-loaded.

♦ MET/CAL and 5500/CAL users should go to the *Getting Started Guide* for some practical exercises. The Getting Started Guide helps you learn how the database operates, and guides you through your first calibration using the new system.

♦ MET/TRACK users should begin looking to the Users Guide for assistance in customizing the database and the Manual Entry screen.

Testing

After installing the software, you may want to perform some preliminary testing to see that everything is working properly. Note that if the licenses were successfully applied during installation, no further client-to-server testing is needed; however, if your installation was abnormal in any way, you may want to do some confidence testing

Chapter 7 contains some simple tests that you can run to ensure that the database is properly installed and that the Clients are able to access the information it contains.
Chapter 7 also contains some basic troubleshooting information in case you should run into any difficulty.

MET/CAL Hardware Installation and Setup

For MET/CAL and 5500/CAL workstations, if the IEEE-488 boards are not yet installed, you may wish to complete the hardware and MET/CAL procedure installation before beginning testing. Instructions for these tasks can be found in the *Getting Started Guide*.

Note Regarding Database Operation:

♦ The database requires a login name and password each time you start a Fluke Metrology Software application. Ordinarily, you must type in a user name and password every time you start one of the applications.

However, all of the Fluke Metrology Software applications include a **Tools** menu that you can use as a quick way to start up a second application. If you do not minimize the first application, just open the Tools menu and select the next program you want to run. You will not be required to provide a login name and password to the second one.

Chapter 7
Testing the Installation

Contents	**Page**

Introduction

This chapter provides some basic testing procedures to run after installation is complete.

- Do not begin testing until the software installation is complete. This includes the migration of existing data into the database. If you are not sure whether you have completed the installation process, review the flow diagrams at the beginning of all the preceding chapters in this manual before you begin testing.

- For MET/CAL workstations, you may wish to delay testing until you have completed the procedure installation. Refer to the *Getting Started Guide* for details.

This chapter is divided into three main sections, covering the first time startup of a standalone system, first time startup of a networked system, and finally, some network troubleshooting hints if a network installation does not seem to be working properly.

Other problems should be addressed to the Fluke MET/SUPPORT team. Phone numbers for contacting us can be found in Appendix A.

Starting a Standalone Installation for the First Time

The installation process has installed a database ready for your entries. It has been pre-loaded with a few records for you to practice with. Later on, you can easily delete these practice records.

It is a good idea to do a few tests to be sure that the Calibration Data Engine starts properly, and that a client application can properly connect to the data source. A simple test such as the one described next verifies successful database installation.
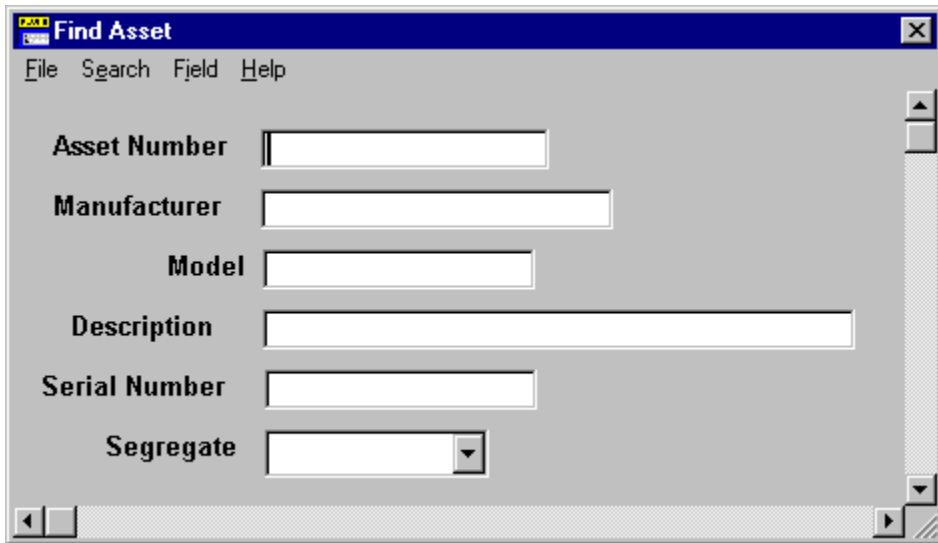
Use the following procedure to test for correct operation of the database. If you do not get the results described here, it is possible that the database or some of the software did not install correctly.

