

DMS Software

DMS COMP

DMS COMP/PROF

DMS 0100/INST

DMS 0702/PAT

Users Manual

November 2015

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Safety Information

⚠ Caution

Observe all operating instructions.

The operating instructions contain information and notes that are necessary for correct operation and use of the software. Read the operating instructions attentively and follow them in all points before the installation and use.

These operating instructions contain descriptions of the modules INST and PAT. On installation of only individual modules, not all functions or areas are available:

- E-Check™ is a protected term of the Landesinnungsverband Bayern.
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- .NET Framework® is a registered trade mark of the Microsoft® Corporation
- Windows® is a registered trademark of the Microsoft Corporation.
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System requirements

Processor	Pentium® 4 or higher with support of all customary operating systems
Operating system	Microsoft Windows® XP, Windows® 7, Windows® 8, Windows® 8.1, and Windows® 10
Memory	256 MB RAM
Hard drive memory	400 MB
Monitor	Super VGA (800 x 600).
Drive	CD-ROM
Input device	Mouse or compatible
Interface	RS-232 for data transmission USB by means of optional adapter cable, (USB - RS-232)

Notes

The manufacturer guarantees that the software works essentially in accordance with the printed accompanying material. In the current state of the art and fast further and new development of operating systems, it cannot be guaranteed that the software will run on all systems. In no event is Fluke liable towards a user for any, especially, chance or consequential damage which are attributable in any form to the use of the software.

Viruses: In the present state of the art it cannot be guaranteed 100% that the enclosed data medium is free of viruses. Despite a careful virus test with the latest anti-virus programs we cannot be liable for any damage caused by viruses.

Under certain unfavorable circumstances data can be lost or changed in every electronic memory. Fluke undertakes no liability for financial or other losses that have arisen due to loss of data, incorrect handling or other reasons.

Data backup: It is indispensable that your data is backed up at regular intervals. On failure of the computer system (for example, hard disk defect or other hardware error) data can be lost or damaged, see notes on data backup page 8.

Registration

You can benefit from current information and updates only by sending in the registration card. Return to us the postpaid, completely filled out registration card after installation of the software.

To register your product, visit <http://register.fluke.com>.

Contacting Fluke

To contact Fluke, call one of the following telephone numbers:

- Technical Support USA: 1-800-44-FLUKE (1-800-443-5853)
- Calibration/Repair USA: 1-888-99-FLUKE (1-888-993-5853)
- United Kingdom: +44 1603 256600
- Germany, Austria, Switzerland: +49 (0)69 / 2 22 22-0210
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31 402-675-200
- Japan: +81-3-6714-3144
- Singapore: +65-6799-5566
- Anywhere in the world: +1-425-446-5500

Or, visit Fluke's website at www.fluke.com.

To view, print, or download the latest manual supplement, visit <http://us.fluke.com/usen/support/manuals>.

Hotline

The Technical Hotline supports enquiries or application problems for our products. For enquiries regarding software, provide the name and the serial number of the software. To find the contact information for the Technical Hotline, go to:

? (Help) | Info

Introduction

Module PAT

Software for the administration and recording of the tests of machines and appliance testing according to code of practice (as well as EN 60204-1, DIN VDE 0701-0702, 0751).

Module INST

Software for the administration and recording of the tests of electrical installations according to 17th Edition, EN 60364-6, DIN VDE 0100/0105.

Kit Contents

- Software Fluke DMS on data medium (for example, CD-ROM)
- Quick Reference Guide
- Operating instructions in the PDF format on data medium
- IR-USB interface cable for use with 0100/INST
- USB cable for use with 0702/PAT

For Fluke DMS updates, no interface cables are supplied.

Software Installation

The required files are copied onto the hard disk when the software is installed.

The sub-folders DATA and BACKUP are also created in the stated installation folder. The database FDMSPRO1x.MDB is in the DATA sub-folder. The transmission protocols are also in the DATA folder. Use the **Settings I Directories** to set up the DATA folder. If this folder is not stated, the DATA sub-folder of the application is used. Data is backed up in the BACKUP sub-folder. All backup copies of the transmission protocols and the backup of the database are put in this folder. If no folder is entered, the application uses the BACKUP sub-folder.

Caution

Before the installation of the Fluke DMS software, restart Windows or end all running application programs (also programs working in the background, such as virus scanners).

The Access Run Time Module must be installed on your computer. Admissible versions are Access 2002 Run Time, Access 2003 Run Time, Access 2007 Run Time, and Access 2010 Run Time. The recommended version is Access 2010 Run Time. You can install Access 2010 Run Time when you install DMS.

Note

Do not use Access 2013 Run Time because the functionality of Access 2013 Run Time is limited with respect to earlier versions (database replication is not supported).

The .NET Framework 2.0 program must be installed on the computer. On Windows 8 or 8.1, .NET Framework 3.5 must be installed on the computer. For installation instructions, go to:

<https://msdn.microsoft.com/en-us/library/506443%28v=vs.110%29.aspx>

Administrator rights are necessary for DMS installation. In order for the non-admin user <username> to be able to run DMS, the default installation directory you must change:

C:\Fluke\Fluke DMS 1.x

to:

C:\Document and Settings

To install:

1. Insert data medium (for example, CD-ROM) in the corresponding drive of your computer.

The SETUP.EXE program starts automatically when the CD-ROM is inserted.

If the program does not start automatically, start Windows Explorer and select the CD drive. Select the SETUP.EXE file with Explorer. Double-click to start the installation.

Optionally, you can start the installation from the START menu, select RUN and then enter the start location (for example D:\SETUP.EXE). The SETUP program installs the Fluke DMS program on your hard disk.

2. At the installation prompt, select the installation language (English, German, French, or Dutch).

If you choose to install Access 2010 Run Time, the corresponding language version installs and the context menus and error messages show in this language.

If you choose to install Access 2010 Run Time, click **Close** when installation is complete. Depending on the Operating System, you may also be asked to restart the computer after the installation of Access 2010 Run Time is complete.

Software Removal

To remove the Fluke DMS software, use Windows **Settings | Control Panel | Add or Remove Programs**. If you are in doubt, contact your system administrator.

Note

During software removal, the file Init.MDB and the two subdirectories DATA and BACKUP (including the content) are not deleted from the root folder where the Fluke DMS software was installed.

Data backup

It is very important to back up your data at regular intervals. On failure of the computer system (for example, hard disk defect or other hardware error) data can be lost or damaged.

For data backup copy the following files on a corresponding external data medium (for example, tape drive, CD-ROM or network drive)

1. The DMS database (FDMSPRO1x.MDB) in the DATA folder
2. Your read in measurement data in the BACKUP folder

Temporary data backup

For temporary data backup on ending the program the DMS database can be saved for data backup in a backup file in the BACKUP sub-folder with the name FDMSPRO1x_BAK.MDB.

Select **Yes** to make a copy of the database, the database is saved at the current state as ...BACKUP \ FDMSPRO1x_BAK.MDB. Saving can take a longer time according to computer speed and size of the database.

If your data are destroyed or inadvertently deleted after the next program start, this copy can be used later for data restoration.

Restore the data

1. For data restoration, first rename the invalid or destroyed database FDMSPRO1x.MDB in the DATA folder as for example FDMSPRO1x.XXX.
2. Then copy the backup file... \ BACKUP \ FDMSPRO1x_BAK.MDB into the DATA folder.
3. Rename the FDMSPRO1x_BAK.MDB file as FDMSPRO1x.MDB and restart the program.

Program start

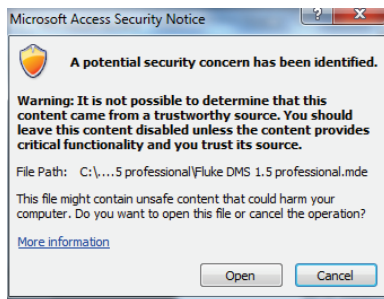
When you start the DMS program, DMS checks the presence of Access on your computer. If no version of Access is installed then you are informed that Access 2010 Run Time will be installed. If another version of Access other than 2010 is installed then you have the option to install Access 2010 Run Time. It is possible to run DMS also with versions other than Access 2010. Fluke recommends Access 2010 Run Time if Access 2013 is already installed.

Note

Do not use Access 2013 Run Time because the functionality of Access 2013 Run Time is limited with respect to earlier versions (database replication is not supported).

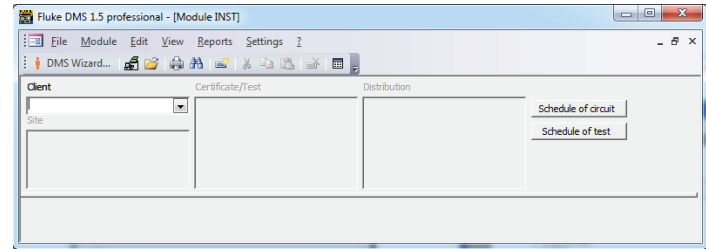
After installation, click on **Close**. Depending on the Operating System, you may be asked to restart the computer. DMS is able to run only with a 32-bit version of Access. If a 64-bit version of Access is installed on your computer, uninstall the 64-bit version first. The user is informed about it at the start of DMS.

Depending on the OS version and Access version, the following Security Warning may appear.

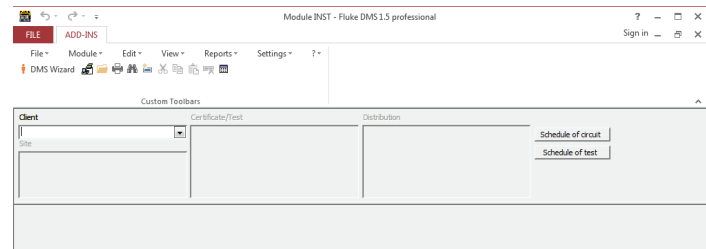


If this window appears, click **Open**.

If your Access version is earlier than 2013 then the Main DMS window looks like this:



If your Access version is 2013 (look under ADD-INS for DMS) then the Main DMS window looks like this:



At the first program start, you will be asked to:

- Set language (and country)
- Set interface
- Set company (name/logo)

Corresponding windows appear in each case one after the other. Confirm the entries corresponding to your requirements. You can also later change all settings for language, interface, company name and logo under the Settings menu.

Note

To print certificates used in the United Kingdom, DMS must be set to English. Certificates are country-specific and cannot be transferred later from different languages.

You are then in the main window of the application.












Program Operation: Main menu

The menu bar with the main menu is located at the upper border. You reach all functions of the program via this. The main menu has these functions

- **File**
- **Module**
- **Edit**
- **View**
- **Reports**
- **Settings**
- **?**

Explanation of the menu functions

Program functions are selected with buttons:

	Start DMS Wizard (see also under Help - DMS Wizard menu)
	Receive data from test instrument (see also under File menu)
	Read data from file (see also under File menu)
	Print (see also under Reports - Certificate print menu)
	Find test (see also under Edit menu)
	Add record (see also under Edit menu)
	Cut (see also under Edit menu)
	Copy (see also under Edit menu)
	Paste (see also under Edit menu)
	Delete data record (see also under Edit menu)
	Read in data (see also under View menu)

Display of the data records

List boxes with which data records for the existing clients are displayed are located below the menu bar.

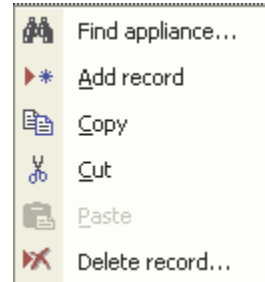
In each individual window a selection is made from a list with data records. For instance, if the appliances of the Service location should be displayed, then "Sample company", "Site B" and "Service" location are simply selected one after the other.

The view of the current data record is located below the window. You only have to click on the required window to change the view or select **Site**, **Location**, **Appliance** and **Test**. The current view can be seen from the header above the data records.

With a set screen resolution greater than 800x600 the size of the window can be changed by shifting the bar.

Right-click menu

Depending on the current window, you can open an additional function menu with a right-click. Some of the available functions are shown below.



Pop-up menu in the Site, Location, Appliance, Test data record windows."

With the Copy functions, data records and texts can be edited with Copy and then Paste.

Input correction

The software stores the texts from the input fields in the database. The current entries are accepted in the database as soon as the current input field is left.

If an input field is deleted inadvertently, the last entry can be undone with the Ctrl+Z keyboard shortcut.

Basic settings

Only the basic settings that are required for the following example are mentioned here. You will find the complete explanation of all settings in the main instructions on the CD (selectable with F1).

Set the language (and country)

Select the language (and country) from the menu **Settings | Language**. Language selection in this submenu affects all text that shows in menus, warnings, headings, captions, and error messages in DMS. This selection of language does not affect the text language in Access. These depend on the language version of Access installed on your computer. You can install the Access language version of your choice at any time from the installation CD (folder AccessRT). Other message windows and popups depend on the language version of the Operating System.

Note

To print certificates used in the United Kingdom, DMS must be set to English. Certificates are country-specific and cannot be transferred later from different languages.

Set the serial interface

Select **Settings | Serial Interface** and then select the serial interface used for the data transmission from the test instrument in the "COM" input window.

For instance, select **COM 1** and click **OK** to confirm.

Set the company address

1. Select **Settings | Company**.
2. Enter your company address in the address field.
3. As an option, enter the folder and the file name of your company logo in the **Company logo** field, the Fluke logo is the default. The company logo must be in bitmap (*.bmp) format. Both appear on the printed single test certificates.
4. Click **OK** to confirm.

As an option, enter further information like NICEIC enrollment No., branch No. phone and fax No. here.

The company logo is scaled on the printout to the size of approx. 24 X 24 mm. We recommend you to create your company logo in this size with a resolution of 150 to maximum 300 dpi.

Set the test instrument data

Here you can make further settings corresponding to the relevant test instrument used (only valid for module PAT):

- Test code display: ref. Fluke 6500, important for correctly displaying and printing the test code.
- Appliance number: ref. 9032, 9050 and 9092, important for correct use of the client and appliance number
- Site code: ref. Fluke 6500, important for correct use of the client and site code

Certificate settings

Place, date and signature file for the certificate printout can be determined here.

User settings

Users and authorizations can be determined here.

Test instrument settings

1. Select **View | Test instrument**.
2. Click the **New** button to create a new test instrument.
3. The "Type" field contains the type of test instrument. Select the corresponding type of the test instrument (for example, Fluke 1653 or Fluke 6500).
4. Change the data as required, enter the "Name", "Calibration date" and "Remark" fields correspondingly.
5. Click **OK** to confirm.

The communication parameters and the type of data transmission are set by the selection in the "Type" field.

Enter a new engineer

1. Select **View | Engineer**
2. Click the **New** button to create a new engineer.
3. Modify the data according as required, enter the "Name", "Description" and "Remark" fields correspondingly.
4. In the "Engineer code" field enter the engineer code (for example, the personnel number). Tests are assigned to certain engineers by this. Make sure that the length agrees with the setting of the user code.
5. Click **OK** to confirm.

The "Engineer code" field must absolutely be filled out for Fluke DMS PAT. The engineer code must be unequivocal, no duplicate numbers may occur, so that the automatic assignment of the tests to the individual engineers can be made.

The "Engineer code" field has no function in the Fluke DMS INST software. The personnel number, for instance, can be entered here.

View or change the organization

Select **View | Organizations**.

Here you can view or change the list of organizations. This data is used in the dropdown lists in the certificate if appropriate. When you select a company in the dropdown list all fields in the certificate that belongs to the company automatically update.

To add a new organization to the list, click the **New** button.

To remove a selected organization from the list, click the **Delete** button.

Note

The NICEIC number must be a 6-digit number, the NICEIC branch must be a 3- digit number.

Create a data record for client

1. Select the data records for the clients: select **View | Client** or click in the **Client** list box.
2. Create a new data record: select **Edit | Add record** command or right-click to use the pop-up menu. The system creates a new data record named "xxx".
3. Change the name of the client to "Client A" and now enter your data for the new data record.
4. Complete the remaining fields as required.

The "Contact, Company, Street, Post code and City" fields are printed on the test certificate and data of the client. Therefore these fields should be completed.

The client code must be unique, no duplicate numbers may occur. This field is required.

If duplicate numbers are present, you are notified by a message after the entry.

Example for Fluke DMS PAT

In this example it is shown how data records are created, measurement data are read from the test instrument, the database is assigned and certificates are printed. However, the Fluke DMS software is also able to create all data records independently and to assign the measurement data. However, information on client, site, location and appliance must be updated manually.

Now change to the module PAT, use the Module menu function for this.

Create a data record for site

1. Change to the Site window: select **View | Site** or click in the **Site** list box. The previously created client "Client A" must still be displayed in the "Client" window.
2. Create a new data record: select **Edit | Add record** or right-click to use the pop-up menu. A new site for the client "Client A" is created.
3. Change the name of the site to "Site 1" and now enter your data for the new data record.
4. Complete the remaining fields as required.

The address fields 1 to 4 are printed on the test certificate as data on the appliance. Therefore these fields should be completed.

Create a data record for location

1. Change to the Location window: select **View | Location** menu or click in the **Location** list box. The previously created data records for "Client A" and "Site 1" must still be displayed in the corresponding windows.
2. Create a new data record: select **Edit | Add record** command or right-click to use the pop-up menu. A new location for the site "Site 1" for the client "Client A" is created.
3. Change the name of the location to "location 1".
4. Enter comments in the "Remark" field as required.

The name of the location should be completed expediently, since this is printed on the test certificate as data on the appliance.

