

EuroForm Forms and Font Manager Installation and User Guide

English



For HP LaserJet Printers

 EuroForm


Forms & Font
Manager

Installation and User Guide

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EuroForm Forms and Font Manager

Version 03

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Introduction

EuroForm FlashSIMM/DIMM are non-volatile, re-programmable memory options for HP LaserJet Printers. In this manual these will be referred to as **Flash Memory**.

Flash Memory can be used to store macros, forms, fonts and signatures created specifically for use in a customized environment, which will remain stored even when the printer is turned off.

Benefits

Among the benefits of using Flash Memory are:

Increased Throughput

As commonly used forms, fonts and signatures are stored in the printer, the volume of data transmitted to the printer and hence the time taken to download a job can be significantly reduced, resulting in faster overall printing times. The corresponding reduction in network traffic will help avoid network congestion.

Improved Document Management

More effective electronic document management through password protection, network download and update of company standard documents, provides a secure and easily managed printing environment.

Cost Savings

A reduction in stationery costs is achieved by the effective implementation of electronic documents, reducing the need for pre-printed stationery.

Better Mixed Language Printing

Conflicts between PCL and Postscript print jobs are reduced when operating in a mixed printing language environment. PCL data stored in the Flash Memory is not overwritten when the printer switches languages.

Improved Printer Control

Printers on the network can be accessed using bi-directional communications allowing the status and contents of the Flash Memory to be remotely configured and managed.

Compatibility Matrix

Printer	Type	Product
HP LaserJet 4 / 4M	SIMM	1MB, 2MB & 4MB
HP LaserJet 4+ / 4M+	SIMM	1MB, 2MB & 4MB
HP LaserJet 4P / 4MP	SIMM	1MB, 2MB & 4MB
HP LaserJet 4V / 4MV	SIMM	1MB, 2MB & 4MB
HP LaserJet 4Si / 4Si MX	SIMM	1MB, 2MB & 4MB
HP LaserJet 5P	SIMM	1MB, 2MB & 4MB
HP LaserJet 5 / 5N / 5M	SIMM	1MB, 2MB & 4MB
HP LaserJet 5Si / 5Si MX	SIMM	1MB, 2MB & 4MB
HP LaserJet 6P / 6MP	SIMM	1MB, 2MB & 4MB
HP LaserJet 2100	DIMM	1MB, 2MB & 4MB
HP LaserJet 4000	DIMM	1MB, 2MB & 4MB
HP LaserJet 4050	DIMM	1MB, 2MB & 4MB
HP LaserJet 4100	DIMM	1MB, 2MB & 4MB
HP LaserJet 5000	DIMM	1MB, 2MB & 4MB
HP LaserJet 8000	DIMM	1MB, 2MB & 4MB
HP LaserJet 8100	DIMM	1MB, 2MB & 4MB
HP LaserJet 8150 MFP	DIMM	1MB, 2MB & 4MB
HP LaserJet 240	DIMM	1MB, 2MB & 4MB
HP LaserJet 320	DIMM	1MB, 2MB & 4MB
HP LaserJet 9000	DIMM	1MB, 2MB & 4MB
HP Color LaserJet 4550	DIMM	1MB, 2MB & 4MB
NOTE		
Not for use with HP LaserJet 4L, 4ML, 5L, 5ML, 5MP, 6L, 1100,		

Table 1

System Requirements

- 10MB available hard disk space
- Microsoft Windows 95, Windows 98, Windows NT 4.0 and Windows 2000 or higher

Network Requirements (for Flash Memory use in a networked printer)

- HP JetDirect interface card with firmware revision A. 03.15 or higher installed in the printer
- If using Novell Netware, it must be v3.11 or above with ODI or VLM workstation shell

NOTE

No BiDi support using Novell Netware

Requirements for Network BiDi communications

- TCP/IP protocol enabled on the HP JetDirect card (Refer to the HP JetDirect manual for instructions).

Warning: Bi-Di communication from Windows NT client workstations is not supported in this software revision.

NOTE

Information in this document is subject to change without notice.

Installation

Installing EuroForm FlashSIMM/DIMM

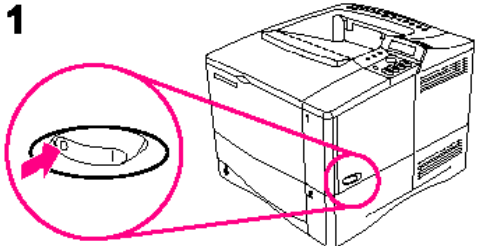
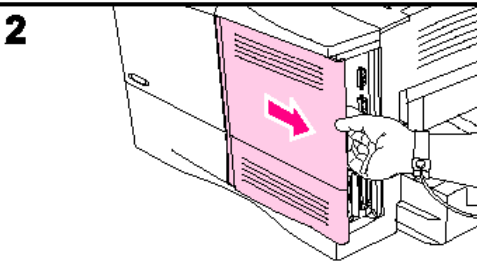
Check the EuroForm FlashSIMM/DIMM label against the compatibility matrix on the previous page to ensure it is the correct unit for the printer concerned.

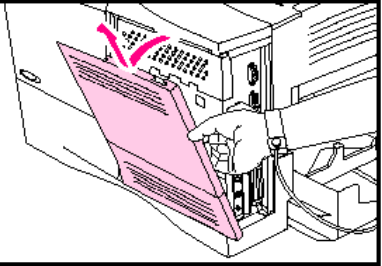
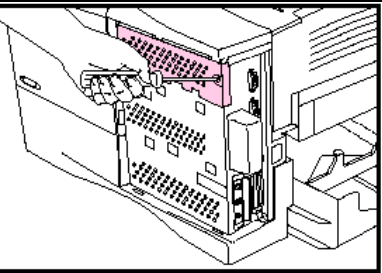
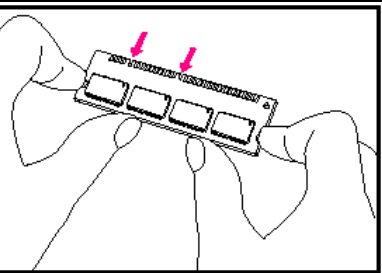
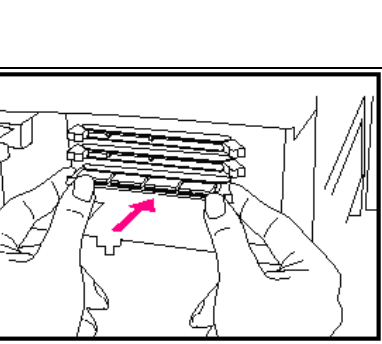
For information on how to install the EuroForm FlashSIMM/DIMM board in the printer, please refer to the section entitled “SIMM/DIMM Board Installation” in the printer’s User Reference Manual.

NOTE

Video clips (AVI) are on the CD showing how to install the DIMM on a HP LaserJet printer.

If you have not already done so, print a configuration page to find out how much memory is installed to make sure you have a slot free to add the Flash Memory. The following example illustrates how the FlashDIMM module is installed in the HP LaserJet 4000, 4050 and 4100 series of printers.

<p>1</p> 	<p>Turn the printer off. Rotate the printer for access to its right side.</p> <p>Unplug the power cord and disconnect any cables.</p>
<p>2</p> 	<p>Grasp the cover (as illustrated) and pull it firmly toward the rear of the printer until it stops.</p>

<p>3</p> 	<p>Remove the cover from the printer.</p>
<p>4</p> 	<p>Loosen the captive screw holding the DIMM access door with a Phillips #2 screwdriver.</p> <p>Open the door.</p>
<p>5</p> 	<p>Remove the DIMM from the anti-static package.</p> <p>Hold the DIMM with fingers against the side edges and thumbs against the back edge.</p> <p>Align the notches on the DIMM with the DIMM slot.</p> <p>(Check that the locks on each side of the DIMM slot are open, or outward).</p>
<p>6</p> 	<p>Press the DIMM straight into the slot (press firmly).</p> <p>Make sure the locks on each side of the DIMM snap inward into place.</p> <p>(To remove a DIMM, the locks must be released).</p>

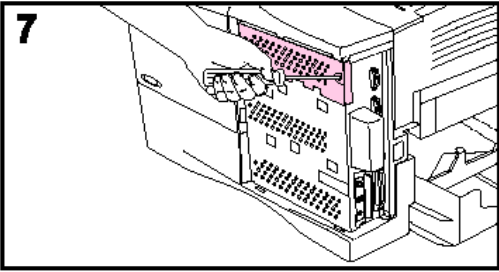
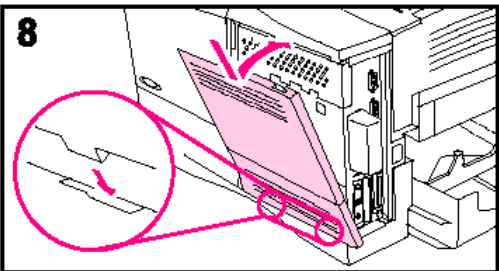
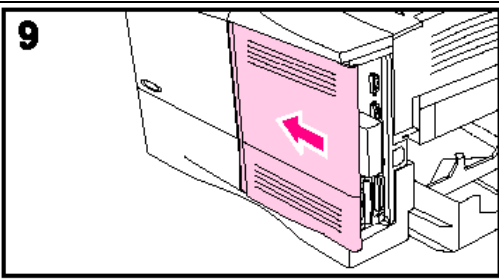
<p>7</p> 	<p>Close the DIMM access door and tighten the screw.</p>
<p>8</p> 	<p>Set the bottom of the cover onto the printer. Make sure the bottom tabs on the cover fit into the corresponding slots in the printer. Rotate the cover up towards the printer.</p>
<p>9</p> 	<p>Slide the cover toward the front of the printer until it clicks into place. Reattach any interface cables and the power cord, then turn the printer on and test the DIMM.</p>

Figure 1

Installing EuroForm FlashSIMM/DIMM

WARNING

SIMM/DIMM boards can be easily damaged by small amounts of static electricity. To reduce the risk of damage, keep the SIMM/DIMM in its anti-static bag until ready to install. Touch something metal before the card and handle the board carefully at all times, avoiding flexing it or touching its components.

Testing the Flash Installation

To test if the EuroForm FlashSIMM/DIMM is correct installed, please do the following:

- Turn the printer ON
- Use the Menu key to select the Test Menu
- In the Information Menu go to PRINT CONFIGURATION PAGE using the Item key
- Press the Enter key

NOTE

Some printers do not have a Menu/Display. Read in the HP User's Manual how to print configuration page.

Verify that the EuroForm Flash solution is listed under Installed Personalities and Options on the printed Configuration Page.

