FLUKE networks

LinkWare™

Cable Test Management Software

Getting Started Guide

October 2002, Rev. 4 3/04
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Getting Started with LinkWare Cable Test Management Software

Introduction

LinkWare™ Cable Test Management Software is a Windows® program that helps you organize, customize, print, and save copper and fiber cable test records from the following Fluke Networks testers:

- DTX Series CableAnalyzer™
- DSP Series CableAnalyzer™
- OMNIScanner®
- PentaScanner®
- OF-500 OptiFiber™ Certifying OTDR
- CertiFiber®
- SimpliFiber®
- FM150 Fiber Meter

LinkWare includes support for the ANSI/TIA/EIA-606-A Administration Standard for Commercial Telecommunications Infrastructure. You can add 606-A administration information to your LinkWare database and print administration records in addition to cable test reports.

This guide helps you get started importing test records and creating test reports with LinkWare software. For additional information, see the LinkWare online help.

Contacting Fluke Networks

Notes

If you contact Fluke Networks about your tester, have the tester's software and hardware version numbers available if possible.

If you contact Fluke Networks about this software, have the software's version number available, along with the type and version number of the operating system on the PC. This information is available by clicking ***Help*** *>* ***About...*** *on the software's menu.*

www.flukenetworks.com

support@flukenetworks.com

+1-425-446-4519

- Australia: 61 (2) 8850-3333 or 61 (3) 9329-0244
- Beijing: 86 (10) 6512-3435
- Brazil: 11 3044 1277
- Canada: 1-800-363-5853
- Europe: +44 1923 281 300
- Hong Kong: 852 2721-3228
- Japan: +81-3-3434-0181
- Korea: 82 2 539-6311
- Singapore: +65-6738-5655
- Taiwan: (886) 2-227-83199
- USA: 1-800-283-5853

Visit our website for a complete list of phone numbers.

To reach us by mail

Fluke Networks
PO Box 777
Everett, WA 98206-0777
USA

Mimimum PC Recommendations

- 200 MHz Pentium® microprocessor system
- 64 MB of RAM
- Windows 98 or later operating system.
- PC monitor with minimum 800 x 600 resolution

Localizing the LinkWare Window

To change the language for LinkWare and for printed reports

Select **Options** > **Language**.

To change the length units and the date, time, and number formats

Select **Options** > **Display**.

Using the Online Help

The LinkWare online help provides detailed information on LinkWare features.

To get help for the current LinkWare window

Press F1.

To see the online help contents or search the help for a specific topic

Select **Help** on the LinkWare menu; then select **Contents** or **Search**.

Connecting the Tester to a PC

Connect the tester to a serial (RS-232) or USB port (DTX, OMNIScanner, and OptiFiber testers) on the PC using the serial or USB cable that came with the tester.

Details on the serial and USB connections, including descriptions of the interface cables, are provided in the LinkWare online help.

To connect a tester to a serial port (RS-232)

1. Connect the tester to a serial port on the PC.
2. Select **Options** > **Serial Port** in the LinkWare window.
3. In the **Serial Port Options** dialog, set the COM number under **Serial Port** to match the port number on the PC.
4. Click **Test Connection**.

Note

*The **Test Connection** function does not support the FM150 Fiber Meter.*

To connect a tester to a USB port

Connect the tester to a USB port on the PC while Windows® is running and the tester is on.

Connecting the Memory Card Reader to a PC

Some testers can store test records on a memory card, and come with a USB memory card reader for uploading the records to a PC. Older DSP testers included a parallel memory card reader.

To connect a USB memory card reader to a USB port

Plug the reader into a USB port on the PC while Windows® is running.

For details on connecting the parallel memory card reader, select "parallel memory card reader" in the LinkWare online help index.

Importing Test Records

Note

If you don't have any test data, but want to practice using LinkWare, you can use the sample file included with LinkWare software. The sample ".flw" file is copied to your LinkWare directory during installation.

You can import records from a Fluke Networks cable tester, a memory card, or from Scanlink™ or Data-LINK™ files.

If the cable IDs for the records include characters that represent infrastructure elements, such as patch panels and telecommunications spaces, you may want to use the LinkWare Import Wizard to automatically organize your database. See "Using the Import Wizard" on page 5 for details.

To import test records into a LinkWare database

Import button

1 Click the **Import** button.

2 Select the source for the records from the dropdown list.

If LinkWare cannot connect to the tester or reports errors during data transfer, see "Connection Problems" in the LinkWare online help for troubleshooting information.

Using the Import Wizard

When you import records, the LinkWare Import Wizard can automatically build or add to a database structure and place the records at the correct levels based on characters in the cable IDs. For example, if your cable IDs contain characters that represent patch panels, telecommunications rooms, and floors the Wizard can add these icons to the database structure; then place the records at the correct levels in the structure.

To use the Import Wizard

1 If you are importing records from a tester, connect the tester to the PC.

2 Open a new or existing LinkWare database.

3 Click the **Import** button; then select **Import Wizard**.

4 Click **Next**. Follow the instructions in the next two dialog boxes to select a source for the records. Click **Next** after you have made your selection in each box.

5 Select an option for organizing the test records:

- **Use the tester's organization**

  This option organizes the records as they are organized in the tester:

  - DSP records are organized by the site names used in the tester.
  - OMNIScanner and PentaScanner records are organized by the project names used in the tester.
  - DTX and OptiFiber records are organized by the folder names used in the tester. Folder names are assigned to project icons in the database structure.
  - CertiFiber records are organized by the job names used in the tester. Job names are assigned to project icons in the database structure.
  - SimpliFiber and FM150 records are organized by the project name you enter when you import the records.

- **Use the level currently selected in the database structure pane**

  This option places all the imported records at the currently-selected level or at a lower level if one is defined by the tester's organization. This option is not available if a level is not currently selected.

- **Define the fields used in the cable IDs**

  This option lets you tell the Import Wizard which cable ID characters were used to represent the elements in the cabling installation.