Create a data record for appliance

1. Change to the Appliance window: select **View | Appliance** or click in the **Appliance** list box. The previously created data records for "Client A", "Site 1" and "Location 1" must still be displayed in the corresponding windows.
2. Create a new data record: select **Edit | Add record** or right-click to use the pop-up menu. A new UUt for the location "Location 1" for the site "Site 1" for the client "Client A" is created.
3. Change the appliance number to "123".
4. Change the name to "Drilling machine".
5. Do not change "Test interval" and "intermediate test interval". These are set to 12 months and correspond to the selected type.

6. "Continue test" is set to the current date, "Continue intermediate test" remains empty. Leave these values unchanged.

The Test code field indicates the test code of the type.

7. Enter comments in the "Remark" field as required.
8. Complete the Type name, Device type, Year of manufacture, Current, Voltage and Power fields as required.

For the automatic assignment the appliance number within a client must be unequivocal, no duplicate numbers may occur. This field must absolutely be completed.

If duplicate appliance numbers exist within a client, you are informed about this directly by a corresponding message.

The "appliance number, Name, Type, Serial No., Manufacturer, test code, remark, Type name, Device type, Year of manufacture, Current, Voltage and Power" fields are printed on the test certificates.

Execute tests

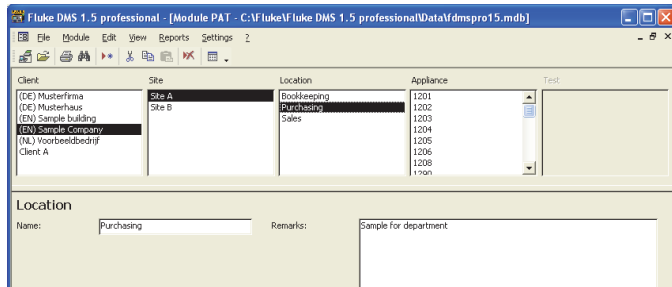
The due appliances are firstly displayed in a list and selected. The list is then printed out. The tests must be performed and the measurements transferred back into the Fluke DMS database. Test certificates are then printed.

Prepare the test instrument

Delete the measurement memory on your test instrument.

Create a list with due appliances

1. Select client, site and location in the Fluke DMS software (Sample company, Site A, Purchasing) corresponding to the following picture.



Location window

2. Select **Reports | Due appliances** function and change to the List of appliances window to the Location register
3. Mark the "Current location" field. Now only due appliances from the currently selected location are sought.
4. Click **Continue** to confirm. The list of the due appliances is shown for "Sample company" client, "Site A" site and "Purchasing" location.

5. Select **Print with barcode**.
6. To print the list with the due appliances: click **Print report...**
The entire list of due appliances is printed out.

Transfer the measurements to Fluke DMS

After the tests are performed, the measurements are transferred from the test instrument to the computer.

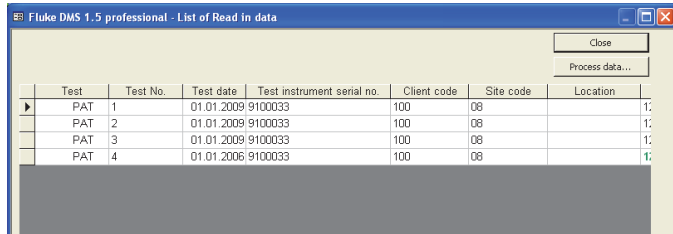
Optionally, for this example, you can load the measurement results of the tests directly from a file without having to do the measurements.

For this purpose select **File | Read data from file**, and load the measurement data from the file DEMO_1.ESCAP.

1. Select **File | Receive data from test instrument**.
2. Select the tester from the **Type** drop down list.
3. Click **Continue**.
4. Start the data transfer at the test instrument. You can follow the transfer of the individual measurements.
5. Wait until all data are transferred. The window is closed at the end of the transfer.

Edit the read in data

During the transfer all read in measurements are stored additionally in a backup file (with the file extension *.ESCAP) in the BACKUP sub-folder. A list with the read in measurements appears after the data transfer.



Test	Test No.	Test date	Test instrument serial no.	Client code	Site code	Location	
PAT	1	01.01.2009	9100033	100	08		1:
PAT	2	01.01.2009	9100033	100	08		1:
PAT	3	01.01.2009	9100033	100	08		1:
PAT	4	01.01.2006	9100033	100	08		1:

Read in data window

The data are taken over in the database as shown in the "Read in data" window. For instance, if an engineer code, client code, test instrument, etc. is not yet available, the missing data record is marked light green and is created automatically. Missing appliances are created in this case with the "Basic type" appliance type. The created appliance type can be changed subsequently. The last test can also be adapted subsequently to the changed appliance type.

The data can be partially corrected and supplemented in this list. Editing possibilities are:

- Delete tests
- Enter/change test No.
- Change test date
- Change/assign test instrument serial number
- Change/assign client code

- Change/assign site
- Change/assign location
- Change/assign appliance number
- Change or assign engineer code
- Enter/change remarks on the test
- Create new appliances
- Change/enter description of the appliance

Change/enter test code/appliance type for the appliance

To change a field, click on the field concerned and select the wanted entry from the filed list.

In the example, click on a **Client code** field with the entry 0. Click ▼ to get a list of all available client codes.

After the changes are made click the **Process data** button and the read in data are accepted in the Fluke DMS database.

Missing engineers, test instruments, clients, sites, locations and appliances are created in this process.

If a site or a location is not stated, then the site or a location is created for the associated client with the name "???".

Automatic creation of tests

The next figure is an example of a test that was created automatically from the read in data on processing data. The individual test steps are marked automatically as "Passed" or "Failed" The "Passed" field (next to the test date) is marked automatically if all test steps have been passed. In addition the next test date is automatically calculated.

The screenshot shows the 'Test window' in the Fluke DMS 1.5 professional software. The window title is 'Fluke DMS 1.5 professional - [Module PAT - C:\Fluke\Fluke DMS 1.5 professional\Data\dmspro15.mdb]'. The interface is divided into several sections:

- Client Table:** A table with columns 'Client', 'Site', 'Location', 'Appliance', and 'Test'. The 'Test' column shows the date '01.01.2009'.
- Appliance Form:** A form with various input fields:
 - Appliance number: 1201
 - Description: Computer, Desktop
 - Type: 0701/0702
 - Test code (6500): 149
 - Test interval: 12 Month(s)
 - Intermed. test interval: 0 Month(s)
 - next test: 01.01.2010
 - State: In use
 - Weight, Length, Width, Height, Range, and Remarks fields are also present.

Test window

If required the order number and the reason for the test can be stated for every test.

Print test reports

Test reports are then printed. Fluke DMS offer the possibility of printing out total or single test certificates.

Print a single test certificate

1. Have the data record for the test on 01.01.2009 of appliance number 1201 displayed.

The screenshot shows the 'Print test certificate' window in the Fluke DMS 1.5 professional software. The window title is 'Fluke DMS 1.5 professional - [Module PAT - C:\Fluke\Fluke DMS 1.5 professional\Data\dmspro15.mdb]'. The interface is divided into several sections:


- Client Table:** A table with columns 'Client', 'Site', 'Location', 'Appliance', and 'Test'. The 'Test' column shows the date '01.01.2009'.
- Test 0701/0702 Form:** A form with various input fields:
 - Test date: 01.01.2009
 - Passed:
 - Order No.: [empty]
 - Engineer: Anybody, John
 - Test No.: 1
 - Intermediate test:
 - Reason of test: cxx
 - Test instrument: Fluke 6500
 - Test step: Add, Delete
 - Remarks: Demo
- Table:** A table with columns 'Remarks', 'Test step', 'Limit', 'Measurement', and 'Paramet'. The table contains several rows of test data:

Remarks	Test step	Limit	Measurement	Paramet
	Visual test of mains cable and appliance			
	Earth bond resistance ± 200 mA [0,3 Ohm], up to 5 m cable max 0.3 Ohm		0.12	
	Cable test L-N			
	Cable test L-N			
	Differential current [3,5 mA]	max 3,5 mA	0.84	
	Touch leakage current [0,5 mA]	max 0,5 mA	0.12	
	Load power [3,7 kVA] (=230 V*16 A)	max 3,7 kVA	0.125	
	Laststrom	max 16 A	0.6	

2. Select **Reports | Print test certificate**.
3. Select **current test**. This prints only the test that is selected.
4. Click **Continue** and the list of test reports for a test appears.

- Click **Print report** to print a single certificate for the displayed appliances.

To view the individual reports, click the **Show report** button.

Certificate for Appliance Testing (acc. DIN VDE 0701-0702)				
Customer		Contractor		
Sample customer 12 Oak Park 12345 Any Place		Fluke UK Ltd 52 Hurricane Way Norwich, Norfolk NR6 6JB		
				
Specification for appliance				
Appliance name:	Desktop computer			
Appliance no.:	1201			
Type:	Basis type			
Manufacturer:	None			
Site:	Sample customer Location A			
Location:	Purchasing			
Specification for test				
Test date:	01.01.2009	Next test:	01.01.2010	
Inspector:	Anybody, John	Serial no.:	9100033	
Test instrument:	Fluke 6500			
Remark:	Demo			
Remark	Test step	Limit	Value	Passed
	Visual test of mains cable and appliance			yes
	Earth bond resistance ± 200 mA (0,3 Ohm), up to 5 m cable	Max: 0.3 Ohm	0.12 Ohm	yes
	Cable test L-N			yes
	Differential current [3,5 mA]	Max: 3.5 mA	0.04 mA	yes
	Touch leakage current [0,5 mA]	Max: 0.5 mA	0.12 mA	yes
	Load power [3,7 kVA], (=230 V*16 A)	Max: 3.7 kVA	0.125 kVA	yes
	Laststrom	Max: 16 A	0.6 A	yes
Test has been made correctly. <small>Test record</small>				

Certificate for appliance testing sample printout

Print a test report with test steps

- Have the data record for the test on 01.01.2009 of appliance number 1201 displayed.
- Select **Reports | Print test certificate**.
- Select **current test**. This prints only the test that is selected.
- In “Output” select **Detailed**.
- Click **Continue** and the list of test reports for a test appears.
- Click **Print report** to print a single certificate for the displayed appliances. The printout appears.

Example for Fluke DMS INST

In this example it is shown how data records are created, measurement data are read from the test instrument, the database is assigned and certificates are printed. However, the Fluke DMS software is also able to create data records automatically and to assign the measurement data. However, information on client, site, certificate/test, distribution and current circuit must be updated manually.

Now change to the module INST, use the Module menu function for this.

Fluke DMS Wizard

Use the Fluke DMS Wizard to assist you with data downloads, assignment of measurement data and to print of certificates.

The setup of the data structure for the assignment of measurement data can take place during data input. Fluke recommends that you create the client and site before you start the Wizard.

Create a data record for client

1. Select the data records for the client: select **View | Client** menu or click in the **Client** list box.
2. Create a new data record: use the **Edit | Add record** or right-click to use the pop-up menu. A new data record named "xxx" is created.
3. Change the name of the client to "Client A" and now enter your data for the new data record.
4. Complete the remaining fields as required.

The fields "Contact, Company, Street, Post code and City" are printed on the test report and data of the client. Therefore you should complete these fields. The client code must be unique, no duplicate numbers may occur. This field must absolutely be completed. If a number exists twice you will get a message during data entry.

Create data record for site

You can create different templates for sites with the corresponding structure of distributions and current circuits (for example, single family house, apartment block, building current distribution). These can be copied and changed as required.

1. Select **View | Site** or click in the **Site** list box to open the Site window. The previously created client "Client A" must still be displayed in the "Client" window.
2. Select **Edit | Add record** or right-click to use the pop-up menu to add the record. The system creates a new site for the client "Client A".
3. Change the name of the site to "Site 1" and enter the data for the new record.
4. Complete the remaining fields as required.

The code for the site is allocated automatically when it is created, leave this unchanged. However, this can be changed if needed. The site code is not used in Fluke 1653.

Download data via Wizard

Start the Wizard via the **DMS Wizard** button or **Help - DMS Wizard** menu.

1. Click **DOWNLOAD DATA** (top button) to receive data from a test instrument and assign to a certificate
2. Select the type of test instrument and the serial interface.

3. Click **Continue**, the data communication shows.

After data transmission, the Assign the measurement to window appears.

Now you can select the assignment of the measurement data to the existing data records (for client and site) or create new data records. You have the following possibilities:

1. If you want to create LATER a new client and a new site, click **Continue**.
2. Select a client to assign data to an existing client and select a site to assign data to an existing site (for example, client A, site 1). RECOMMENDED version.

Now select a certificate/test or create a NEW certificate using the button "NEW" corresponding to line "Test".

3. If you want to create a new client or a new site, or a new certificate immediately, click on the particular "New" button next to the selection field.

Note

A new data record "xxx" will be created in the main window in the background. To change this data record, select the main window and enter the desired data. Afterwards, change back to the Assign the measurement... window.

Edit test results

To enter additional information for Continuity and Insulation test results click **Edit results** to open an edit window. Here specific information about each test result can be entered, for example, insulation measurement at Phase-Phase (PP), Phase - Neutral (PN), Phase - Earth (PE), Neutral - Earth (NE).

Afterwards, click **Process data**, to assign the transmitted data to the DMS data base. The measurement values are now been assigned to Client A and Site A. New data records for tests/certificates, distribution and current circuits (marked in green) will be automatically created.

4. Click **Next**. The **Read in data** window appears.

Print certificate via Wizard

Start the Wizard via the **DMS Wizard** button or **Help - DMS Wizard** menu.

1. Click **PRINT CERTIFICATE** (bottom button) to print and preview certificates.
2. Select client, site and test (for example, Client A, Site 1 and test 01.01.2009).
3. Click **Continue**.
4. Select which page range to report.
5. To preview the printout, select **Preview** and then click **Go** to preview the printout.

Note

The printout is "printer friendly", so only the information fields are printed into the pre-printed forms.

6. To print certificates, select **Print** and then click **Go**.

Manual data setup, download and assign measurement data

Create a data record for certificate

1. Select **View | Certificate** or click in the **Certificate / Test** list box to go to the Certificate / Test window. The previously created data records for "Client A" and "Site 1" must still be displayed in the corresponding windows.

2. Select **Edit | Add record** menu or right-click to use the pop-up menu to create a new record. A selection window for IET and NICEIC certificate appears.
3. Select the appropriate certificate and click **OK** to confirm (for example, NICEIC- Electrical Installation).

The system creates a new certificate for the site "Site 1" for the client "Client A".

Note

All marking fields and text entries that are done on the selected pages of the certificates on the screen are printed out on corresponding pages of the selected certificate.

In the Select certificates window, you can select 4 types of IET certificates and 5 types of NICEIC certificates.

Create a data record for distribution

Use this example to manually create distributions and current circuits.

The structure of a site can be entered before a test by the possibility of manual entry of distributions and current circuits. It is possible to print out a current circuit list which represents for the engineer an aid for entering the distribution and current circuit code when saving the measurements.

1. Different templates for sites with the corresponding structure of distributions and current circuits (for example, single family house, apartment block, building current distribution) can be created. These can be copied and changed as required.
2. Select **View | Distribution** or click in the **Distribution** list box to go to the Distribution window. The previously created data records for "Client A", "Site 1" and "NICEIC-Electrical Installation" must still be displayed in the corresponding windows.
3. Select **Edit | Add record** or right-click to use the pop-up menu to create a new record. A new distribution "xxx" for the "NICEIC-Electrical Installation" in the "Site 1" at the client "Client A" is created.

The code for the distribution is allocated automatically when it is created, leave this unchanged. However, this can be changed if needed. The code must be a number between 1 and 9999.

The purpose of the code for the distribution is that measurements in the test instrument can be stored so that they can be assigned automatically to the associated distributions and current circuits on reading. The code for the distribution is the number that is entered for the distribution on storing at the test instrument and under which the measurements are stored in the test instrument.

In the installation tester Fluke 1653 (or 1653 B) the data record field is used as distribution code.

4. Enter as designation for the distribution "Main distribution".

For the automatic assignment the measurements to the distributions and current circuits the distribution code within a test must be unequivocal, no duplicate numbers may occur. The distribution code is allocated automatically when it is created, leave this field unchanged. However, the code can be changed if needed.

If duplicate distribution codes exist within a client, you are informed about this directly by a corresponding message. These must then be changed in the distribution window correspondingly.

Note

No distributions can be set-up for UK NICEIC minor work certificates.

Create data records for current circuits

Use this example to manually create distributions and current circuits.

1. Click **Schedule of circuit** to go to the Schedule of circuit window.
2. Click the **Add** button to create a new record. A window Setup options appears. You can enter the number of circuits to be created, also the assignment of the phase can be selected, click **OK** to confirm.

Three new current circuits "001" to "003" for the distribution "Main distribution" for the "NICEIC-Electrical Installation" in the "Site 1" at the client "Client A" are created.

The code for the current circuit is allocated automatically when it is created, leave this unchanged. However, this can be changed if needed. The code must be a three-digit number between 1 and 99.

The purpose of the code for the current circuit is that measurements in the test instrument can be stored so that they can be assigned automatically to the associated distributions and current circuits on reading. The code for the current circuit is the number that is entered for the current circuit on storing at the test instrument and under which the measurements are stored in the test instrument.

In the installation tester Fluke 1653 (or 1653 B) the data subset field is used as code for the current circuit.