HP LaserJet 4050 series printers **HEWLETT®
PACKARD**

Configuration Page 1

Printer Information	Memory
Product Name: HP LaserJet 4050 Series Printer Name: HP LaserJet 4050 Series Printer Number: B Formatter Number: S46XXXXXXX Printer Serial Number: XXXXXXXXXX Firmware Datecode: 19981230 MB6.22W PS Wait Time-out: 300 seconds Page Count: 334 Preventive Maintenance Interval: 200000 Pages Since Last Maintenance: 334 HP JetSend Address: ip:212.242.67.246	Total Memory: 16 MB DWS: 4.12 I/O Buffering: 100 KB Allocated of 12200 KB Available Resource Saving: 0 KB Allocated of 9100 KB Available

Event Log	Security
Number of Entries in Use: 6 Maximum Number of Entries: 30 Last Three Entries: Number Error Page Count 6 13.1 50 322 5 79 00FE 273 4 79 00FE 270	Control Panel Lock: NONE Control Panel Password: DISABLED Write Protect: DISABLED

Installed Personalities and Options	Paper Trays and Options
PCL (19981230) PCLXL (19981230) PS (19981230) EuroForm Flash DIMM Build 75 (19990701) DIMM Slot 1: Side 1: 1 MB ROM DIMM Slot 2: Side 1: 1 MB ROM DIMM Slot 3: Empty EIO 1: Empty EIO 2: HP JETDIRECT J3113A RAM DISK Storage: 8000 KB Capacity	Mopier: ON Default Paper Size: A4 Tray 2 (A4) Tray 3 (A4)

Figure 2
Configuration page

Installing the Forms and Font Manager software

Accompanying the Flash Memory is a software program called Forms and Font Manager. Its purpose is to manage the selection of macros, forms, fonts and signatures. It also manages the process of downloading to a printer and the contents and status of the Flash Memory.

To install the software, do the following:

- Insert the CD named Forms and Font Manager in the CD Drive
- In Windows 95/98/NT/2000, chose Start then Run from the TaskBar
- Type D:\SETUP (or specify the letter of the drive containing the installation CD) in the text box
- Follow the instructions on the screen, clicking Next to select the recommended system defaults
- At the end of the installation the PC have to be rebooted
- The installation is now completed

To use the Forms and Font Manager in a network environment, the Network Operating System must be Windows Sockets v. 1.1 compliant. The networked printers must have TCP/IP enabled on the HP JetDirect cards and IP addresses set (Refer to the HP JetDirect manual, P/N J2552-90051, for instructions).

Registration of the Forms and Font Manager software

The first time Forms and Font Manager is started a window will appear. Type in the registration key on the back of the CD box. Then Forms and Font Manager will run for 14 days without further registration. In this test period Forms and Font Manager will work 100 %.

During the test period Forms and Font Manager will indicate how long time of the test period remains. To make the final registration just type in the information needed and press the web button. This will send an e-mail to EuroForm and an e-mail will be returned with a registration file. If the web button doesn't work, it could be a firewall problem or a missing Internet connection. In this case use the fax button, this will print a registration form to LPT1. Fax this to EuroForm. The fax number will be printed on the form.

After the 14-day test period Forms and Font Manager will not update or program the Flash devices in the printers. The software will function as a non-working demo version. Be sure to register before the test period ends.


Getting Started

This chapter will describe how to create a project in Forms and Font Manager step by step.

The steps will be like this:

- Step 1: Create a new project
- Step 2: Adding files to the project
- Step 3: Adding a printer to the project
- Step 4: Download the project to the printer
- Step 5: How to print a test of the downloaded files

Step 1: Create a new project

First a new project is made by pressing the button  to make a new project.

Naming the project

By default the project will be named “New Project”.

To rename the project just type the new name or right click on the name and select the rename function.

In this sample the project name is “Step by step Project”.

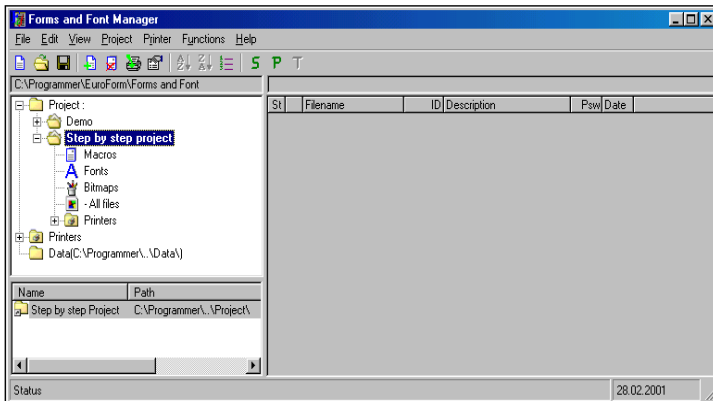



Figure 3
Create a new project

Step 2: Add files to the project

The next step in making a project is to add files.

- Click on the icon  and the window shown in Figure 13 (see Add file to project) will appear
- Select the file you want to add and press OPEN
- The selected file will now be added to the selected project.

Alternatively adding files can also be done by “dragging and dropping” files into the project or by right clicking on the project name. All added files must be given an ID number. This ID number is the number that makes it possible to use the files from different applications. The figure below shows the four different types of files.

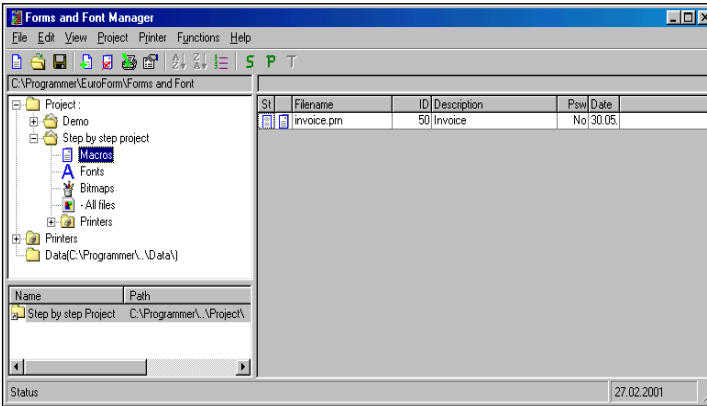


Figure 4
A macro is added to the project

FFM supports PCL5e macros. These macros can be created using any Windows application and then printed via a PCL5e driver. The Macro files are often referred to as PRN files.

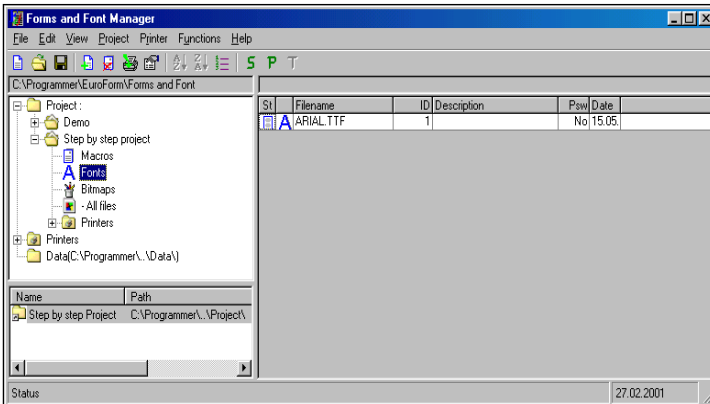


Figure 5
A Font is added to the project

Many font formats are supported. More details can be found in Appendix 1.

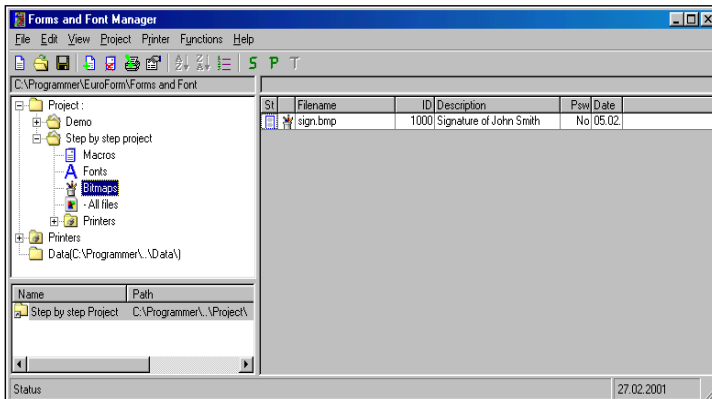


Figure 6
A bitmap is added to the project

Bitmaps will depend on the settings of being stored as a macro or font. Bitmaps are often used for signatures/company logos. The different supported formats are listed in Appendix 1.

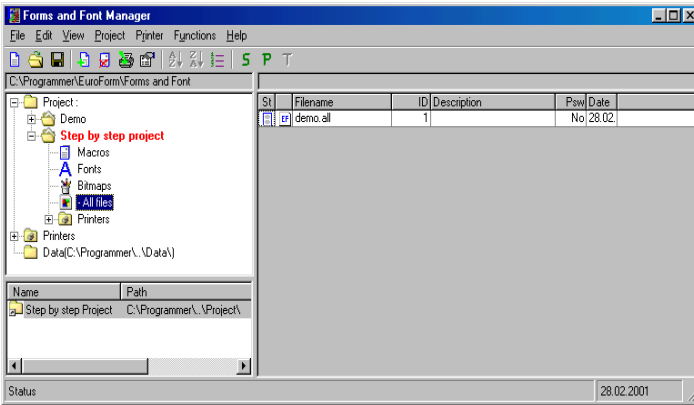


Figure 7

An ALL file is added to the project

The ALL file is the output file format from FFM. This function gives FFM the ability to be used as distribution tool together with the multi-printer download function.

Step 3: Add a printer to the project

Now it is time to add a printer to the project. This is done by right click on the project name and select the Add Printer function or by drag'n'drop from the printer list. It is possible to add as many printers as needed to a project.

If a printer group is added to a project, then all printers in the group will be added to the project.