1. In the Fluke Metrology Software Program group, start the program labeled **Calibration Data Engine**. As you start the data engine, you will see it added to your Windows task bar.

2. Start the Manual Entry application (also in the Fluke Metrology Software Program Group).

3. As part of its startup, the Manual Entry application requires that you login to the database. Refer to the following illustration.
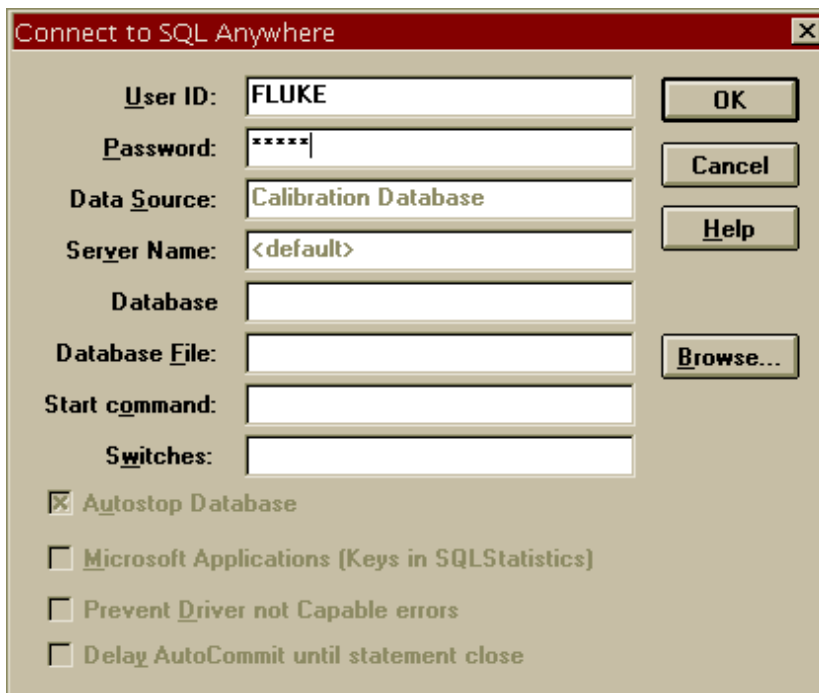

ip701s.bmp

4. Log in using **fluke** as the user ID and **fluke** as the password, then click **OK**. Do not make entries in the other fields.

5. When the Manual Entry Tool starts, select **Search,** then **Find Asset.**

6. Refer to the next illustration and enter a **?** in the Asset Number field. The question mark character is the wild-card. It should match all the assets in the database. Select **Search** and you should find assets.

zt17s.bmp

When you use the Manual Entry application to perform a Search, the wildcard character **?** matches all the assets in the database. When you press the Search button, you should see the first sample asset. The Inventory History Form should appear similar to the following illustration.

zt18s.bmp
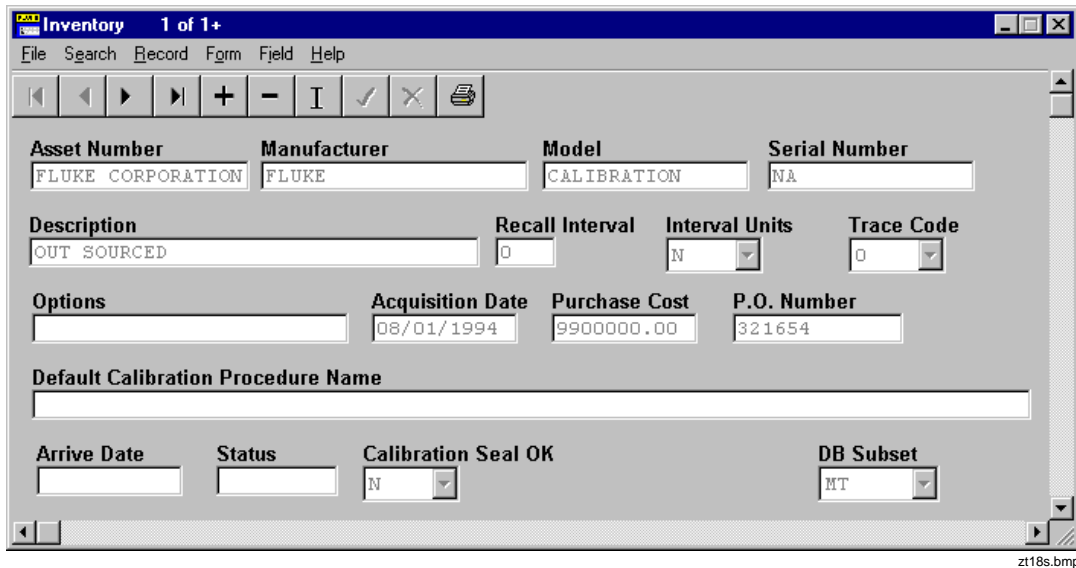
A number of sample assets have been pre-loaded in the database for you to practice with.