The Schedule of test window will show later the test results for the selected distribution. To change click **Schedule of test**.

Prepare the test instrument

Delete the measurement memory on your test instrument.

In the Fluke Installation tester 1653, you must enter the distribution code under 'a' and enter the current circuit code under 'b' so that Fluke DMS makes the assignment correctly.

Transfer the measurements into Fluke DMS INST

After the tests are completed the measurements are transferred from the test instrument to the computer.

Optionally for this example, you can load the measurement results of the tests directly from a file without doing the measurements. Select **File | Read data from file**, and load the measurement data from the file "DEMO_2.SER". This example uses measurements of a single family house.

1. Select **File | Receive data from test instrument**.
2. Select from the list the test instrument type of which you want to read measurements, for example, Fluke installation tester 1653 or Fluke 1653 B.

If a test instrument is not yet available in the instrument list, it is created automatically on data transfer. The data can then be supplemented from the **View | Test instrument** menu.

If no serial number is transferred, the Serial No. field appears for one-time entry of the number. If several test instruments without serial number of the same type are present, select the relevant serial number from the list before the data transfer.

3. Click **Continue**.
4. Wait until all data are transferred. The window closes automatically after the end of the last measurement.

Assign the measurements to client, site and test

After the measurement results are read from a measuring instrument or from a file, the transmitted measurements must be assigned to clients, sites and test.

⚠ Caution

Data records for clients and sites must always be created manually so that the measured data can be assigned.

A window appears for the assignment for the read in measurements.

1. Select the client, the site and the certificate/test to which the read in measurements should be assigned. Select Client A, Site 1 and the test "01.01.2009 NICEIC- Electrical Installation" and confirm with "Continue".

The automatic assignment of the measurement result to the distributions and current circuits can take place only if the distribution and current circuit codes were entered correctly and correspond to the current circuit list.

Assign the measurements to distribution and current circuits

A list with the read in measurements now appears.

1. Click **Process data** and the data is accepted in the Fluke DMS database.
2. Click **Close**, to close the window.
3. Check the assignment of the measurements to the distribution and the individual current circuits in the database, to do this select Client A, Site 1, the test "01.01.2009 NICEIC-Electrical Installation" and "Main distribution".

Manually print test certificates

You can manually print the test certificates

1. Select client, site and certificate for reporting, select Client A, Site 1 and the test "01.01.2009 NICEIC-Electrical Installation".
2. Select **Reports |Certificate print**.
3. Select which page range to report.
4. To preview the printout, select **Preview** and then click **Go** to preview the printout.

Note

The printout is "printer friendly", so only the information fields are printed into the pre-printed forms.

5. To print certificates, select **Print** and then click **Go**.

Menu Functions for Module PAT

File Menu Options

File | Receive data from test instrument

To read in data from a test instrument:

1. Select **File | Receive data from test instruments**.
2. Select the tester from the **Type** drop down list.
3. Click **Continue**.

It is absolutely necessary that you wait until all the data is transmitted. The window closes automatically after the last value has been transmitted.

- The data transfer from the measuring instrument can take a few minutes if there are a large number of values to transfer.
- Once the data transfer is complete, the data is automatically checked. If an error is detected in the records, the system shows an error message.

Once the data is transferred successfully, the List of read in data window appears. The List of read in data window shows the data. You can edit the data before final processing. In addition, you can enter details for the tests such as "Client code", "Site", "Location" and "Appliance No.".

4. After you edit the data, click **Process data** to save the data in the database. Alternatively you can also close the window and save the data in the database later on.

To call the List of read in data window directly, select **View| Read in data**.

Fluke recommends that you complete and save the data immediately. Only then is the processing of data complete.

For more detailed information on working with Read in data, refer to the section *Read in data menu*.

Generally, all the transmitted readings are also stored in a backup file (with the file extension *.ESCAP) in the BACKUP subdirectory. The default file name is the date and a serial number. The format is: YYMMDD_n with YY = year, MM = month, DD = day and n = serial number.

For each date (day), the serial number starts at 1. For each further file received from the test instrument, the number is incremented by 1.

File | Read data from file

Use **File | Read data from file** to load readings saved in a file (for example, in the format *.escap or *.flk) into the database.

1. Select **File | Read data from file**.

2. Select a file with readings and click **Open**.

The List of read in data window shows the data. You can edit the data before final processing. In addition, you can enter details for the tests such as "Client code", "Site", "Location" and "Appliance No.".

3. After you have edited the data, click **Process data** to save the data in the database. Alternatively you can also close the window and save the data in the database later on.

To call the List of read in data window directly, select **View| Read in data**.

Generally, the data is processed directly after it has been read in from the test instrument. The data should be read in from the file in exceptional cases only. If the data received was deleted before it could be saved, the data can be loaded into the database from the backup file that is automatically created.

File | Database copy (replication)

Use **File | Database copy (replication)** to create a copy of the topical database.

Note

Access 2013 (Run Time) does not support replication.

Important notes for creating a replication

An database copy (replication of FDMSPRO1x.MDB) that can be aligned, can be created only from the master database FDMSPRO1x.MDB (original database) that was installed from the CD.

Use a database copy to allow external employees to use the software with notebooks when they are travelling. The database copies can then be aligned again with the "original database".

- Do not delete records in the database copies. If one or multiple records are deleted in the database copy, the deleted data are also transmitted when aligning the copy with the original database, and these records will also be deleted in the original database.
- The database synchronization can be done in either direction, for example, if a specific data record is edited in both the databases, the modification made to the original database (master database) will always be taken as the basis of the synchronization.

- You can create a replicate from the master database only 10 times. No more than 10 replicates are allowed.
 - Never rename a replicate's filename or the filename of the master database.
 - Before synchronizing the replicates with the master the master and replicate databases must be in the same folder where they have been created.
 - Never make a copy of a replicate database to get another replicate.
 - Synchronization must start within 60 days.
 - Do not delete, move or rename records in the replicates of the master. These operations should only be done in the master database. Then synchronize the master with the replicates to make the changes visible in the replicates.
 - Do not forget that all changes in one database concern all databases, but changes are not visible before synchronization.
 - The changes in the master are treated with higher priority than the changes in the replicates.
 - Changes in replicates have the same priority. So it is not sure which changing wins after synchronization.
 - Never mix up different generations of the databases. After synchronization, the generation is incremented. Backups of older generation cannot be synchronized with databases of newer generations.
1. Select **File | Database copy (replication) | Create** to show the Create database copy window.
 2. Select a file name and click **Save**.
As soon as the copy has been saved, system prompts you with information about the database copy.
 3. Click **OK**.
To use the database copy on a second computer, the new database name and the directory must be set on this computer. Use the **Settings | Directories** menu.
 4. Select **File | Database copy (replication) | synchronize** to start the synchronization.
 5. Select the **external database** and click **Open**.
 6. Be sure to notice the system prompt on deleted data. Data in the synchronized databases will be deleted.
 7. The system prompts you when the database copy is successful.

File | Import data

You can import readings from earlier version of the DMS program "es control", "Expert-Manager", "PowerCert II" and load them into the database. When data is imported, all the clients, sites, tests, distributions, current circuits and values from the "Expert-Manager" software are copied to the Fluke DMS. The company name, selection list of inspectors, data logger readings and supplementary measurements are NOT copied to the Fluke DMS.

1. Close the program, from which the data are to be imported.
2. Select **File | Import data**, the Import data window appears.
3. In the "Source" field, enter the directory and the database file of the "es control" software, from which the data are to be imported. Optionally, click the **Search** button to select a directory and database file.
4. Click **Start data transfer** to start the data import.

Importing from Expert-Manager or PowerCert II

1. Select **File | Import data**, the Import window appears.
2. In the "Data source" field, enter the directory and the database file of the "Expert-Manager" software, from which the data are to be imported. Alternatively, you can click the **Change** field to select a directory and database file.
3. Click **Import** to start the data import.

The data import is started. While the data are being imported, the number of tests and readings imported is shown.

The data import may take some time.

Do not abort the ongoing data import in any way. Otherwise the database of Fluke DMS may be damaged. If you do abort the import, the records that have been imported partially must be deleted from the Fluke DMS database manually and then the software must be restarted.

After the data import has been completed successfully, a corresponding message will be displayed.

Do the data import only once. If you do the data import multiple times, the same tests are created again.

In the "Line/Cable", "Fuse" and "RCD" selection lists, only those types will be created that are required for printing the certificates.

File | Exit (and recovery of a damaged database)

Use **File | Exit** to close the database and exit the program. In this case, the database can be compressed.

The compression process may take some time depending on the size of the database.

For temporary data backup, the DMS database can be backed up in a backup file `FDMSPRO1x_BAK.MDB` in the `BACKUP` subdirectory when the program is exited.

The system prompts you to save a backup file.

1. Click **Yes** to create a backup copy of the database and compress the database. The topical status of the database is saved as `...BACKUP\FDMSPRO1x_BAK.MDB`. The backup process can take some time depending on the computer speed and size of the database.

If your data are corrupted or inadvertently deleted after the next program start, this backup copy can be used later on to restore the data.

2. For data recovery, rename the invalid or corrupted database `FDMSPRO1x` in the `DATA` directory, for example, to `FDMSPRO1x.XXX`.
3. Copy the backup file `...\BACKUP\FDMSPRO1x_BAK.MDB` into the `DATA` directory.
4. Rename the file `FDMSPRO1x_BAK.MDB` to `FDMSPRO1x.MDB` and restart the program.

Module Menu

If you have installed the additional DMS modules "INST" or "PAT", you can switch to these modules via the **Module** menu. Only the appliances and tests of the selected module are shown. If the modules are not extant, the corresponding menu items are identified in gray.

Edit Menu Options

This main menu combines commands that can be applied to the records for clients, sites, locations, appliances and tests.

Depending on the action, not all menu functions are available at all times. For example, you cannot paste a data record before it has been cut or copied.

Edit | Find appliance

Use **Edit |Find appliance** to find and show an appliance. On the various tabs you can search according to these criteria:

- In the "Sort order" area you can select different criteria for sorting the list of results.
 - The search fields also support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*).
 - If you do not enter a search criterion, all the tests are shown in a table.
1. Click the **Continue** button to display a list of the appliances to be found.

These buttons are available:

- **Export list** – export the current list in various formats
- **Print report** – print the list
- **Save report** – save the report to a snapshot file
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask
- **Close** – exit the window.

Edit | Add record

Use **Edit | Add record** to create a new data record for the selected database field (valid for records of "Client", "Site", "Location", "Appliance" and "Test").

1. Select **View** or click the database field to select the database.
2. Select **Edit | Add record** or right-click and use the pop-up menu to create a new record.

The default entry for the name of a new data record for "Client", "Site", Location" and "Appliance" is "xxx".

In addition to the description "xxx", a new appliance is assigned the next free appliance number that can be assigned to the client. The basic type is used as the "Type". The topical system date is used as the next test date.

A new test is created with the topical system date as the test date. The test steps created depend on the appliance type of the appliance.

The default entry for a new engineer is "xxx" and the next free engineer code.

The default entry for a new appliance type in the active module is "xxx" without any test steps. In this case, the test code is calculated from the test steps.

The default entry for a new test step is the description "xxx".

3. Change the name of the data record and enter the data for the new data record. Complete the remaining fields as required.

The data are saved to the database as soon as you exit the current input window or select a different data record.

Edit | Cut (Move)

Use **Edit | Cut** to cut an existing data record out of the selected database field. The selected data record can be moved (cut and pasted) within the DMS database using **Edit | Paste**.

1. Select **View** or click the database field to select the database.
2. Select **Edit | Cut** or right-click to use the pop-up menu. The record is selected and can be moved within the database using the cut-and-paste method.

Clients cannot be cut since they cannot be assigned to a higher database level. Either this function cannot be selected at all for a client, or it will be ignored.

Edit | Copy

Use **Edit | Copy**, to copy an existing data record for the selected database field including all the entries (valid for records of "Client", "Site", "Location" and "Appliance").

Tests cannot be copied. It is only possible to create new tests.

1. Select **View** or click the database field to select the database.
2. Select the **Edit | Copy** or right-click to use the pop-up menu. The selected data record is copied.

Edit | Paste

Use **Edit | Paste** to insert a copied data record or to assign a previously cut data record to another data record within the FLUKE DMS database. To paste a data record, you must select a database field on the same database level.

1. Select **View** or click the database field to select the database.
2. Select **Edit | Paste** or right-click to use the pop-up menu and paste the selected data record into the selected test (the record is moved).

The appliance number must be unique within a client. Duplicate numbers are not permitted.

The default number for a copied appliance is the next free number of the client, for whom the appliance is created.

The data is saved to the database as soon as you exit the current input window or select a different data record.

Note

Tests cannot be copied since each appliance must always be tested verifiably, for example, a new test must be created in each case.

Edit | Delete data record

Use **Edit | Delete** to delete the selected data record.

1. Select **View** or click the database field to select the database.
2. Select **Edit | Delete data record** or right-click to use the pop-up menu to delete the record.
3. Click **OK** to confirm the security prompt.

When you delete clients, sites or locations, an additional security prompt shows to specify the number of appliances. Click **OK** to continue.

If many modifications are made to the database (deleting, duplicating), exit the software to compress the database.

View Menu Options

Use the menu functions in this section to switch to the different database fields. To select a data record, you must select an entry in the database field. To display the records directly, click the corresponding list field or the button below the list fields.

Unless otherwise specified, all the database fields can accommodate a maximum 50 characters. This does not mean that using the available space to the maximum necessarily yields useful results in reports and lists.

Memo fields do not have a predefined length (however max. 64,000 characters are permitted). Line breaks may be entered in the field. The field contents automatically wrap whenever a line break is required. The line length displayed does not necessarily correspond to the print layout.

View | Client

Use **View | Client** to show the client record. All the fields can be edited. Each appliance must be assigned to a client. The clients are on the top level of the database structure, made up of site, location, appliance and test. The fields are:

- "Name" and "Client no." – short designations for the client. These fields are not printed on the test report.
- "Client code" – a unique code to identify the client. The client code provides for a direct assignment of the readings through the user code. Leading zeroes of the client code are removed. The client code is assigned only once, it must be unique for every single client.

- "Contact", "Company", "Location", "Street", "Post code" and "City" – form the client address printed on the test reports as the client.
- "Remark" – a memo field, in which you can enter further client data.

View | Site

Use **View | Site** to show the site record. All the fields can be edited. Every client can have different sites (factories), on which locations and appliances are existing.

- "Name" – a short description, and will not be printed on test certificates.
- The address fields 1 to 4 are printed on the test certificates under specification of appliance.
- "Remarks" – a memo field for further entries.
- Site code – used for the assignment of the read in measurement data to the site. This field must be unique for every single site.

View | Location

Use **View | Location** to show the location record. All the fields can be edited. Every site can have different locations (departments).

- "Name" – is printed on test certificates.
- "Remarks" – a memo field, and can be used for further entries.

View | appliance

Use **View | appliance** to show the appliance record. All the fields can be edited. The main function of the Fluke DMS software is the management and monitoring of appliances in recurring tests. Thus, the appliance is the central object of this database.

- "Appliance No." – the ID number of the appliance. The appliance number. Appliance number must be unique for a client. The appliance number can be alphanumeric. For simplified entry at the test instrument, Fluke recommends the use of numeric characters. The appliance number shows in all the lists when an appliance is selected and it is also printed.
- "Name" – a description of the appliance. Appliances can be selected in the list or entered.
- "Type" – the appliance type defined in a stored list. Click the [...] button to go to the Appliance Type window to select the type. The appliance types define how appliances are tested. Test steps, limits and test intervals are stored for each appliance type.
You can change the appliance type later. The new type "inherits" the test interval.
- "Serial no." – a serial number or a manufacturer number.
- "Manufacturer" – the manufacturing company or the type description.
- The fields for the test intervals permit entries in the range of from 0 to 999 days, weeks, months or years. The test intervals can be individually adapted to each appliance.

- "Intermediate test interval" – the interval of an intermediate test or a visual inspection. These intermediate tests can be done in-between the complete tests without a test instrument. Normally, the appliance is only inspected visually. If this intermediate test is to be performed, the checkbox must be checked and the "Intermediate test interval" field must contain a value larger than 0.
- When a new appliance is created, the "next test" field is set to the date of the day. The "Next intermediate test" field remains empty. After a passed test, the date for the next test is determined on the basis of the test intervals. However, a date can also be entered in the fields directly.
When the next test date is calculated automatically, the date is overwritten or changed.
- "Test code" – indicates the test code determined by the selected type.
- "Remark" field – a memo field, in which you can enter further data on the appliance (for example, purchased on...).
- "Serial No.", "Manufacturer", "Type description", "Appliance type", "Year of manufacture", "Current", "Voltage", "Power", "Weight", "Length", "Width", "Height" and "Range" – additional fields to describe the appliance.

- "State" – select the current state:
 - **in operation**
 - **in repair**
 - **decommissioned** – If an appliance has the status "decommissioned", it is no longer considered in the "Due appliances", for example, it is no longer subject to monitoring for recurring tests.

View | Test

Use **View | Test** to show the Test record. All the fields (and values) can be edited. The tests are sorted in descending order according to the test date. Tests are automatically created by reading in values from the test instrument. Optionally, tests can also be created manually. The tests are deemed passed when all the test steps have passed.