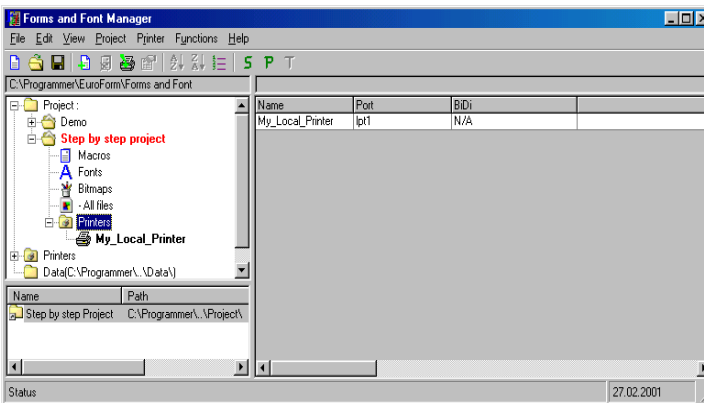


Figure 8

A printer is added to the project

Step 4: Download the project to the printer

Now the “step by step project” contains 3 different files (Macro: Invoice.PRN, Fonts: Arial.ttf and Bitmaps: sign.bmp) and there is also added a printer. The project is now ready to be downloaded to the default printer. There are two different ways to do this:

Downloading directly:

It is possible to download directly to all added printers (LPT1, IP, IPK). Select the function Download and the download window will appear. Here are all the settings regarding the download directly available. If the project only contains one printer then simply press the download button. The download window will inform about the download process and the result. Most printers need to reboot to update the Flash Memory. This will happen automatically and then the resources will be ready to use.

Not all Windows versions will handle the bi-directional Communication correctly.

Copy the ALL-file to the printer:

The ALL file is always generated, but you have the option to only make an ALL-file. When this function is used the file, “Project name.all” will be generated. This file can be copied to one or more printers, and then updating the Flash Memory just like a directly download.

Example of how to copy to a printer from DOS:

```
Copy /b "step by step project".all lpt1:  
/b          = Binary copy  
lpt1:      = printer port
```

NOTE

Appendix 3 contains a description of how to copy an ALL file to a printer in different OS.

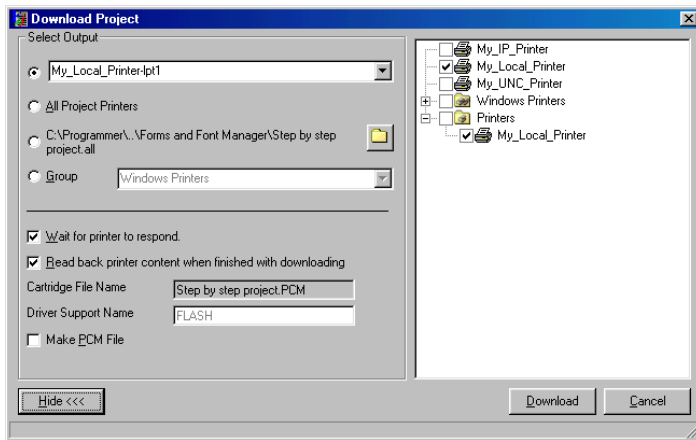




Figure 9
The project is to be downloaded to the local printer

Step 5: How to print a test of the downloaded files

When the project is downloaded to the printer, it is then possible to test the files by using the build in test function. Mark the files that shall be tested and then press the button . The selected file will be printed on the projects default printer.

Another way to verify that the 3 downloaded files are correctly stored on the Flash is to print a status page. The status page is a printout of the content on the Flash.

The status page can be printed in different ways:

- From the active project, Press the tool button .
- In the FFM folder on the computer is a directory "Util". In this folder is a file "status.pjl", Copy this file to the printer and a status page will be printed.
- On the printer, go to the – FlashDIMM menu - and select "Print Statuspage". This function is only available on some HP printers.

Main Functions

Once the Flash is installed in the printer and the Forms and Font Manager software is installed on the PC, load the program by double-click the icon in Program Manager.

Then the Main menu of Forms and Font Manager will appear.

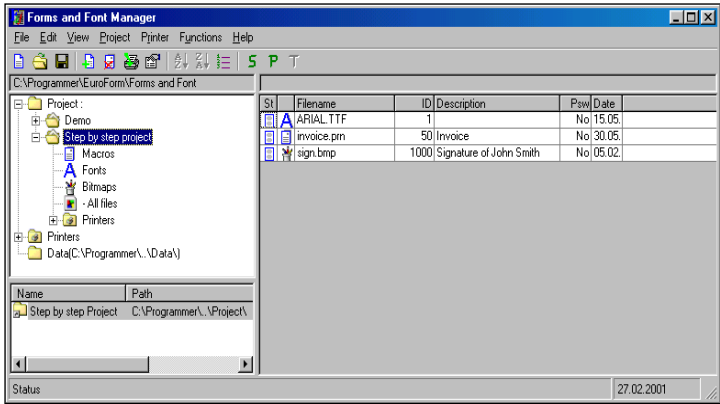


Figure 10
Forms and Font Manager Main menu

The upper left window is the explorer window, here the user can view different projects, printers and data.

The right window shows the contents of the selected item from the explorer window.

The lower left window is the shortcut window that enables the user to change from one working folder to another.

The toolbar at the top of the window contains shortcuts to the most used functions.















Icons	Function
	New Project
	Open Project
	Save Project
	Add file
	Delete
	Download Project
	Properties
	Sort Ascending
	Sort Descending
	Auto Number
	Print Status Page
	Print Project Description
	Test Selected file(s)

Table 2

The toolbar

New Project

When there is a need for a new project then:

- Click on the icon  and a new project will be added to the project list
- The project name is “New Project” but can be changed by typing a new name, or by right click and selecting the Rename function
- Then the project is created and files and printers can be added to the project


For further information please refer to the sections: “Add file to the project” and “Add printer”.

The new project will be based on Normal.prj default settings. If a specific printer is used generally, then just add this printer to Normal.prj and it will appear in all new projects. Normal.prj is stored in Program Path\Project.

Select “Project/Default settings” in the top menu to change other default settings.

Open Project

When a previous saved project has to be opened:

- Click on the icon  and the dialog in Figure appears
- Select the project to open and press **Open**

The project folder will be moved to the new path, and the selected project will now be opened.

The shortcut window can also be used to change the project path.

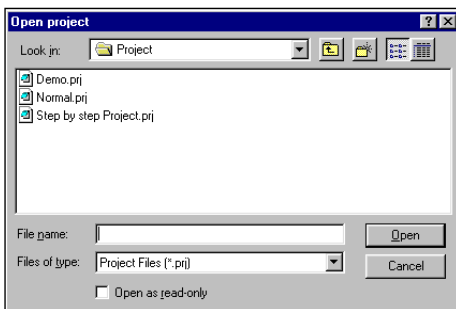



Figure 11
Open project

Save Project

When a project has to be saved then

- Click on the icon  and the window shown below will appear
- Select the path and file name and press **S**ave

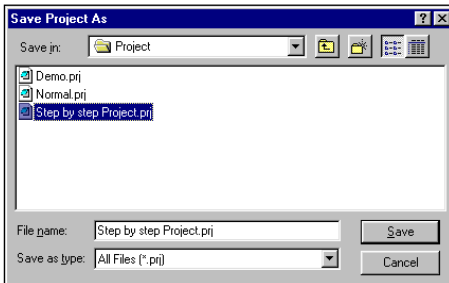



Figure 12

Save project

Add file to the Project

When a macro/font/bitmap must be added to the project then:

- Click on the icon  and Figure 13 will appear se manual
- Select the file you want to add and press **O**pen
- The selected file will now be added to the project

It is also possible to Drag & Drop files to the project, from the data directory or use Windows Explorer. Select the file to move, hold the left mouse button down and drag the file to the destination project.

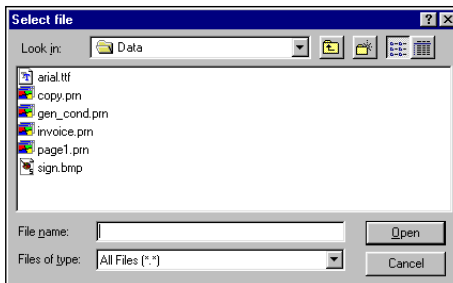



Figure 13


Add file to project

In the project it will be placed in the appropriate folder, Macros, Fonts or Bitmap. If the file type is not recognized or not supported an error message will appear with an option to get more information from the help file. If you choose to add the file, the file will not be added to a folder, but it will be added directly in the project and have a  as the icon type.

See Appendix 1 for more details on supported files.

Delete Item

When a macro/font/bitmap must be removed from a project then


- Mark the Item, then press the icon , or press the Delete button

The Item will now be removed from the project.

The Item is not deleted on the Flash device before the Flash device is erased or before a new macro with the same ID overwrites the Item.

Download Project

When a project needs to be downloaded to a printer or to an ALL-file then:

- Place the cursor on the project that needs to be downloaded
- Press the Icon  and figure 15 will appear or right click on the project and select “Download”

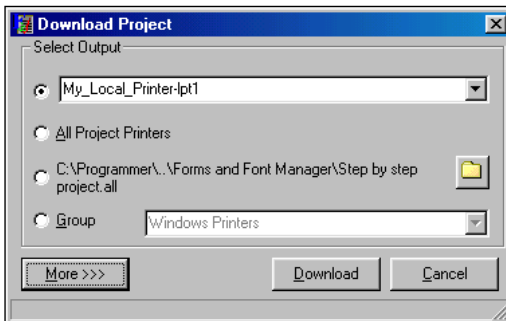


Figure 14
Download project

The project can be downloaded to:

- The current printer
- All printers in the project
- A .ALL file
- A group of printers
- Selected printers from the Download Advanced Window (More >>> button)

A .ALL file is always created before the download starts. This file can always be copied to a printer with a Flash device installed.

See Project / Options in the top menu for the .all file path.

When a project is downloaded to one or more printers, the .ALL file will be copied to the port that the printer is defined to. The download process will be shown as a bar at the bottom of the download window. If the download is to more than one printer then a multi-print window, that shows the status for each printer, will appear. From here select download again to start downloading.

Download Advanced

If you want to change the default settings for downloading projects, select “More” in the download window.

In this window, you are able to select / deselect printers as needed.

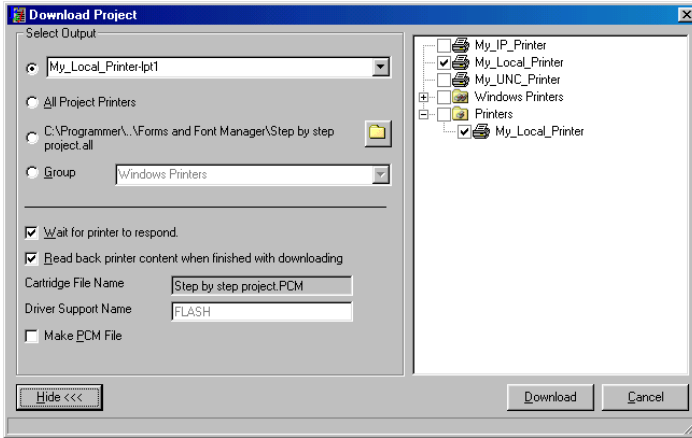


Figure 15
Download advanced

Multi-Print

If you have selected more than one printer for your download, the Multi-Print window shows up.