  If you select this option, click **Define cable ID fields** to define the fields. This option gives you the following choices:

  Use the following delimiter to separate the cable ID fields

  Choose this option if the cable ID fields are separated by dashes, slashes, periods, or any other delimiter (for example C.A5.23). Enter the delimiter in the box. If the IDs use more than one type of delimiter, use the other option.

  After you enter the delimiter, use the **Field Number** boxes to define which ID field represents which element in the installation. You do not need to define fields for all the elements listed.

  Click **OK** when you are finished.

  Define location of the characters for each field in the cable ID

  Choose this option if the cable ID fields are not separated by a delimiter (for example, CA523), or if the IDs use more than one type of delimiter (for example, C/A5-23).

  Use the **Position of First Character** and **Number of Characters** boxes to define the positions and lengths of cable ID fields. You do not need to define fields for all the elements listed.

For example, for the cable ID C/A5-23, where "C" is the room, "A5" is the rack, and "23" is the patch, you would set the character positions as follows:

Room C
ABCDEFGHIJKLMNOPQRSTUVWXYZ

Rack A5
AB**CD**EFGHIJKLMNOPQRSTUVWXYZ

Patch 23
ABCDE**FG**HIJKLMNOPQRSTUVWXYZ

Click **OK** when you are finished.

6 Click **Next,** then click **Finish** to import the records.

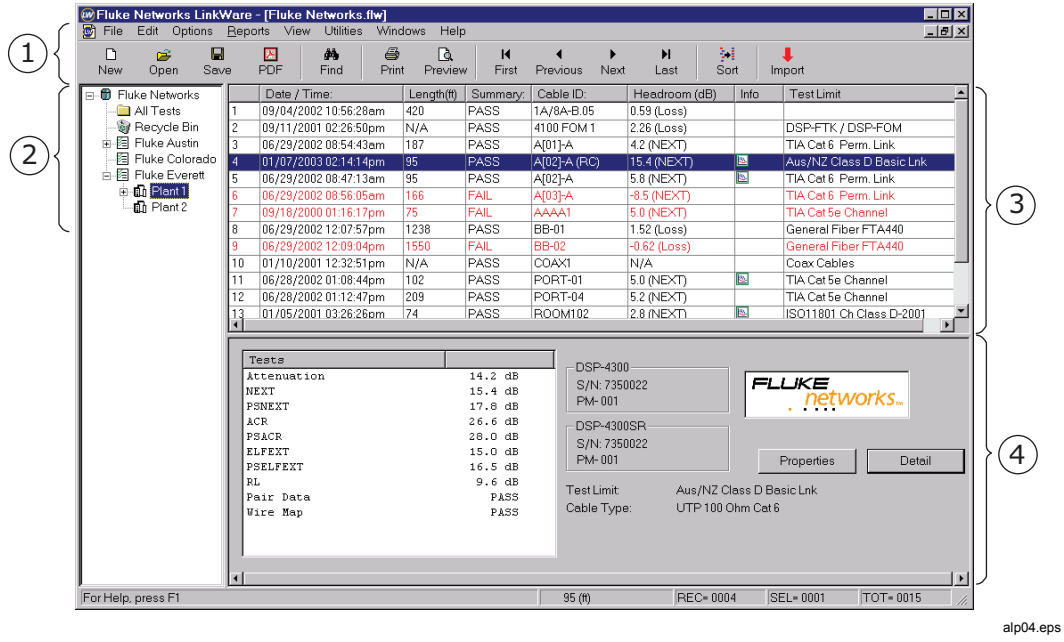
Opening CableManager Files

To open a Fluke CableManager (.fcm) file

Click the **Open** button, then set **Files of type:** to .fcm in the **Open** dialog box; then locate and select the CableManager file.

Working with a LinkWare Database

The main LinkWare window shows the structure of the database and lets you view summaries of the records in the database, as shown in Figure 1,



alp04.eps

① The command menus and toolbar, where you select most LinkWare functions.

② The structure of the current database. The icons represent elements in a cabling installation. You can organize your database by adding project, site, building, floor, telecommunication room, rack, and patch panel icons, then moving test records to the appropriate places. You can choose to show the IDs of these elements at the bottom of your test reports. For jobs where the 606-A administration standard is used, showing this information helps demonstrate compliance with that standard.

③ The record summary list shows the records in the currently selected level in the database structure.

④ The record data pane shows some details about the selected record. Click the **Detail** button to see additional details from individual tests in the record. Click **Properties** to edit the record's administration information.

Figure 1. The LinkWare Database Window

Looking at Test Results

Plot icon

Note icon

To see the results in a record

Click on the record in the list. If a copper test record includes plot data, the plot icon appears in the **Info** column.

If a note has been entered in the record's report properties, the note icon appears in the **Info** column.