- "Test date" – the date of the test.
- "Test no." – the serial number of the tests of the test instrument.
- "Passed" – automatically controlled by the results of the individual test steps. The checkbox is selected only if all the test steps have passed. It can be modified manually but it will be overwritten again when the individual test steps are changed.

- "Intermediate test" – selected if the test is an intermediate test. Generally, an intermediate test is performed without a test instrument and readings are not made.
- "Order no." – enter the order number. It will be printed on the test reports when selecting "Output Detailed" or "Single test certificate".
- "Test reason" – choose a reason (Optional):
 - **Initial test**
 - **Repeat test**
 - **Repair**
 - **Modification**
- "Engineer" – enter the person who conducted the test. Click the [...] button to change the engineer or to show detailed information.
- "Test instrument" – identify the instrument used for the test. Click the [...] button to change the test instrument or to show detailed information.
- "Remark" – a memo field, enter further data on the test (for example, repair of the feeder...).
 1. Select the corresponding type of the test instrument (for example, Fluke 1653 or Fluke 6500).
 2. Change the data according to your requirements. Enter the "Description", "Calibration date" and "Remark" fields accordingly.
 3. Click **OK** to confirm.
 - "Test step" – the individual test steps. Use the **Add** and **Delete** buttons to add or delete test steps. The "Remark", "Value", "Parameter" and "Passed" fields can be changed (through double clicking or clicking). The fields for the measurements are text fields. You can also enter data like ">300" or "<0.50".
 - "Remark" – enter additional data on the test step. Here, for example, you can enter the description of the measuring point. This field is printed on the single test certificate.
 - "Parameter" – additional parameters of a measurement that were transferred or displayed by the test instrument. The values in the "Parameter" column are not printed on the single test certificate.
 - "Test date", "Passed", "Engineer", "Test instrument" and "Remarks" and the individual test steps (with the limits, values and remarks) are printed on the test report.

View | Test instrument

Use **View | Test instrument** to show the records for all the created test instruments. All the test instruments used for tests must be entered here. Records may be edited, added or deleted.

Modifications to these records are implemented in existing tests. For example, if the description of the test instrument is changed, this modification is reflected in all the tests performed with this test instrument.

- "Name" field – the description of the test instrument and is directly displayed when the corresponding tests are performed. You should always enter a designation for the test instrument. Otherwise an empty field is displayed in the list and the certificate will not contain a description either.
- "Type" – the type of test instrument. Select the corresponding type of the test instrument (for example, Fluke 1653 or Fluke 6500). Change the data according to your requirements. Enter the "Description", "Calibration date" and "Remark" fields accordingly.
- "Serial no." – the serial number of the test instrument.
- "Inventory number" – the identification number of the test instrument (for example, inventory or test equipment number).
- The "Next calibration date" – a text field, in which you can enter the date of the next calibration for the test instrument.
- "Remarks" – a memo field to enter further data on the test instrument (for example, supplier, repairs, calibration equipment...).
- The fields "Description" and the serial number are used on test reports.

View | Engineer

Use **View | Engineer** to show the records for all the created engineers. All the inspectors conducting tests must be entered here. Records may be edited, added or deleted.

Modifications to these records are implemented in existing tests. For example, if the name of an engineer is changed, this modification is reflected in all the tests conducted by this engineer.

- "Name" – the name of the engineer and is directly displayed when the corresponding tests are performed.
- "Position" – an additional description of the engineer.
- New engineers will be attributed a unique engineer code that has not been assigned yet.
- "Remark" – a memo field. In this field you can enter further data on the engineer.
- The "Name" field is printed on the test reports.

View | Type

Use **View | Type** to show the records for all the created appliance types. Records with samples have been created. These can be changed or deleted according to your requirements. You can also add new records. For this purpose, use the corresponding "New", "Duplicate" or "Delete" buttons.

The appliance types define how appliances are tested. Test steps, limits and test intervals are stored for each appliance type. Each appliance type can be assigned multiple test steps.

- "Name" – the description of the appliance type. This text is directly displayed for the corresponding appliances.
 - "Certificate headline" – define your own header for the single test certificate. The standard text "Certificate for Appliance Testing" is then replaced with the text entered.
By changing the heading, test reports of tests conducted on non-electrical appliances (for example, fire extinguishers or ladders) can also be assigned a useful title.
 - "Protection class" – enter the protection class.
 - The fields for the test intervals permit entries in the range of from 0 to 999 days, weeks, months or years. Additionally, the test intervals can be individually adapted for each appliance.
 - "Test code" – the test code. The user must assign this (3-digit) code.
 - "Electrical test" – must be checked for all appliance types. This checkbox is not checked for appliances that are not subject to electrical tests according to appliance testing such as fire extinguishers, ladders and the like.
 - "Description" – is a memo field, in which you can enter further data on the appliance type (for example, for testing...).
- "Test step" – the individual test steps. Use the **Add** and **Delete** buttons to add or delete test steps. The test step marked with the triangle will be deleted.
 - The fields "Description", "Protection class" and "Test code" as well as the individual test steps with the limits are printed on test reports.
 - The fields "Description" and "Certificate headline" can be adapted to the language set. The texts of the language currently active will be displayed and edited.

View | Test step

Use **View | Test** to show the records for all the created test steps.

Some records are indispensable for the program. For this reason, they can neither be changed nor deleted.

You can, however, add new records for your own (user-defined) test steps. These can be changed and deleted as required. To create or delete test steps, use the **New** or **Delete** buttons.

- "Description" – a description of the test step. This text is directly displayed for the appliance types and lists.
- "Group" – facilitates grouping of the test steps.
Use self-defined groups only. It is best that you start all self-defined groups with the letter "Z".
- "List order" – specifies the order of the test steps in lists and on the printed reports.
- "Maximum" – defines whether a value must stay below a limit to pass the individual test.
- "Limit" – defines the numeric limit value the appliance must comply with.
- "Unit" – a text field that is output together with the limit values.
- "Ignore at tests" – select to specify that the marked test step is not to be evaluated or displayed in the list of test steps in the "Tests" window.
- The fields "Description", "Maximum" and "Limit" and "Unit" are printed on the test reports.

- "Compare limit" – defines whether the test step is a good/bad evaluation (for example, visual inspection). If the field is not checked, it is a test step without limit.
- The fields "Description" and "Unit" can be adapted to the language set. The texts of the language currently active will be displayed and edited.
- In the list for displaying the test steps, the test steps are sorted according to the value specified in the "List order" field.

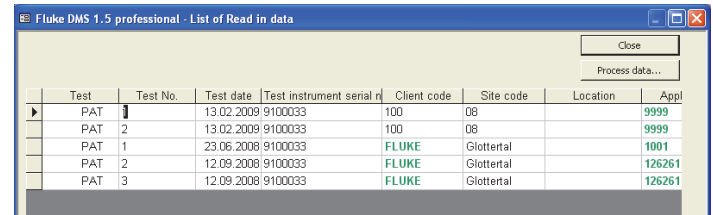
View | Read in data

The data read in from the test instrument or the memory card can be shown, edited and then loaded into the database from the **View | Read in data** menu.

The data can also be deleted.

1. Select **View | Read in data**.
2. Click and drag to mark the lines.
3. Right-click and select **Delete data record** or press the **DEL** key.

The "read in data" are supplied by the test instrument. You practically look into the memory of the test instrument. This view could also be called "measurement memory of the test instrument". The Fluke DMS memorizes the data read in and displays them together with all the other data previously read in. It adds all the data read in to this view until all the data have either been deleted or loaded into the database.



View | Read in data window

Column	Description
Test	The value is always PAT. (Cannot be edited.)
Test No.	The number from the test instrument.
Test date	The date the test was done. (Cannot be edited.)
Test instrument serial number	The serial number supplied by FLUKE 6500 (from firmware V1.20). If no serial number is delivered, the system creates a test instrument without a serial number in the database for the FLUKE 6500 when time data is first loaded into the database.
Client code	The client code specified when the test is saved. If there is no client code the value is 0 (zero). If not yet created, the client with the client code is created when data is loaded into the database.

Column	Description
Site code	<p>A text field to identify the site. Leading zeroes are not removed. Supplied by FLUKE 6500 (from firmware V1.20).</p> <p style="text-align: center;"><i>Note</i></p> <p><i>For FLUKE 6500 (up to firmware V1.18) the site code is created with the client code when the test is saved. When the data is read in, the client/site code is separated. The method used to split the client/site code is defined by the Site Code settings. A description of the method is in the corresponding section. New appliances are created in the site. Existing appliances move to the site specified. If not yet available, the site is created. If the field remains empty, the system creates a site with the description "???" for the appliance.</i></p>

Column	Description
Location	The location is specified in the FLUKE 6500 when the test is saved. If the location code is in the location code list, the location name replaces the location code. New appliances are created in this location. Existing appliances are moved to this location. If there is no data for new appliances, the appliance is created in location "???".
Appliance number	If the appliance number is not entered in the FLUKE 6500, the value is 0 (zero). Missing appliances are created. The appliance number must be unique for each client.
Engineer code	The inspector conducting the test is created with the code, if not yet available. Supplied by FLUKE 6500 (from firmware V1.20).
Remarks	The remarks for test (not the remarks for the appliance).

Column	Description
Description	The appliance designation. The description is considered for new appliances only. If the description is found as a code in the appliance designation list, the description is displayed in this column instead of the code. Analogously to the "Location" field, this is done only once when the data are read in.
Test code	The code is considered for new appliances only. An appliance is created that creates the appliance type with this test code for the FLUKE 6500. If an appliance type with this code is not found, the appliance type is created.

Reports Menu Options

Use the Report menu options to create, export and print certificates (reports) and lists. In addition you can create lists of all the database entries, for example, for clients, sites, locations, appliances, test instruments, engineers, appliance types or test steps.

You can create a list of all the UTTs due and transmit it to the test instrument, print single or total test reports or export them (for example, in the snapshot format).

Reports | Client...

To create a list of clients:

1. Select **Reports | Client...** to open the List of Clients screen.
2. Select **current client** to create the list for the current client or clear **current client** to create the list for multiple clients.
3. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the clients are shown.

4. In "Output", select:
 - Standard** – The report contains the fields "Client name", "Client no.", "Company" and "Client code" only.
 - Detailed** – The report contains all the fields.
5. In "Sort order", select how to group the records (sorted according to client name or client number).
6. Confirm your settings and click **Continue**. The list of the database entries appears.

To print the client code and a barcode for the client code, select **Print with barcode**.

These buttons are available:

- **Export list** – export the current list in various formats
- **Print report** – print the list
- **Save report** – save the report to a snapshot file
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.

- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask
- **Close** – exit the window.

Reports | Site...

To create a list of sites:

1. Select **Reports | Site...** to open the List of Sites window.
2. Select **current site** to create the list for the current site or clear **current client** to create the list for multiple sites.
3. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the sites are shown.

4. In "Output", select:

Standard – The standard report contains the fields ""Client name", "Client no.", "Site name", "Contact", "Phone" and "Fax" only.

Detailed – The detailed report contains all the fields.

5. In “Sort order”, select how to group the records (sorted according to client or site).
6. Confirm your settings and click **Continue**. The list of the database entries appears.







To print with a barcode, select **Print with barcode**. The barcode is formed by appending the site code to the client code.

To output the sites grouped according to clients, select Group report. In the grouped report, the client number and the client name always precede the site of the respective client.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.

- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

List of sites			
created at: 06.04.2009			
Client name	Site name	Site code	
(NL) Voorbeeldbedrijf	Fabriek A	12	
(NL) Voorbeeldbedrijf	Fabriek B	13	
(EN) Sample Company	Site A	10	
(EN) Sample Company	Site B	11	
(DE) Musterfirma	Werk A	08	
(DE) Musterfirma	Werk B	09	

Reports | Location...

To create a list of locations:

1. Select **Reports | Location...** to open the List of Locations window.
2. Select **current site** to create the list for the current site or clear **current client** to create the list for multiple sites.
3. Enter the search criteria.

The search fields support the wildcards "*" for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the locations are shown.

4. In "Output", select:
 - Standard** – The standard report contains the fields "Client name", "Client no.", "Site name", "Contact", "Phone" and "Fax" only.
 - Detailed** – The detailed report contains all the fields.
5. In "Sort order", select how to group the records (sorted according to client, site, or location).

6. Confirm your settings and click **Continue**. The list of the database entries appears.

To output the sites grouped according to clients, select **Group report**. In the grouped report, the client number, the client name and the site name always precede the respective location.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** – switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** – switch back to the search mask.
- **Close** – exit the window.

Reports | Appliance...

To create a list of appliances:

1. Select **Reports | Appliance...** to open the List of Appliances window.
2. Use the **Module** tab to limit the display of data.
3. On the **Appliance** tab, select **current site** to create the list for the current appliance or clear **current client** to create the list for multiple appliances.
4. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the appliances are shown.

5. In "Output", make the appropriate selections:

Standard – The report contains the fields "Client name", "Client no.", "Site name", "Location name", "appliance designation", "appliance No." and "appliance type" only.

Detailed – The report contains all the fields.

Due appliances – only those appliances that have exceeded the next test date are printed. In addition you can specify the time period of the appliances due in the two input fields: "Next test from ... until ...".

Duplicate appliances – lists the appliances per client with duplicate appliance numbers. The appliance numbers in the list can be edited.

Barcode printer – required to select appliances, with data that are transmitted to an external barcode printing program.

6. In "Sort order", select how to group the records (sorted according to client, site, location, or appliance).
7. Confirm your settings and click **Continue**. The list of the database entries appears.

To print the list of appliances that also show the appliance number and test code as a barcode, select **Print with barcode**.

To sort according to clients, sites, and locations, select **Group report**. In the grouped report, the client description, the client description, the site description, and the location description always precede the listing of the appliances.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.

- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

Reports | Test

To create a list of tests:

1. Select **Reports | Test** to open the List of Tests window.
2. Select **current site** to create the list for the current tests or clear **current client** to create the list for multiple tests.

3. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the tests are shown.

4. In "Output", make the appropriate selections:

Standard – The report contains the fields Client name", "Client no.", "Site name", "Location name", "appliance designation", "appliance No.", "appliance type", "Test date", "Passed", "Engineer" and "Intermediate test" only.

Detailed – The report contains all the fields.

Single test certificate – The list of database entries shows in a modified form and cannot be grouped. The output is at least one page per test.

5. In "Sort order", select how to group the records (sorted according to client, site, location, appliance or test).

6. Confirm your settings and click **Continue**. The list of the database entries appears.

To sort the output by clients, sites, locations, and appliances, select **Group report**. In the grouped report, the client description, the site description, and the location description always precede the listing of the tests. At the end of each test report, the system prints the line: "City, Date, Signature".

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** – switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** – switch back to the search mask.
- **Close** – exit the window.

Reports | Test instrument

To create a list of test instruments:

1. Select **Reports | Test instrument** to open the List of Test Instruments screen.
2. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the tests are shown.

3. Confirm your settings and click **Continue**. The list of the database entries appears.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.

- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

Reports | Engineer

To create a list of engineers:

1. Select **Reports | Engineer** to open the List of Engineers screen.
2. Enter the search criteria.

The search fields support the wildcards "*" for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the engineers are shown.

3. Confirm your settings and click **Continue**. The list of the database entries appears.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

Reports | Type

To create a list of appliance types:

1. Select **Reports | Type** to open the List of Appliance Types window.
2. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the tests are shown.

3. In "Output", select:

Standard – The report contains the fields "Name", "Protection class", "Test intervals", and "Test code" only.

Detailed – The report contains all the standard fields plus "Description".

4. In "Sort order", select how to group the records.
5. Confirm your settings and click **Continue**. The list of the database entries appears.

To also print the test code as a barcode, select **Print with barcode**.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** – switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** – switch back to the search mask.
- **Close** – exit the window.

Reports | Test step

To create a list of test steps:

1. Select **Reports | Test step** to open the List of Test Steps window.
2. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the tests are shown.

3. In "Sort order", select how to group the records.
4. Confirm your settings and click **Continue**. The list of the database entries appears.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.

- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

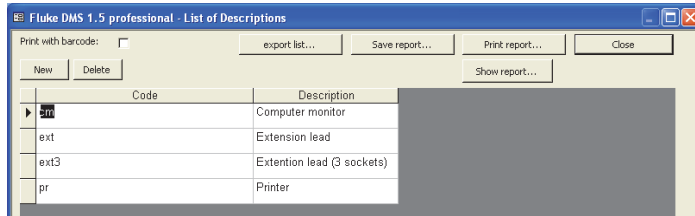
Reports | Location code

The location can be specified in the FLUKE 6500 test instrument when the test is saved. If the entry is found as a code in the location code list, the location code is replaced with the location name found in the list

1. Select **Reports | Location code**.
2. Click **New** to add a new location code to the list. **Delete** deletes the selected location code.
3. Select **Print with barcode** to print the list with the codes in the form of barcodes to work with a barcode reader.

Reports | Descriptions

If the description is found as a code in the appliance designation list, the designation is displayed in this column instead of the code.



Reports | Descriptions window

The descriptions are listed when the **View | Appliance | Appliance designation** is open.

Reports | Due appliances

Use **Reports | Due appliances** to create a list of due appliances. Those appliances are listed that must be tested within a specific time period. You can select appliances in this list or print them.

When an appliance fails a test, the date of the next test is not changed. When the due appliances are queried again, appliances already tested are also taken into consideration if they failed the last test.