You need to click on the download button, to start downloading. During download the status will be updated, and you should be able to react from this.

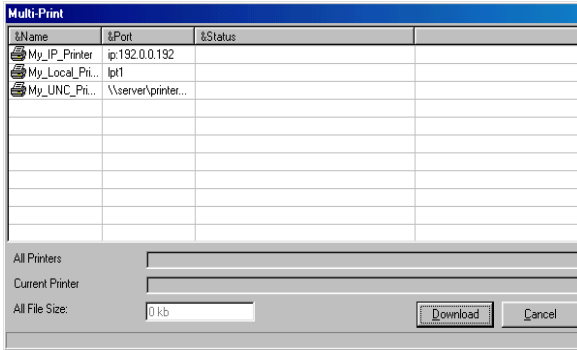


Figure 16
Multi-Print

Properties

Properties are special settings, which can manipulate the printing behavior of the macros, fonts and bitmaps. The properties for a file (macro, font or Bitmap) are displayed by placing the cursor on the file, a right click, and then select the function Properties.

Figure 17 is an example of the properties in the demo file sign.bmp.

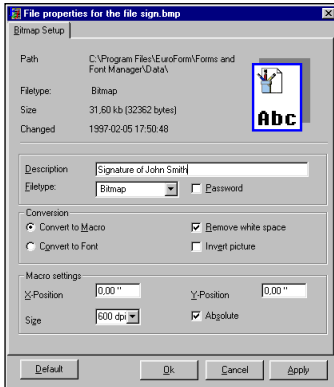


Figure 17

File properties for a Bitmap file

Please refer to “Setting up Forms and Font Manager” for more details on file properties.

Add Printer

There are two ways to add a new printer to a project:

- If the printer exists then drag'n'drop the printer to the project from the list of printers or from another project
- If the printer doesn't exist, then right click on the project and select "Add Printer" and the window shown below appears. In this window the printer can be set up as a Network printer using the following syntax:

IP: IP: 10.0.0.20

UNC: \\servername\printer\

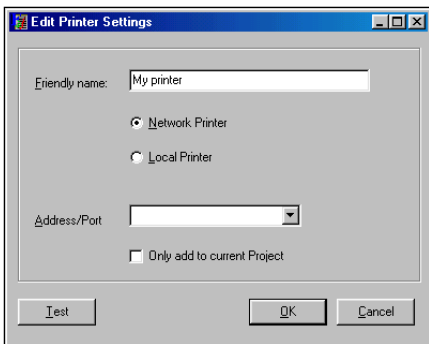


Figure 18

Add printer

If a printer is added to a project with the same port/IP address or URL path as an existing printer, then the error window shown in figure 19 appears. There is no reason for having two printers in the same project with the same port/IP address or URL path.



Figure 19

An error has accrued

Sort files in a project

Sort ascending

If the information, shown in the right side of the screen, shall be placed in order:

- Use the icon  to sort ascending

It is also possible to sort the files by click on the column description on the right side of the screen.

One click will sort ascending, two clicks will sort descending.

Sort descending

If the information, shown in the right side of the screen, shall be placed in order:

- Use the icon  to sort descending

It is also possible to sort the files by click on the column description on right side of the screen.

One click will sort descending, two clicks will sort ascending.

Automatic numbering files in a Project

This icon  can enable/disable the auto number function.

The function gives an ID number to macros/fonts/bitmaps automatically.


The next ID number will be assigned to the macro/font/bitmap, starting from 1.

It is possible to drag & drop many files this way and not have to assign an ID to each.

First priority is the macro command `<esc>&f6009Y`, in any combination in the file. In this sample, the ID would be assigned Macro no. 6009.

Second priority is the filename. If the filename is Numeric, i.e. 7301.PRN then the Macro ID would be 7301.

Checking the Status Page

This icon  sends a status page to the default printer.

The default printer is marked in **Bold** letters in the printer list.

The status page gives information about the contents of the flash. If the installation is correct, there will be a Flash Personality on the Configuration page.

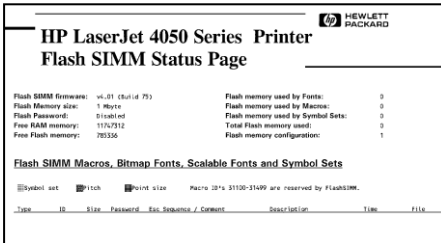


Figure 20

Flash SIMM Status Page


Checking the Project Description

This icon  sends project descriptions to be printed on the default printer.

The default printer is marked in **Bold** letters in the printer list.

Test Files in a Project

When a project is downloaded to the printer, it is possible to test the downloaded files in the printer.

- Select the file in the project, which has to be tested, and then press the icon .

This will print the marked file on the default printer using the PCL code to activate the macro or font on the Flash Memory.

This is the best way to test that the files are downloaded to the printer.

If you need to test more than one macro on the same page, you can use CTRL and Shift to mark the files.

The file used for testing is stored as “flash.tmp” in the program directory.

Printer Group

It is possible to create groups of printers, like special groups of printers to specific departments in the company.

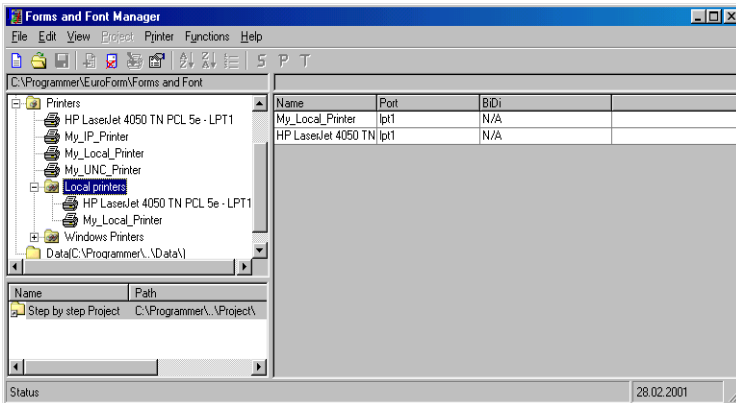


Figure 21

Printer Group

- To create a printer group, right click on Printer folder, and select “New Group”. Name the group the same way as projects
- To add printers to the group, right click on the Group name, and select “Add New Printer”, or drag other defined printers to the new group

If a group of printers is dragged & dropped to a project, all printers in the group will be added to the project.

PCM File

The PCM files are used when a font or a macro needs to be called from a Windows application without using the proper <esc> sequence. The PCM file is "installed" into a PCL5e Windows printer driver adding the font/macro to the Windows font list. This list can then be selected in most Windows applications, and when the document is sent to a printer having the font/macro installed, then the correct font/macro is printed.

Install a PCM file.

Select properties on a printer driver and open "other options".

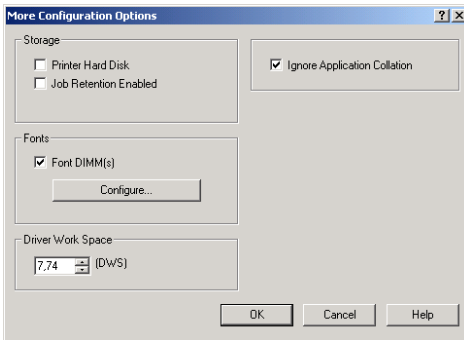


Figure 22

Printer driver configuration

Select: Configure...

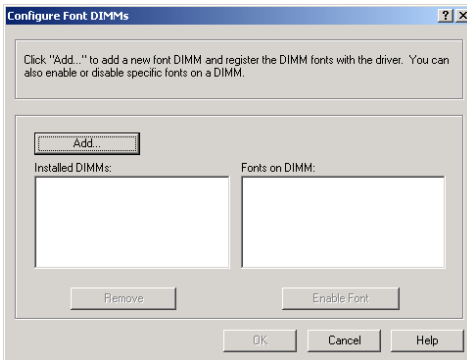


Figure 23

Adding a PCM file

Select Add... and point on the PCM file made with FFM.

The font/macro will now be available in Windows programs as long as the driver containing the PCM file is selected.

NOTE

It's only possible to install a PCM file into a PCL5 driver not into a PCL6 or a PS driver.

Shortcuts

To change the working directory (Project- and Data- directory) easy, use the shortcut function.

The shortcut function can be found in the lower left window.

- Right click in the area to make a new shortcut
- Type in the shortcut name and the Project- and Data- directory

The next time that the working directory has to be changed, then just double-click the shortcut.

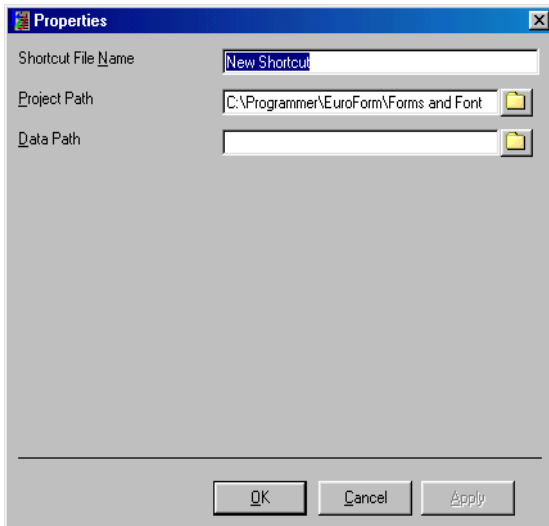


Figure 24

Shortcut

If the Data-directory is left empty in a shortcut, then it will remain the same when the shortcut is used.

The Project- and Data- directory can also be changed by going to the function menu.

Setting up the Forms and Font Manager

Having read the Getting Started section, all the basic Forms and Font Manager functions are known. In this chapter all the settings will be described.

Project Defaults settings

When a project is selected, it is possible to select the default setting menu, go to **Project** and then **Defaults settings**. If these settings are changed, it will affect the selected project.

There are 5 different tabs:

- General
- Printer Codes
- Bitmaps Setup
- Font Info
- Job Commands

If Forms and Font Manager is started with: `ffm.exe /exp`, this extra tab will appear

- Expert Settings

General

The description field allows text to be entered to help identify the file. The file type is determined by Forms and Font Manager by examining the contents of the file. If the file type is incorrect, it can be altered by selecting the correct file type from the drop down list box. If the macro is to be password protected, check the Password box.

If the Password checkbox is set, the file can only be printed if the password is entered, the password is set in: Project Option / Password.

These fields are also shown in the Bitmap set-up and Font Info tabs.

The Portrait / Landscape button indicates which orientation the paper will have. The test text is a way to get a text added to the test print. The X and Y position enables changing of the placement of the macro. The measurement units are set under Program Settings.