Starting a Network System for the First Time

The installation process has installed a database ready for your entries. It has been pre-loaded with a few records for you to practice with. Later on, you can delete these practice records with very little effort.

It is a good idea to do a few tests to be sure that that Calibration Data Engine starts properly, and that a client application can properly connect to the data source. A simple test such as the one described next verifies that the database installation was successful.

This next set of instructions describes the first start and tests of a networked system. Use the following procedure to test for correct operation of the database.

The procedure that follows uses the database and does a search using the Manual Entry application.

Start the Calibration Data Engine (Data Server)

The Data Engine (Data Server software) reads from and writes to the database files. The following describes how to start the Calibration Data Engine for Windows.

To start the Calibration Data Engine on a Windows Server:

Go to the Server workstation and from the START menu, open the Fluke Metrology Software Program Group, and start the program called **Calibration Data Engine**.

As the date engine starts, it is added to your Windows task bar.

Start the Calibration Data Requester

The Calibration Data Requester provides the means for the Client to communicate with the Calibration Data Engine. Proceed as follows to start the Requester:

1. At the Client Workstation, from the Start menu, open the Fluke Metrology Software group, and select the Calibration Data Requester.

2. When the Network Requester has connected to the Calibration Data Engine, the connection window automatically minimizes.

    Proceed to the next section, titled, "Start the Manual Entry Application."

3. If the Network Requester has not found the Calibration Data Engine (Server), proceed to the heading "In Case of Difficulty" later in this chapter for information about network troubleshooting.

### Start the Manual Entry Application

Proceed as follows to start the Manual Entry Application:

1. On the Client, start the Manual Entry application (Start Menu, Fluke Metrology Software group).

2. Refer to the next screen illustration. When you start any of the Fluke Metrology software applications, the Sybase database engine arbitrates access to the database, and requires a login. As shipped, the database has one user, named **fluke**. Log in using **fluke** as the user ID and **fluke** as the password. Do not make or change entries in the other fields.
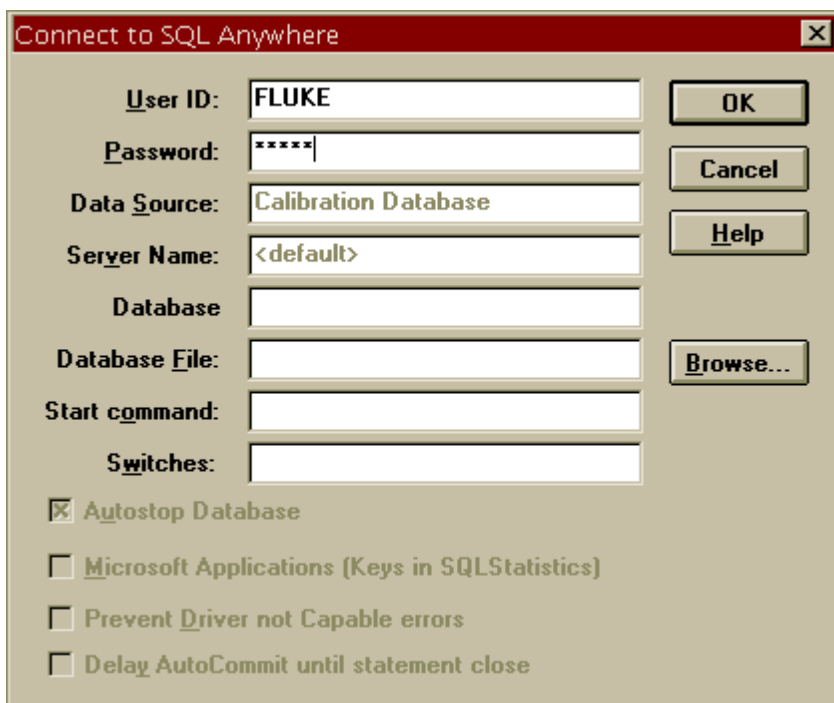
ip701s.bmp