1. Select **Reports | Due appliances**

2. Enter the search criteria.

The search fields also support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the due appliances will be displayed in a table as a result.

3. In Output, select **Due appliances**. In addition you can specify the time period of the appliances due in the two input fields: "Next test from ... until ...".
4. Select the desired sort order.
5. Confirm your settings and click **Continue**. The list of the database entries shows.

To print the appliance number and test code as a barcode, select **Print with barcode**.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.

- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

Whether an appliance is shown in the list of due appliances or not depends on the next test date and the selected test type. The test date must be within the selected period under observation, and at the same time, the test type (complete test/intermediate test) must correspond to the set selection.

If you leave the fields **Next test** or **Next intermediate test** empty or delete the entries, this appliance will not show when you select **Reports | Due appliances**. In this case, the appliance is "decommissioned" and is no longer subject to monitor for recurring tests.

The fields "Client name", "Client no.", "Client code", "Site name", "Location name", "appliance designation", "appliance No.", "appliance type" "Test date" and "Test code" will be shown on printed reports.

"Transfer selection" button for transmitting the marked records to the test instrument (only possible with 0701/0702 PC-Multi Tester 8993).

Reports | Error Statistics

Use **Reports | Error Statistics** to create a list of appliances of a selected range that facilitates an evaluation of the tests according to "Passed" and "Failed". This permits a statistical evaluation of the test results over a period of time.

1. Select **Reports | Error statistics** to open the List of Error Statistics window.
2. Select **current site** to create the list for the current tests or clear **current client** to create the list for multiple tests.
3. Enter the search criteria.

The search fields also support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the tests will be displayed in a table as a result.

4. Select the desired sort order.

5. Confirm your settings and click **Continue**. The list of the database entries shows.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** – switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.

Use the **Change test interval** button, to change the test interval of all the appliances in the list by one factor. For example, you can double all the test intervals simultaneously by entering the factor 2. The next test date is calculated automatically.

Before changing the test interval of appliances, the report must be evaluated. The report will assist in assessing whether, for example, the test intervals may be shortened.

- **Back** – switch back to the search mask.
- **Close** – exit the window.

Reports | Print test certificate

In this menu you can print or export a single test certificate for one or multiple tests.

1. Select **Reports | Print test certificate** to open the List of Tests window.
2. Enter the search criteria.

The search fields also support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the tests will be displayed in a table as a result.

3. Select the desired sort order (sorted according to client, site, location, appliance or test).
4. In "Output", select **Single test certificate**. The output is at least one page per test.
5. Confirm your settings and click **Continue**. The list of the database entries shows.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.

- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.

Use **Change test interval**, to change the test interval of all the appliances in the list by one factor. For example, you can double all the test intervals simultaneously by entering the factor 2. The next test date is calculated automatically.

Before changing the test interval of appliances, the report must be evaluated. The report will assist in assessing whether, for example, the test intervals may be shortened.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

On printed reports, information on the client (client), on the company (contractor), on the appliance and on the test are shown.

Reports | Not unique appliance numbers

If multiple appliance numbers exist within a client, you will be informed upon entry or upon program start by a corresponding message and the corresponding test numbers will be displayed.

This function is used to search the database for multiple appliance numbers within a client. This is already checked when entering the appliance numbers and illegal entries are blocked. Multiple appliance numbers, however, may also be loaded in the database when importing or moving appliances within the database.

For an automatic assignment, the appliance number within a client must be unique. There must be no duplicate numbers.

1. Select **Duplicate appliances** in the **Output** area.
2. Confirm your settings and click **Continue**. Either a list of duplicate appliance numbers are output, or a message informs you that duplicate appliance numbers were not found.

Settings Menu Options

Use the **Settings** menu to make the basic settings for the database and for the test instrument used.

Settings | Directories

Here, the directories for storing the buffered measurements and the measurements read in have to be entered.

1. Select **Settings | Directories**.
2. In field "Directory for data files" specify where the DMS database (FDMSPRO15.MDB) is to be stored.
3. In field "Directory of backup files" specify where the backup copy of the database (with the *.bak file extension) and the backup files of the measurements read in (with the *.escap file extension) are to be stored.

If you do not enter directories, the subdirectories DATA and BACKUP of the application directory are used.

Settings | Company

1. Select **Settings | Company** to open the Company window.
2. Enter your company address in the Address field.
3. If required, enter the directory and the file name of your company logo in the Logo field; the Fluke logo is the default entry. The company logo must be available in the bitmap (*.bmp) format. Both appear on the printed single test certificates. The company logo is scaled on the printout to the size of approx. 24 X 24 mm. We recommend you to create your company logo in this size with a resolution of 150 to maximum 300 dpi.
4. Click **OK** to confirm.

For UK version

If desired you can enter further information like NICEIC enrolment No., branch No. phone and fax No.

If required, enter the directory and the file name of your company logo in the Logo field; the Fluke logo is the default entry. The company logo must be available in the bitmap (*.bmp) format. This will appear on the printed single test certificates.

The company logo is scaled on the printout to the size of approx. 24 X 24 mm. Fluke recommends that you create your company logo in this size with a resolution of 150 to maximum 300 dpi.

For non UK version

If available, you can integrate your E-Check* logo. Click **Change** under E_Check* Logo and select the directory and the file name of your E-Check* Logo. The Fluke logo is entered by default. You can integrate images with the file extensions ".jpg", ".gif", ".ico", ".cur", ".enf" and ".rie". The E-Check* Logo should be available in the bitmap format (*.bmp) or as Windows Metafile (*.wmf). The E-Check* Logo appears on printed standard test reports.

The company logo and the E-Check* Logo are scaled on the printout to the size of approx. 24 X 24 mm.

Fluke recommends that you create your company logo in this size with a resolution of 150 dpi to a maximum of 300 dpi. For larger dimensions and resolutions, the company logo file will be very large and can cause considerable delay when printing the certificates.

Note

E-Check is a protected term of the Landesinnungsverband Bayern (Bavarian Guild Association).

Settings | Serial interface

1. Select **Settings | Serial interface**.
2. Enter the serial interface the test instrument uses for the data transmission in the "COM" input window.
3. For instance, select COM 1 and click **OK** to confirm.

Settings | Test code display

Test code display: ref. Fluke 6500, important for correctly displaying and printing the test code.

Settings | User code

User code: refers only to PC-Multi Tester 8993, important for correct use of the user code.

Settings | Appliance No.

Appliance No.: refers only to 9032, 9050 and 9092, important for correct use of the client and appliance number.

Settings | Site code

Site code: refers only to Fluke 6500 (up to firmware V1.18), important for correct use of the client and site code.

The site code is used when reading in data from the test instrument. The FLUKE 6500 test instrument provides a client code that is broken down into client code and site code. The last digits of the client data are interpreted as the site code if the length of the site code is specified as a value >0. The remaining digits are interpreted as the client code. Make sure that all the site codes feature the length specified here.

Settings | Language

In this menu you can set the program language (and country).

Since the database entries for the appliance types and test steps are directly toggled when the language is changed, these can already be edited in the selected language. This can be useful for editing the appliance types and test steps in a different language. In this case, the program need not be constantly restarted.

The language setting also affects the created test reports (important for UK and Australia).

Note

For printing of the certificates used in United Kingdom the software must be set up to the language English (United Kingdom). The certificates cannot be transferred later from different languages.

Settings | Certificate

In this menu you can determine a few preferences for the signature on the certificate.

To use the date of the PC for the certificate, select **Use system date**.

A scanned signature stored in the bitmap format (.bmp) can be used for the signature.

Settings | User

In the Fluke DMS software you can assign different access permissions for various users.

When starting the software, user login is required only if:

- a password was stored for the administrator
- more than one user

1. Click **New** to create another user type.

Only the administrator is authorized to create new users, change users or delete users. In addition, the user "Administrator" can neither be deleted nor can the name be changed.

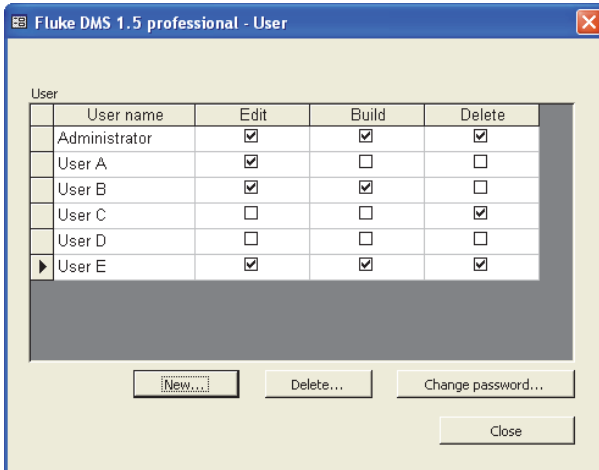
2. In the New User dialog box enter a name and, if desired, a password.

You can define these different user types:

Administrator has all the rights (edit, create, delete):

User A	can edit/process the existing records further
User B	can edit/process the existing records further and create new records
User C	can display the existing records and delete them
User D	has all the rights but is not permitted to create new users
User E	has all the rights but cannot change access rights

The menu functions a user is not permitted to perform are identified in gray.



Examples for different users window

Settings | Options

When the program starts, all the clients are checked for duplicate appliance numbers. To remove this check and speed up the start of the program:

1. Select **Settings | Options**.
2. Clear the checkmark from **Check on double appliance numbers, when starting the program**.

Menu Functions for Module INST

File Menu Options

File | Receive data from test instrument

To read in data from the test instrument.

1. Select **File | Receive data from test instrument**. The Test instrument window appears.
2. Select the test instrument type, the readings of which you want to read in the list.

Not all instrument types are used with Fluke DMS.

- If there are several instruments of the same type, select the correct test instrument type only and the Fluke DMS software automatically selects the correct test instrument through the serial number.
- When a test instrument is receiving data for the first time and an instrument with this serial number is not yet available in the list of instruments, a new test instrument will be created in the list. Data such as the inventory number, the next calibration date and remarks should then be supplemented. You can also create test instruments manually from the **Data record | Add** menu.

- If a serial number is not transmitted, the "Serial No." field is displayed for a one-time entry of the number. If several test instruments without serial number of the same type are present, the relevant serial number must be selected in the list before the data transfer.
 - If you select an incorrect test instrument type, the data received cannot be processed.
3. Click **Continue**.
4. Start the data transfer at the test instrument. You can follow the transfer of the individual values.
- It is absolutely necessary that you wait until all the data have been transmitted. The window closes automatically after the last value has been transmitted.
- The data transfer from the measuring instrument may take a few minutes if a large number of values are to be transferred.
5. When the transfer is complete an Assign the measurement to: window appears.
- Select the assignment of the measurement data to the existing data records (for client and site) or create new data records. You have the following possibilities.
- If you want to create LATER a new client and a new site then click direct to button "Continue".
 - Select a client to assign data to an existing client and select a site to assign data to an existing site (for example, client A, site 1). RECOMMENDED version.

Now select an existing certificate/test or create a NEW certificate using the **NEW** button corresponding to line "Test."

6. If you want to create a new client or a new site, or a new certificate immediately, click on the particular **New** button next to the selection field.

Note

A new data record "xxx" will be created in the main window in the background. To change this data record, select the main window and enter the desired data. Afterwards, change back to the "Assign the measurement..." window.

The automatic assignment of the measurement result to the distributions and current circuits can take place only if the distribution and current circuit codes were entered correctly according to the list of current circuits.

Then the "Read in data" window is shown. The final assignment of measurements to distributions and current circuits is made here. This window is called directly when you select **View | Read in data**.

Generally, all the readings read in are stored in a backup file (with the file extension *.SER) in the "BACKUP" subdirectory. Ascending numbers are assigned as file names. It is also possible to transfer the data from this file. See **File | Read in data from file**.

File | Read data from file

This function can be used to transfer data to the database that has already been read in.

1. Select **File | Read data from file**.
2. Select the file with readings and click **Open**.
3. The Assign the measurement to: window appears.

Now you can select the assignment of the measurement data to the existing data records (for client and site) or create new data records. You have the following possibilities.

- If you want to create LATER a new client and a new site then click direct to button "Continue".
- Select a client to assign data to an existing client and select a site to assign data to an existing site (for example, client A, site 1). RECOMMENDED version.

Now select an existing certificate/test or create a NEW certificate using the **NEW** button corresponding to line "Test".

4. If you want to create a new client or a new site, or a new certificate immediately, click on the particular **New** button next to the selection field.

Note

A new data record "xxx" will be created in the main window in the background. To change this data record, select the main window and enter the desired data. Afterwards, change back to the "Assign the measurement..." window.

The automatic assignment of the measurement result to the distributions and current circuits can take place only if the distribution and current circuit codes were entered correctly according to the list of current circuits.

The "Read in data" window is displayed. The final assignment of measurements to distributions and current circuits is made here. This window is called directly when you select the "View | Read in data" function.

File | Database copy (replication)

Use **File | Database copy (replication)** to create a copy of the topical database.

Note

Access 2013 (Run Time) does not support replication.

Important notes for creating a replication

An align-able database copy (replication of FDMSPRO1x.MDB) can only be created from the master database FDMSPRO1x.MDB (original database) that was installed from the CD.

Use a database copy to allow external employees to use the software with their notebooks when they are travelling. The database copies can then be aligned again with the "original database".

- Do not delete records in the database copies. If one or multiple records are deleted in the database copy, the deleted data are also transmitted when aligning the copy with the original database, and these records will also be deleted in the original database.
 - The database synchronization can be done in either direction, for example, if a specific data record was edited in both the databases, the modification made to the original database (master database) will always be taken as the basis of the synchronization.
 - No more than 10 replicates are allowed from the master database.
 - Never rename a replicate's filename or the filename of the master database.
 - Before you synchronize replicates with the master, the master and replicate databases must be in the same folder where they have been created.
 - Never make a copy of a replicate database to get another replicate.
 - Synchronization must start within 60 days.
 - Do not delete, move or rename records in the replicates of the master. These operations should only be done in the master database. Then synchronize the master with the replicates to make the changes visible in the replicates.
 - Do not forget that all changes in one database concern all databases. But are not visible before synchronization.
- The changes in the master are treated with higher priority than the changes in the replicates.
 - Changes in replicates have the same priority. So it's not sure which changing wins after synchronization.
 - Never mix up different generations of the databases. After synchronization, the generation is incremented. Backups of older generation cannot be synchronized with databases of newer generations
1. Select **File | Database copy (replication) | Create** to show the Create database copy window.
 2. Select a file name and click **Save**.

As soon as the copy has been saved, the system confirms the database copy has been created.
 3. Click **OK**.

To be able to use the database copy on a second computer, the new database name and the directory must be set on this computer. Use the **Settings | Directories** menu.
 5. To align the databases, select **File | Database copy (replication) | synchronize**.
 6. Select the **external database** and click **Open**.

Be sure to notice the system prompt on deleted data. Data in the synchronized databases will be deleted.

The system prompts you when the database is synchronized.

File | Import data

You can import readings from earlier version of the DMS program "es control", "Expert-Manager", "PowerCert II" and load them into the database. When data is imported, all the clients, sites, tests, distributions, current circuits and values from the "Expert-Manager" software are copied to the Fluke DMS. The company name, selection list of inspectors, data logger readings and supplementary measurements are NOT copied to the Fluke DMS.

Importing from Fluke DMS & es control Module 0100/INST (V1.1/1.2)

1. Close the program, from which the data are to be imported.
2. Select **File | Import data**, the Import data window appears.
3. In the "Source" field, directly enter the directory and the database file of the "es control" software, from which the data are to be imported. Optionally, click the "**search**" button to select a directory and database file.
4. Click **start transfer** to start the data import.

Importing from Expert-Manager or PowerCert II

1. Close the program, from which the data are to be imported.
2. Select **File | Import Data | 0100 Expert-Manager**, the Import window appears.
3. In the "Data source" field, enter the directory and the database file of the "Expert-Manager" software, from which the data are to be imported. Alternatively, you can click the **Change** field to select a directory and database file.
4. Click the **Import** button to start the data import.

The data import is started. While the data are being imported, the number of tests and readings imported is shown.

The data import may take some time.

Do not abort the ongoing data import in any way. Otherwise the database of Fluke DMS may be damaged. If you do abort the import, the records that have been imported partially must be deleted from the Fluke DMS database manually and then the software must be restarted.

After the data import has been completed successfully, a corresponding message will be displayed.

Do the data import only once. If you do the data import multiple times, the same tests are created again.

In the "Line/Cable", "Fuse" and "RCD" selection lists, only those types will be created that are required for printing the certificates

File | Exit (and recovery of a damaged database)

Use **File | Exit** to close the database and exit the program. In this case, the database can be compressed.

For temporary data backup, the es control database can be backed up in a backup file `FDMSPRO1x_BAK.MDB` in the `BACKUP` subdirectory when the program is exited.

The system prompts you to save a backup file.

1. Click **Yes** to create a backup copy of the database and compress the database. The topical status of the database is saved as `...BACKUP\FDMSPRO1x_BAK.MDB`. The backup process can take some time depending on the computer speed and size of the database.

Once the backup copy has been created, the database (not the copy) is compressed and reorganized.

The reorganization and compression may take some time depending on the size of the database.

If your data are corrupted or inadvertently deleted after the next program start, this backup copy can be used later on to restore the data.