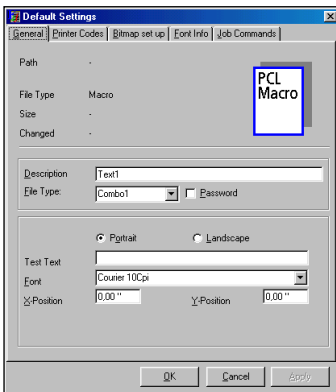


Figure 25

General

Printer Codes

The download optimization routine uses a compression algorithm to minimize the amount of storage space taken up on the Flash Memory. The default is to optimize .ALL files. If “Optimize bitmaps” is deselected, any bitmap files in the Project will not be compressed.

The “Printer Codes to be removed” panel allows the selection of escape sequences and printer commands to be excluded from the files added to the project. This panel is also available in the File properties on a file, to allow the default settings for individual files to be overwritten.

Most applications will insert printer commands when creating output files. These commands may not be required when using the file as a macro (e.g. an invoice template should not print a Form Feed before the invoice data has been merged).

The default is to strip all the codes, which control the mechanical functions of the printer. These codes are listed in the panel. Any necessary control codes can then be inserted, at the right place in the project, using the **Job Commands** function. This panel is also available in the File properties at each file, to allow the default settings for individual files to be overwritten.

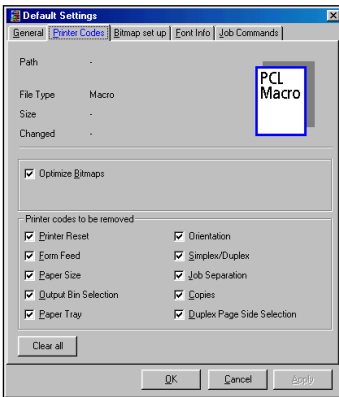


Figure 26

Printer Codes

Bitmap Setup

Conversion

This menu selects the type of conversion that will be applied to bitmaps. Default is "Convert to macro".

- To remove the white space around the edge of all bitmaps put a checkmark in the box (default)
- To invert all bitmaps (i.e. have them print in negative) put a checkmark in the box (default)

These settings can be changed for individual bitmaps later.

Macro Settings

The X- and Y-Position default co-ordinates can be set here. These are relative to the actual cursor position, unless the Absolute box is checked.

The size of the bitmap can be set in the size. Default is 75dpi, but can be up to 600dpi.

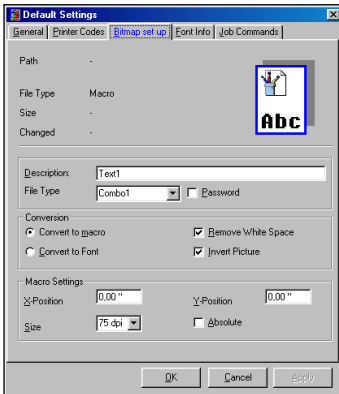


Figure 27

Bitmap Setup / Macro

If Conversion is set to "Convert to Font", the menu changes so that Macro Settings changes to Font Settings.

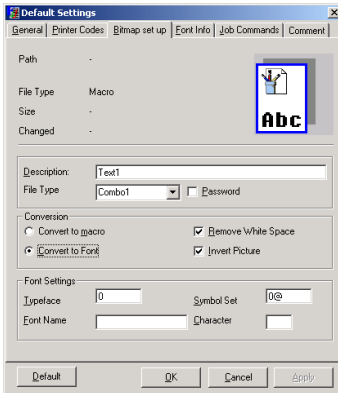


Figure 28
Bitmap Setup / Font

These settings define the Typeface, Font name, symbol set and the Character to which the bitmap is converted.

Font info

This info box gives detailed information about the selected font. There are no settings here to configure.

For an in-depth explanation of PCL font characteristics please refer to the Hewlett-Packard PCL5 Printer Language Technical Reference Manual (HP P/N 5961-0509).

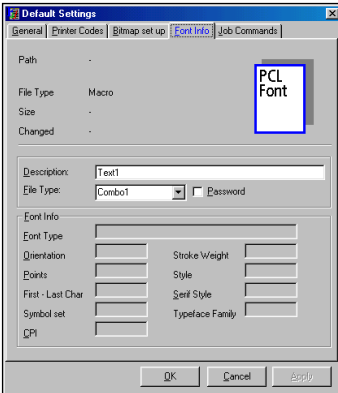


Figure 29

Font Info

Job commands

It is possible to add printer control commands before and after [Current Macro].

The ability to send printer control commands before and after macros allows the construction of complex print jobs, which are then very simple to use.

Select those printer control commands from the list of Available Commands, that should be issued before or after the file (e.g. a Form Feed command may be required before printing a letterhead macro to ensure, that it is always printed at the top of a new page).

The order of commands can be rearranged by highlighting one and then clicking on the Up and Down arrows at the side of the Selected Job commands window to move it relative to the others. Commands can be included, which are not predefined in the list of Available Commands, by selecting **Printer String** and supplying your own parameters.

The commands push and pop are very often used to avoid data and macros to be printed on separate pages.

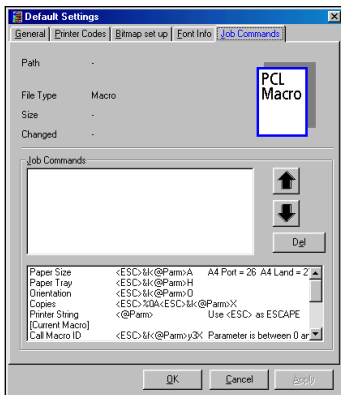


Figure 30

Job commands

See **Appendix 4** for more details in using Job commands.

Expert Settings

The expert mode option appear when FFM is started with: FFM.exe /exp
ONLY **expert** users should use these functions.

Pass-through

The file will not be changed during the download process at all.

No Optimize but add Control Data

The same as Pass-through – but FFM does add Control Data

Macros: Start Macro and End Macro

Fonts: Start Font and End Font

Leave optimized File

FFM does optimize the file – meaning some redundant information is removed, and for bitmap the best compression is selected. Use this option to leave the optimized file for debugging. The file is stored in “program path”\Forms and Font Manager\optimize.

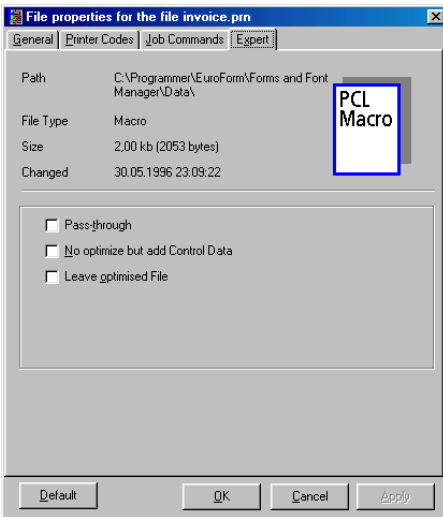


Figure 31

Expert

Project Options

The Option menu can be selected whenever a project is active. When the settings are changed it will affect the selected project only.

The Option Menu contains 2 different tabs:

- Project Options
- Password

Project Options

Setting the path for the .ALL-file

Use this field to set the default file storage location of the .ALL file.

The default is: Program Path\FORMS and Font Manager\

PCM file support

If PCM is created along with the .ALL file, then it is possible to change the Cartridge file name and the name of the driver support file. The PCM file is used to add fonts/macros into a PCL5 HP printer driver in order to make them available in Windows applications. More information on PCM files is found under “Working with PCM files”.

Output in HEX format (Mainframe)

HEX-format is used to expand the data file into a format that can be uploaded and used from Mainframes.

Example:

PCL: <esc> E <esc> & l 8 H T E S T <esc> E

HEX format: 1B 45 1B 26 6C 38 48 54 45 53 54 1B 45

Relative Path Information

This function makes all path references in the project file relative. This enables that project can be moved or copied to be used other places without being changed manually.

NOTE

Projects created with this option selected, are not compatible with older versions of FORMS and Font Manager

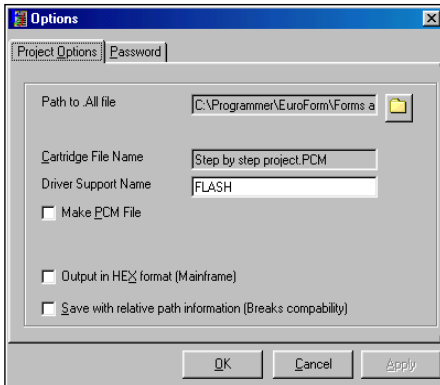


Figure 32

Project options

Password

The Password panel allows a new password to be set or an existing password to be modified or deleted. This panel can be used on its own or in conjunction with a Project.

Change Password

To change the password on a Flash Memory module, which is already password protected:

- Select Project Options / Password
- Type the current password in the **Current** password box
- Type the new password into the **New** password box. Select OK. A dialog box will appear with “Password is changed. Update now?” displayed
- Click on Yes

The password will be downloaded to the Flash Memory and “Flash Memory Open” will be briefly displayed on the printer’s front panel.

When the download is completed, “Ready” will appear on the printer's front panel.

To download a macro and/or a font with password protection, the password in the **Current** password box must be the one set on the Flash Memory, and the password box must be checked in the File Properties screen.

Delete Password

To delete a password from the Flash Memory do the following:

- Select Project Options / Password
- Type the current password into the **Current** password box
- Leave the **New** Password field blank and select the **Clear password** box
- Select OK. A dialog box will appear with “Password is changed. Update now?”
- Click on Yes

The password deletion will be downloaded. “NVM Open” will briefly be displayed on the printer's front panel.

When the update is completed “Ready” will appear on the printer's front panel.

To verify that the password has been disabled, click on the Status Page button to print a status page.

REMEMBER

If the password is deleted, none of the macros, forms, fonts or signatures in the Flash Memory will be password protected. If the password is forgotten the Flash Memory will have to be reinitialized, which will erase all data stored on it.

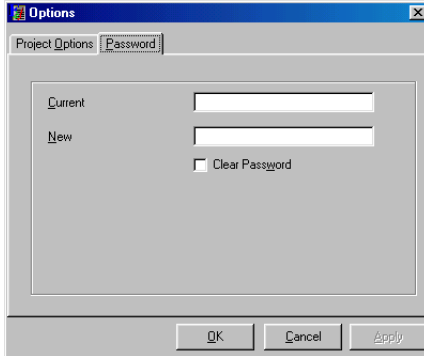


Figure 33

Password

Settings

Under Functions in the top menu it's possible to select the Setting menu. This menu contains settings that affect all projects. If the settings are changed then they will be the new default start-up settings.