To see detailed test results for the highlighted record

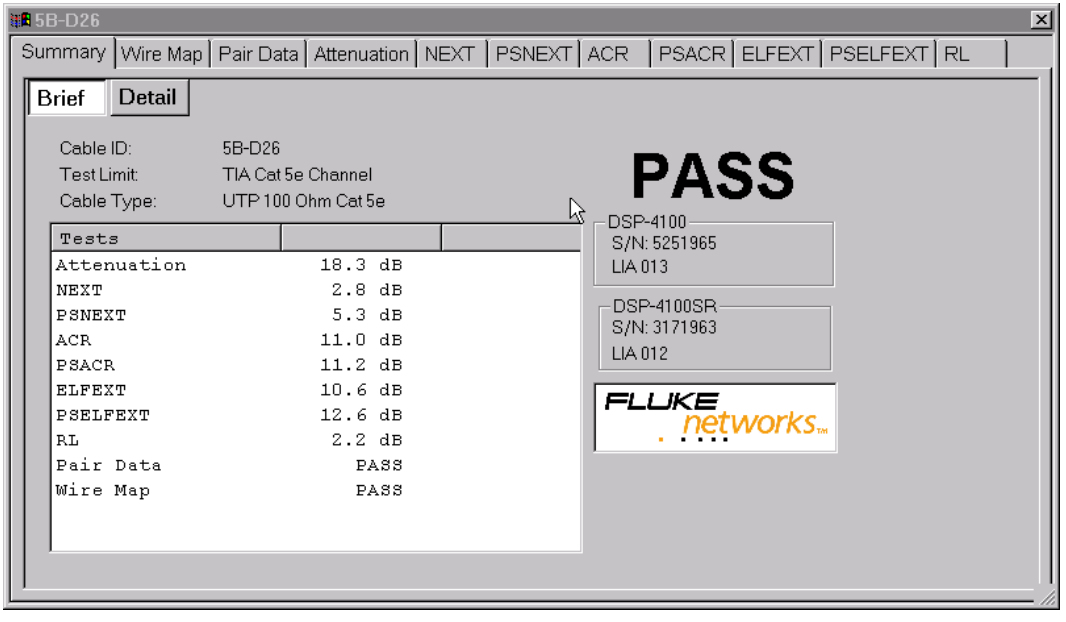
Click the **Detail** button near the lower-right corner of the main LinkWare window, or double-click on a record. This brings up the results pop-up window, as shown in Figure 2.

To see the additional details about the test

Click the **Detail** button on the **Summary** tab in the detail pop-up window.

To see the plot for a test

Click the test's tab in the results pop-up window; then click a **Plot** button.



link0014.bmp

Figure 2. Results Pop-up Window (copper results shown)

Print Preview button

To see what a printed report or summary will look like

Select **File** > **Print Preview**. You can quickly preview reports by clicking the **Print Preview** button.

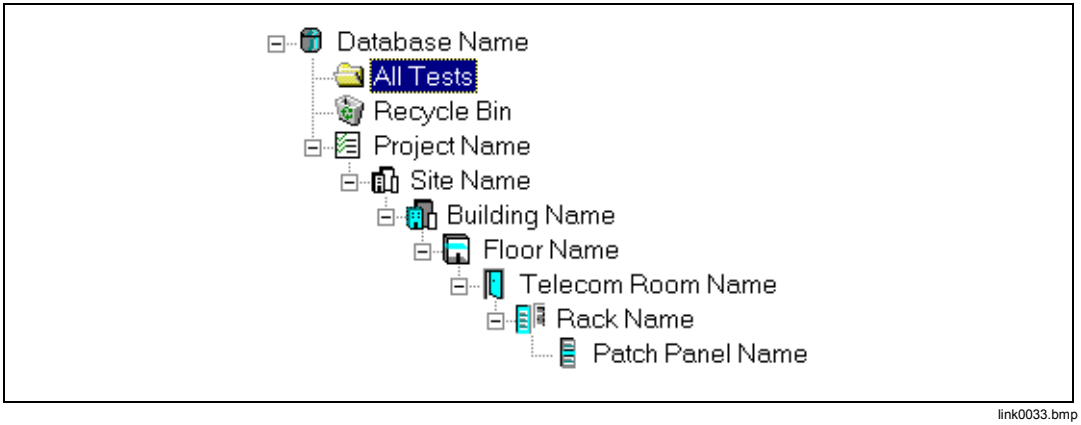
Organizing Your Database

You can organize your database by changing the database structure and by moving and sorting the records.

Structuring Your Database

The database structure at the left side of the main LinkWare window lets you structure your database to match the layout of the cabling installation. Figure 3 shows an example of a database structure with icons added to represent elements in the installation. Table 1 describes the icons in the LinkWare database structure.

In the **Printing Options** dialog, you can choose to show the IDs of the installation elements at the bottom of printed reports. For jobs where the 606-A administration standard is used, showing this information helps demonstrate compliance with that standard.



link0033.bmp

Figure 3. The LinkWare Database Structure

Table 1. Database Icons

Icon	Description
	LinkWare database: This icon shows the name of the LinkWare database.
	All Tests folder: This folder contains all the test records in the database.
	Recycle Bin: The bin contains any tests you have deleted.
	Project: A customer name, work order, or other project identifier. If you import records from an OMNIScanner, PentaScanner or CertiFiber tester, LinkWare creates a Project icon for each project or job name used in the tester. For SimpliFiber or FM150 records, LinkWare creates a Project icon with the project name you entered during the import process. If you import records from a DTX or OptiFiber tester, LinkWare creates a Project icon for each folder name used in the tester.
	Site: A job site. If you import records from a DSP tester, LinkWare creates a Site icon for each site name used in the tester.
	Building: A building at a job site.
	Floor: A floor in a building.
	Telecom room: A telecommunications room on a floor.
	Rack: A rack of patch panels in a telecommunications room.
	Patch panel: A patch panel, punch-down block, or group of panels or blocks with sequentially numbered ports.

To add levels to the database structure

Right-click on an existing icon that is one level up from the level you want to add. Select **Add new** from the popup menu, then select an icon to represent the level you want to add.

To edit an icon's properties, which include 606-A information for some icons

Right-click on the icon; then select **Properties**.

To see all the records at the levels below a level in the database structure

Right-click anywhere in the structure; then select **Include lower-level records** from the popup menu.

To rename an icon

Right-click on the icon's label. Select **Rename** from the popup menu; then enter a new name in the label box. Press ENTER or click on a different icon when you are finished.

To rename the database icon

Select **File** > **Save As** to save the database with a different name.

To move an icon in the database structure

Use the mouse to drag the icon and drop it in a new location.

To delete an icon from the database structure

Right-click on an icon; then select **Delete** from the popup menu. Deleting an icon also deletes all lower-level icons and all records stored at and below the deleted icon.

To restore deleted icons and their associated records

Select the records in the recycle bin, right-click on the selected records; then select **Restore**.