- a. For data recovery, rename the invalid or corrupted database `FDMSPRO1x` in the `DATA` directory, for example, to `FDMSPRO1x.XXX`.
- b. Copy the backup file `...BACKUP\FDMSPRO1x_BAK.MDB` into the `DATA` directory.
- c. Rename the file `FDMSPRO1x_BAK.MDB` to `FDMSPRO1x.MDB` and restart the program.

Module Menu

If you have installed the additional DMS modules "0100" or "0701/0702", you can switch to these modules via the Module menu. Only the appliances and tests of the selected module are shown. If the modules are not extant, the corresponding menu items are identified in gray.

Edit Menu Options

This main menu combines commands that can be applied to the records of clients, sites, tests, distributions and current circuits.

Edit | Find certificate/test

Use **Edit | Find appliance** to find a certificate/test and directly display it. You can search according to these criteria:

Search certificate

- In the "Sort order" area you can select different criteria for sorting the list of results.
- The search fields also support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*).
- If you do not enter a search criterion, all the tests are shown in a table.

Edit | Add record

Use **Edit | Add record** to create a new data record for the selected database field (valid for records of "Client", "Site", "Certificate", "Distribution" and "Current circuit").

1. Select **View** or click the database field to select the database.
2. Select **Edit | Add record** or right-click and use the pop-up menu to create a new record

The default entry for the name of a new data record for "Client", "Site", "Distribution" and "Current circuit" is "xxx".

The default entry for the code of a new data record for "Sites", "Distribution" and "Current circuit" is a serial number starting with "001".

The default entry for a new test is "Initial test". The default entry for a new test date is the date of the day.

3. Change the name of the data record and enter the data for the new data record. Complete the remaining fields as required.

The data are saved to the database as soon as you exit the current input window or select a different data record.

Edit | Cut (Move)

Use **Edit | Cut** to cut an existing data record out of the selected database field. The selected data record can be moved (cut and pasted) within the DMS database using **Edit | Paste**.

3. Select **View** or click the database field to select the database.
4. Select **Edit | Cut** or right-click to use the pop-up menu. The record is selected and can be moved within the database using the cut-and-paste method.

Clients cannot be cut since they cannot be assigned to a higher database level. Either this function cannot be selected at all for a client, or it will be ignored.

Edit | Copy

Use **Edit | Copy**, to copy an existing data record for the selected database field including all the entries (valid for records of "Client", "Site", "Certificate" and "Distribution").

1. Select **View** or click the database field to select the database.
2. Select the **Edit | Copy** or right-click to use the pop-up menu. The selected data record is copied.

Edit | Paste

Use **Edit | Paste** to insert a copied data record or to assign a previously cut data record to another data record within the FLUKE DMS database. To paste a data record, you must select a database field on the same database level.

1. Select **View** or click the database field to select the database.
2. Select **Edit | Paste** or right-click to use the pop-up menu and paste the selected data record into the selected test (the record is moved).

The code for site must be unique within a client, the code for distribution and current circuit must be unique within a test. There cannot be any duplicate numbers. This code should be checked after every duplication and change, if required.

The code for site, distribution and current circuit is assigned automatically. For this purpose, the code used last is incremented by 1.

"Copy" is appended to the name of a copied data record.

The data are saved to the database as soon as you exit the current input window or select a different data record.

Note

Readings are not transferred during the copy procedure. These must be recreated or read in from the test instrument, since verifiable readings must be available for every test.

Edit | Delete data record

Use **Edit | Delete** to delete the selected data record.

1. Select **View** or click the database field to select the database.
2. Select **Edit | Delete data record** or right-click to use the pop-up menu to delete the record.
3. Click **OK** to confirm the security prompt.

When deleting clients, sites or certificates/tests, an additional security prompt shows since all subordinate records will be deleted. Click **OK** to continue

If another module contains additional appliances, a security prompt specifies the number of appliances grouped according to the individual modules. This must be taken into consideration since all the records will also be deleted in the other modules.

View Menu Options

Use the menu functions in this section to switch to the different database fields. To select a data record, you must select an entry in the database field. To display the records directly, click the corresponding list field or the button below the list fields.

Unless otherwise specified, all the database fields can accommodate a maximum 50 characters. This does not mean that using the available space to the maximum necessarily yields useful results in reports and lists.

"Remarks" are text fields and not have a predefined length (however max. 64,000 characters are permitted). Line breaks may be entered in the field. The field contents automatically wrap whenever a line break is required. The line length displayed does not necessarily correspond to the print layout.

View | Client

Use **View | Client** to show the client record. All the fields can be edited. Each site must be assigned to a client. The clients are on the top level of the database structure, made up of site, test, distribution and current circuit. The fields are:

- "Name" and "Client no." – short designations for the client. These fields are not printed on the test report.
- "Client code" – a unique code to identify the client. The client code provides for a direct assignment of the readings through the user code. Leading zeroes of the client code are removed. The client code is assigned only once, it must be unique for every single client.
- "Contact", "Company", "Location", "Street", "Post code" and "City" – form the client address printed on the test reports as the client.
- "Remark" – a memo field, in which you can enter further client data.

View | Site

Use **View | Site** to show the site record. All the fields can be edited. Each client can have multiple sites (for example, buildings or sites), in which there are tests, distributions and current circuits with values.

- Site code – The code for the site is allocated automatically when the site is created but it can be changed if required. The code must be a three-digit number between 1 and 999.

The purpose of the code for the site is that readings can be stored in the test instrument in such a way that they can be automatically assigned to the associated site as well as to the distributions and current circuits when read in. The code for the site is the number that is entered for the object when storing measurements in the test instrument and under which the measurements are stored in the test instrument. The site code is not used in Fluke 1653.

- "Remark" – is a memo field, in which you can enter further data. The code is printed in the "No." field if a number has not been entered.

An image can be stored for every site. This image is printed in the "Reports | Certificate print | List of current circuits" report. To store a site image, click the [...] button to the right of the input field. The Select picture file window appears. Open the image file. You can switch the display of an image on or off with the **View** (or **Close**) buttons.

The image must be available in the bitmap format (*.bmp) or as a Windows Metafile (*.wmf). Using the entry "*" (confirm with the ENTER key) in the "File name" window, you can also link images with the file extensions "jpg", "gif", "ico", "cur", "enf" and "rle". Printing on the report is also possible.

The site image is scaled to the size of approx. 78 x 61 mm (W x H) on the printout. Fluke recommends that you to create the image in that size with a resolution of 150 to a maximum of 300 dpi. For larger dimensions and resolutions, the image file will be very large which may cause considerable delay when printing the certificates.

View | Certificate/Test

This menu displays the Test record. The window features these tabs:

- Test report
- Visual check
- Checked
- Measurement
- E-Check report
- Handing-Over report

All the fields and entries available on the tabs are printed on the standard certificates: Handing-Over report, Test report, and E-Check report.

⚠ Important note for UK certificates

All marking fields and text entries that are done on the selected pages of the certificates on the screen are printed out on corresponding pages of the selected certificate.

The entry fields depend on the selected type of certificates. IET and NICEIC certificates are available.

Test report tab

Use the Test report tab to enter data on the test date, the reason of the test, the engineer, the test report no., the order no., the test according to standards and other test report information.

Note

E-Check is a protected term of the Landesinnungsverband Bayern (Bavarian Guild Association).

- Engineer – To select the engineer, click the [...] button (to the right of the input field "Engineer").
- Test report number – Automatically entered when a test is created. Fluke DMS searches all clients for the last allocated number and enters the next free number in this field. This default test report number can be changed at any time.
- Order No. – enter an order number according to systematic you defined yourself (consisting of the year and the serial number, for example, 2004-05 or any other systematic you determine).
- Remarks – a memo field for further data.
- All the other checkboxes and input fields can be checked or completed as required.

Visual check tab

Use the Visual check tab to select the visual checks that were done. (Correct selection of equipment, No damage to equipment, Protection against direct contact, for example.) There are also two blank input fields.

The screenshot shows the 'Visual check' tab selected in a software window titled 'Test'. The window has a header with 'Test date' (01.01.2009), 'Reason of test' (Initial test), and a 'completed' checkbox. Below the header is a navigation bar with tabs: 'Test report', 'Visual check', 'Checked', 'Measurement', 'E-Check* report', 'Handing-Over report', and 'Equipment'. The main area contains a grid of checkboxes for various visual checks:

- Heat sources
- Main earth bar
- Correct selection of equipment
- Identification of circuit and equipment
- Additional earth bar
- No damage to equipment
- Laying of conductors
- Protection against direct contact
- SELV
- Security
- Insulated voltages
- Location of bus appliances in circuit
- Fire shield
- Double insulation
- Control bus conductors

View | Certificate/Test window "Visual check" tab

Checked tab

Use the Checked tab to select the checks that were done (Function of security and guard equipment, Function of installation, Right rotation, for example) Use the blank input field and Remarks for more information.

The screenshot shows the 'Checked' tab selected in a software window titled 'Test'. The window has a header with 'Test date' (01.01.2009), 'Reason of test' (Initial test), and a 'completed' checkbox. Below the header is a navigation bar with tabs: 'Test report', 'Visual check', 'Checked', 'Measurement', 'E-Check* report', 'Handing-Over report', and 'Equipment'. The main area contains a list of checkboxes for checked items:

- Function of security and guard equipment
- Function of installation
- Right rotation in Industrial 3-phase sockets
- Right rotation of motors
- Function of EIB-facility

At the bottom, there is a 'Remarks' label followed by a text input field.

View | Certificate/Test window "Checked" tab

Measurement tab

Use the measurement field to enter information about two checkboxes and the input fields "Earth resistance" and "Insulation resistance between bus conductors" as evidence of the described tests.

View | Certificate/Test window "Measurement" tab

This tab has "Earth resistance" and "Used measuring and test instruments" fields. These two fields have the following properties:

- When values are read in, the highest measured earth resistance for all the associated distributions and current circuits is entered in the "Earth resistance" field. This value can be changed at any time.
- This value can originate from a direct earth measurement or from a RCD contact voltage measurement. If the measurements are changed subsequently in the associated tables under "distribution current circuit measurements", then this value is not updated.
- When values are read in, the type and the serial number of up to four measuring instruments used are entered in the "Used measuring and test instruments" field.

- A measuring instrument can also be entered directly. Click the [...] button to the right of the input field. The Test instrument window appears. Find the corresponding entry and click **OK** to confirm.
- The two input fields as well as the two checkboxes, the type of measuring instrument and the serial number will be printed on the standard Test report certificates.

E-Check report tab

On this tab you can check the checkboxes according to your requirements.

View | Certificate/Test window "E-Check* report" tab

The "Remark" field is a memo field, in which you can enter further data.

Note

E-Check is a protected term of the Landesinnungsverband Bayern (Bavarian Guild Association).

Handing-Over report tab

Information on "Utility", "Mains voltage", "Meters" and "Type of system" can be entered on this tab. -On this tab you can check the checkboxes according to your requirements and complete the input fields.

The screenshot shows the 'Handing-Over report' tab in a software interface. At the top, there is a 'Test' section with a 'Test date' field containing '01.01.2009', a 'Reason of test' dropdown menu set to 'Initial test', and a 'completed' checkbox. A 'Daten Logger' button is also present. Below this is a navigation bar with tabs: 'Test report', 'Visual check', 'Checked', 'Measurement', 'E-Check* report', 'Handing-Over report', and 'Equipment'. The main area contains several input fields: 'Utility' (empty), 'Mains voltage' (230/400V), 'Meter-No.' (123456ZZ), and 'Meter reading' (5000 kWh). There are also two checkboxes: 'Circuit documents provided' and 'EIB-functions and diagrams provided', both of which are unchecked. At the bottom, there is a 'Type of system' section with three radio buttons: 'TN system' (checked), 'TT system', and 'IT system'.

View | Certificate/Test window "Handing-Over report" tab

Equipment tab

The assignments of the appliances to the individual rooms and sites as well as distributions and current circuits are entered on the "Equipment" tab.

The screenshot shows the 'Equipment' tab in the software interface. It features the same top navigation and 'Test' section as the previous screenshot. The main area is a large table with multiple columns and rows, intended for entering appliance assignments. The table is currently empty.

View | Certificate/Test window "Equipment" tab

The entries from the "Handing-Over report" and "Appliances" tabs are printed on the standard Handing-Over report.

The "Appliances" table is made up of 58 columns and a maximum of 48 lines. The columns 1-29 are printed on the first page, the columns 30-58 on the next page.

View | Distribution

Use **View | Distribution** to show the distribution record. All the fields can be edited. Each site can be assigned multiple tests with distributions and current circuits with values. The fields are:

- **Distribution Code** – The code for the distribution is allocated automatically when the distribution is created but it can be changed if required. The code must be a two- digit number between 1 and 99 (when using Fluke 1653/1653B).

The purpose of the code for the distribution is that readings can be stored in the test instrument in such a way that they can be automatically assigned to the associated distributions and current circuits when read in. The code for the distribution is the number that is entered for the distribution when storing it in the test instrument and under which the measurements are stored in the test instrument.

With the Fluke installation tester 1653 the "Data record" field is used as the distribution code.

- **Distribution number** – You can specify the number (No.) for the distribution. For example, UV01. If a description is entered here, it is printed instead of the distribution code.
- **Distribution name** – You can enter a Name for the distribution. Click the "▼" field to the right of the input field. A list of all the distribution names in use will show. Select the entry from the list.

The "Current circuit (Explanation)" table contains the overview of the current circuit contained in the selected distribution with the descriptions of Code, Number, Name, Line/Cable, Fuse, RCD and Remarks.

You can also enter these descriptions in the "Current circuit" window but it is faster and more convenient to enter them directly in this table.

- **Code** – automatically allocated when current circuits are created, double-click to change.
- **No.** – Double-click to change the fields.
- **Name** – To change the field, double click and click the [...] field to the right of the input field. A list of all the current circuit names in use is shown. Select an entry from the list.
- **Line/Cable, Fuse and RCD** columns can also be changed by double-clicking. Select an entry from the list.
- **Remark** – Click to edit the entry.

To facilitate the input, Fluke DMS offers the possibility of marking columns from multiple current circuits with the mouse.

Switch to the Distribution view.

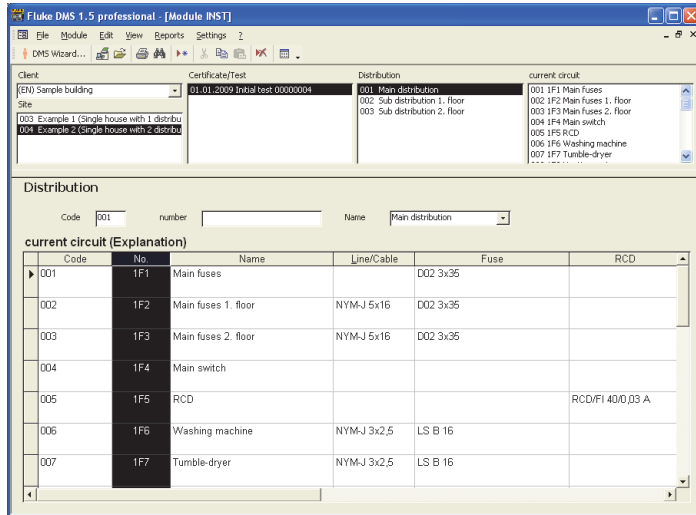
To mark multiple fields:

1. Move the mouse cursor in the column (for example, "No.") to the beginning of the line of the first field (for example, "003") until the mouse cursor changes to a crosshairs.
2. Click and drag to the line of the last field (for example, "008").
3. Release the mouse button and move the cursor to the marked area.
4. Right-click and select **Modify group**.
5. Enter the new designation or modification. The selected description will change for all the fields selected.
In this way, identical assignments can be made for "Line/Cable", "Fuse", "RCD" or "Remarks" with little effort.

In addition, Fluke DMS offers the possibility of numbering AUTOMATICALLY when assigning current circuit codes and numbering current circuit codes. To automatically number fields:

1. Mark the column (for example, "Current circuit No.").
2. Right-click and select the **Modify group**.
3. Enter the description (for example, "1F1") in the new window and click **OK** to confirm.

Fluke DMS will number all the current circuits starting from 1F1 right up to 1F13.



Automatic numbering of current circuits

For the automatic assignment to work, the description must end with a number. If you only enter "1F" in the example, the description "1F" is assigned to all the fields.

For the automatic assignment of the readings to the distributions and current circuits, the distribution code within a test must be unique. Duplicate numbers must not be assigned. The distribution code is allocated automatically when it is created. Do not change this field. However, if required, the code can be changed.

If duplicate distribution codes exist within a client, the system will prompt with an error message. The duplicate codes must then be

changed in the "Distribution" or "Current circuit (Explanation)" windows.

The manual entry of distributions and current circuits provides for the possibility of entering the structure of a site before performing a test. A list of current circuits can be printed that assists the engineer in entering the distribution and current circuit code when saving the values.

Different templates for sites with the corresponding structure of distributions and current circuits (for example, one-family house, apartment building, and building site main cabinet) can be created. These can be copied and changed as required.

View | Current circuit

This menu displays the record for the current circuit. All the fields can be edited. Each site can be assigned multiple tests with distributions and current circuits with values.

- **Code** – the code for the current circuit is allocated automatically when the current circuit is created but it can be changed if required. The code must be a two-digit number between 1 and 99 when using Fluke 1653.

The purpose of the code for the current circuit is that readings can be stored in the test instrument in such a way that they can be automatically assigned to the associated distributions and current circuits when read in. The code for the current circuit is the number that is entered for the current circuit when storing it in the test instrument and under which the measurements are stored in the test instrument.