Make .bak files

Creates a backup file. When a Project is overwritten by a newer version the old file will be renamed to *.bak

Save filedate on Flash

The creation date of the file is saved on the Flash device if this function is enabled.

This enables the verification of the version of a file stored on a Flash device.

Check printers for BiDi

Enables the next two settings, Default off.

Check local printers for BiDi at startup or Check Networked printers for BiDi at startup

Specifies the types of printers that are checked for BiDi when FFM is started. The default value is off.

Show normal.prj

This function determines if normal.prj is shown in FFM.

The normal.prj is the default project in FFM. If normal.prj includes a certain printer then all new project will include this printer.

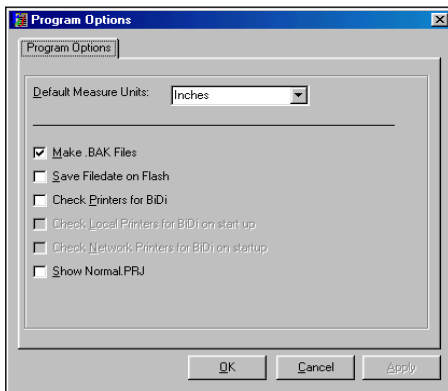


Figure 34

Project Default Settings

Working with FFM

This section will describe how to generate and use the different files that FFM supports.

Working with Macro's

A macro can be created from almost any program, in this example Word will be used. One way to make a macro will be described in this section. Before starting to make a macro, then make sure that a PCL 5e driver from www.hp.com is installed on the PC.

- Start Word and open the document that needs to be made into a macro
- Select the menu : Print
- Select the installed PCL5 printer driver
- Activate the function: print to file #
- Press OK
- Word will now ask for a path and a file name for the print file.

The file made by word is a PCL Macro and can be used directly in FFM.

NOTE

*If the 'print to file' function doesn't exist in the application, then go to the **Control Panel**, select **Printers**. Right click on the installed PCL 5 printer and select properties. Go to the Tab Details and set the printer port to **FILE**: This has the same effect as the function in Word. Remember to change it back when the macro is made.*

Working with Fonts

Fonts can be added directly in a FFM project, the supported font types can be seen in Appendix 1. When a Font is added to a project and downloaded to a printer with an installed Flash module, then it is ready for use. The details on the font can be seen by a PCL font list directly from the printer or by sending a test page from FFM

On these printouts information on how to use the font using <esc> codes are listed. If the font has to be used from a Windows application without using <esc> codes, then the PCM file functionality is the way to call a font.

See **Working with PCM files**, for more details.

Working with Bitmaps

Some Bitmaps can be added directly to a project see Appendix 1 for details on supported Bitmap types. The Bitmaps are not stored as Bitmaps on the Flash, they are stored as Fonts or as Macro's. The different ways of working with Bitmaps can be seen in the next descriptions.

Bitmaps converted to Macro's

This is the default setting for FFM. Every time a Bitmap is added, it will be converted to a macro. The settings can be seen, by selecting properties on the added Bitmap. When a Bitmap is added to a project and downloaded to a Flash, they behave as macro's and are called and used like macro's.

Bitmaps converted to Font's

When a Bitmaps is added to a project and the properties are selected, then the default setting "Convert Bitmaps to a macro" can be changed to "Convert Bitmaps to a font". When the Bitmaps are added to a project and downloaded to a Flash, then they behave as macro's and are called and used like Font's.

Other ways to use Bitmaps

A bitmap can also be used in another way. Make a print file (PCL 5) in any application. This could be MS-Word, position the bitmap in the wanted position and print to file. Then the print file is added into FFM, and will be detected as a macro, but when printed it will be the Bitmap in the right position.

Working with PCM files

A PCM is a file that can be generated by FFM together with the ALL file, this file enable downloaded files to be accessed from any Windows application

The PCM file is "installed" into a PCL 5e printer driver. And the font/macro will be added to the Windows font list, and can then be selected in most Windows applications. When the font is used in Windows and the document is printed on the printer containing the font/macro, the correct font/macro is printed.

The PCM file is generated when the ALL file is created, and is named like the ALL file with the extension .pcm and placed like the ALL file. To create and use PCM files follow this step by step description:

- Make a project containing the Macros, Bitmaps and Fonts needed
- Activate the Download function
- Activate the make PCM function
- Download the project to an ALL file
- From the **Start** menu, select **Settings / Printers**.
- Right click on the installed PCL 5 printer and select properties
- Click on the button **More Options** under the Tab Configuration, in some older drivers the Tab is called **Fonts**
- Configure the option **Fonts**
- Use the function **Add**, and select the PCM file made earlier
- The files will default be copied to the folder c:\pclfonts\
- In the left side the cartridge name appear and the added font's / macro's / logo's will be listed to the left
- The different files on the right side can be **Deactivated**, they will not be available in Windows

The active files to the right will now be Fonts in Windows applications. To activate the files in Windows just select the font in the font list. If a Macro or Logo is added this way then use any character in the font to print it.

See **PCM files** in Main functions for more details.

NOTE:

This function is not supported in all printer driver versions of Windows NT – contact your local partner for more details.

Working with macros from applications using <esc> codes

If an Escape Sequence <esc> can be inserted into the document then that's the easiest way to access Macros in the Flash Memory. IMPORTANT: You must use a PCL 5e driver from Windows. PCL6/XL or PostScript drivers are not supported.

The Escape character, which begins an Escape Sequence, is a special character, which can not be typed directly from the keyboard and most applications have a special method for inserting it. Consult the application manual for instructions on how to insert the Escape character and then follow the steps below:

- Move the cursor to the point in the document where the Macro is to be inserted
- Type: <esc>&f####y3X (where <esc> is the accepted method of entering an Escape Character and #### is the Macro ID). It is important to type lower case "f" and "y" and a capital "X"

As an example to insert an Escape Sequence in a Microsoft Word for Windows version 6.0 or 7.0 document, do the following:

- Select the **Insert** menu from the menu bar. Select **Field**
- Scroll down the **Field Names** box and select **Print**

In the **Field Codes** box below, the word PRINT appears.

- Type in the escape sequence between quotes but without the escape character after the word PRINT, e.g. **27"&f123y3X"**
- Click on **OK**
- From the **Tools** menu in the menu bar select **Options**
- In the **View** screen, click on **Field Codes** check box to activate it. Click on **OK**

The Field Code is now displayed in the document.

- Position the cursor after the opening quote and before the '&' and insert the escape character by holding down the **ALT** key and typing **027** from the numeric keypad

It will be displayed as a box character.

Note

To avoid the data and form to print on separate pages, it very often helps to use push/pop, Os = Push and IS = Pop. Ex. <esc>&f0s123y3x1S

Working with fonts from applications using <esc> codes

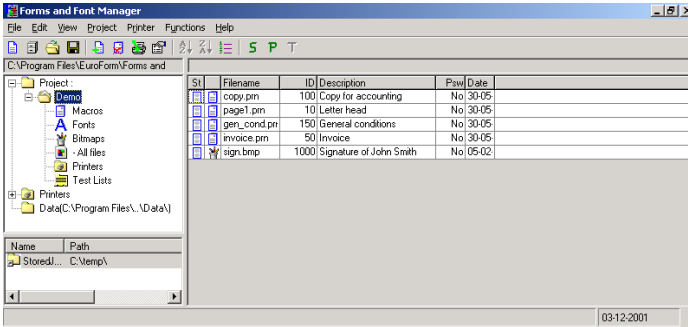
This chapter will describe how a downloaded font can be called by using Escape Sequence.

First the <esc> code for the font must be found. Use the option Print PCL font list directly from the display, or this information can also be printed by using the Test button under FFM. When the print has been made the exact same <esc> command can be seen.

The Escape character, which begins an Escape Sequence, is a special character, which cannot be typed directly from the keyboard and most applications have a special method for inserting it. Consult the application manual for instructions on how to insert the Escape character and then follow the steps below:

- Move the cursor to the point in the document where the Macro is to be inserted
- Type: **<esc>("symbolset"<esc>(slp"pointsize"v0s0b"Fontnumber"T**. And then type the Letters/numbers that shall be printout in the font. It is important to type lower case and capital letters correct

See **Working with macros from applications using <esc> codes** for more details.



Working with test files

FFM has some build in test functions. The most advanced is the Test List function. This function enables FFM to generate user defined test files for the project. The Test List function is found under all projects and can contain as many test lists as needed.

How to define a Test List

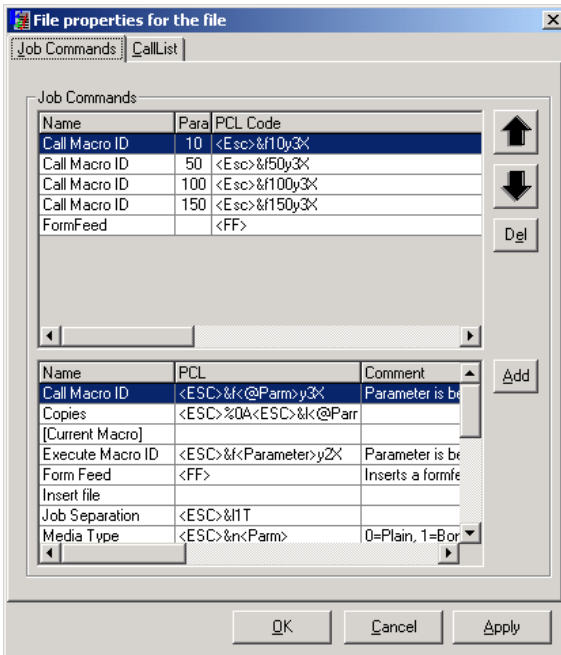
A Test List is added by marking the project, to where the test file must be added and then select the function “Test Lists” under “Project” in the menu bar. There are two ways to start a Test List, the first one defines a new Test List containing all added macros in the project, and the other one defines an empty list. This example will add a standard Test List to the Demo project.

The first option given is to rename the Test List to a describing name. In this case “Demo Test List” the list added to the project is containing 5 files, 4 macros from the project and a Form Feed in the end. Each of the objects have the following information’s:

- Order This is the order in which the objects are in the test file
- Command A description of what type of command it is
- Description The description from the macro in the project
- Parameter The value of the parameter in the command
- PCL Code The PCL code that the test file will contain

It is possible to change the Order, Description and Parameter directly in the grid and the changes will be saved. Only macros from the project can be added to a Test List. Bitmaps are not supported under Test List.