Moving Records

After you import records into a LinkWare file and build a database structure, you can organize the records by moving them to the appropriate locations in the database structure. You can also move records to another database.

To move records between levels in the database structure

1. Click on the name in the database structure where the records are located.

Note

*If **Include lower-level records** is checked, moving records out of any location also moves them from all lower locations.*

2. Select the records you want to move.
3. Using the mouse, drag the records and drop them in the desired location.

To move records to another LinkWare database

1. Open the source and destination databases.
2. If the structure of the destination database does not include an icon at the Project level or below, create one now.
3. Select **Windows** > **Tile** from the LinkWare menu.
4. Select the records you want to move; then drag and drop them on an icon or record list at the Project level or below in the destination database.

Copying and Pasting Records

To copy records within the current LinkWare database or to another LinkWare database

1. Select the records in the record list.
2. Select **Edit** > **Copy** or type Ctrl +C.
3. In the database structure, click on the destination for the records.

Note

*You can paste records only to icons at or below the **Project** level in the database structure. If an icon does not exist at or below the **Project** level, create one as the destination for the records you will paste.*

4. Select **Edit** > **Paste** or type Ctrl +V.

Deleting and Restoring Records

You can delete a record from any location in the database structure. Deleting a record removes the record from all levels in the database. For example, if a record is stored in a patch panel icon, and **Include lower-level records** is selected, you could delete the record from the patch panel icon or from any icon above it.

You can also delete duplicate records that were mistakenly imported twice or copied and pasted within the same database. This function finds duplicate records by comparing cable IDs and timestamps. Deleting duplicate records deletes all duplicates at the level you select and below.

Deleted records go into the LinkWare Recycle Bin, where they remain until you empty the bin, move the records, or restore the records.

To delete records

Select the records; then press Delete on the keyboard.

To delete duplicate records

Click on the database icon where you want duplicate records deleted; then select **Utilities** > **Delete Duplicate Records**.

To delete a database icon and all the records stored in that icon

Right-click on the icon; then select **Delete** from the popup menu.

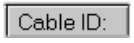
To restore deleted records and their associated icons to the database structure

Select the records in the recycle bin, right-click on the selected records; then select **Restore**.

Sorting Records

You can sort records in ascending or descending order based on cable identification, date and time, site, operator, test summary result, length, or headroom items. LinkWare displays and prints records in the order you specify.

Sorting records at any level in the database structure applies the same sorting order to all levels of the database structure.



Column heading in the records list

To sort records by one item

Click on a column heading in the records list. Clicking on the same heading again sorts the records in the opposite order.

You can also use Quick Sort to sort by one item in ascending order.

To use Quick Sort

Select **Reports** > **Quick Sort**.

The **Advanced Sort** function on the **Reports** menu lets you sort records by multiple items. For example, you could sort the records in ascending alphabetical order by site name; then you could sort the records for each site in descending order by cable identification.

Sorting with all fields set to **None** sorts the records in the order they were saved in the tester.

Advanced Sort uses the **Site** names used in the site icon labels in the database structure. **Operator** names are taken from the records' administration information.

To use Advanced Sort

Select **Reports** > **Advanced Sort**.

Adding and Editing Database Information

You can add administration information to create administration reports. You can also edit some of the information imported with the test records.

Note

You cannot edit test results in LinkWare.

Creating 606-A Administration Reports

LinkWare lets you document a cabling installation to meet the Telecommunications Industry Association's 606-A administration standard. Even if you are not required to meet this standard, you may find some or all of the required documentation useful to you or your customers.

Note

Telecommunications Industry Association standards are subject to changes and amendments. Contact the TIA for detailed information on standards.

Table 2 lists the records defined by the 606-A standard and the paths to the dialog boxes where you can enter information for the records.

For details on 606-A information, press F1 from a record's or icon's **Properties** dialog box, or select "606-A" in the LinkWare online help index.

Table 2. Administration Records

Record	How to Enter Information
Horizontal link record Backbone cable record	Right-click on a test record; then select **Report Properties**. Select **Horizontal Record** or **Backbone Record** in the **Report Properties** dialog box. To enter this information for a group of test records, highlight the group, right-click on the group; then select **Report Properties**. To enter patch panel information for these records, right-click on a patch panel icon in the database structure; then select **Properties**.
Telecommunications space record Telecommunications grounding busbar record (TGB record) Firestopping record	Right-click on a telecommunications room icon in the database structure; then select **Properties**.
Building record Telecommunications main grounding busbar record (TMGB record)	Right-click on a building icon in the database structure; then select **Properties**.
Site record	Right-click on a site icon in the database structure; then select **Properties**.

Editing ID Information Imported from the Tester

Note

LinkWare will not search for or modify test results in records. The message "Unable to find" or "Unable to find or modify this text" appears if you try to search for or modify results.

Test records may include the following ID information imported from the tester:

- Cable or circuit ID
- Custom header (such as your company's name)
- Operator name
- Cable type

To edit the cable or circuit ID, custom header, operator name, or cable type for one record

Highlight the record; then click the **Properties** button.

To edit the custom header, operator name, or cable type for multiple records

Highlight the records; then select **Report Properties** from the **Edit** menu.

To edit the project or site name for one or more records

Right-click on the project or site name in the database structure; then select **Rename** from the popup menu. Enter a new name in the label box. Press ENTER or click on a different icon when you are finished.

To search for and replace ID information

Use the **Replace** command from the **Edit** menu.

Customizing Your Report's Appearance

Select **Options** > **Printing** to choose what will be shown on printed reports. You can choose to do the following:

- Place your own logo on reports.
- Show 606-A information at the bottom of reports.
- Print summaries every time you print reports.
- Select and arrange the plots that appear on copper cable reports.
- Add FiberInspector™ images to OptiFiber reports.

Press F1 in the **Printing Options** dialog box for more information on these options.

Printing Your Reports

You can print cable test reports and summaries and 606-A administration reports.