With Fluke 1653, the data subset field is used as the code for the current circuit.

- **Number** – (No.) for the current circuit can be specified. For example, enter 1F2. If a description is entered here, this is printed out instead of the current circuit code.
- **Name** – You can enter a name for the current circuit. Click the [...] button to the right of the input field. A list of all the current circuit names in use is shown. Select the entry from the list.
- **Line/Cable, Fuse, and RCD** – can also be changed here. Click the [...] button to the right of the input field. Select the entry from the list.
- **Site** – Double click the fields in the "Site" column to enter an additional description (for example, socket no.) for the item number for each value.

To hide empty columns, click the **Hide empty columns**. The measurement results read in are shown.

The compression provides a better overview on the printout and for uses fewer sheets of paper. Click **Compress**. During the compression, lines with values in different columns are combined. Values are combined to form groups of values. Then the data is sorted according to item numbers in ascending order and empty lines will be deleted.

Prior to the compression or the hiding of empty columns, you should assign item numbers. Otherwise the column with the item numbers is not shown or values that are not associated are written into the same line during the compression.

For the automatic assignment of the readings to the distributions and current circuits, the current circuit code within a test must be unique. Duplicate numbers must not be assigned. The current circuit code is allocated automatically when it is created. Do not change this field. However, if required, the code can be changed.

If duplicate current circuit codes exist within a client, the system will prompt with a message. The duplicate codes must be changed in the "Current circuit" or "Current circuit (Explanation) windows.

To delete the contents of the line, first mark the respective range, then delete it using the "DEL" key or the "Delete" command in the context menu.

To delete the complete line, first mark the last field to the left in the line, then delete it using the "DEL" key or the "Delete" command in the context menu.

Limit Value Monitoring (not for UK version)

The Fluke DMS professional program can evaluate the measurement of the measuring functions that are printed on the standard report.

Depending on the values measured, various active limits can be displayed. If a limit value has been violated, the measurement is marked in red. If a limit has not been specified, the value is marked in blue. Limits can be edited via the "Limits" command in the context menu (right click to call the context menu).

When this function is called, the Limits window appears.

For more information on limit value monitoring, see the Settings | Limits menu (not for UK version) section.

View | Test instrument

Use **View | Test instrument** to show the records for all the created test instruments. All the test instruments used for tests must be entered here. If a new test instrument is used when reading in values, it is automatically added to this list. Records may be edited, added or deleted

To edit, add, or delete records, click the **New** or **Delete** buttons.

- "Description" – contains the description of the test instrument and shows for the corresponding tests and test reports or printed.
- "Type" – contains the type of test instrument.
- "Serial no." – contains the serial number of the test instrument. It is stored in the test instrument and for some test instruments it is transmitted together with the data (for example, for Fluke 1653).
- "Inventory number" – contains the identification number of the test instrument (for example, inventory or test equipment number).
- "Calibration date" – a text field, in which you can enter the calibration date of the test instrument.
- "Remarks" – a text field, in which you can enter further data on the test instrument (for example, supplier, repairs, calibration equipment...).
- The fields "Description", "Serial No." and "Inventory number" are used on test reports.
- The communication parameters and the type of data transfer are set via the selection in the "Type" field.

View | Engineer

Use **View | Engineer** to show the records for all the created engineers. All the persons conducting tests must be entered here. Records may be edited, added or deleted.

To edit, add or delete records, click the **New** or **Delete** buttons.

- "Name" – contains the name of the engineer. It is displayed for the corresponding tests and test reports or printed.
- "Position" – contains the description for the position of the engineer.
- "Engineer code" – has no function in the Fluke DMS INST software. The personnel number, for instance, can be entered here.
- "Remarks" – a text field. In this field you can enter further data on the engineer.

View | Organizations (UK only)

Here you can view or change the list of organizations. This data is used in the dropdown lists in the certificate if appropriate. When you select a company in the dropdown list, all fields in the certificate that belong to the company automatically update.

To add a new organization to the list click **New**.

To remove a selected organization from the list click **Delete**.

Note

The NICEIC Number must be a 6-digit number. The NICEIC branch must be a 3-digit number.

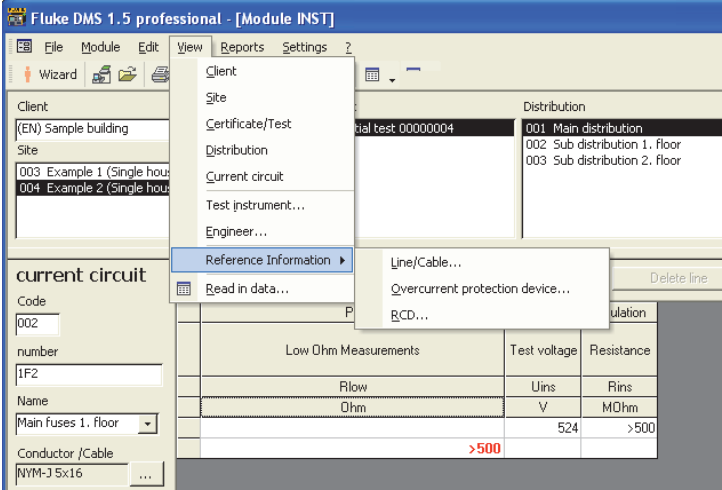
View | Reference Information

This submenu allows you to enter information for printed certificates.

Note

For UK the selection of reference information is extended acc. to the IET/NICEIC certificates.

For languages settings English or English (Australia) only these selections are available.



View | Reference information window (non UK version)

View | Read in data

This menu lists read in data that have not been transferred to the database. All the measurements performed with a test instrument and transmitted to Fluke DMS are listed in the "Read in data" table before they are finally assigned to the tests in the database.

This makes it possible to assign the transmitted readings to different clients and sites later on or to delete them. It is also possible to change the distribution and current circuit code and thus to adapt the assignment of the readings to distributions and current circuits.

- "No." – mark multiple readings with the mouse. The modifications are applied to all the records marked.
- "Client" – the client assignment of the respective measurement.
- "Site" – the site assignment.
- "Test" – the test assignment.
- "Distribution" – the distribution assignment.
- "Current circuit" – the current circuit assignment.
- "Time of measurement" – the date that is transmitted for the respective measurement by the measuring instrument.
- **Delete line** button deletes all the marked readings.
- **Process data** button processes all the values that are marked in light green or black in the fields. These are assigned to the Fluke DMS database and at the same time deleted from the list of read in data.
- **Close** button closes the window.

Values marked in red are not transferred when the data are loaded into the database.

When changing the assignment of the individual readings, the following order must be heeded: "Client" - "Site" - "Test" - "Distribution" - "Current circuit"

1. Mark the data you want to change.
2. Right-click to display a list of all the available database entries.
3. Select an entry in the list.

Description of the colors in the table:

Black marking:

Lines with the values marked in black are already assigned to existing records upon data transfer. These data have already been modified by the user or identified with the transmitted data of distributions and current circuit codes.

Light green marking:

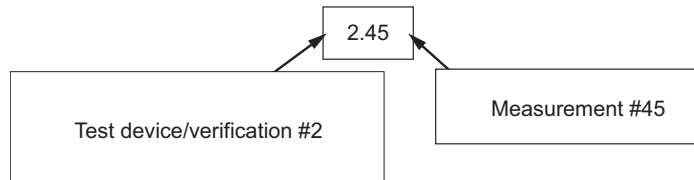
Lines with the values marked in light green are automatically created upon data transfer.

Red marking:

Lines with the values marked in red are not transferred upon data transfer. These values must be modified by the user or the associated data for client, site and test must be created.

Reading in data from several test instruments or tests:

After the values have been read in, you can close the "Read in data" window and read in data from another test instrument. The measurement data will then be added to the list in the "Read in data" window. The values are marked in the column "No." as following:



Displaying measurements of several test instruments

Reports Menu Options

Use the Report menu options to create, export and print certificates (reports) and lists. In addition you can create lists of all the database entries, for example, for clients, sites, test instruments and engineers.

Fluke DMS offers the following possibilities of outputting test reports:

- Output of the certificates based on the standard certificates (Handing-Over report, test report, E-Check*) as printout or snapshot file.
- Output of the test and measurement certificates as a printout or as a file in the snapshot format (SNP), text format (TXT), Rich Text Format (RTF) or Excel format (XLS).
- If you select the "Export as snapshot" function in the corresponding windows, you can export the list displayed in the form of a snapshot file.

What is Snapshot? Snapshot is a Microsoft program that can be used for creating reports in the snapshot format (SNP), which can then be used for displaying and printing the report. The created snapshot file cannot be changed.

Note

E-Check is a protected term of the Landesinnungsverband Bayern (Bavarian Guild Association).

Reports | List of clients

To create a list of clients:

1. Select **Reports | List of clients** to open the List of Clients screen.
2. Select **current client** to create the list for the current client or clear **current client** to create the list for multiple clients.
3. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the clients are shown.

4. In "Output", select **Standard** or **Detailed**.

5. In “Sort order”, select how to group the records (sorted according to client name or client number).
6. Confirm your settings and click **Continue**. The list of the database entries appears.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

Reports | List of sites

To create a list of sites:

1. Select **Reports | List of sites** to open the List of Sites window.
2. Select **current site** to create the list for the current site or clear **current client** to create the list for multiple sites.
3. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the sites are shown.

4. In “Output”, select:

Standard

Detailed

Due sites – only those sites that have exceeded the next test date will be printed. In addition you can specify the time period for the due sites in the two input fields: "Period under observation from ... until ...".

5. In “Sort order”, select how to group the records (sorted according to client or site).

6. Confirm your settings and click **Continue**. The list of the database entries appears.

These buttons are available:

- **Export list** – export the current list in various formats
- **Print report** – print the list
- **Save report** – save the report to a snapshot file
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** – switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** – switch back to the search mask
- **Close** – exit the window.

Reports | List of test instruments

To create a list of test instruments:

1. Select **Reports | List of test instruments** to open the List of Test Instruments screen.
2. Enter the search criteria.

The search fields support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the tests are shown.

3. Confirm your settings and click **Continue**. The list of the database entries appears.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.

- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

Reports | List of engineers

To create a list of engineers:

1. Select **Reports | List of engineers** to open the List of Engineers screen.
2. Enter the search criteria.

The search fields support the wildcards "*" for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*). Search for the term ??? by entering "???" as the search term.

If you do not enter a search criterion, all the engineers are shown.

3. Confirm your settings and click **Continue**. The list of the database entries appears.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.

- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.

Reports | Certificate print (UK reports only)

To print a certificate:

1. Select the client, site, and certificate for reporting.
2. Select **Reports | Certificate print**.
3. Select the page range.
4. Select the action (Preview, Print, Save as) and click **Go**.

5. To print certificates select **Print** and click **Go**.

Note

The printout is "printer friendly", so only the information fields are printed into the pre-printed forms.

For 166x Continuity:

- R1+R2 field on the certificate is mapped to L-PE measurement
- r1 is mapped to L-N measurement
- rn is mapped to N-PE measurement

For RCD operating times, 0/180 degree values (worst case) are used with the following mapping:

- "at I_{rn}" field on the certificate is mapped to RCD multiplier x1
- "at 5 I_{rn}" field on the certificate is mapped to RCD multiplier x5

For L-PE Loop test, when memory field A = 1000 and memory field B = 1000, the Ze column is populated. Otherwise, the Zs column is populated.

Reports | Certificate print (non UK reports)

Always select a client, site and certificate before printing or outputting a report

Reports | Certificate print | acc. standard

1. Select the client, site, and certificate for reporting.
2. Select **Reports | Certificate print | acc. Standard**
 - In the "Measurements only ..." field, the certificate can be reduced to the printout of the selected distribution.
 - Click **Print** to print the certificates selected in the corresponding checkboxes.
 - Click **View page ...** to the right of the desired checkbox (for example, Handing-Over report) to view the corresponding certificate and set up the page before printing it.
 - The E-Check Report selection is available only for these languages: Deutsch (Deutschland), Deutsch (Suisse), Francais (Suisse).

The print preview provides the following functions in addition to the "Page setup" function:

- Click **Save under** to export the certificate to a snapshot file.
- Click **Print** to print the certificate.
- Click **Close** to close this window.

Note

E-Check is a protected term of the Landesinnungsverband Bayern (Bavarian Guild Association).

Reports | Certificate print | acc. FLUKE

1. Select the client, site, and certificate for reporting.
2. Select **Reports | Certificate print | acc. FLUKE**
3. Select the "Reports | Certificate print | acc. FLUKE" function. The following window will be displayed:
 - In the "Measurements only ..." field, the certificate can be reduced to the printout of the selected distribution.
 - Click **Export** to export the certificates selected in the corresponding checkboxes to a file in the text format (TXT), rich text format (RTF) or Excel format (XLS). Only the measurements will be exported in the form of a table, the test report is not exported.
 - Click **Print** to print the reports selected in the corresponding certificates.
 - Click **Preview** to the right of the checkbox (for example, "Handing-Over report") to view the corresponding certificate and set up the page before printing it.

If you click **Export** button the export window opens.

- Specify the file name and directory for the output file.
- Specify the file type. Select text format (TXT), rich text format (RTF) or Excel format (XLS).
- The default file name is composed of the site code, the name of the site and the test date, the reason of the test and the test report number.

Note

<u>RCD Code</u>	<u>Description</u>
<i>FV2H</i>	<i>Fault Voltage Too High</i>
<i>TL2L</i>	<i>Trip Level Too Low</i>
<i>TL2H</i>	<i>Trip Level Too High</i>
<i>TT2S</i>	<i>Trip Time Too Short</i>
<i>TT2L</i>	<i>Trip Time Too Long</i>
<i>RCD_OK</i>	<i>RCD is OK</i>
<i>TCD has tripped</i>	<i>RCD tripped</i>

Reports | Certificate print | Current circuit list

The codes, numbers and names for the distribution and current circuits are printed on the list of current circuits.

The list of current circuits serves as a template for storing the readings in the test instrument under the correct distribution and current circuit code.

1. Select the client, site, and certificate for reporting.
2. Select **Reports | Certificate print | List of current circuits**
3. Enter the search criteria.

The search fields also support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*).

If you do not enter a search criterion, all the tests will be displayed in a table as a result.

4. Select the desired sort order.

5. Click **OK** to confirm. The list of the database entries shows.
These buttons are available:
 - **Export list** – export the current list in various formats.
 - **Print report** – print the list.
 - **Save report** – save the report to a snapshot file.
 - **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
 - **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
 - **Back** –switch back to the search mask.
 - **Close** – exit the window.

Reports | Certificate print | Explanation

The numbers and descriptions for the distribution and the associated current circuits are printed on the explanation.

The explanation can be attached in the relevant distribution to explain to the site owner the assignment of the switches and fuses to the current circuits.

1. Select the client, site, and certificate for reporting.
2. Select **Reports | Certificate print | Explanation**.
3. Enter the search criteria.

The search fields also support the wildcards '*' for multiple characters and '?' for any single character. These may be used within, preceding or following the character string to be found (for example, *02*).

If you do not enter a search criterion, all the tests will be displayed in a table as a result.

4. Select the desired sort order/

5. Click **OK** to confirm. The list of the database entries shows.

These buttons are available:

- **Export list** – export the current list in various formats.
- **Print report** – print the list.
- **Save report** – save the report to a snapshot file.
- **Show data record** – search for a data record previously marked with the mouse and show it. The data record found shows in the window behind the currently active window. To show the window in the foreground, close the currently active window by clicking the **Close** button.
- **Show report** –switch to the preview. Switches to the window with the print preview and the form settings. In the print preview mode, you can save and print the list or perform a page setup via the menu bar.
- **Back** –switch back to the search mask.
- **Close** – exit the window.

Settings Menu Options

Use the **Settings** menu to make the basic settings for the database and for the test instrument used.

Settings | Directories

Here, the directories for storing the buffered measurements and the measurements read in have to be entered.

1. Select **Settings | Directories**.
2. In the **File folder and database name** field you have to specify where the DMS database (FDMSPRO1x.MDB) and the files with the buffered measurement data (with the *.esco or *.esca file extension) are to be stored.
3. The line "Directory of backup files" specifies where the backup copy of the database and the backup files (with the *.bak file extension) of the measurements read in are stored.

If you do not enter directories, the subdirectories DATA and BACKUP of the application directory are used.

Create subdirectories to save measurements and read in data in separate directories. This provides for a clear data structure and easier data backups. The creation of the subdirectories and the copying of the files must be made manually (in the Windows Explorer).

Settings | Company

Your company address and the directory with your company logo is entered in this menu. Both will appear on the printed test reports.

1. Select **Settings | Company** to open the Company window.
2. Enter your company address in the Address field.

If desired you can integrate your company logo. Click **Change** (under "Company Logo") and select the corresponding directory and the file name of your company logo. The Fluke logo is entered by default. The company logo should be available in the bitmap format (*.bmp) or as a Windows Metafile (*.wmf). Both will appear on the printed test reports.

For UK version

If desired you can enter further information like NICEIC enrolment No., branch No. phone and fax No.

If required, enter the directory and the file name of your company logo in the Logo field; the Fluke logo is the default entry. The company logo must be available in the bitmap (*.bmp) format. This will appear on the printed single test certificates.

The company logo is scaled on the printout to the size of approx. 24 X 24 mm. Fluke recommends that you create your company logo in this size with a resolution of 150 to maximum 300 dpi.