When the Test List is defined it's possible to add further test commands to the list. This is done by “right clicking” on the Test List or a Test List object and then selecting properties. This will result in this menu:



The properties of a Test List are very similar to the job commands found under properties on a macro in a project and the commands that can be added are the same. Please refer to Appendix 4. New commands can be added and the internally order can be changed.

The only new feature added under test list compared to job commands is the function Add “Test text file”. This function enables the user to send a test text file together with the test list. This can be used to verify that data stream and form match.

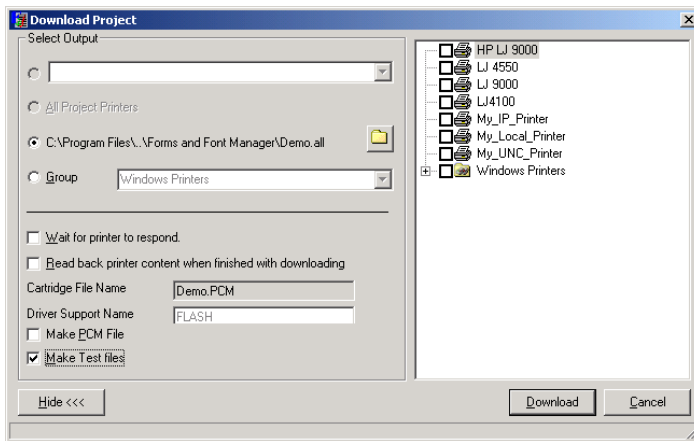
FFM gives advance users a possibility to add there own job commands / test list functions. Read about this function in Appendix 5

How to export a Test List

The Test List can be exported from FFM in 3 different ways:

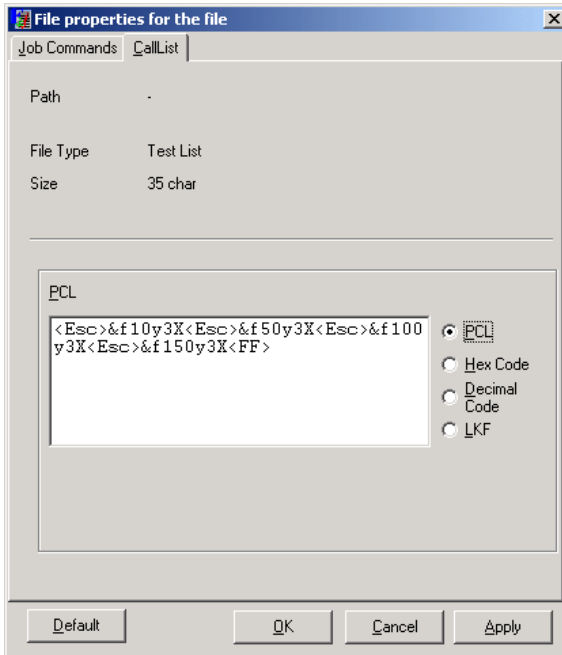
1. Mark the Test List that needs to be transferred to a printer and press the T button in the menu bar. This will copy the test file to the default printer defined in that project. If only part of the test file needs to be copied, then press the “CTRL” key and select the wanted commands.

2 . Open the Download window as in the picture below, mark the option “Make Test files” and then generate the ALL file. The test files will be exported to the same folder as the ALL files.



3. Select “Properties” on the Test List and click on the menu bar “Call List”

Here is the command shown in 4 different ways. It’s possible to copy the commands from the window where they are displayed and then paste into the program/file where they are needed.



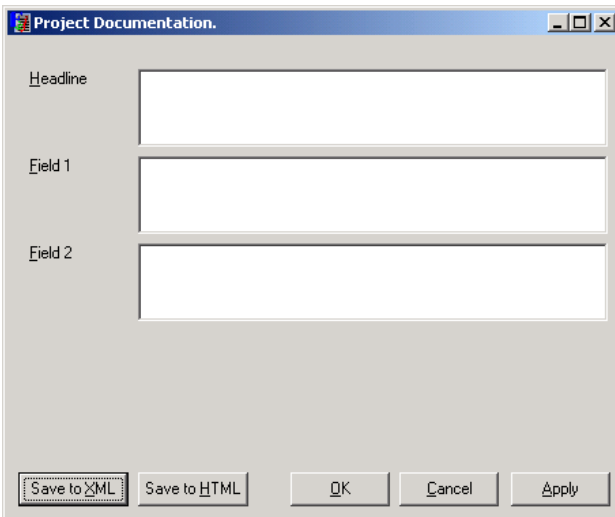
PCL	The commands showed as PCL codes.
HEX Codes	The commands showed as HEX codes
Decimal Codes	The commands showed as decimal codes.
LKF	The commands showed as LKF codes, same as PCL except for the <ESC> command, which is translated to #271B. This can only be used in EuroForm PowerFlash 100 instead of <ESC>.

Note

Some codes are show as text and not as code such as form feed <FF> and <ESC>.

Working with Documentation

When a project gets big or if it's not every day that the user works with the project, then the documentation is very important. FFM has a build-in documentation function, that very easy and fast generates a complete report with all information needed to keep track of all projects. The documentation generator takes the information from the files in the project and the user doesn't need to type everything again.

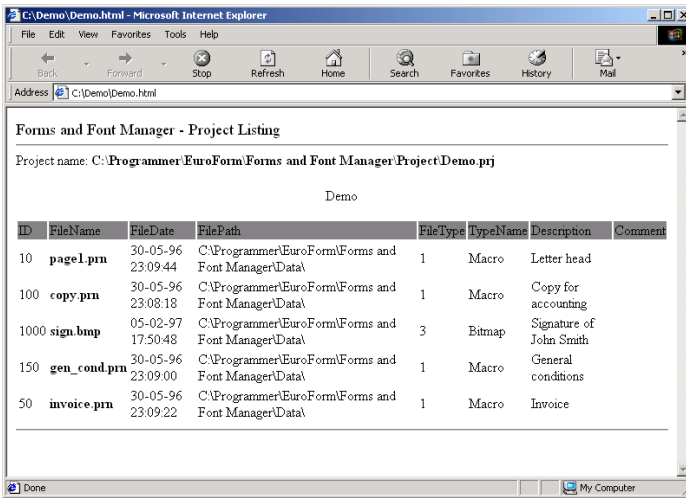


The image shows a dialog box titled "Project Documentation." with a standard Windows-style title bar (minimize, maximize, close buttons). The dialog contains three text input fields stacked vertically, labeled "Headline", "Field 1", and "Field 2" on the left. At the bottom of the dialog, there are five buttons: "Save to XML" (with a dotted border), "Save to HTML", "OK", "Cancel", and "Apply".

How to generate documentation

Select the function "Export" under "Documentation" which is found under "Project" in the menu bar. The following window will appear:

The information that can be typed in here can be general information on the project such as who made the latest update and so on. This will be used as a head in the rapport. The report can be generated in to formats HTML and XML. The HTML file gives the user the possibility to change the design. For further information about the file formats contact EuroForm at support@euroform.com



The screenshot shows a Microsoft Internet Explorer browser window displaying a web page titled "Forms and Font Manager - Project Listing". The address bar shows the URL "C:\Demo\Demo.html". The page content includes the project name "C:\Programmer\EuroForm\Forms and Font Manager\Project\Demo.pj" and a "Demo" section containing a table of file listings.

ID	FileName	FileDate	FilePath	FileType	TypeName	Description	Comment
10	page1.pjn	30-05-96 23:09:44	C:\Programmer\EuroForm\Forms and Font Manager\Data\	1	Macro	Letter head	
100	copy.pjn	30-05-96 23:08:18	C:\Programmer\EuroForm\Forms and Font Manager\Data\	1	Macro	Copy for accounting	
1000	sign.bmp	05-02-97 17:50:48	C:\Programmer\EuroForm\Forms and Font Manager\Data\	3	Bitmap	Signature of John Smith	
150	gen_cond.pjn	30-05-96 23:09:00	C:\Programmer\EuroForm\Forms and Font Manager\Data\	1	Macro	General conditions	
50	invoice.pjn	30-05-96 23:09:22	C:\Programmer\EuroForm\Forms and Font Manager\Data\	1	Macro	Invoice	

Complexed Project Example

By using appropriate Job Commands to control a series of macros it is possible to automate the printing of complex documents. In the following example the document is a duplicate sales invoice bearing the Terms and Conditions of trade on the reverse of the original and the word COPY on the duplicate.

This example assumes that the output printer is capable of duplex printing and has two paper trays:

- Using a word processor or Forms Design software, prepare a blank invoice (portrait format) and **print to a file** called INVBLANK.PRN
- Using a word processor prepare the Terms and Conditions to appear on the reverse of the invoice and **print to a file** called T&C.PRN
- Using a graphics program or a word processor prepare the “COPY” text. Select a large font size and an outline typeface and position
- The word “COPY” in the middle of the page. **Print to a file** called COPYTXT.PRN
- From the Forms and Font Manager software main screen, select **Files/New project**
- Highlight the three files INVBLANK.PRN, T&C.PRN and COPYTXT.PRN in the **Directory Contents** box and double-click to copy them into the **Project Contents** box
- Assign **macro ID** 1 to INVBLANK.PRN, 2 to T&C.PRN and 3 to COPYTXT.PRN
- Click on the **Job Commands** tab
- From the list of **Available Commands** double-click on **Simplex/Duplex** and type “1” in the prompt box. The command is copied into the upper window
- From **Available Commands** select **Papertray** and type “1” in the prompt box to select the main papertray
- From **Available Commands** select **Call Macro ID**, and enter “4” in the prompt box. (This ID will be for the invoice data). The command is copied to the upper window
- From **Available Commands** select **Call Macro ID**, and enter “1” in the prompt box. (This is INVBLANK.PRN). The command is copied to the upper window
- From **Available Commands** select **<FF>**. (This will eject the page with the invoice form and invoice data printed on the front)
- From **Available Commands** select **Call Macro ID**, and enter “2” in the prompt box. (This is T&C.PRN). The command is copied to the upper window
- From **Available Commands** select **<FF>**. (This will eject the page with the invoice form and data printed on the front and the terms and conditions on the back)

- From the list of **Available Commands** double click on **Simplex/Duplex**, choosing **Simplex** when the prompt box appears. The command is copied into the upper window
- From **Available Commands** select **Paper tray** and type “5” in the prompt box to select the secondary paper tray. (This tray can be filled with colored paper)
- From **Available Commands** select **Call Macro ID**, and enter “4” in the prompt box. (This is the invoice data for the copy invoice). The command is copied to the upper window
- From **Available Commands** select **Call Macro ID**, and enter “1” in the prompt box. (This is INVBLANK.PRN). The command is copied to the upper window
- The last entry in the top window is Current Macro, which is the COPY text to be overprinted on the copy invoice
- Click on **OK**. Save the project
- Click on the **printer** button in the toolbar to download the project to the printer
- To do a test print, highlight the COPYTXT.PRN macro in the project window and click on the **test print** button in the toolbar. The test should produce a blank invoice with the Terms and Conditions text printed on the reverse and another blank invoice with COPY overprinted
- In your invoicing application enter the following Escape sequence at the beginning of the invoice: **<esc>&f4y0X**
- This starts recording the macro that contains the data for this invoice. Then enter the invoice data. At the end of the data enter the following Escape sequence: **<esc>&f1x9x3y3X**
- This will call the COPYTXT macro, which will call the others in sequence

Plug-Ins

FFM is not only a Flash device management program. Some Plug-ins are available as an add-on products and can be bought through the local partner.