3. After the Manual Entry application starts, Select **SEARCH** from the menu.

4. The Search Form opens, as shown in the following screen illustration. Enter a
   ? in the ASSET Number field (upper left). The question mark character is the
   wild card for the Manual Entry application.
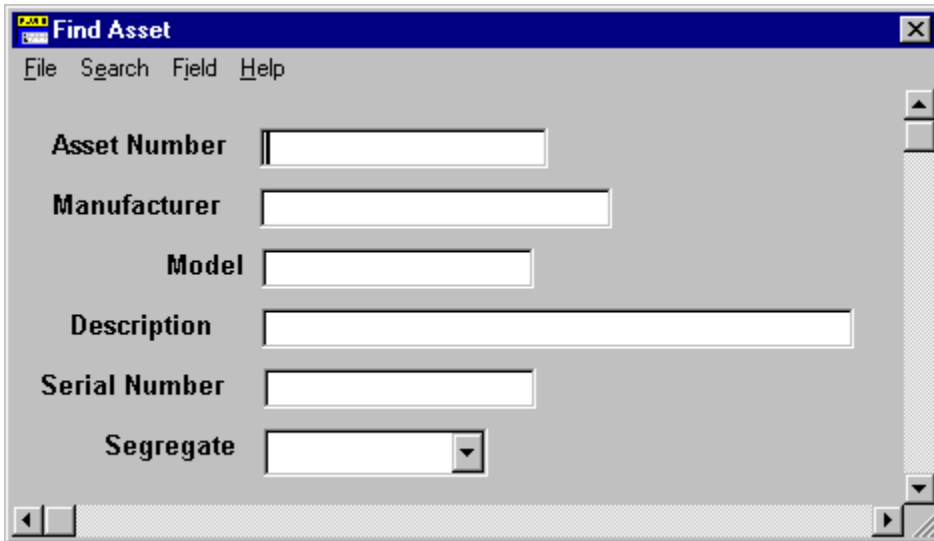
zt17s.bmp

5. Select SEARCH and you should find the pre-loaded sample assets. An Inventory form opens with the first asset in the database.
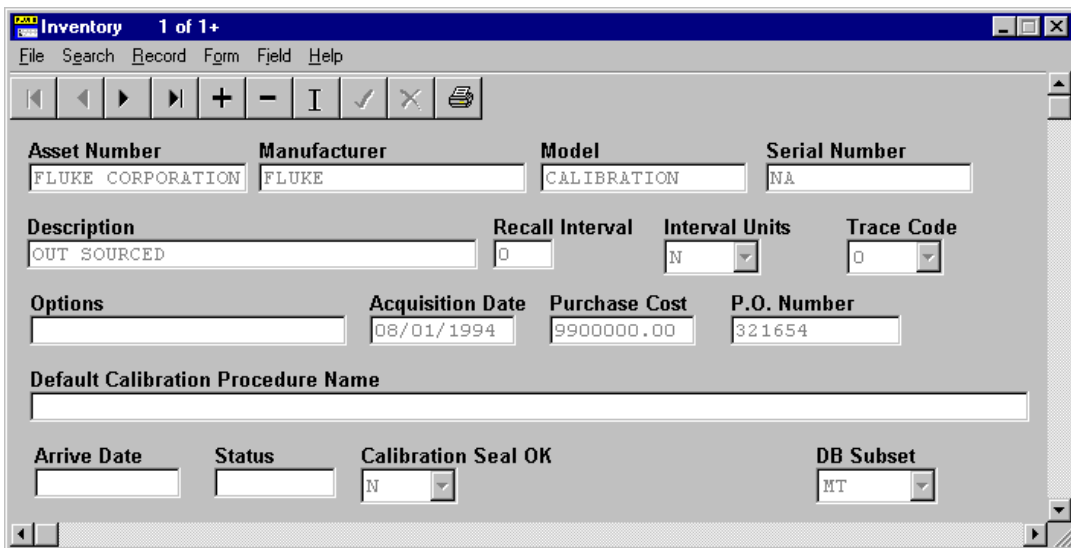
zt18s.bmp

6. Using the —> and <— buttons, browse the assets.

This simple exercise verifies that the Server and Client software are communicating with one another, and confirms the proper installation of the Fluke Metrology Software on your network. You should immediately change the password. For instructions, see the *Users Manual.*

In Case of Difficulty

Network software involves several different components, increasing the likelihood of problems. Although some tips are provided concerning network troubleshooting here, the primary source of assistance in network troubleshooting should be the documentation and technical support for your network communications software.