Previewing Reports and Summaries

To preview reports and summaries before you print them

Select **File** > **Print Preview**.

Printing Reports and Summaries

Figures 4 through 6 show examples of copper and fiber test reports. Report features may vary slightly, depending on which version of LinkWare you have.

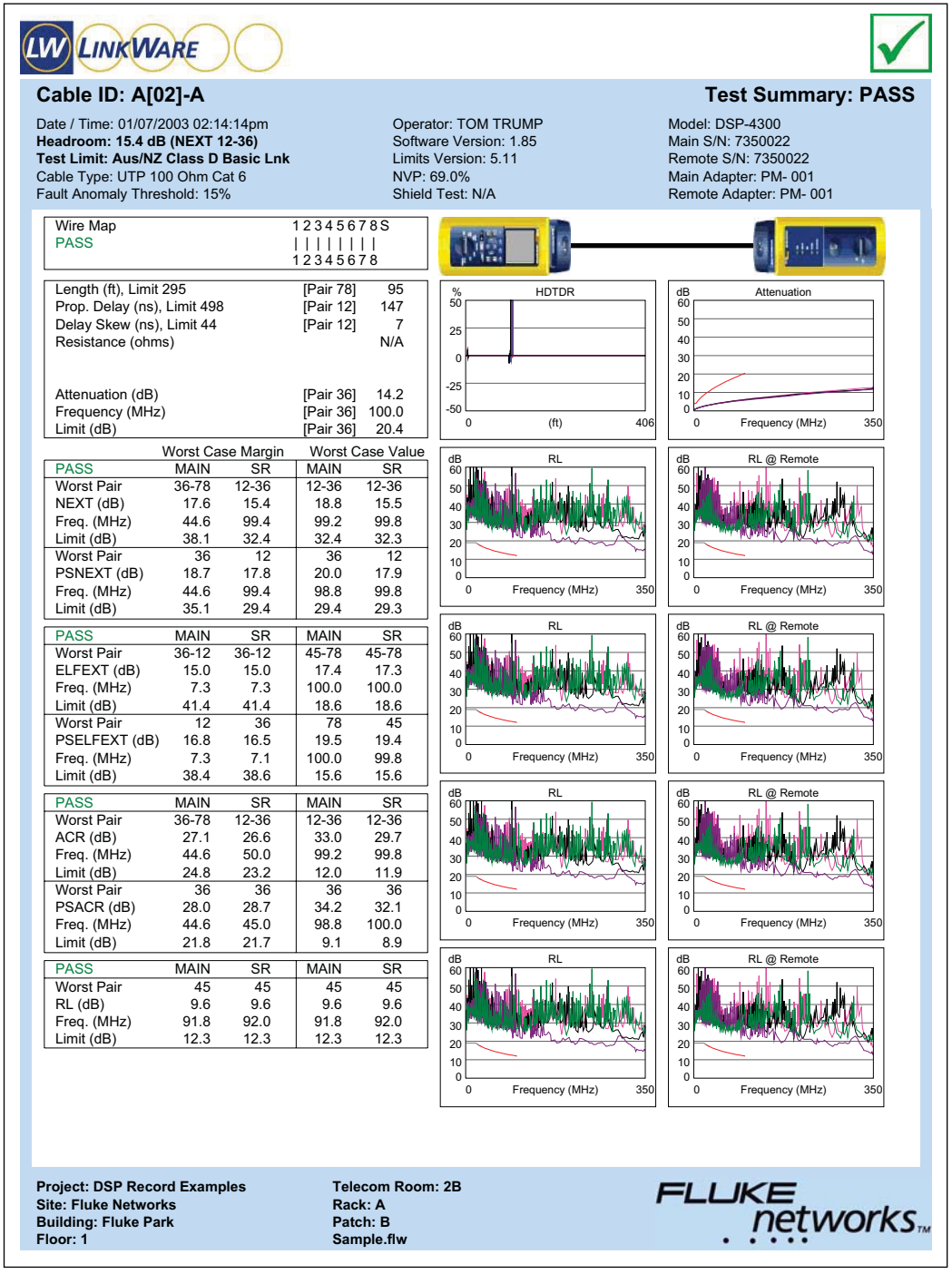
You can also print 606-A administration reports. Information for these reports comes from the properties you enter for the reports and the icons in the database structure.

To always print a summary list whenever you print Autotest reports

Select **Options** > **Printing**; then select **Automatic Summary Print** on the **Summary** tab.

To print Autotest reports, summaries, or administration reports

1. In the database structure, click on the level that contains the records you want to print.
2. In the record list, select the records you want to print.
3. Select **Print** from the **File** menu; then select what you want to print.



alp01.eps

Figure 4. Copper Cable Report

LINKWARE

Cable ID: 1A-B24

Test Summary: PASS

Date / Time: 08/01/2002 07:52:05am
Headroom: 1.25 dB (Loss)

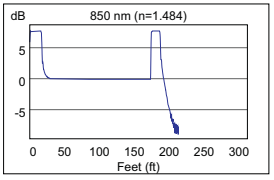
End1: BUILDING3-IDF04
End2: BUILDING3-CLOSET06

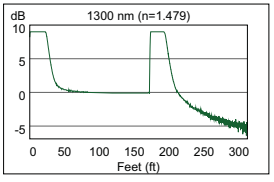
Model: OptiFiber

OTDR End1 PASS

Date / Time: 08/01/2002 07:42:49am
Test Limit: General Fiber
Module: OFTM-5612 (V0.7.49)
S/N: 8129005
Overall Length: 172.84 ft PASS
Overall Loss: 0.15 dB

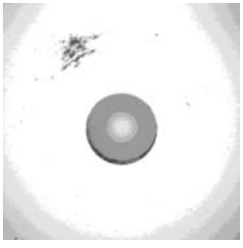
	850 nm (n=1.484)		1300 nm (n=1.479)	
Length (ft)	Loss (dB)	Status	Loss (dB)	Status
6.96	N/A	N/A	N/A	N/A
172.84	N/A	PASS	N/A	PASS





Endface Image End1 PASS

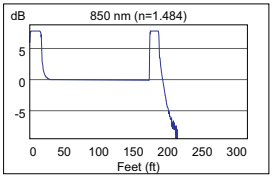
Date / Time: 08/01/2002 07:51:45am
Test Limit: Manual
Operator: JOHN SMITH JR.