For non UK version

If available, you can integrate your E-Check* logo. For this purpose click the "Change" button under E_Check* Logo and select the corresponding directory and the file name of your E-Check* Logo. The Fluke logo is entered by default. It is possible to integrate images with the file extensions "jpg", "gif", "ico", "cur", "enf" and "rle". The E-Check* Logo should be available in the bitmap format (*.bmp) or as Windows Metafile (*.wmf). The E-Check* Logo appears on printed standard test reports.

The company logo and the E-Check* Logo are scaled on the printout to the size of approx. 24 X 24 mm.

Fluke recommends that you create your company logo in this size with a resolution of 150 dpi to a maximum of 300 dpi. For larger dimensions and resolutions, the company logo file will be very large and can cause considerable delay when printing the certificates.

Note

E-Check is a protected term of the Landesinnungsverband Bayern (Bavarian Guild Association).

Settings | serial interface

In this menu you set the serial interface of the PC that is used for transferring data from the test instrument to the PC. The Fluke DMS software features an automatic interface detection function. For example, only the available and enabled interfaces will be displayed.

1. Select **Settings | Serial interface**.
2. Enter the serial interface the test instrument uses for the data transmission in the "COM" input window.
3. For instance, select COM 1 and click **OK** to confirm.

Settings | Printer Offset (UK only)

The printer offset is used only for printing to NICIEC certificates (computer friendly printing)

1. Select **Settings | Printer Offset**.
2. Enter the offset value to adjust the position of the print on pre-printed forms.
3. Click **OK** to confirm.

Settings | Language

In this menu you can set the language (and country) of the Fluke DMS program.

Depending on the software version, there may be an extended language selection.

The selection of English (United Kingdom) and English (Australia) includes the corresponding national certificate headlines instead of the DIN-VDE regulations.

Language selection in this submenu affects all text that shows in menus, warnings, headings, captions, and error messages in DMS. This selection of language does not affect the text language in Access. These depend on the language version of Access installed on your computer. You can install the Access language version of your choice at any time from the installation CD (folder AccessRT). Other message windows and popups depend on the language version of the Operating System.

Note

For printing of the certificates used in United Kingdom the software must be set up to the language English (United Kingdom). The certificates cannot be transferred later from different languages.

Settings | User

In the Fluke DMS software you can assign different access permissions for various users.

When starting the software, user login is required only if:

- a password has been stored for the administrator
- more than one user

When this function is called, the following window will be displayed:

1. Select **Settings | User**.
2. Click **New** to create another user type.

Only the administrator is authorized to create new users, change users or delete users. In addition, the user "Administrator" can neither be deleted nor can the name be changed.
3. In the **New User** dialog box enter a name and, if desired, a password.

You can define these different user types:

Administrator	has all the rights (edit, create, delete) and can change rights
User A	can only process existing records further
User B	can process existing records further and create new records
User C	can display existing records and delete them
User D	has only read permission and can print certificates
User E	has all the rights but cannot change access rights

The menu functions a user is not permitted to perform are identified in gray.

Settings | Appliances (not for UK version)

This function can be used to save the default equipment table headers as the standard equipment table headers. The table headers of the currently selected tests are saved. When a new test is created, these saved texts will be written into the equipment table by default.

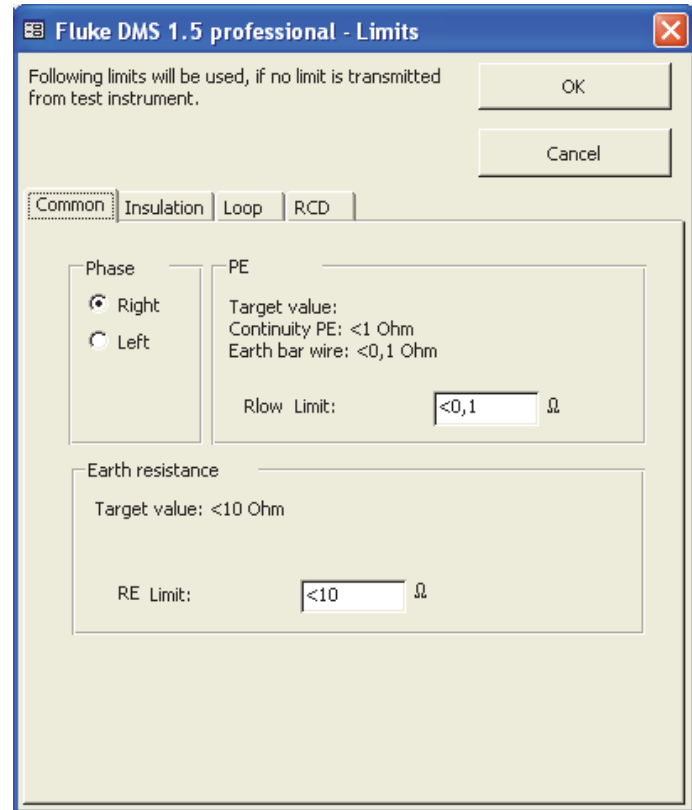
Settings | Limits (not for UK version)

The Fluke DMS professional program can evaluate the measurement of the measuring functions that are printed on the standard report.

If the test instrument does not supply any limits, the limits are loaded from a table specified in this menu item. Depending on the values measured, limits can be displayed. If a limit value has been violated, the measurement is marked in red. If a limit has not been specified, the value is marked in blue.

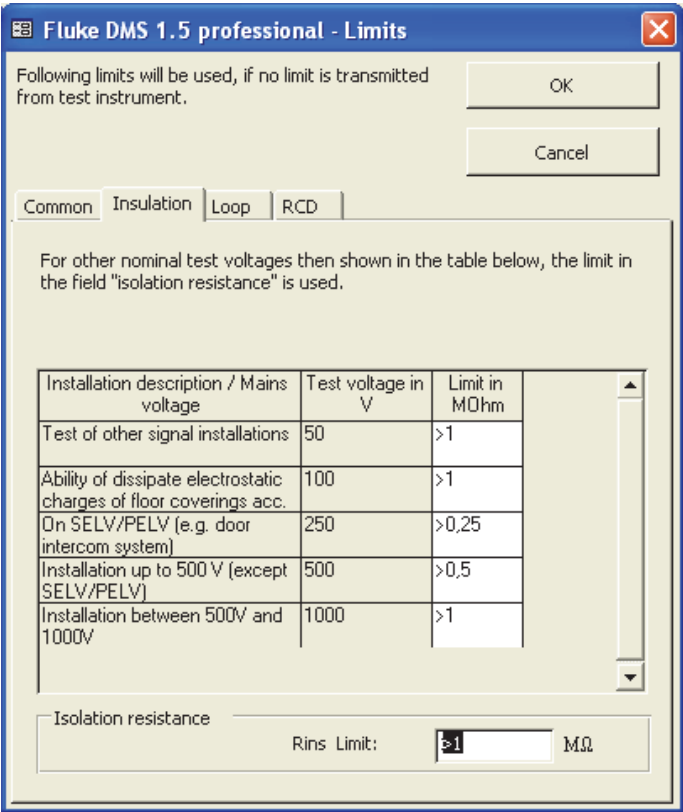
When this function is called, the following window will be displayed: "General limit" tab (Rotary field, PE and "Earth resistance")

In this window and the next three windows you can make entries for the limits.



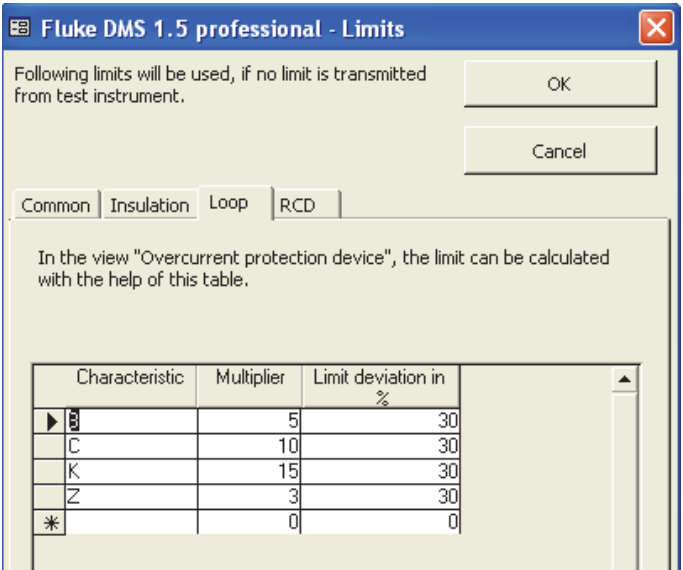
Settings | Limits - Common window

Phase rotation default, limit values for low-resistance measurements (PE) and Earth resistance



Settings | Limits - Insulation window

Insulation (Rins): If the nominal test voltage is 50, 100, 250, 500 or 1000 Volt, the limit value is derived from this table when the measurements are transferred. For every other test voltage, the limit value in the "Insulation resistance" field below this table will be used.

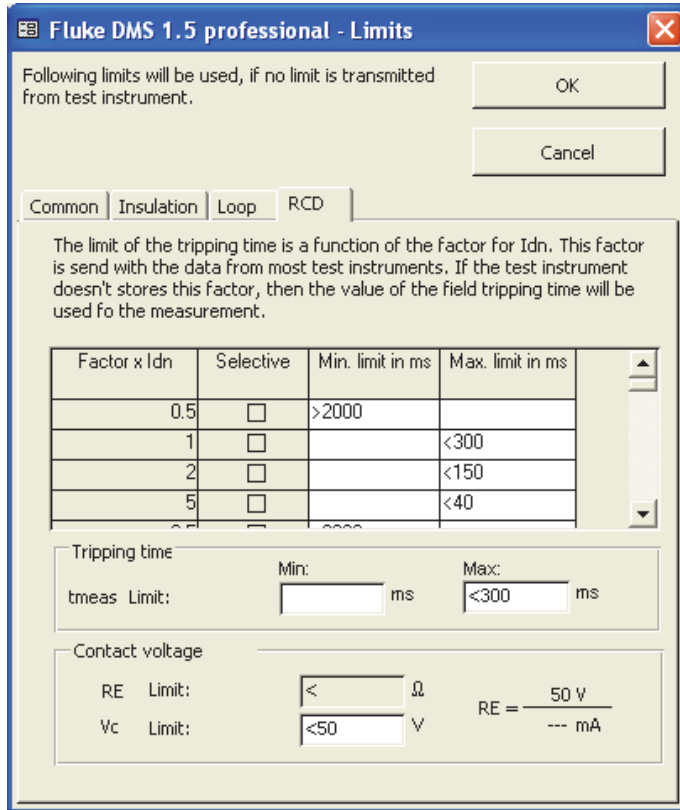


Settings | Limits - Loop window

Using the data in this table, the limit value can be calculated in the "Fuse" window. The "Type/Characteristic" column must not feature duplicate entries or empty fields.

Creating a new data record: To create a new data record, enter a text in the last line using the "*" icon.

Delete data record: The data record identified with the ">" icon can be deleted using the "DEL" key.



Settings | Limits - RCD window

The value of the nominal trip current (Idn) is always adopted by the test instrument. When transferring a factor for Idn, the limit

value for the tripping time is derived from this table. If a factor is not specified, the limit value specified in the "Tripping time" field below this table is used.

Depending on the test instrument type, the limit value for Vc (or RE) is taken from the test instrument or from the limit value table.

Fluke 16xx Info Menu

Use the Fluke 16xx Info menu to query the test instrument ID (serial no.), the firmware version and the date and time of the measuring instrument.

In addition, the time can be synchronized with the PC.

Use the **Clear test instrument memory** button to delete the measurement memory of the measuring instrument.

This function can be called only if a measuring instrument is connected to the interface.

"?" Menu

Menu "Wizard" (only Module INST)

The Fluke DMS Software Assistant supports you in the input and assignment of measurement data and the printing of protocols.

The application of the data structure for the assignment of measurement data can take place during input, but we recommend inputting the customer and installation before starting the Assistant.

Use the upper button "DOWNLOAD DATA" to receive data from a test instrument and assign to a certificate.

Use the lower button "PRINT CERTIFICATE" to print and preview certificates.

Wizard function "DOWNLOAD DATA"

Start the Wizard via the **DMS Wizard** button or **Help - DMS Wizard** menu.

1. Click **DOWNLOAD DATA** (top button) to receive data from a test instrument and assign to a certificate
2. Select the type of test instrument and the serial interface.
3. Click **Continue**, the data communication shows.

After data transmission, the Assign the measurement to window appears.

Now you can select the assignment of the measurement data to the existing data records (for client and site) or create new data records. You have the following possibilities:

4. If you want to create LATER a new client and a new site then click direct to button "Continue".
5. Select a client to assign data to an existing client and select a site to assign data to an existing site (for example, client A, site 1). RECOMMENDED version.

Now select an existing certificate/test or create a NEW certificate using the button "NEW" corresponding to line "Test".

6. If you want to create a new client or a new site, or a new certificate immediately, click on the particular "New" button next to the selection field.

Note

A new data record "xxx" will be created in the main window in the background. To change this data record, select the main window and enter the desired data. Afterwards, change back to the "Assign the measurement..." window.

7. Click **Next**. The Read in data window appears.

Edit test results (UK only)

To enter additional information for Continuity and Insulation test results an additional window can be opened by the button "Edit results". Here specific information about each test result can be entered, for example, insulation measurement at Phase-Phase (PP), Phase - Neutral (PN), Phase - Earth (PE), Neutral - Earth (NE).

Afterwards, click **Process data**, to assign the transmitted data to the DMS data base. The measurement values are now been assigned to Client A and Site A. New data records for tests/certificates, distribution and current circuits (marked in green) will be automatically created.

Note

If Access or AccessRT version 2002 and higher is used and language is set to English-UK, you may notice some abnormal Windows (OS) behavior such as part of the window becomes white. The workaround to restore the window is to move the vertical scroll bar on the right hand side.

Wizard function "PRINT CERTIFICATE"

Start the Wizard via the **DMS Wizard** button or **Help - DMS Wizard** menu.

1. Click **PRINT CERTIFICATE** (bottom button) to print and preview certificates.
2. Select client, site and test (for example, Client A, Site 1 and test 01.01.2009).
3. Click **Continue**.
4. Select which page range to report.
5. To preview the printout, select **Preview** and click **Go**.

Note

The printout is "printer friendly", so only the information fields are printed into the pre-printed forms.

To print certificates select **Print** and click on **Go**.

Help Menu

In this menu you can call the help function of the Fluke DMS software. After you have called this function, the "Adobe Acrobat Reader" will be started and at the same time, the help file will be loaded. The help text includes the operating instructions of Fluke DMS. The operating instructions can be read with Adobe Acrobat Reader as of Version 5.0.

Software or Data Recovery

For example, if the program exhibits malfunctions after a system crash.

1. Start Windows and select **Settings | Control Panel | Add or remove programs**.
2. Select the entry **Fluke DMS** and click **Change**.
3. Click **Next**.
4. Select the **Repair** radio button and click **Next**.

The repair of the software is started. For tracing purposes, a window with the topical status appears.
5. Once the repair operation has been completed, **Finish** and close the Properties of Software window.
6. Restart the program.

Special Characteristics/Functions (Module PAT only)

Editing Multiple Records / Multiple modification

Multiple records can be edited in one operation. The procedure is described with the example of the list of clients. The procedure is identical for other data fields.

1. Select **Reports | Client** to open the List of clients window.
2. Click **Continue** to display a list of clients
3. Enter a new client number.
4. Right-click in this field to and select **Copy cell**.

Now there are three possibilities of modifying all the client records in one operation.

Variant 1:

In the first data record to be edited, click the first unlabeled column to the left of the "Name" column.

1. Press and hold the Shift key.
2. In the last data record to be edited, click the first unlabeled column.
3. Right-click in the marked block and select **Replace cell**. Do not click the left mouse button since this will cancel the marking.

Variant 2:

1. Click the "Client no." column header. The entire column is marked.
2. Right-click in the column header and select **Replace cell**.

Variant 3:

1. Click the small unlabeled square to the left of the column headers. The entire table will be marked.
2. Right-click and select **Replace cell**.
Do not click the column headers or the first unlabeled column to the left of the "Name" column since this will cancel the table marking.

Moving Records/Changing the Assignment



Each site is assigned to a client. In the list view, it is possible to change the assignment of one site (data record) or of multiple sites (records) at the same time.

The procedure is described with the example of the list of sites.

1. Click **Reports | Sites** to open the List of sites window.
2. Click **Continue** to display the list of sites.

It is not possible to edit all the columns. The reason is that for the site, the columns "Number range (client code)", "Client no." and "Client name" are not directly associated with the site data record. The site is assigned to the client record via a link. For this reason, the fields of the client must not be changed in the list of sites. The link can be changed, for example, by changing the link, a site is moved to another client.

The procedure is as follows:

1. Click the "Number range" column in the data record to be changed. The  button will be displayed on the right margin of the field.
2. Click the  button. A list with all the available number ranges (clients) will be displayed.
3. Using the mouse, select the desired client in the list, to whom the site is to be moved. The list is closed and the client data are updated.

It is possible to edit or move multiple records, as described in the previous chapter

In the tables, always use the "Replace cell" command of the context menu for pasting data. Never use Ctrl+V. The use of Ctrl+V can cause undesired modifications to the records that cannot be undone.

To copy data, use Ctrl+C.