How to Test a TCP/IP Protocol Stack

If you are running under TCP/IP, several applications can be used to test the compatibility of the client computer and server computer TCP/IP protocol stack. The *ping* utility provided with many TCP/IP packages is useful for testing the IP network layer.

Execute the ping command to determine if your own protocol stack is operating correctly. For example, if your workstation name is pc-client, enter the following at the command line prompt:

ping pc-client

Wait to see if the packets are routed. If they are, the output appears similar to the following:

```
c:> ping pc-client
Pinging pc-client with 32 bytes of data:
Reply from [pc-client] 191.72.109.12: bytes=32 time<10ms TTL=32
Reply from [pc-client] 191.72.109.12: bytes=32 time<10ms TTL=32
Reply from [pc-client] 191.72.109.12: bytes=32 time<10ms TTL=32
. . .
```

If the ping command works, the computer is routing packets to itself, and the IP layer is setting up correctly. If the PC cannot ping itself, this problem must be corrected.

Ensure that you can ping the computer running the database server from the computer running the network requester before proceeding.

Compatible Network Protocols

By default, both the database server and the requester attempt to use all available network protocols. The server supports client requests on any active protocol, and the client searches for a server on all active protocols.

To restrict the Server or Requester to a network protocol, use -x command line option. The list is a comma-separated list of settings, and must be one of the following:

IPX	TCPIP
NetBIOS	DDE
NamedPipes	

Use only the listed communication links. Refer to the following illustration. For example:

-x NamedPipes,IPX

In this example, the Server is forced to use only Named Pipes and IPX communications.
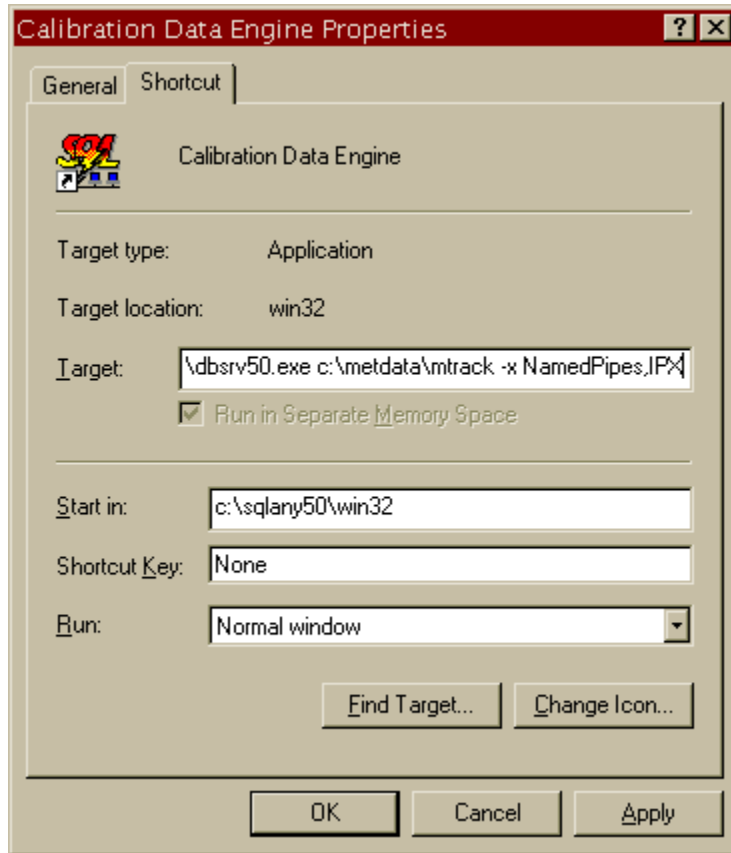
ip708s.bmp

For the TCP/IP setting, additional parameters may be provided in the following format:

   -x tcpip{PARM1=value1;PARM2=value2;. . .}

The parameters are taken from the following list:

- HOST specifies additional machines outside the immediate network to be searched to avoid starting a server with a duplicate name. For example:

   -x tcpip{HOST=sentinel;HOST=exchange}

This command looks on the machines "sentinel" and "exchange" to find database servers of the specified name, and will not start a duplicate-named server. IP is a synonym for HOST, and the period separated IP address may be used as an alternative to the hostname.

- BROADCAST (short form BCAST) specifies the special IP address used by your TCP/IP protocol implementation to identify a broadcast message, and has a default setting of 255.255.255.255, which is the most common broadcast IP address.