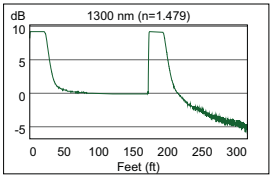


OTDR End2 PASS

Date / Time: 08/01/2002 07:46:20am
Test Limit: General Fiber
Module: OFTM-5612 (V0.7.49)
S/N: 8129005
Overall Length: 172.84 ft PASS
Overall Loss: 0.16 dB

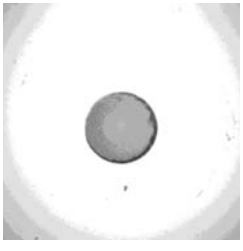
	850 nm (n=1.484)		1300 nm (n=1.479)	
Length (ft)	Loss (dB)	Status	Loss (dB)	Status
6.01	N/A	N/A	N/A	N/A
172.84	N/A	PASS	N/A	PASS





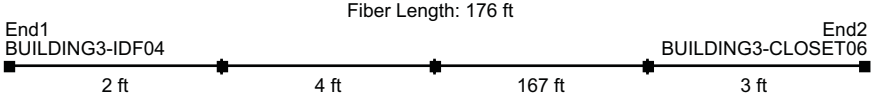
Endface Image End2 PASS

Date / Time: 08/01/2002 07:49:56am
Test Limit: Manual
Operator: JOHN SMITH JR.



ChannelMap

Date / Time: 08/01/2002 07:41:28am
Module: OFTM-5612 (V0.7.49)
S/N: 8129005



Page 1 of 2

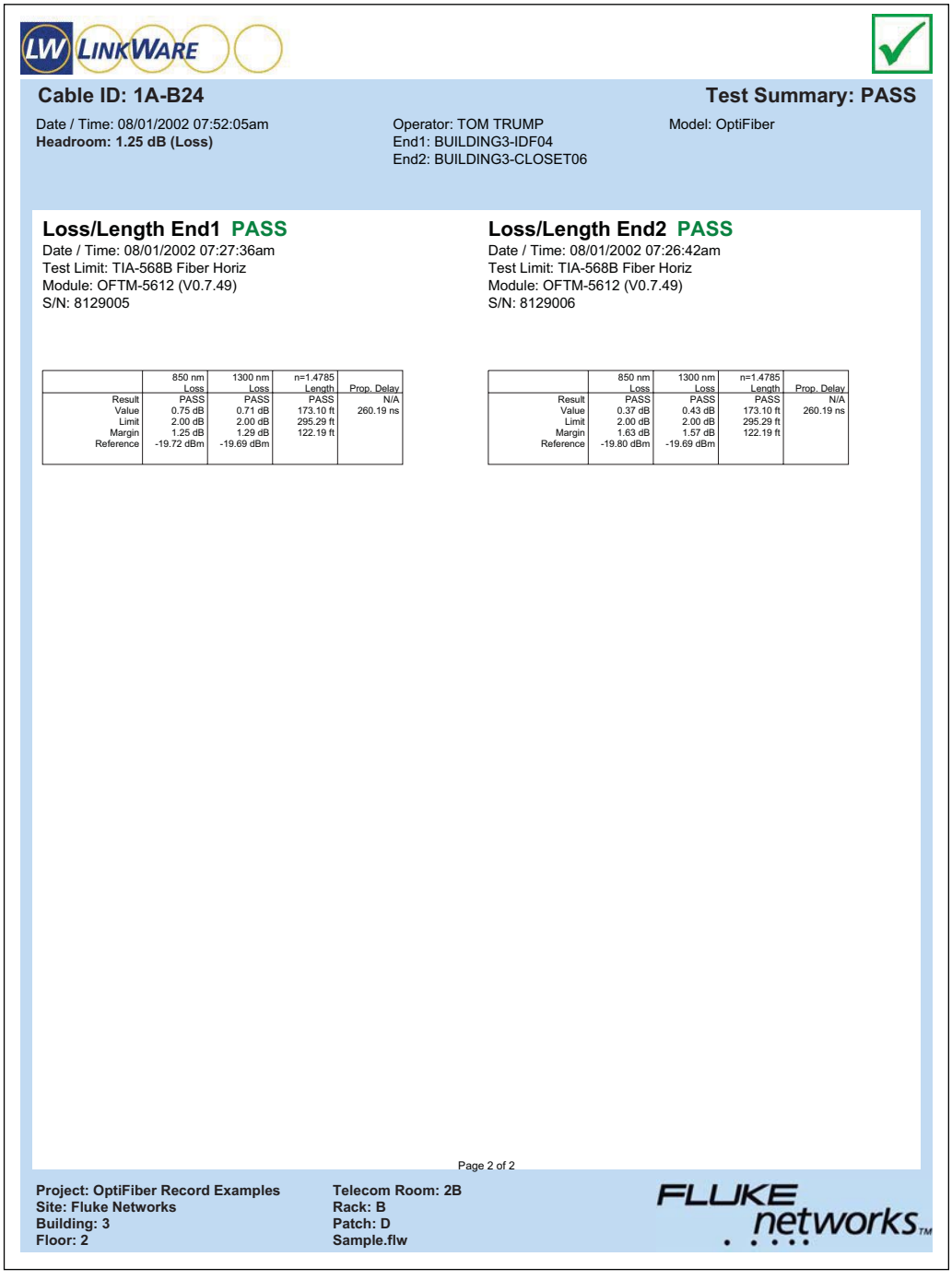
Project: OptiFiber Record Examples
Site: Fluke Networks
Building: 3
Floor: 2