Below please find a short description of the Job Management (JMF) Plug-in:

Job Management

Enables FFM to store printed job on the Hard disk on many different HP printers, and after storing the job it will become available from the front panel on the printer.

The JMF Plug-in has the following benefits:

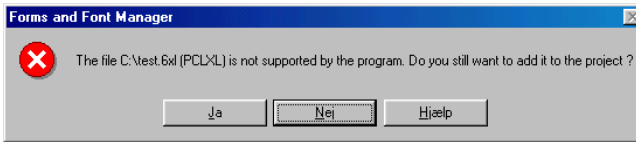
- The print jobs are pre-ripped and prints very fast not taking up any network traffic.

EuroForm do offer web interface to print the stored job. It's using the newest CHAI technology from HP.

Hints and trouble shooting

Not supported file

If a file with a not supported file format is added to a project, this error message appears:



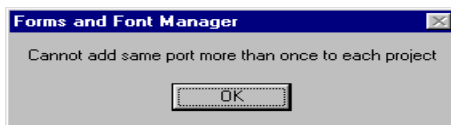
If you click on help, you will get the most appropriate help to describe why this is not a supported file.

See **Appendix 1** for more details on supported files.

Unable to add printer

When a printer is added to a project, the Address/Port to the printer has to be unique. If two different printers are added with the same Address/Port, this error message appears:

It makes no sense to give a printer two different names.



Errors during download

If You get some errors during download or by generating an ALL file, You will see some read lights in the right window.

If You place the mouse on the file that is read, an error description for that specific file will pop up on the screen.

Appendix 1

Supported files

Supported fonts

- TrueType fonts
- PCL Soft fonts
- Intellifonts, bound and unbound

Note: PostScript fonts are NOT supported.

Supported Bitmaps

TIFF

FFM supports TIFF files with the following properties:

- Samples/pixel min. 1
- Compression 1 or 32773
- X & Y res. 300

BMP

FFM supports BMP files with the following properties:

- X & Y res. 0/300/600
- Monochrome
- 16/256 colors

PCX

FFM supports PCX files with the following properties:

- X & Y res. 300/600
- plans 1
- Bits/pixel 1 (monochrome)

Supported macro's

FFM only supports macro's generated by PCL 5e printer drivers.

Macros generated by PCL 6 (PCL XL or Extended) drivers, are not supported.

Macro's generated by PS drivers, are not supported.

Appendix 2

Util directory

During installation of FFM a folder called **Util** is created. This folder contains 11 PCL files. These files are installed as help files.

Below is a description of the function of these files, if they are copied to a printer with a Flash installed.

DL_off.pjl	: Disk lock off (FSA)
DL_on.pjl	: Disk lock on (FSA)
Erase.pjl	: This erases a EuroForm Flash
Ff.pjl	: Generates a form feed
fsinit.pjl	: Reinitialize and erase a FSA Flash
Open.pjl	: Opens the Flash for download
Pclcont.pjl	: Prints configuration page (is not supported by all printers)
Pcldemo.pjl	: Prints Demo page (is not supported by all printers)
Selftest.pjl	: Prints self test page (is not supported by all printers)
Status.pjl	: Prints contents of the Flash together with a Flash Status page
Typelist.pjl	: Prints a font list (is not supported by all printers)

see **Appendix 3** for more details of how to copy files to the printer.

Appendix 3

How to distribute the ALL-file

When an ALL file is created but not distributed to the printers by FFM, there are different ways to send the ALL file to the printers. The way to do this depends on the printer installation. Common is to start a MS-DOS prompt and then select the correct command from this list:

DOS

Copy /b FILENAME.ALL LPT1:

Novell

Copy /b FILENAME.ALL \\servername\printername

NT

Copy /b FILENAME.ALL \\servername\printername

IP

Use Forms and Font Manager to download to a set off IP printers.

Or

Copy /b FILENAME.ALL LPT1:

UNC

Use Forms and Font Manager to download to a set off UNC printers.

Or

Copy /b FILENAME.ALL \\servername\printername

UNIX

Cp FILENAME.ALL /dev/xxx

Appendix 4

PCL Command Reference

This section gives a brief explanation of the Job Commands in the Forms and Font Manager Advanced Options Menu. For a full explanation of PCL commands, consult the HP PCL 5 Printer Language Technical Reference Manual.

Call Macro ID

Calls the macro whose identification number is specified. When a macro is called, the current print environment is saved, before the commands in the macro are carried out and restored, once the macro has completed.

Execute Macro ID

When a macro is executed, any changes, which are made to the print environment, remain in force, once the macro has completed.

<esc>&f#y2X

= 0-32767

Form Feed

Causes the printer to eject a sheet of paper.

<ff>

<ff>= Ascii 12 or Hex 0C

Paper size

Specifies the size of paper the printer is using.

<esc>&l#A

= Used to specify the page size

A4 = 26

Letter = 2

Output Bin Selection

On printers, which have more than one paper collection bin, select output bin.

<esc>&l#G

= 0 up to 11

Paper tray

On printers, which have more than one input paper tray, selects the paper tray from which paper will be fed into the printer.

<esc>&l#H

= 0, 1, 2, 3, 4, 5, 6, 7, 8, and 20-29

Orientation

Selects whether the job should print in portrait or landscape mode.

<esc>&l#O

= 0, 1, 2, 3

Simplex/Duplex

On printers, which has duplex printing capabilities, selects whether to print on one or on both sides of the paper.

<esc>&l#S

= 0:Simplex

= 1:Duplex Long

= 2:Duplex Short

Job Separation

Some printers are able to separate one print job from the next by offsetting the sheets of paper in the output tray. This command causes the printer to offset a print job in the output tray:

<esc> &lIT

Copies

Specifies the number of copies required.

<esc>&l#X

= 0-999 numbers of copies

Escape Sequence

This command inserts the Escape character and takes whatever parameter is supplied. The HP LaserJet Printer User's manual has a useful section with Printer Commands.

<esc>

ASCII 27

HEX 1B

Push/pop

This command saves the actual cursor position, execute the next macro, and return to the saved cursor position.

<esc>&f0s

<esc>&f1s

Appendix 5

Registry Settings

It is very important that only persons, who are familiar with how the registry of a Windows PC works, use this function. This is an example on how a job management command can be defined. The other keys can be found in the registry.

```
[HKEY_LOCAL_MACHINE\Software\EuroForm\Shared\FormsandFontManager\JobCommands\  
SimplexDuplex]
```

```
@="0"
```

```
"Sequence"="<ESC>&l<@Parm>S"
```

```
"Name"="Simplex/Duplex"
```

```
"HelpString"="Simplex = 0 Duplex Long = 1 Duplex Short = 2"
```

If any important commands are missing then please contact EuroForm by sending an e-mail to support@euroform.com

Glossary

BiDi

BiDi is a facility, which allow two-way communication between a computer and a printer.

If the printer is connected directly to the parallel port of a PC, the parallel ports must be capable of supporting nibble mode as defined in IEEE 1284.

If the printer is connected to a PC by a network, the Network Operating System must conform to the Windows Sockets specification. Forms and Font Manager is capable of operating with any Windows Sockets Compliant protocol implementation.

Forms and Font Manager has a Windows Sockets Interface and is a Windows Sockets Application.

Font

A font is a complete set of characters of a given size and style. A font is identified by three elements; the type face (such as Times New Roman or Courier), the type style (such as Bold or Italic) and the type size (such as 12pt).

For example:

Times New Roman Bold 10 pt

Courier New Italic 14 pt

The Forms and Font Manager supports PCL Bitmap Fonts, Intellifont Scaleable Fonts, TrueType fonts and user-defined Symbol Sets, if these facilities are available in the printer.

PCM file / Font Drivers

A PCM is a file that can be generated by FFM together with the ALL file, this file enable downloaded files to be accessed from any Windows application. The files will be added as a font in Windows Font selection.

Macro

A macro is a group of printer commands and/or data, which is downloaded for storage in the Flash Memory.

Macros can be created using any popular Word Processing/Forms Design software packages. Each macro is assigned a unique ID number (any number between 1 and 32767, excluding the range 31000 to 31400).

Once stored in the Flash Memory, a macro can be called from within an application using the assigned macro ID number.

Practical uses of macros include forms such as invoices, purchase orders, standard letters, letterheads, logos and lengthy printer commands.

Further information on macros, PjL and HP PCL can be found in the Hewlett-Packard Technical Reference Documentation Package.

Password Protection

Password protection prevents accidental or unauthorized modification or deletion of macros and/or fonts stored in the Flash Memory.

Projects

One or more files (macros and/or fonts) grouped together. The details of the components of the Project are stored in a Project control file that is created when the Project is saved. Project control files are given the file extension .PRJ as default and are held in the project directory, a macro can be called from within an application using the assigned macro ID number.

Practical use of macros includes forms such as invoices, purchase orders, standard letters, letterheads, logos and lengthy printer commands.

Further information on macros, PjL and HP PCL can be found in the Hewlett-Packard Technical Reference Documentation Package.

Notes:

Support

If you experience problems with EuroForm Forms and Font Manager or you have other questions, please send an email to support@euroform.com.

However, before contacting us via email or telephone, we recommend that you visit our home page <http://www.euroform.com/english/software/ffm/> where you can find updates, FAQs etc.

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EuroForm A/S technologies have created a range of solutions that integrate with Hewlett-Packards LaserJet and Color LaserJet printers and multifunctional devices enhancing your business.

EuroForm Barcode 100
EuroForm ELP
EuroForm PagePlus

EuroForm BusinessCard
EuroForm FFM
EuroForm PowerFlash 200

EuroForm JetAdvice™
EuroForm IPDS 100
EuroForm ThinPrint

For detailed information on the different solutions please refer to <http://www.euroform.com> or contact us at info@euroform.com.

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