  Some TCP/IP implementations use instead a broadcast address consisting of the network IP address potion, with 255 as the remaining integers. For example, if the network portion of your IP address is 197, some TCP/IP implementations use 197.255.255.255 as the broadcast IP address. If your network portion is 192.023, the broadcast IP address would be 197.023.255.255.·

- TIMEOUT (short form TO) specifies the length of time, in seconds, to wait for a response when establishing TCP/IP communications. The default setting is five seconds, but you may wish to try longer times if you are having trouble establishing TCP/IP communications.

Use Current Drivers

Because old network adapter drivers are a common source of communication problems, be sure to have the latest version of the NDIS or ODI driver for the network adapter. Obtain the current network adapter drivers from the manufacturer or supplier of the card.

Network adapter manufacturers and suppliers make the latest versions of drivers for their cards available. Most card manufacturers have a BBS (bulletin board system) that you can phone and download the latest versions of NDIS and ODI drivers. You may also be able to obtain a current network adapter driver from the provider of the networking software.

Switch Off the Computer Between Attempts

Some network adapter boards do not reset cleanly when you reboot the computer. When you are troubleshooting, it is better to turn the computer off, wait a few seconds, and then turn it back on between attempts.

Verify the Data Link Layer is Working

If you can connect to the server computer in any way, then the data link layer is working, regardless of whether the connection is made using the same protocols you will be using for Watcom SQL Server at higher layers of the protocol stacks.

For example, you may want to try to connect to a disk drive on the computer running the database server from the computer running the network requester.

When the data link layer is verified to work, verify that other applications using the same network and transport layers as Watcom SQL Server are working.

See the README text file on the Application Notes disk and the Watcom Network Setup Manual Help File for any new information.

What To Do Next

Following the installation of Fluke Metrology software, there are a number of different tasks you may wish to complete next, depending on your own needs and inclinations.

For MET/CAL workstations, a separate manual entitled *Getting Started with MET/CAL* is supplied when you purchase a MET/CAL license. The Getting Started exercises require you to have the workstation completely set up, including the hardware and procedure installation, as described in the *Getting Started Guide*.

MET/CAL Workstations	You may wish to complete the hardware and procedure installation before beginning testing. Instructions for these tasks can be found in the *Getting Started Guide*.
	There, you will begin immediately to set up your calibration system and start working with the Run Time application.
Customization	When you have confirmed that the installation of the software has been accomplished with no errors, you may want to begin the configuration and customization of the system. A first step is to add users to the system. For details on this and other topics, see the *Fluke Metrology Software Users Guide*.

Chapter 8
Other Installation Procedures

Contents	Page

# *Introduction*

This chapter describes how to install Crystal Reports, the report-writing software that is shipped with MET/CAL. You will find more information about how to use Crystal reports in the *Users Guide*.

Information is also included to explain how to install and access the Fluke Calibration Software electronic manuals from the CD. Installing these on your system will allow all users to access to the manual material any they need.

Installing Crystal Reports

1. Insert the CD for Crystal 7.0 in your CD drive.

2. Browse to your CD drive.

3. Select the appropriate language folder off the CD. Open by double clicking the left mouse button.

4. Run setup.exe.

5. Follow the on-screen instructions as they guide you through the installation. Accept the default selections unless you have an overriding reason for not doing so.