Telecom Room: 2B
Rack: B
Patch: D
Sample.flw

FLUKE networks

alp02.eps

Figure 5. Fiber Cable Report from OptiFiber Tester, Page 1



LINKWARE

Cable ID: 1A-B24 **Test Summary: PASS**

Date / Time: 08/01/2002 07:52:05am
Headroom: 1.25 dB (Loss)

Operator: TOM TRUMP
End1: BUILDING3-IDF04
End2: BUILDING3-CLOSET06

Model: OptiFiber

Loss/Length End1 PASS
Date / Time: 08/01/2002 07:27:36am
Test Limit: TIA-568B Fiber Horiz
Module: OFTM-5612 (V0.7.49)
S/N: 8129005

	850 nm Loss	1300 nm Loss	n=1.4785 Length	Prop. Delay
Result	PASS	PASS	PASS	N/A
Value	0.75 dB	0.71 dB	173.10 ft	260.19 ns
Limit	2.00 dB	2.00 dB	295.29 ft	
Margin	1.25 dB	1.29 dB	122.19 ft	
Reference	-19.72 dBm	-19.69 dBm		

Loss/Length End2 PASS
Date / Time: 08/01/2002 07:26:42am
Test Limit: TIA-568B Fiber Horiz
Module: OFTM-5612 (V0.7.49)
S/N: 8129006

	850 nm Loss	1300 nm Loss	n=1.4785 Length	Prop. Delay
Result	PASS	PASS	PASS	N/A
Value	0.37 dB	0.43 dB	173.10 ft	260.19 ns
Limit	2.00 dB	2.00 dB	295.29 ft	
Margin	1.63 dB	1.57 dB	122.19 ft	
Reference	-19.80 dBm	-19.69 dBm		

Page 2 of 2

Project: OptiFiber Record Examples
Site: Fluke Networks
Building: 3
Floor: 2

Telecom Room: 2B
Rack: B
Patch: D
Sample.flw

FLUKE networks

alp03.eps

Figure 6. Fiber Cable Report from OptiFiber Tester, Page 2

Making PDF Files for Delivering Reports Electronically

Saving reports in PDF format lets you deliver them on diskette, CD, by email, and by other electronic methods. PDF files can be viewed and printed without LinkWare by opening them with the widely-used Adobe® Acrobat® Reader™ software. This software is included on the LinkWare CD and can also be downloaded from the Adobe website.

Note

LinkWare cannot open PDF files.

If you save multiple reports in a PDF file, LinkWare saves them in one PDF file where each report is on a separate page.

To save test reports as a PDF file

1. If you want to save only some of the records from the database, select them now.
2. Click the **PDF** button on the LinkWare toolbar.
3. Select an option in the **Export to File** dialog box; then click **OK**.
4. In the **Save as PDF** dialog box, enter a file name for your reports. The .pdf file extension is automatically added to the file name.
5. Select a directory for saving the file; then click **OK**.

To save 606-A administration reports as a PDF file

1. If you want to save horizontal link or backbone cable reports for only some of the records in the database, select the records now.
2. Select **File** > **PDF** > **Administration Reports**; then choose the type of report you want.
3. In the **Save as PDF** dialog box, enter a file name for your reports. The .pdf file extension is automatically added to the file name.
4. Select a directory for saving the file; then click **OK**.

To combine PDF files

Adobe® Acrobat® Exchange™ software lets you combine multiple PDF files into one file. Visit the Adobe website for details.

Saving Your Database

Saving your database as a Fluke LinkWare (.flw) file saves all the records in one file that you or your customer can reopen and modify with LinkWare.

You can also export records to text (.txt) or comma-separated value (.csv) files for use with other applications. See the LinkWare online help for details.

To save a database as a LinkWare (.flw) file

Save button

1. Click the **Save** button. To save a previously saved file under a new name, choose **Save As** from the **File** menu.

   Note

   *The **Save** button and the **Save** selection on the **File** menu are available only if you have made changes to the database since it was last saved.*

2. In the **Save Database As** dialog box, enter a file name for your database. The .flw file extension is automatically added to your database file.
3. Select a directory for saving the file; then click **OK**.

Creating Cable ID Lists

Note

*For information on industry standards for cable IDs, search for **cable ID standards** in the online help index in LinkWare.*

The **Create ID List** utility lets you create lists of fiber IDs and save them in the tester's internal memory. You can also save the lists on the PC to download to the tester later.

Creating Cable ID Lists for a DTX Tester

1. Select **Utilities** > **DTX Utilities** > **Create ID List** from the LinkWare menu.
2. Note the guidelines for IDs given near the top of the Create Custom ID List dialog box.

   Enter IDs as follows:

   Note

   LinkWare changes all letters to upper case to match the letters available in the tester.

   To add individual IDs to the list

   Enter an ID in the editing box next to the **Enter ID** button. Click **Enter ID** to add the ID to the list.

   To create a sequence of IDs

   Click **Build Sequence**. LinkWare builds an ID list by incrementing the characters in your start ID from right to left until the end ID is reached.

   To copy an ID from the list to the editing box

   Click on the ID in the list.

   To sort the ID list in alphanumeric order

   Click the **Sort** check box.

   To add IDs from another list file

   Click **Open ID List**. Locate an .ids or .txt list file; then click **Open**. LinkWare edits list entries that do not meet the ID guidelines.

   To delete an ID from the list

   Click on the ID; then click **Delete ID**.

To save the ID list on the PC for downloading to the tester later

Click **Save ID List**.

To download the list to the tester

1. Connect the tester to the PC and turn on the tester.
2. Click **To DTX**.

To use the ID list in the DTX tester

Select **List** as the **Cable ID Source**; then select the name of the list you downloaded.