6. At the following screen, you are asked to enter an installation key.

zt12s.bmp
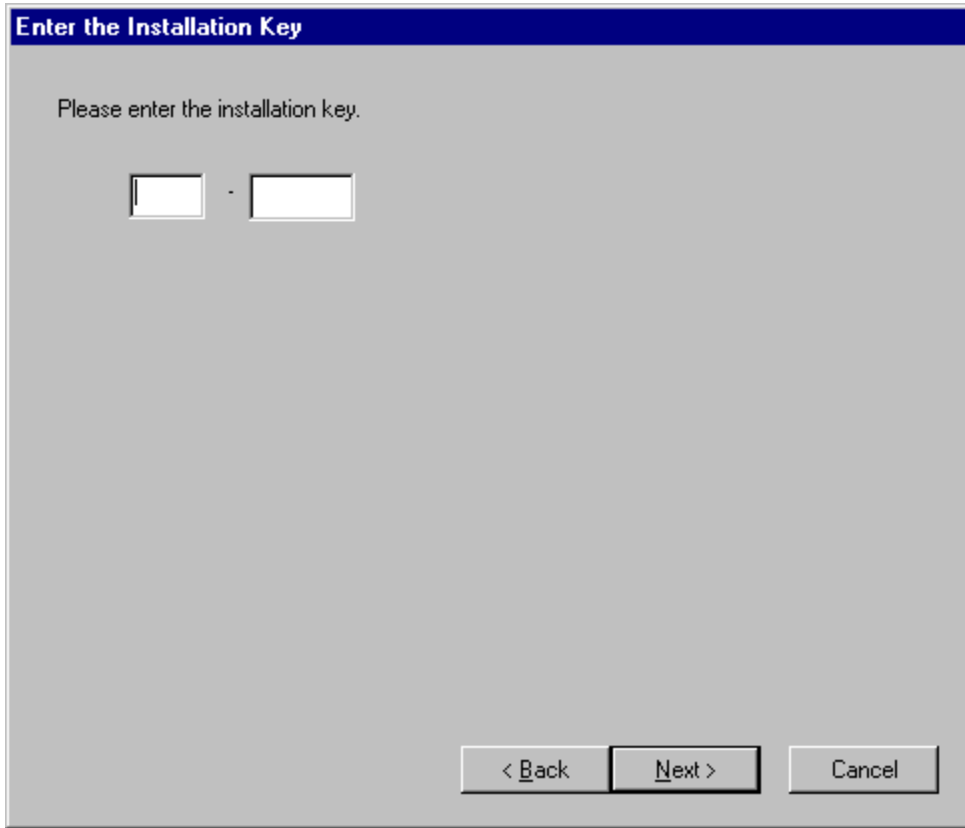
7. Select the appropriate key from the following list. This information is also found on the Crystal CD in the readme file.

Language	Installation Key
English	70009-0140411
French	70001-7370613
German	70001-2171329
Portuguese	70001-0103123
Spanish	70001-0070405

8. Continue through the screens until the installation program indicates you are finished. Again, accept the default selections unless you have an overriding reason for not doing so.

9. When the installation is complete, you will see the following screen:

zt15s.bmp

After this screen appears, you will need to restart your computer before the new Crystal settings will take effect.

Note

The first time you run Crystal Reports after the inital installation, you will be asked to register the product. Be sure to tell Seagate you purchased the software from Fluke Corporation bundled with Fluke Metrology Software.

Installing Acrobat Reader

In order to install and use the electronic manuals provided on your MET/CAL CD, you must have Acrobat Reader installed on your computer. If you already have Acrobat Reader installed, go on to the next section to find out about accessing MET/CAL electronic manuals. If you do not currently have an Acrobat Reader installed, do the following:

1. Insert your MET/CAL CD into your CD-ROM drive.

2. Place the cursor on the DOC folder and open by double-clicking the left mouse button.

3. Double-click Ar32e301.exe to run the Acrobat Reader setup.

4. Follow the on-screen install instructions.

5. Once Acrobat Reader is installed, go to the next section to find out about accessing MET/CAL manuals online.

Accessing MET/CAL Manuals Online

Your MET/CAL CD also contains MET/CAL manuals in electronic format. This gives you an easy way to provide all users access to the manuals. In order to view PDF files that contain the manuals, you must have Acrobat Reader installed on

your computer. If you do not have Acrobat Reader, go back to the previous section "Installing Acrobat Reader." Otherwise, follow these steps:

1. Insert your MET/CAL CD into your CD-ROM drive.

2. Place the cursor on the DOC folder and open by double-clicking the left mouse button.

3. Select the User manual, Installation Guide or Getting Started guide in PDF format. Double-clicking on one of these files activates the Acrobat Reader and opens the manual in a read-only format.

Appendices

Appendix	Title	Page

Appendix A
How to Access MET/SUPPORT™

About the MET/SUPPORT Program

Fluke Metrology Software is supported by a highly skilled and conscientious team of professionals who are available to answer questions, help solve unique problems, and assist in troubleshooting in the event you run into difficulties.

Telephone Support

Telephone support is available, but only to registered users of Fluke software. Be sure to register your software as soon as possible so you can make use of this service should the need arise.

Within the United States, toll free telephone support is available from 7:30 AM to 4:30 PM, Pacific Standard Time.

Phone: 1-800-825-7411

Mail, FAX, E-Mail and World Wide Web

You may also contact us by mail, E-Mail, FAX, or by visiting the Fluke World Wide Web site.