Creating Cable ID Lists for a DSP-4300

The **Create ID List** utility lets you create lists of cable IDs and save them on a memory card for use in a DSP-4300. You can also save the lists on the PC to move to a memory card later.

To create an ID list for a DSP-4300 tester

1. Connect the memory card reader to a PC and insert a memory card into the reader.
2. Select **Utilities** > **DSP-4x00 Utilities** > **Create ID List** from the LinkWare menu.
3. Note the guidelines for cable IDs given near the top of the **Create Custom ID List** dialog box.

   Enter IDs as follows:

   Note

   LinkWare changes all letters to upper case to match the letters available in the tester.

To add individual IDs to the list

Enter a cable ID in the editing box next to the **Enter ID** button. Click **Enter ID** to add the ID to the list.

To create a list of sequential IDs

Click **Build Sequence**. LinkWare builds an ID list by incrementing the characters in your start ID from right to left until the end ID is reached.

To copy an ID from the list to the editing box

Click on the ID in the list.

To sort the ID list in alphanumeric order

Click the **Sort** check box.

To add IDs from another list file

Click **Open ID List**. Locate an .ids or .txt list file; then click **Open**. LinkWare edits list entries that do not meet the ID guidelines.

To delete an ID from the list

Click on the ID; then click **Delete ID**.

4 To save the ID list to the memory card, click **Save ID List**. Locate the memory card reader in the **Save As** dialog box; then click **Save**.

You can also save the list on another PC drive; then move it to a memory card later.

To use the ID list in the DSP tester

Select the list under the auto increment feature in the tester's setup mode.

Notes

LinkWare can open .ids files or text (.txt) files, but saves list files only as .ids files.

The DSP-4300 accesses only the first eight ID list files (sorted alphanumerically) saved on a memory card.

LinkWare truncates ID list filenames longer than 20 characters to meet DSP-4300 file requirements.

Creating Circuit ID Lists for an OMNIScanner Tester

The OMNIScanner Configuration utility lets you create circuit ID lists as part of an OMNIScanner project.

To create an ID list for an OMNIScanner Tester

1. Select Utilities > **OMNIScanner Utilities** > **Configuration** on the LinkWare toolbar.

Edit Project Library button

2. Click the **Edit Project Library** button; then click **Create**.
3. In the subsequent dialog boxes, enter a name for the project and make appropriate choices for the Autotests and cables required for the project.
4. In the **Circuit ID** Dialog box, enter values for the **First Circuit ID** and the **Last Circuit ID**. Click OK when your are finished

Configure selected tree object button

5. To add your project to a configuration that you can download to the tester, click on **OMNIScanner Projects** under the configuration, then click the **Configure selected tree object** button.

   See the online help in the Configuration utility for details on downloading configurations to the tester.

Creating Fiber ID Lists for an OptiFiber Tester

The **Create ID List** utility lets you create lists of fiber IDs and save them in the tester's internal memory. You can also save the lists on the PC to download to the tester later.

OptiFiber associates fiber ID lists with folders on the memory card, but the lists are stored in the tester's internal memory. You can access the list on the tester only if the tester's current folder name matches the name selected when the list was downloaded from LinkWare.

To create an ID list for an OptiFiber tester

1. Put a memory card into the tester. If the folder you want to associate with the list is not present on the card, create it now.
2. Select **Utilities** > **OptiFiber Utilities** > **Create ID List** from the LinkWare menu.
3. Note the guidelines for cable IDs given near the top of the Create Custom ID List dialog box.

   Enter IDs as follows:

   Note

   LinkWare changes all letters to upper case to match the letters available in the tester.

To add individual IDs to the list

Enter an ID in the editing box next to the **Enter ID** button. Click **Enter ID** to add the ID to the list.

To create a sequence of IDs

Click **Build Sequence**. LinkWare builds an ID list by incrementing the characters in your start ID from right to left until the end ID is reached.

To copy an ID from the list to the editing box

Click on the ID in the list.

To sort the ID list in alphanumeric order

Click the **Sort** check box.

To add IDs from another list file

Click **Open ID List**. Locate an .ids or .txt list file; then click **Open**. LinkWare edits list entries that do not meet the ID guidelines.

To delete an ID from the list

Click on the ID; then click **Delete ID**.

4 To save the ID list on the PC for downloading to the tester later, click **Save ID List**.

To save the ID list in the tester's internal memory, click **Write to OptiFiber**; then select a folder to associate with the list.

See the OptiFiber users manual or online help for details on using cable ID lists.

Notes

LinkWare can open .ids files or text (.txt) files, but saves list files only as .ids files.

LinkWare truncates ID list filenames longer than 25 characters to meet OptiFiber file requirements.

About LinkWare Stats

LinkWare includes a demo version of the LinkWare Stats statistical report option. LinkWare Stats provides statistical analysis of cable test reports and generates browsable, graphical reports.

LinkWare Stats reports show key statistics from twisted pair and fiber cable test records exported from a LinkWare database. These statistics help you do the following:

- Quickly determine the overall quality of cabling installation.
- Identify link performance consistency, trends, and the best and worst links.
- Review the capability of the cabling infrastructure.
- Monitor the usage of your test equipment and spot trends in equipment and operator performance.
- Document an installation to get a manufacturer's extended cabling system warranty.
- Compare the capabilities of different cabling systems.
- Add value to your installation services by providing comprehensive documentation to your customers.

To use LinkWare Stats

Notes

The demo version of LinkWare Stats processes a maximum of 20 records. To purchase the full version, contact Fluke Networks or a Fluke Networks distributor.

A purchased version of LinkWare Stats requires a keycode to fully enable the program. The purchased version runs for a trial period of 10 calendar days, then reverts to demo mode until you enter your keycode. See the LinkWare or LinkWare Stats online help or the LinkWare Getting Started Guide for details on getting your keycode.

Stats button

1. Open any cable test database in LinkWare.
2. Click the **Stats** button on the LinkWare toolbar.