FLUKE Corporation	**Phone**	1-425-356-5870
PO Box 9090	**FAX**	1-425-356-5992
Everett, WA 98206-9090	**E-Mail**	metsupport@tc.fluke.com
Attention: MET/SUPPORT, M/S 275G	**WWW**	*http://www.fluke.com*

Before Calling Technical Support

You may be able to discover the answer for yourself., so take the following steps before calling for support:

- Check the manual
- Check the on-line help
- Check the Fluke World Wide Web site

Please Have the Following Information Available

If you do find it necessary to call for assistance, take a few moments to jot down some information. If this information is readily available, the support person can more quickly get to the exact details of the difficulty you are having, and will be able 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 to recreate the problem
- Contents of AUTOEXEC.BAT and CONFIG.SYS files if applicable
- Version of *Crystal Reports*

International Support

For more information on international MET/SUPPORT™, please contact the Fluke office nearest you or your local representative.

LOCATION	TELEPHONE	FAX
Fluke Canada	905-890-7600	905-890-6866
Fluke China	86-10-6 512-3435	86-10 6 516-3437
Fluke Europe Headquarters (NL)	31-40-2678200	31-40-2678222
Fluke France	33-1-48-96 6300	33-1-48-96 6350
Fluke Germany	49-561-95940	49-561-9594-119
Fluke Japan	81-3-3434-0181	81-3-3434-0170
Fluke Singapore	65-276-5161	65-276-5759
Fluke UK	44-923-240511	44-923-225067

Appendix B
Extracting a Disk Set from the CD

Introduction

All Fluke Metrology Software is provided on two CDs. This appendix describes how to create a set of floppy disks if you must install the software on a system that has no CD-ROM drive.

In general, the process is as follow:

1. Have ready 30 blank, formatted disks.

2. On a computer with a CD-ROM drive, load the CD into the drive. From Windows Explorer (Window 95, Windows 98 and Windows NT), browse to the CD-ROM drive, and start the program DISKIMAG.EXE. It is located in a folder named DISKIMAG.

3. When you are prompted, indicate the type of disk set you wish to create. The choices are as follows:

   METBASE CD:
   - ♦ Fluke Metrology Software - MET/BASE

   - ♦ Sybase for Windows NT

   - ♦ Sybase for Windows 95

   PROCEDURES CD:
   - ♦ MET/CAL Procedure Install

   - ♦ 5500/CAL Procedure Install

4. Run the disk imaging program once to extract the MET/BASE programs.

5. Run the disk imaging program a second time to extract the Sybase SQL Anywhere programs for your particular Operating System.

6. If you will be installing a MET/CAL or 5500/CAL license, run the DISKIMAG.EXE program on the **Calibrations Procedures for MET/CAL and 5500/CAL CD** to extract the MET/CAL or 5500/CAL Procedures. Note that the Calibration Procedures are located on their own CD, not the MET/BASE Data Engine CD.

7. As you extract each disk set, follow the on-screen prompts, loading disks and labeling them as directed by the program.

8. When you have created a complete disk set, return to Chapter 1 of this manual to begin the installation.

Note

The installation instructions beginning in Chapter 1 assume you are installing from the Compact Disk. If you are installing from the disk set you have created by following the instructions above, you must proceed a little differently.

For example, when you are directed to run SETUP from the SYBASE directory of the CD, you would instead insert the disk labeled SYBASE Disk Number 1.

Appendix C
5500A/EP Upgrade from MET/CAL

Introduction

This appendix provides special instructions for 5550A/EP. First perform the Version 6 upgrade as described in Chapter 4 or 5, depending on whether you are upgrading a standalone or networked system.

Following the software upgrade, 5500A/EP customers must upgrade to 5500A/EP V1.5.

To install 5500A/EP V1.6, perform the following steps:

1. Insert the MET/BASE CD in the drive.

2. Select **Start**, then **Run**.

3. Enter x:\5500ep\setup.exe, where x is the drive designator of your CD ROM drive.

4. Click **OK**.

5. After installing 5500A/EP version 1.6, you must re-characterize your 5500A before executing any of the 5500/EP procedures for the 2000, 34401A, 3478A, 8840A, or 8842A.

If you were running 5500A/EP, version 1.3 or earlier, the following files in your MET/CAL directory are no longer used. They may be deleted, although it is not necessary to do so:

```
clrerr.exe
cor_tmpl.awk
empty.cor
```

```
gawk.exe
initcor.bat
insert.exe
savecor.bat
```